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# The Role of Connectedness and Religious Factors on Bullying Participation among Preadolescents in Puerto Rico

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The Role of Connectedness and Religious Factors  
on Bullying Participation among Preadolescents in Puerto Rico

by

Melissa C. Mercado-Crespo

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
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College of Public Health  
University of South Florida

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## **Abstract**

Relationships or connections with caring pro-social others (e.g., parents, teachers, school, friends, neighborhood, religion) serve as pro-resilience assets that may enhance children's abilities to cope with bullying. The purpose of this research study was to explore the roles of connectedness and religiosity as potential factors that could enhance resiliency against bullying among preadolescents in Puerto Rico (PR). This doctoral dissertation also addressed several gaps in the children's bullying, resilience and religiosity research literature.

A sample of 426 community-based afterschool program preadolescents (ages 10-12 years old) participated in this exploratory, cross-sectional study, by completing a quantitative questionnaire in paper and pencil format. Data was analyzed overall, by location (i.e., San Juan Metropolitan Area (SJ Metro), Other Municipalities within PR), gender, age, and church attendance.

Twenty percent of all participants were victimized by bullying at least 2-3 times per month. On the other hand, 5% of participants said they had been a bully 2-3 times per month. The most frequent type of bullying perpetration and victimization reported was verbal. Participants reported the highest levels of connectedness to school and the community, followed by connectedness to parents, teachers, mothers, religion, fathers, and friends. Most participants (71%) said they attended church regularly, but only 35% did so every week. Statistically significant differences were found by location, gender, age and church attendance.

Connectedness and religiosity were correlated significantly to the participants' involvement in bullying at different roles. Surprisingly, having strong prosocial connections do not appear to have a reduction impact on participants' bullying victimization. Connectedness overall, to mothers, teachers and school was positively and significantly correlated to victimization, whereas connectedness to school was negatively correlated to perpetration. Bully-victimization was negatively correlated to connectedness overall, to parents, mothers, friends, teachers, and school. Multiple linear regression analyses found that higher levels in connectedness to mother and connectedness to the community accounted for a 60% decrease and a 45% increase, respectively, in bullying perpetration among non-church attending participants.

In terms of religiosity, analyses distinguished between participants' engagement in private and public religiosity practices. Private religiosity was negatively correlated to being a bullying perpetrator, and positively correlated to being a bystander. Public religiosity was positively correlated to bullying victimization.

The self-report of religiosity did not affect the odds of being a perpetrator, victim or bully-victim. Specifically among SJ Metro participants, the self-report of private religiosity or the combination of both private and public religiosity reduced the odds of being a bystander. Multiple linear regression analyses found that among non-church attending participants, a 1-unit change in public religiosity accounted for a 62% increase in bullying perpetration. While the religiosity-related findings from this study's correlation analyses were consistent with the literature, regression analyses' findings were unexpected and warrant additional research.

This study goes beyond solely school-based approaches to bullying research and prevention, by utilizing a non-school sample of low-income preadolescents who attend afterschool programs at local community-based organizations. Furthermore, its focus on a younger age group (i.e., preadolescents) is consistent with the resiliency literature and the need to enhance resilience factors earlier in childhood. Findings also consider the multiplicity of actors involved in bullying (i.e., perpetrators, victims, bully/victims, or bystanders), and distinguishes between direct and indirect types of bullying. Consistent with recommendations from previous research, a socio-ecological approach was followed to explore the role of connectedness to others at the individual, family, school, peer, religious and community levels, as well as the role of religiosity as an external asset to enhance resilience in preadolescents.

This exploratory study contributes to our understanding of bullying among PR preadolescents, and serve to inform the development of prevention programs, strategies and policies at the school and community level. Research on bullying in PR is limited, making it increasingly challenging for PR schools, community- and faith-based organizations to collaborate in multilevel interventions that specifically address the needs of PR's children.

## **Chapter 1**

### **Introduction and Statement of the Problem**

#### **Statement of the Problem**

Violence can be expressed directly or indirectly, against one or more persons, and by single or multiple perpetrators. It can be physical, sexual, emotional, relational or psychological – as an intentional mechanism to cause or threaten harm. In 2002, the World Health Organization (WHO) declared violence a public health problem because of its health implications for all parties involved, as well as its impact on society's health and wellbeing. They defined violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation” (Krug et al., 2002).

In children, violent behavior and violent victimization both have been associated with multiple individual, family, peer, school, and community-related factors (e.g., Nansel et al., 2001). Children who engage in violence may grow to engage in similar forms of violence as adults, such as physical fighting, weapons-related violence, dating violence, and bullying. The Centers for Disease Control and Prevention (CDC) refers to violence perpetrated by young people – including children and adolescents – as youth violence (CDC, 2011a, 2011b).

Youth violence can impact a child's health – whether as a victim and/or perpetrator – in terms of mortality and morbidity (e.g., murder/homicide deaths, suicides,

physical injuries, mental health outcomes). WHO estimates that 199,000 ten to twenty year olds died as a consequence of murder in year 2000 alone (Krug et al., 2002).

Puerto Rico (PR) – the largest United States (US) territory (population 3.7 million; U.S. Census Bureau, 2010) – is not exempt from youth violence (for more information on Puerto Rico, please see Figure 1). The most recent publicly available data from PR’s Department of Health show that homicides are the third-leading cause of death among children ages 10 to 14 years (PR Department of Health, 2005). The most recently estimated (year 2007) death rate by all causes for PR’s teenagers (15-17 years) is 67.5 per 100,000 – higher than for the US overall (62 per 100,000) (Rivera-Hernández & Andino-Ortiz, 2011). Specifically in terms of deaths by accidents, homicides and suicides, the 2008 teen death rate in PR was 53 per 100,000, compared to 43 per 100,000 in the US overall (National KIDS COUNT Program, 2009).

The most recent data on physical aggression among PR youth come from the 2011 PR Youth Risk Behavior Survey (YRBS), which shows that 24.6% of all surveyed PR high school students reported engaging in at least one physical fight during the past 12 months (CDC, 2012a). Surprisingly, the YRBS finding for PR high school students is notably lower than the one estimated by *Consulta Juvenil* (CJ) for middle school students, a youth survey conducted by the PR Administration of Mental Health and Addiction Services (ASSMCA, Spanish acronym), with a representative sample of nearly 10,000 fifth and sixth graders from PR’s public and private schools. Analyses of CJ data estimate the prevalence of physical fights among PR’s fifth and sixth graders to be 41% during the 2000-02 period (Mercado-Crespo, 2006). Additionally, the most recently available yearly (2009) data from the PR Police Department (PRPD) showed that

children comprised 17.6% (n=736) of all aggravated assault and 48% (n=60) of all forced rape offending cases reported (PRPD, 2010a).

Youth violence is also responsible for many of the intentional injury cases attended to at hospitals and clinics, and the financial burden it implies. For every young person that dies due to violence, WHO estimates that 20 to 40 additional ones will need medical treatment (Krug et al., 2002); they may also endure life-long psychological or emotional consequences. According to 2011 YRBS data, 3% of PR high school students required medical treatment due to injuries received in at least one physical fight during the past 12 months (CDC, 2012b).

Youth violence can affect family finances due to the healthcare costs incurred, years of productive life lost, and time lost from work. It has also been associated with substance use, delinquency and crime, engaging in other types of risk behaviors, other forms of violence, low academic achievement, and school absenteeism (e.g., Nansel et al., 2001). The 2011 PR-YRBS found that 13.9% of students had been absent from school at least once during the past month, because they feared for their safety at, or on the way to, school due to violence; this is more than double the rate (5.9%) reported for the US overall (CDC, 2012c). More recently, it was estimated that 25% of all 10<sup>th</sup>-12<sup>th</sup> PR public school students have been absent from school at least once because of safety concerns (Office of the Governor of Puerto Rico, 2011a, 2011b). This same study also estimated that 28% of PR public high school students took a firearm to school during the past year; YRBS estimated gun carrying for PR high school students to be significantly lower (3.2%) during year 2011 (CDC, 2012d).

A particular type of violence among children that has been gaining attention and significance in Puerto Rico is bullying. Notwithstanding, limited research has been conducted on this topic among PR-based children. CDC recently released its first estimates on Puerto Rican high school students' bullying and cyberbullying for year 2011. It showed that 12.7% of PR high school students report having been bullied on school property during the past 12 months (US overall: 20.1%); the prevalence of cyberbullying victimization was self-reported to be 8% (US overall: 16.2%) (CDC, 2012e).

Another recent and smaller scale study – with a sample of 1,261 students from 3 public and 2 private schools in the San Juan Metropolitan Area in PR – found that 17% of students report having been bullied at least 2 or 3 times within the past 2 months. This study also found that in a quarter (25%) of all self-reported bullying incidents, the victim was in elementary school grade levels. Fifteen percent of surveyed students said peers had mocked them, and 12% were the object of peers' malicious rumors (González, Suárez, Pedrosa & Ortiz, 2011; López-Cabán, 2011).

### **Purpose of the Study**

The purpose of this study was to explore the role of connectedness and religious factors, as potential mechanisms to enhance resiliency against bullying among preadolescents in Puerto Rico (PR). This doctoral dissertation also addressed several gaps in the children's bullying, resilience and religiosity research literature.

### **Research Questions**

The following research questions and their corresponding objectives were explored:



1) How does bullying affect preadolescent members of an afterschool program in Puerto Rico?

Objective 1a: Estimate the prevalence of different types of bullying perpetration and victimization among a sample of PR preadolescents.

Objective 1b: Assess any differences by geographical location, gender and other socio-demographic characteristics of the participants.

Objective 1c: Describe the nature of the bullying incidents experienced by participants.

2) How does connectedness to others impact preadolescents' exposure to and/or roles in bullying?

Objective 2a: Estimate preadolescents' connectedness to people, places and institutions at different socio-ecological levels, namely: parents, friends, teachers, school, community, and religion or religious institutions.

Objective 2b: Assess any differences in preadolescents' connectedness to others by geographic location, gender and other socio-demographic characteristics of the participants.

Objective 2c: Assess the relationship between preadolescents' connectedness to others and their role in bullying, namely as: perpetrators, victims, bully/victims, or bystanders.

Objective 2d: Assess the magnitude of the impact of preadolescents' connectedness to others on their role in bullying.

3) Does religiosity affect preadolescents' exposure to and/or roles in bullying?

Objective 3a: Describe the relationship between religious factors (i.e., public religiosity, private religiosity, and parental religiosity) and preadolescents' role in bullying, by geographic location, gender and other socio-demographic characteristics of the participants.

Objective 3b: Assess the relationship between parental religiosity and preadolescents' role in bullying, by geographic location, gender and other socio-demographic characteristics of the participants.

Objective 3c: Assess the probability of engaging in different bullying roles by the level of public or private religiosity of preadolescents, by geographic location, gender and other socio-demographic characteristics of the participants.

## **Definitions**

This research addresses three main topics – bullying, connectedness and religiosity – among a sample of at-risk Hispanic preadolescents in Puerto Rico that regularly attend a community-based afterschool program. All indicators explored quantitatively through this study were conceptually and operationally defined, as shown on Table 1. The conceptual definitions of the major key elements for this study are

presented below, and have been discussed more in depth as part of the literature review conducted for this research (Chapter 2).

**Violence.** Violence is considered a public health problem worldwide. The World Health Organization (WHO) defines it as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation” (Krug et al., 2002).

**Bullying.** This research focuses on bullying as a form of violence among school-aged children. This study adopts Olweus’ view that “a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students (p. 9)” (Olweus, 2005, 1993). This is the most complete and widely accepted bullying definition found across the literature to date.

**Resilience.** Resilience is defined as the process through which an individual overcomes, copes or adapts to the negative effects of risk exposures, challenges to their development, or other threatening circumstances by employing protective factors to moderate the impact of that stress in a positive, socially-acceptable manner (Fergus & Zimmerman, 2005; Karapetian-Alvord & Johnson-Grados, 2005; Luthar, Cicchetti & Becker, 2000; Masten & Coatsworth, 1998; Masten et al., 1999; Smith & Carlson, 1997; Ungar, 2008a).

**Connectedness.** Connectedness refers to individuals’ ability to develop and sustain close relationships with others (i.e., people, entities or places) that care for, value, and instrumentally or emotionally support them, while increasing their ability to adapt to stress and threats (Resnick, 2000). It reflects a reciprocal connection to social support,

and is demonstrated through actions and affection of the individual towards those to whom s/he is connected to (Karcher, 2012). Connectedness was explored in this research as a strength or mechanism that could increase resilience among at risk children across multiple socio-ecological levels.

**Religiosity.** While religiosity is a multidimensional construct, this research focused only on public and private religiosity, its two main dimensions recognized by the Association of Religion Data Archives (Scheitle, n.d.). Public religiosity refers to those actions that the individual takes in relation and support to a specific religion or religious institution, such as frequency of church attendance, participation in church events, offering and tithing. Private religiosity refers to those subjective attitudes, behaviors, experiences, self-perceptions and beliefs that the individual holds in regard to his/her religion, such as affiliation, prayer, closeness to God, belief in sacred books, and importance given to religion (Chatters, 2000; Nonnemaker et al., 2003).

**Puerto Rican.** This research was conducted in Puerto Rico – U.S. territory of commonwealth status, located in the Caribbean. The people of Puerto Rico are known as Puerto Ricans, whether they were born in Puerto Rico or from Puerto Rican parents elsewhere. For the purpose of this research, the term Puerto Rican refers to Puerto Rican origin individuals that are currently living in Puerto Rico.

**Preadolescents.** Also commonly referred to as pre-teens, preadolescents comprise children ages 10-12 years. School-attending preadolescents are likely to be in late elementary or early middle school grade levels within the Puerto Rico education system.

## **Conceptual Framework**

Distinct theoretical approaches from the social sciences, psychology and criminology fields have been used to help understand deviant behavior. These have been or could also be applied in the study of children's bullying and the role of context.

Some of the most frequently utilized theories in violence research are Deterrence Theory, Rational Choice Theory, and Conflict Theories. The latter have been widely cited in the development and evaluation of youth violence prevention programs supported by the U.S. Office of Juvenile Justice and Delinquency Prevention (LeBoeuf & Delany-Shabazz, 1997). Other theoretical approaches have also been utilized within youth violence and bullying research, such as: cultural capital, social capital, collective efficacy, social identity, theory of mind, transtheoretical model of change, strain and anomie theories, and social competence (e.g, Gunther et al., 2007; Hay et al., 2010; Jones, Manstead & Livingstone, 2009; Robbers, 2009; Sheridan, Warnes & Dowd, 2004; van Roekel, Scholte & Didden, 2010).

**Socio-ecological perspective.** The socio ecological perspective has been frequently utilized to explain children and adolescents' bullying and risk behaviors (e.g., Barboza et al., 2009; Espelage, Bosworth & Simon, 2000; Hawkins, Catalano & Miller, 1992; Hong & Eamon, 2009; Lee, 2010; Sheridan et al., 2004; Swearer, 2002; Swearer & Doll, 2001). Socio ecological theory asserts that humans' wellbeing and behaviors are related to the dynamic interplay of influences or factors originating not only from the individual, but also from his/her environment or ecology (Stokols, 1996). Its interdisciplinary nature has allowed for the socio ecological perspective to be widely

applied to research and interventions within community health promotion, social epidemiology, stressful life events research, human development, and other areas.

Different approaches to the socio ecological perspective have been proposed throughout the years; Urie Bronfenbrenner's is one of the most widely recognized. While agreeing with James Gibson's focus on the individual's direct relationships with his/her physical environment, Bronfenbrenner goes beyond to also emphasize the impact of the social environment (i.e., proximal processes) and distal processes originating from indirect cultural, historical, social or environmental conditions (Tudge, Gray & Hogan, 1997). Departing from positivistic views on value-neutral or context-free social sciences, he defined the ecology of human development as "the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded (p. 21)" (Bronfenbrenner, 1979). These contexts may be at the individual, family, peer, school and community levels (Swearer & Espelage, 2004).

Bronfenbrenner's Ecological Systems Theory (EST) identifies distinct and inseparable factor levels – microsystem, mesosystem, exosystem, macrosystem, and chronosystem – that can be represented by different social contexts. These system levels, which were described by Bronfenbrenner as "nested structures, each inside the next, like a set of Russian dolls," describe the different facets of a child's environment. The child is at the center of his/her social ecology, and is affected by each system level – both proximal contexts (e.g., family) or more distal ones (e.g., culture). Each system level can influence a child's behavior (Barboza et al., 2009; Swearer & Espelage, 2004).

*Microsystems* relate to those immediate, proximal settings where the child's behaviors unfold – the most direct environment(s) where the child develops. It is a “pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics (p. 22)” (Bronfenbrenner, 1979). It refers to the interpersonal relationships the child has at specific locations – for example, the child's relationships with parents and siblings at home, with peers and teachers at school, or friends and other adults living in their neighborhood. The child adopts different roles, specific to each relationship (e.g., as a son/daughter, sibling, classmate, student or friend). The simultaneous and dynamic interactions of the child's relationships within different *microsystems* contribute to the development of the child's social identity (Bronfenbrenner, 1979; Tudge et al., 1997).

‘Peer ecology’ refers to children's *microsystem* relationship with other children, and includes both horizontal (e.g., peers are at the same power level; mutual support), and vertical behavioral relationships (i.e., peer power differentials) (Rodkin & Hodges, 2003). Song and Stoiber (2008) define ‘protective peer ecologies’ as the “aspects of children's interactions with one another that serve as a shield against internal or external sources of stress (p. 243).”

*Mesosystems* refer to the social interconnections the child holds across contexts – that is, the relationship that exists across the child's different *microsystems* (Bronfenbrenner, 1979; Tudge et al., 1997). It includes how the experiences the child has in different contexts relate to one another – for example, how family experiences relate to other experiences the child has at school, church or community. The norms that dominate at each of those contexts may influence the child's behavior, and affect the *mesosystem*

level relationship of these contexts. The joint contributions of two or more microsystems can be instrumental in positively impacting a child's development process and behaviors (Barboza et al., 2009).

Events that occur in certain settings may affect a child, even if he/she is not an active participant in them. Bronfenbrenner refers to those contexts as *exosystems*, or the community level of influence in children's behaviors. The norms that globally affect a community will also affect its children. For example, situations that occur among teacher unions locally may affect the enforcement of policies and guidelines that affect children's experiences at school; changes in parents' experiences at work may affect the time they spend with their children.

*Macrosystems* refer to the larger and more distant institutions to which the child belongs, or that affect his/her life through the establishment of social norms, beliefs, socio-economic status, or ideologies. These comprise the culture in which the child develops, and can be affected by the *micro-*, *meso-*, and *exosystems*.

*Chronosystem* refers to time's effect on behaviors and their context, emphasizing the progressive, dynamic and embedded nature of the different systems within a child's ecology. Bronfenbrenner recognizes the dynamic and reciprocal interaction between the child and his/her environment. It implies that multiple actors at different system levels can play pro-social or negative roles that directly or indirectly affect the child's development.

***Socio-ecological approach to bullying.*** Bullying does not occur in a vacuum, nor is it solely the result of individual perpetrator characteristics. Rather, it is a complex and dynamic process that is affected by his/her interactions with other individuals and



contexts. In Swearer and Doll's (2001) view, understanding an ecological perspective of bullying and victimization is the first step towards transcending the "school bullying-fad", and engaging in empirically supported anti-bullying programs that aim at developing healthy contexts for children's development.

The socio-ecological perspective is especially important in bullying research, as it allows to simultaneously study multiple risk factors operating at different levels and their role in reinforcing or discouraging bullying (Swearer & Doll, 2001). It may also be helpful in exploring the dynamic interactions between bullies, victims and bystanders within the diverse proximal and distal contexts they are part of (Barboza et al., 2009; Garbarino & deLara, 2002; Swearer & Doll, 2001). Bullying psychology experts from the United Kingdom, Canada, Australia, Scandinavia, and elsewhere note that bullying research must consider the impact of multi-dimensional factors at the family, peer, school, community, and societal levels (Dixon, 2008).

The impact of multiple ecological-level contexts on the risk for bullying victimization and perpetration may vary according to the developmental stage of the child (Ho & Cheung, 2009; Matjasko et al., 2010). This is consistent with research that shows that bullying and other forms of violent offending rapidly increases in late childhood or preadolescence, reaches its peak in mid-adolescence, and stabilizes or decelerates during late adolescence and young adulthood (Fitzpatrick, Dulin & Piko, 2007; Loeber, Stouthamer-Loeber, VanKammen & Farrington, 1991; Powell & Ladd, 2010).

Children's roles in bullying need to be examined and addressed across a continuum of different contexts, scenarios and time (Espelage & Swearer, 2003). Bullying is considered an ecological phenomenon that goes beyond the traditional and

person-centered “bully-victim” (perpetrator-victim) dyadic definition, and the limitations of describing bullying only as a set of discrete and observable behaviors (Swearer & Doll, 2001).

Bullying – characterized by its repetitive, intentional and power-differential nature – calls for the socio-ecological exploration of factors that contribute to its occurrence (Swearer & Doll, 2001). Furthermore, the impact that bullies may have on children’s risk for bullying and victimization, including the co-existence of bullying and victimization (bully/victim) and the role of bystanders, must be considered (Espelage & Swearer, 2003).

**Akers’ Social Learning Theory.** Social Learning Theories allow for studying interactions that can encourage or reinforce children’s use of violence (Hoffman & Edwards, 2004), via learning from direct experiences with violence or the modeling witnessed from family and others. Social learning models have been developed both from the psychological and criminology perspectives (i.e., by Albert Bandura and Ronald Akers, respectively), encompassing different propositions and constructs.

Akers developed his Social Learning Theory (A-SLT) based on Sutherland’s previous Differential Association Theory work, and his and Burgess’ Differential Association-Reinforcement theoretical proposals (Akers & Sellers, 2009; Burgess & Akers, 1966). A-SLT is based on four main dimensions or factors: differential associations, definitions, differential reinforcements, and imitation.

*Differential associations* provide the main social contexts for the individual to receive differential reinforcements, definitions and models to imitate in his/her learning process. It refers to the associations the individual has with others, and the differences

among those associates (e.g., violence-supporting peers vs. non-violence supporting parents). Although an individual may be exposed to reinforcements, definitions, and models outside the groups with whom he/she holds a proximal association, it is likely and common that the most effective sources are those with which an established association persists (Kubrin et al., 2009).

When talking about *definitions*, Akers refers to an individual's personal definitions regarding specific behaviors. These personal definitions, attitudes, or beliefs may be favorable, unfavorable, or neutral towards deviance. Favorable definitions towards violence will make such a behavior "morally desirable or wholly permissible (p. 91)" (Akers & Sellers, 2009). Unfavorable definitions would be firm and absolute in their rejection of the deviant act. A neutral definition towards it can allow for the individual to find ways to justify specific instances in which violence could be permitted and morally defensible. The individual's definitions regarding violence will emerge based on the frequency and impact of favorable vs. unfavorable definitions learned (Kubrin et al., 2009).

*Differential reinforcement* relates to external forces that either support or discourage the behavior of interest. For example, would parents/peers approve or disapprove of the individual bullying others? It may be in the form of rewards (e.g., praise, benefits, satisfaction) or punishments (e.g., reprimands, penalties) resulting from the behavior. Additionally, these reinforcements may vary in terms of quantity, frequency and their likelihood of being obtained – also known as modalities of reinforcement (Akers & Sellers, 2009).

Researchers consider *imitation* to be the most difficult A-SLT factor to measure. Imitation refers to “the engagement in behavior after the observation of similar behavior in others” (Akers, 1994). Akers’ empirical test of his theory found imitation to be the A-SLT element with the smallest impact on increasing the likelihood for an individual to engage in deviance – specifically in terms of adolescents’ alcohol and drug use (Akers et al., 1979).

***Social learning approach to bullying.*** A-SLT has been frequently utilized to explain violence among children and youth. In fact “children who observe (*i.e. associations*) and later imitate (*imitation*) violence, not only learn that violence is accepted (*reinforcements*), but also learn specific rationales and motivations (*definitions*) for using violence (p.198; italics added)” (Powell & Ladd, 2010). A-SLT allows for the specific exploration of the impact of differential associations in the child’s intent to cause or threat harm, the repetitive aspect of it, and the power differential implied in bullying. A child can have proximal or distal differential associations with others, consistent with socio-ecological theory perspectives on the impact of multiple contexts on children’s bullying.

### **Theoretical Integration Model for Bullying Research**

Theories are often integrated to assess different research questions. In terms of bullying, semi-structured interviews with an international sample of 11 of the best known, peer-reviewed and recognized bullying experts found that there is a need for stronger explanatory theory regarding bullying (Dixon, 2008). Better connections between these theories and their implications for effective anti-bullying interventions are recommended. These theoretical integrations could be the result of interdisciplinary work

between the fields of public health, psychology, criminology, education, and others. The availability of theory-based bullying research, programs, interventions, and impact evaluations is currently limited.

Figure 2 presents a theoretical integration, based on the socio-ecological perspective on bullying research and Akers' Social Learning Theory (A-SLT) constructs. Specifically, it explores the role of connectedness to differential associations on children's risk for bullying behavior. The *micro*, *meso*-, *exo*-, and *macrosystem* levels are conceptualized as interpersonal relationships (e.g., parents, friends, teachers), family/school, community (e.g., community), and cultural (e.g., religion) contexts, consistent with previously utilized socio-ecological models in bullying research (e.g., Swearer & Espelage, 2004). These four contexts are interconnected, and together impact a child's behavior in a proximal to distal manner (i.e., interpersonal relationships, then family/school, then community, and then culture). Individually and together these multilevel differential associations provide definitions, models to imitate, and differential reinforcements for bullying and its 3 core elements of repetition, intentionality and power differential (see examples on Table 2).

The use of socio-ecological systems and learning theories in the design, implementation and evaluation of bullying prevention programs is recommended. Additionally, children's bullying research could benefit from theoretical integrations and interdisciplinary approaches that consider the multi-level differential associations to which the child is exposed, the weight the associations distinctively carry at each developmental stage, how they inter-relate across levels, and the differential reinforcements and models they provide for children.

**Implications for bullying research.** Consistent with the *microsystem* level of socio-ecological perspectives, A-SLT allows for the study of the interactions between children and others (e.g., parents, friends, teachers, school-peers, school, community, religion). Although Akers does not specify a strict causal process, his main empirical tests on A-SLT and adolescent deviant behavior (i.e., alcohol and marijuana use) identify *differential association* as the A-SLT factor with the greatest impact on increasing deviance (Akers et al., 1979). This finding has been confirmed by multiple A-SLT based studies, including the first one known among a solely Hispanic adolescent population (Ventura Miller et al., 2008).

The impact of significant others with which the child holds a *differential association* can serve as an intervening or mediating variable for the development of the child's own *definitions* about bullying. This will affect the child's decision about whether to intentionally harm or threaten to harm others. He/she may then seek to associate with peers that *reinforce* or support that given *definition*, or seek the approval of his/her peer ecology (*microsystem*) by engaging repeatedly in such behaviors. The norms established by others within the *macro-*, *exo-*, and *mesosystems* will also affect the child's *definition* of bullying, and the *differential reinforcements* and models (*imitation*) received for it.

**Considering connectedness.** The Commission for the Prevention of Youth Violence's (2000) study on America's youth violence made recommendations on how to address this public health problem from a socio-ecological perspective. The Commission's recommendations targeted the role of children's proximal and distal contexts, such as families, communities (e.g., FBO, CBO), the media and broader social policy contexts. Their recommendations highlight the importance of considering adolescents'

connectedness to family, school, peers or others for the prevention of youth violence. Furthermore and consistent with A-SLT constructs, the Commission (2000) recommends creating “mentoring and peer support programs within communities to foster youth interaction and connectedness (*to differential others*), and to provide positive relationships with persons who can offer advice (*including definitions*), support (*including reinforcements*), and healthy role *modeling* (p.22; italics added)”.

Connectedness to conventional others (e.g., parents, teachers, pro-social peers) is considered one of adolescents’ best protective factors against violent behavior. Conversely, unconventional connectedness increases adolescents’ likelihood of engaging in deviant activities, including actions that can cause or threaten to cause harm to others (Karcher, 2004). Assessing the type of connectedness (conventional vs. unconventional) to differential others (*differential associations*) at the *microsystems* level, the impact of indirect associations to broader contexts at the *exo-* and *macrosystems* levels, and the simultaneous and dynamic impact of multiple associations at the *mesosystems* levels may shed light on potential bullying prevention strategies to enhance children’s resilience against bullying.

## **Chapter 2**

### **Literature Review**

#### **Children's Bullying**

Children's bullying is not new, yet its recognition as a public health problem within the scope of youth violence is relatively recent (Feder, 2007). While it has been experienced throughout generations, it was not until the mid 1970s that children's bullying emerged as a serious issue for research and intervention.

Consistent with the Convention on the Rights of the Child, UNICEF (2008) and other international non-governmental organizations (NGOs), Dan Olweus – currently based at the Research Center for Health Promotion, University of Bergen, Norway – considers school safety to be a human right, and since the 1980s has advocated and worked towards ensuring it (Hazelden Foundation, 2010b). Specifically, Olweus stated that “it is a fundamental democratic right for a child to feel safe in school and to be spared the oppression and repeated, intentional humiliation involved in bullying (p. 502)” (Olweus, 1997).

Considered the father of bullying research, Olweus started raising awareness about this problem by publishing the first scientific study on bullying: “Aggression in the Schools: Bullies and Whipping Boys” (Olweus, 1973, 1978). Still, it was not until the 1980s-1990s that the Olweus Bullying Prevention Program (OBPP) – one of the most effective and widely cited bullying prevention programs worldwide – received the



support of the Norwegian public school authorities; this occurred specifically after the widely media-publicized suicide of a couple of Norwegian boys due to bullying. The OBPP has been implemented large-scale throughout Norwegian elementary and junior high schools since the early 2000s.

Olweus' book "Bullying at School: What we know and what we can do about it" (Olweus, 2005, 1993) has been distributed and translated worldwide, and is considered one of the key references in defining, understanding and studying children's bullying. In it he explains that "a student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students (p. 9)" (Olweus, 2005, 1993). This is one of the most widely accepted bullying definitions.

At times referred to as a form of emotional terrorism, bullying is a distinct type of aggressive behavior (Smith & Morita, 1999) that unprovokedly attempts to or successfully violates another person's rights (Olweus, 2011). In fact, children themselves have conceptualized bullying as a complex violence phenomenon that comprises a wide range of direct or indirect behaviors – from teasing to physical aggression (Espelage & Asidao, 2001).

Systematic and representative bullying assessments have been conducted worldwide. In the United States (US), the first most widely reported national assessment on bullying was part of the 1998 US Health Behaviour of School-aged Children (HBSC) survey, which estimated that 10.6% of children in grades 6 to 10 report bullying others sometimes, and 8.8% say they bully others weekly. In terms of victimization, 8.4-8.5% said they were bullied sometimes or weekly (Nansel et al., 2001). More recently, the 2002-03 National Youth Victimization Prevention Study (NYVPS) found that 13.2% and

19.7% of the surveyed children were bullied directly or indirectly within the past year (Finkelhor et al., 2009).

**Three core factors of bullying.** For a series of negative actions to be considered bullying they must meet three basic criteria: intentionality, repetition, and power differential. These are also known as the three core factors of bullying.

**Intentionality.** First, bullying includes the expression of “negative actions” that “intentionally inflict, or attempts to inflict, injury or discomfort upon another (p. 9)” (Olweus, 2005, 1993). The bullying perpetrator (or bully<sup>1</sup>) must be intentional in seeking to cause or threaten harm. His/her actions must be “designed to be malicious” (Greif & Furlong, 2006), distinguishing bullying from behaviors that aim to tease others in a friendly manner. It remains unclear whether the intent to cause/threaten harm needs to be real, or if the victim’s perception of the bully’s intent to harm suffices. Victims may attribute intentionality, even when the perpetrator’s intent is not harm, but fun (Greif & Furlong, 2006).

As of December 2010, 45 States had already passed school bullying or harassment laws (Duncan, 2010). The U.S. Department of Education (USDE) recommends that States’ bullying legislation specify the intentional nature of bullying (USDE, 2011). The USDE warns local educational agencies that many bullying incidents could also be subject to federal anti-discriminatory laws (Ali, 2010), if the child intended to cause or threaten of harm because of the victim’s race, religion or sexual orientation.

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<sup>1</sup> For pragmatic purposes, the terms “victim” and “bully” will be used to refer to those children being bullied and the perpetrator(s) of the bullying behavior, respectively. Still, the author recognizes that there is no dichotomy between bullying victims and perpetrators – a child’s role in bullying is dynamic and continuous, and it is possible for a child to engage in bullying due to being victimized by it.

*Theoretical explanations to intentionality in bullying.* Ecological System

Theories (EST) may help explain the intentionality in children's bullying behaviors. Children may engage in bullying to comply with their peer ecology's (i.e. *microsystem* level) expectations. Bullies are not necessarily loners; they frequently hold moderate to high levels of social status or popularity (negative or positive) among peers who may or may not expect them to behave in a certain manner (Rodkin & Hodges, 2003). Thus, bullies' intent of causing or threatening harm can be motivated by their interest in complying with group expectations, or to gain or retain the power associated to peer-popularity and social status (Ferguson, San Miguel & Hartley, 2009; Juvonen, Graham & Schuster, 2003; Kulig, Hall & Kalischuk, 2008). The collective bullying norms within peer ecologies may reinforce a child's individual bullying intentions and behaviors (Espelage, Holt & Henkel, 2003).

The impact that *microsystem* relationships may have on the intentionality of bullying is not limited to the peer ecology. Family relationships may also affect a child's intention in causing or threatening harm. Exposure to family violence (e.g., intimate partner violence, child abuse/maltreatment) as a repetitive and progressive conflict-resolution or goal-attaining mechanism has been identified as a risk factor for school-bullying (Duke et al., 2010; Dussich & Maekoya, 2007; Ferguson et al., 2009; Fitzpatrick, Dulin & Piko, 2007, 2010; Laeheem et al., 2009). Violent exposure may encourage children to be intentional in their aggressive behavior to resolve a conflict or obtain a benefit.

A child's intent to threaten or cause harm through bullying can also be explained with Akers' Social Learning Theory (A-SLT). Intentionality is associated with the

*definitions* the child has regarding bullying, which affect his/her attitudes and subsequent choice in the behavior. “If a student feels that bullying is ‘part of growing up’ or ‘harmless’, he or she is less likely to feel upset when bullying or observing others being bullied (p. 374)” (Espelage & Swearer, 2003). It is important to note that a child’s definition of bullying may be influenced by internal and external factors, at multiple context levels (e.g., socio-ecological levels).

Empathy – defined as people’s “ability to appreciate the emotional consequences of their behaviors on other people’s feelings (p. 468)” (Gini et al., 2007) – is intricately related to a student’s views or *definitions* of bullying (Espelage & Swearer, 2003). As an internal factor, it may mediate the suppression of aggression in children. For example, in their representative study on empathic response and bullying among Norwegian 13-16 year olds, Endressen and Olweus (2001) found that high levels of empathic concern among boys and girls was associated with having negative views on bullying and being less involved in bullying perpetration. On the other hand, Warden and Mackinnon (2003) found that while pro-social children are more empathic towards victims and bullies, these findings are confounded by gender – more pro-social girls are empathic than boys.

Other studies have associated low empathy with offending (Gini et al., 2007; Jolliffe & Farrington, 2004), and high moral affect (e.g., empathy) with pro-social and moral conduct during bullying situations (Laible, Eye & Carlo, 2008) – such as becoming a victim’s defender (Gini et al., 2007). In terms of bullying, low empathy has been associated with adolescent male bullying (Jolliffe & Farrington, 2011). It has also been suggested that the reinforcement of empathy and peer justice to prevent bullying can

potentially be more effective among preadolescents than adolescents (Jeffrey, Miller & Linn, 2001).

A child's *definition* of bullying – as an A-SLT construct – is affected by the normative and outcome-expectancy beliefs towards bullying upheld by other individuals and contexts (Gottheil & Dubow, 2001). Peer normative beliefs (i.e., expectancies of how friends, classmates or peers think a child must behave) have an especially strong influence during adolescence. Perceptions of peer normative beliefs have been found to predict adolescents' attitudes regarding bullying, and bystander roles in the process (Almeida, Correia & Marinho, 2010). Furthermore, children within peer groups share similarities, which may serve to *reinforce* their behaviors.

A child can be exposed to multi-dimensional pro-social or anti-social normative beliefs regarding bullying that can impact his/her bullying *definition*. *Differential associations* to others may *differentially reinforce* their role (pro-social or not) in bullying. For example, parents' intentionality in violence and their attitudes towards it have been significantly correlated with children's attitudes towards fighting and aggression at school or non-family contexts (e.g., Unnever, Cullen & Agnew, 2006). According to A-SLT perspective, parents can *reinforce* aggressive behaviors by modeling it (*imitation*), and giving children what they want, when they use aggression as a means to an end (*reinforcement*).

***Repetition.*** Second, bullying is distinguished by its repetitive and often progressive nature. In bullying, aggression occurs repeatedly and progresses over time. In most bullying research, respondents are asked to specify how often they have bullied others or been victimized. "Many bullying theories conceptualize the experience as a

process, rather than a one-time event (p. 43)” (Greif & Furlong, 2006). Stand-alone or infrequent types of “negative actions” which are not consistently directed at the same individual are not necessarily bullying.

*Theoretical explanations to repetition in bullying.* Bullying is a dynamic process that implies a type of relationship between the perpetrator(s) and the victim(s). This relationship allows for aggression or threats to occur repeatedly and throughout time. The repetitive nature of bullying is consistent with socio-ecological theories’ emphasis on the effect of time on behavior and its context, or its *chronosystem* level. Still, some argue that it is not clear whether the repetitive nature of bullying victimization implies various incidents involving the same bully(ies), or multiple incidents regardless of the perpetrator (Greif & Furlong, 2006).

Because contexts are not static, it is important to consider the different *mesosystems* that children are involved in throughout their development (e.g., younger children, preadolescents, adolescents), which may allow for bullying to occur repeatedly. While most children’s bullying research and interventions to date have been conducted at schools (Smith & Morita, 1999), other contexts could also allow for children’s bullying to occur and be dealt with – such as after school programs, sports’ leagues, community-based organizations (CBOs), faith-based organizations (FBOs), non-school based clubs, and even at home. Focusing on the interrelationships between the different contexts a child is part of (i.e., *mesosystems*) may be helpful in designing interdisciplinary efforts that target bullying not only at the school setting but also at the family and other community-based contexts (Espelage & Swearer, 2003; Smith & Morita, 1999).

At the *exosystems* level, the USDE encourages the development of educational bullying policies locally (USDE, 2011). Unfortunately, their recommendations are not always clear in distinguishing one-time incidents from the repetitive and progressive aggression that constitutes bullying. It is imperative for teachers and staff to be aware of, and trained to recognize and intervene with bullying and its repetitive nature. Bullying's cycle of coercion is many times perpetuated by the non-reactivity of teachers and school adults to its repeated occurrence (Swearer & Doll, 2001).

As it pertains to their associations to similar peers, children whose peers support bullying behaviors are more likely to be repeatedly exposed to or engaged in such actions. Consistent with the homophily (i.e., love of the same) hypothesis and previous research on the predictive power of deviant peer associations and delinquency, adolescents are likely to associate with peers that engage in bullying in the same frequency that they do (Espelage et al., 2003).

Children are exposed to different contexts that may *differentially reinforce* their bullying behaviors. Apart from the *differential associations* children have at the microsystem level (interpersonal relationships), they may also be exposed to different contexts at the meso-, exo- and macrosystem levels. Considering mesosystems, for example, if children attend schools whose policies, faculty and staff support bullying – or do not actively reject it – then it becomes more feasible for them to repeatedly engage in that behavior even when their parents have taught them otherwise (Espelage & Swearer, 2003). Children can be simultaneously exposed to opposite and conflicting *differential reinforcements*.

The *reinforcements* may facilitate or encourage children to repeatedly engage in bullying aggression. For example, parental *reinforcement* of aggression can increase the frequency of children's expression of aggressive attitudes, which in turn can predict violence perpetration (Unnever et al., 2006). Also, the impact of each context's *reinforcement* and the models (*imitation*) they provide the child with varies throughout time and his/her developmental stage – consistent with both A-SLT and EST's chronosystem.

The composite of those contextual *reinforcements* and models (*imitation*), and the child's own experiences and individual characteristics will mold his/her beliefs or *definitions* regarding bullying, which in turn will guide his/her behavior. Normative, self-efficacy, and outcome-expectancy beliefs regarding the use, inhibition of, provocation for, ability, and acceptability of aggression can explain the stability (repetition) of bullying behaviors and victimization in preadolescents (Gottheil & Dubow, 2001).

***Power differential.*** The third core bullying factor establishes that there must be an asymmetric power relationship between the bully and the victim – that is, there is a power differential between them. The victim may try to escape or defend him/herself, unsuccessfully (Olweus, 2005). “It is not bullying when two students of about the same strength or power argue or fight (p. 2)” (Olweus, 2005; Solberg & Olweus, 2003). The power differential may be due to physical strength and ability, social status or popularity, or any type of characteristic that makes the victim different (Rodkin & Hodges, 2003). Furthermore, bullying has been described as “a reflection of social systems that permit, encourage, or are helpless to challenge violence toward their less powerful members... an



expression of intolerance that perpetuates discrimination and power imbalances (p. 340)” (Hazel, 2010).

While the USDE’s recommendations for bullying legislation do not specifically refer to the power differential between the perpetrator and the victim, it is clear in noting that children may be bullied due to characteristics that distinguish them from the majority. These characteristics may be in terms of appearance, race/ethnicity, religion, color, ancestry, gender, sexual orientation, disabilities, or peer associations (USDE, 2011). “If students perceive that they are being bullied because of a characteristic that makes them unique, the implication is that the victim is different and less powerful in some way (p. 41)” (Greif & Furlong, 2006). Still, it is important to note that a child’s power status can be context specific; differences within one context might be the norm at another.

*Theoretical explanations of power differential in bullying.* At the *micro-* and *mesosystem* socio-ecological theory levels and within the school context, a child’s peer ecology includes vertical relationships based on power structures (Rodkin & Hodges, 2003). A child may exert authority over other(s) because of differences in social status or influence, which may grant them the ability to value and devalue peers. Victims are many times physically weaker than the bullies, less popular or likable among peers, lack pro-social skills, and have lower self-esteem than average. These characteristics make them ‘less powerful’, and allows for bullies to select them as their targets (Rodkin & Hodges, 2003).

As the saying goes, “there’s power in numbers.” Research has shown that the number of friends children have is negatively associated with bullying victimization, and

can also be positively associated with bullying perpetration (Barboza et al., 2009; Nansel, Overpeck, Pilla et al., 2001; Wang, Iannotti & Nansel, 2009). Having a greater number of friends may reduce the power differential in bullying situations. By having more friends, the victim may reduce the power imbalance and his/her victimization. For perpetrators, having more friends may contribute to increase his/her power over the target; friends may reinforce and support his/her bullying behavior. Because most of the bullying research has been conducted at the *micro-* and *mesosystem* levels, further research is needed to help explain the influence of bystanding peers on the perpetrator-victim power differentials, and its subsequent impact on children's role in bullying throughout time (*chronosystem*).

The USDE makes *exosystem* level recommendations to schools on how to establish norms and policies that protect the less powerful kids (USDE, 2011). Apart from enforcing zero-tolerance policies, teachers are encouraged to monitor schoolchildren's behaviors closely and intervene immediately upon suspicion of bullying, have children internalize their school's norms, and try to reduce peer power imbalance by including all children in peer activities (Olweus, 2005). Training schoolteachers and staff on how to recognize and address power imbalances at the school context – for example, by enhancing adult supervision during playtime (Swearer & Doll, 2001) – may be instrumental in reducing or preventing children's bullying (Barboza et al., 2009). Creating an equitable school context or environment is key. Socio-ecological bullying prevention programs that consider and target bullying's three core factors at multiple levels are needed.

In terms of A-SLT, a child's *definition* of bullying not only affects the intent and frequency of his utilization of this type of aggression, but may also influence his/her motivation for engaging in it. As previously mentioned, a child may have been exposed to models (*imitation*) of the successful use of bullying to obtain a benefit, or may have him/herself been successful in it (*reinforcement*). He/she has learned that the use of aggression gives him/her power over another or a situation, to obtain the desired outcome.

The power differential component of bullying is based on the power imbalance relationship between the bullying perpetrator(s) and the victim(s). Positive school structures, (e.g., clear and consistent rules), teacher's intervention, and student behavior management has been shown to reduce bullying and victimization (Gregory et al., 2010). Having a school structure that discourages bullying (or provides *reinforcement* against it) also creates a common ground for all children (e.g., same rules, monitoring). This may reduce the power imbalance among peers, and consequently reduce bullying.

Additionally, lack of empathy and narcissistic beliefs can lead adolescents to think (*definitions*) that they have a right to bully their peers, because of their sense of dominance or superiority over others (Ang et al., 2010) – or power differential. An interdisciplinary literature review found that egotism and inflated feelings of self-superiority over others might serve as a mediator to increased violence (Baumeister, Smart & Boden, 1996). When confronted with the need to lower his/her inflated sense of superiority, the child can choose to strengthen his/her power over others through violence. Additional research is needed to empirically describe the mechanism through which exposure to models and *reinforcements* can impact the power balance within the

bully, victim, bully/victim and bystander's dynamic relationship – in order to develop adequate prevention programs and interventions.

**Bullying typology.** Direct bullying refers to actions that are overtly committed by the perpetrator against the victim, which may be physical (e.g., hitting, spitting, kicking, pinching, restraining or pushing), verbal (e.g., name-calling, threats, taunting or teasing), or sexual (e.g., assault, harassment or gestures) in nature (Olweus, 2005, 1993). Indirect (covert) bullying includes relational and social forms of bullying via dirty gestures or faces, pursuing the victim's social isolation, and rumor spreading (Espelage & Asidao, 2001; Olweus, 2005, 1993). Cyberbullying refers to bullying that is committed through electronic communication mediums (e.g., Internet, text messaging, picture/video clips, phone/cell) (Slonje & Smith, 2008). Some researchers believe cyberbullying is a different type of violence, and should not be considered a form of traditional bullying (Smith et al., 2008; Wang, Iannotti & Nansel, 2009). This literature review and research study will focus mainly on direct and indirect bullying.

**Reasons for bullying.** Why a particular child is victimized varies, and can be summarized in three categories: 1) differences between the perpetrator(s) and the victim(s), 2) power seeking, and 3) lack of empathy. Differences (i.e., external negative deviations; Olweus, 2005, 1993) may be due to the victim's appearance (e.g., deformities, dress, weight), speech, physical strength, religion, race/ethnicity, sexual orientation, or preference of peers (e.g., Ferguson, San Miguel & Harley, 2009; Fitzpatrick, Dulin & Piko, 2007; Kulig, Hall & Grant-Kalischuk, 2008; Lumeng et al., 2010; Mooij, 2011; Nansel et al., 2001; Olweus, 1973, 1978; Poteat & DiGiovanni, 2010). Given not all

children who are different are victimized, the impact of children's differences is likely to also be affected by other factors.

Bullying perpetrators may seek to retain power over victims (Juvonen, Graham & Schuster, 2003; Kulig et al., 2008; Sijtsema et al., 2009; Veenstra et al., 2010), while obtaining benefits (e.g., money, homework), and peer prestige (Espelage & Asidao, 2001; Olweus, 2005). They seek strategic control, via status or affection (Veenstra et al., 2010). Group membership and norms can significantly influence the response to bullying (Jones et al., 2011); some children bully others to follow/please the crowd (Espelage & Asidao, 2001).

**Bullying process.** Bullying frequently occurs within group scenarios that do not permit the victim to readily escape, such as schools. In fact, most of children's bullying research has been focused on school children (Smith & Morita, 1999), or very specific child populations (e.g., autistic, disabled) (e.g., Bourke & Burgman, 2010; Humphrey & Symes, 2010).

There are multiple actors that take part in bullying. The perpetrator or *bully* is the child (or group of children) "who fairly often oppresses and harasses somebody else; the target may be boys or girls, the harassment physical or mental (p. 35)" (Olweus, 1978). Bullies – especially males – typically portray a combination of proactive aggression and physical strength (Crapanzano, Frick & Terranova, 2010; Olweus, 2005, 1993). Consistent with bullying's power imbalance nature, bullies are likely to be more popular, "cool" and respected than victims (Juvonen et al., 2003; Kulig et al., 2008; Sijtsema et al., 2009), in spite the dislike of peers (De Bruyn, Cillessen & Wissink, 2010). Empathy

has been negatively associated with bullying perpetration (Jolliffe & Farrington, 2011; Stavrinides, Georgiou & Theofanous, 2010).

Bullying *victims* may be passive/submissive or provocative. Passive victims tend to cry or withdraw when victimized, frequently suffer from low self-esteem, and may be physically weak. Provocative victims can have anxious or aggressive reactions, display concentration problems, hyperactivity, and be perceived as full of tension (Olweus, 2005).

*Bystanders* do not take the lead in bullying. They may support (reinforce, facilitate, follow), ignore, or be against it (defend) (Olweus & Limber, 2010). At school settings, they may play a key role in stopping the abuse by telling teachers about it (Novick & Isaacs, 2010). The bystander's decision to take an active role – as a facilitator or defender – or choosing to remain passive has been associated with his/her perception of peer norms, and his/her own problem solving coping capacity (Pozzoli & Gini, 2010). Low levels of empathy increase bystanders' likelihood of acting as bullying supporters or facilitators, whereas high empathy is associated to becoming active defenders (Gini et al., 2007; Nickerson, Mele & Princiotta, 2008).

A child may become a bully in response/reaction to the victimization suffered from others – that is, become a *bully/victim* (Barboza et al., 2009). The prevalence of bully/victims among self-report studies can range from 0.4% to nearly 29% (Schwartz, Proctor & Chien, 2001; Solberg, Olweus & Endresen, 2007), mostly due to methodological variations.

**Significance of bullying.** Olweus' landmark study on children's bullying found that school-aged victims are likely to also be bullied years after the incidents occurred,

and that school bullies may be aggressive towards others later in life (Olweus, 1973, 1978; 1977). More recently, he found that engaging in bullying during adolescence strongly predicts general and violent criminality during young adulthood – as many as 55% of all adolescent bullies engaged in at least one police-recorded criminal act by young adulthood (Olweus, 2011). Bender and Lösel (2011) found that while bullying at school predicted anti-social behaviors in adulthood, victimization during the school years did not.

Victimization increases the risk of becoming a bully (Barboza et al., 2009), and bullies are at increased risk for juvenile delinquency (van der Wal, de Wit & Hirasing, 2003), fighting, being injured in fights, and carrying weapons (Dukes, Stein & Zane, 2010; Nansel et al., 2003). An assessment of all 1994-1999 US school-associated violent deaths found that bullying victimization made it 2.57 times more likely for the victim to become a school-homicide offender (Anderson et al., 2001); 71% of all 1974-2000 US school shooters reported feeling bullied, persecuted or threatened before their attacks (Vossekuil et al., 2002). Suicidal ideation has also been linked to bullying (e.g., van der Wal et al., 2003).

**Bullying risk factors.** The literature reports a variety of individual, family, school and broader contextual level factors that increase children’s risk for bullying.

**Gender.** Gender is one of the strongest correlates of children’s bullying; reports are highest among males (e.g., Carlyle & Steinman, 2007; Craig et al., 2009; Espelage & Holt, 2001). Boys are more likely to engage in direct or physical forms of bullying, whereas girls are more likely to participate in relational and verbal bullying (e.g., Carbone-Lopez et al., 2010; Fekkes et al., 2005; Nansel et al., 2001; Wang et al., 2009).

Some studies report girls are more likely to be victimized than boys (e.g., Dussich & Maekoya, 2007; Eisenberg, Neumark-Sztainer & Perry, 2003); others do not find significant gender differences (e.g., Lumeng et al., 2010). Gender affects bystanders' approval of bullying (Veenstra et al., 2010), and can moderate empathy's impact on a child's reaction to it (Jolliffe & Farrington, 2011).

**Age.** Older children are more likely to bully others (Barboza et al., 2009; Craig et al., 2009; Espelage & Holt, 2001), whereas victims are usually younger (Carlyle & Steinman, 2007; Eisenberg et al., 2003; Espelage & Asidaao, 2001). Bullying reaches its peak in middle adolescence (Fitzpatrick et al., 2007; Powell & Ladd, 2010); differences by gender and type of bullying committed are noted, and can be affected by the child's age.

**Socio-economic status.** It is estimated that US's 8-11 year olds from different socio-economic status (SES) have equally strong odds for being directly affected by bullying (Lumeng et al., 2010), and that higher SES decreases US children's risk for physical bullying victimization (Wang et al., 2009). It is argued that SES serves as a bullying risk factor in contexts with significant income inequality (Elgar et al., 2009) – also related to lower availability of family, school, and peer support.

**Race and ethnicity.** Few studies have purposefully addressed the role of race/ethnicity in children's bullying. Furthermore, racial/ethnic differences in perpetration and victimization have been inconsistently noted in the literature. While the US-HBSC study found that Hispanics are more involved as bullies and African Americans (AA) are more frequently victimized (Nansel et al., 2001), other studies identify AA and Native Americans with the greatest likelihoods of engaging in bullying



(Carlyle & Steinman, 2007; Fitzpatrick et al., 2007), Whites with the highest rates of victimization (Eisenberg et al., 2003), or no significant differences at all (Lumeng et al., 2010).

***Risk behaviors.*** Alcohol-use increases children's risk for bullying, while smoking may also increase the risk for victimization (Nansel et al., 2001). Bullying has been associated with behavioral problems (Holmberg & Hjern, 2008; Juvonen et al., 2003), acceptance of weapon carrying, and having weapons at school (Dukes et al., 2010; Glew, Fan, Katon & Rivara, 2008; Nansel et al., 2003).

***Mental health.*** Children who suffer from attention deficit and hyperactivity disorders (Gini, 2008; Holmberg & Hjern, 2008), those who express psychotic symptoms (Kelleher et al., 2008), antisocial personality traits (Ferguson et al., 2009), difficulties internalizing problems (Juvonen et al., 2003; Reijntjes, Kamphuis, Prinzie & Telch, 2010), externalized psychosocial distress (Luukkonen et al., 2010; Nansel et al., 2001), and low fear reactivity and effortful control mechanisms (Terranova, Sheffield Morris, & Boxer, 2008) are more likely to bully others. Bullying has also been associated with anxiety (Juvonen et al., 2003; Swearer & Doll, 2001), loneliness (Nansel et al., 2001), low self-esteem and overcontrolling personality traits (Overbeek, Zeevalkink, Vermulst, & Scholte, 2010).

The literature is inconsistent regarding the existence and/or causal direction of the relationship between depression and bullying. Depression has been associated with victims (e.g., Carlyle & Steinman, 2007; Juvonen et al., 2003; Roland, 2002; van der Wal et al., 2003), perpetrators (e.g., Swearer & Doll, 2001; Yabko et al., 2008), and

bully/victims (e.g., Fitzpatrick et al., 2010); other studies say the relationship is weak (Ferguson et al., 2009).

***Heredity.*** While the Environmental Risk Longitudinal Twin Study found that children's risk for bullying/victimization is primordially genetic, differences were also found based on twins' non-shared environmental experiences. This reinforces the environment's significance as a determinant or moderating influence on children's bullying (Ball et al., 2008).

***Parents.*** Having parents who abuse alcohol or who have a permissive attitude towards children's alcohol use (Duke et al., 2010; Kulig et al., 2008); low parental involvement at school, expectations and/or support (Barboza et al., 2009; Wang et al., 2009); and low parental awareness of their child's victimization (Fekkes et al., 2005) has been associated to children's bullying. Consistent with other smaller scale studies with adolescents and young adults (Espelage et al., 2000; Jeynes, 2008), the Eunice Kennedy Shriver National Institute of Child Health & Human Development's (NICHD) longitudinal Study of Early Child-Care found that maternal involvement and monitoring predicts negative views of bullying, and the child's low participation in it (Georgiou & Fanti, 2010). Maternal warmth and support protects victims from the effects of bullying (Baldry & Farrington, 2005; Bowes et al., 2010). Research on the perspective of parents on their children's bullying victimization is limited (Sawyer, Mishna, Pepler & Wiener, 2011).

***Exposure to violence.*** The relationship between children's exposure to violence and their later engagement in bullying and other forms of violence has been noted, and may include children's victimization from child abuse or maltreatment (Bowes et al.,

2009; Duke et al., 2010; Dussich & Maekoya, 2007; Ferguson et al., 2009; Fitzpatrick et al., 2007), exposure to community and media violence (Anderson, 2004; Bok, 1998; Ferguson et al., 2009; Huesmann et al., 2003; Zimmerman, Glew, Christakis & Katon, 2005), and witnessing parental intimate partner violence (e.g., Bowes et al., 2009; Duke et al., 2010; Ferguson et al., 2009; Fitzpatrick et al., 2007; Laeheim et al., 2008). Continuous and escalating antisocial relationships among siblings also predict peer-bullying (Ensor et al., 2010).

**Peers.** The quality and type of friends a child has may increase his/her likelihood for violence. Bullies and bully-victims are likely to have more friends (Barbosa et al., 2009; Nansel et al., 2001; Wang et al., 2009) and poorer peer relationships (Nansel et al., 2001); a study with US middle school students found that 75% of bullies said their friends are also bullies (Espelage & Holt, 2001). Gang affiliated children are more likely to bully others (Ferguson et al., 2009; Fitzpatrick et al., 2007), and being dared by peers has been correlated to bullying perpetration (Laufer, Harel & Molcho, 2006). Negative peer support is significantly related to physical and verbal bullying (Williams & Guerra, 2007), while having supportive friends may buffer the impact of other risk factors (Hodges & Perry, 1997).

**Academic achievement.** While some studies have shown that children with lower academic achievement are at greater risk to bully others (Nansel et al., 2001) or be victimized (Eisenberg et al., 2003; Glew et al., 2008), findings from Olweus' three landmark studies show that male bullies' behaviors are not a consequence of poor grades or failures at school (Olweus, 2005). While both bullies and victims had lower GPAs, the study couldn't establish causality between these factors. More recent research has found

that victimization may predict lower academic achievement, standardized achievement test scores, teacher-rated academic engagement, and ability to concentrate in class (Hazel, 2010; Juvonen, Wang & Espinoza, 2011; Nakamoto & Schwartz, 2009; Schneider, O'Donnell, Stueve & Coulter, 2012).

***School.*** Bullying perpetrators are more likely to have weaker relationships with their teachers and perceive their school environment as poor/limited, while victims may show stronger bonding to teachers and perceive school as unsafe (Akiba, Shimizu & Zhuang, 2010; Barboza et al., 2009; Fitzpatrick et al., 2007; Nansel et al., 2001; Williams & Guerra, 2007). Disliking school, low school attachment, and girls' perceptions of low school support has been associated to higher bullying victimization (Eisenberg et al., 2003; Elgar et al., 2009; Schneider et al., 2012). Low teacher expectations and high teacher apathy could increase bullying among students (Barboza et al., 2009). Teachers' perceptions of school disengagement, and favoring carrying guns at school also increase students' risk for bullying engagement (Glew et al., 2008; Juvonen et al., 2003).

***Community.*** Even though self-reported rates of bullying and victimization are higher on school grounds than elsewhere (Nansel et al., 2003), a child may bully or be victimized in community or other non-school scenarios. Still, few community-level risk and protective factors for bullying were identified as part of this literature review. Their absence does not imply lack of importance. Consistent with research that shows the impact of the school's community environment on feelings of safety at school (e.g., Yablon & Addington, 2010), children's bullying research and prevention efforts must go beyond the school and family settings, and consider how the environment or community affects children's bullying.

The scientific literature on children's bullying surfaced in the late 1970s, parallel to the emergence of the resilience construct, and the growing interest on identifying those multidimensional factors that may protect children against risk behaviors, violence and other threats to their wellbeing. The impact of children's connections to conventional and non-conventional others was noted at this time, and continues to gain multidisciplinary interest from researchers in the fields of sociology, psychology, criminology, education, and public health.

### **Resilience**

Resilience has its origins in 1970-80s research on the needs of children and adolescents living in harsh contexts or factors that resulted in poor social, physical and mental health outcomes. Researchers also developed a special interest in identifying those characteristics or protective factors that helped children not only survive, but also thrive in spite of adversity. These factors not only protected children from immediate adversity and harm, but helped them succeed in reaching their developmental stage goals (Resnick, 2000).

As previously defined, resilience is the process through which an individual overcomes, copes or adapts to the negative effects of risk exposures, challenges to their development, or other threatening circumstances by employing protective factors to moderate the impact of that stress in a positive, socially-acceptable manner (Fergus & Zimmerman, 2005; Karapetian-Alvord & Johnson-Grados, 2005; Luthar, Cicchetti & Becker, 2000; Masten & Coatsworth, 1998; Masten et al., 1999; Smith & Carlson, 1997). It also refers to the presence of strengths – internal assets and external resources – and their effective utilization in coping with the exposure to multiple risks or stressors

(Ungar, 2008a). The literature describes a variety of stressors that may affect the wellbeing of children and adolescents, which may be acute (e.g., single-time argument with parent), chronic (e.g., long-term discrimination, neglect, exposure to violence), ordinary (e.g., common circumstances like taking a test), or unusual (e.g., natural disaster, sudden family illness or death) (Smith & Carlson, 1997; Ungar, 2008a).

**Prevention potential.** One of the most notable implications of resilience is the opportunity it allows for prevention efforts and interventions. While there is no “magic pill” to enhance resiliency in children, many of the characteristics that serve as protective or moderating factors of high-risk and threatening circumstances can be addressed via external interventions. Still, “the research evidence suggests more is better when it comes to strengths, and earlier is better when it comes to when resources are provided (p. 5)” (Ungar, 2008a); their cumulative effects must be considered.

An individual’s expression of resilience could be categorized in terms of social competence, problem solving skills, autonomy, or a sense of purpose or future (Edari & McManus, 1998). Furthermore, it has also been hypothesized that “resilience is not only an individual’s capacity to overcome adversity, but the capacity of the individual’s environment to provide access to health-enhancing resources in culturally-relevant ways (p. 288)” (Ungar et al., 2007). Therefore, resilience is a context-based concept that can be expressed distinctively across families, communities and cultures (Ungar, 2003; 2008a; 2008b).

**Resiliency factors.** There is no universal set of conditions that can protect all children, and having protective characteristics (i.e., assets or resources) do not always cause a resilient outcome (Brooks, 1994; Fergus & Zimmerman, 2005), nor are exclusive

of resilient children (Ungar, 2004). As Masten (2001) explained, resilient children do not possess special or rare characteristics. What distinguishes them from non-resilient children is their employment of developmental adaptation systems in spite of stress and threats. As Fitzpatrick (1997) explained, protective factors impact a child's risk for violence as a buffer, or increasing the risk in their absence. One of the most widely reported children's pro-resilience resources is possessing good intellectual functioning (Garmezy et al., 1984; Masten & Coatsworth, 1998).

**Connectedness.** Research on resilience has also identified having relationships with caring pro-social adults (e.g., parents, teachers) as one of the most important pro-resilience assets for children (Masten & Coatsworth, 1998; Masten, et al., 1999). In their systematic literature review on connectedness, Townsend and McWhirter (2005) identify Hagerty and colleagues' 1993 definition on connectedness as one of the most comprehensive and parsimonious one available – connectedness occurs “when a person is actively involved with another person, object, group, or environment, and that involvement promotes a sense of comfort, well-being, and anxiety-reduction (p. 293).” It is the “active involvement and caring for others (p. 4)” (Karcher, 2002).

Connectedness is a multidimensional construct that has been related in research to variables such as social support, involvement, emotional connection, and belongingness. It emerges from the feelings of relatedness and belongingness provided through the social support of parents, teachers, peers and other pro-social others (Karcher, n.d.). Attachment – focused mostly on the bond between the infant and the primary caregiver (Bowlby, 1944) – is considered an antecedent to connectedness; during adolescence, connectedness

emerges as a way to relate individuals to a larger social context beyond family and immediate peers (Hagerty et al., 1993; Lee & Robbins, 1995).

The concept of connectedness has its origins in the late 1970s-early 80s psychological studies of codependency (i.e., too much connection with others can be psychologically unhealthy), as well as Jessor and Jessor's theory of problem behavior (i.e., impact of conventional and unconventional associations on adolescents' behaviors), and Baumeister and Leary's belongingness hypothesis (i.e., connectedness emerges from the need to belong). More recently and beyond being a positive restatement of codependency, connectedness has been acknowledged as a protective factor against health and behavioral problems (Karcher, 2002; Townsend & McWhirter, 2005).

Connecting and having close relationships with others who care for, value, and emotionally or instrumentally support them is a recurring theme within resilient research. The ability to establish these types of connections – especially to pro-social adults, peers or entities – may increase a child's ability to adapt to stress and threats (Resnick, 2000). Levels of resilience in children have been found to be directly proportional to their levels of pro-social connectedness (Karcher, n.d.).

Michael J. Karcher, author of the Hemingway Measure of Adolescent Connectedness, categorizes children's connectedness as either conventional or unconventional. Conventional connectedness refers, for example, to the connections the individual has with his/her parents, school, teachers, and faith/religiosity. These have been found to predict social competence, achievement and participation in volunteer, non-school activities. Conversely, children with high levels of unconventional connectedness (as indicated by their connections to friends and the community) are more



likely to engage in delinquency if their conventional connections levels are low (Karcher, n.d).

CDC recognizes the significant role that connectedness – in particular, school connectedness and connectedness to pro-social adults – can have in improving children’s academic achievement, behaviors and overall wellbeing (CDC, 2009). Additionally, the Federal Interagency on Child and Family Statistics (2011) recognize the need to establish indicators on social connections and engagement with family, peers, school and the community, in order to assess their impact on healthy development and as protectors against multiple risk factors.

Some external resiliency-enhancing assets – which have also been identified as protective factors against bullying – include: a) having a close relationship to a caring parent figure; b) bonds to pro-social non-family adults; c) connections to pro-social others; d) attending effective schools; and e) engaging in religious activities (Ball, et al., 2008; Fergus & Zimmerman, 2005; Luthar, 1991; Masten & Coatsworth, 1998). These relate to connectedness to parents, family, peers, school, teachers, community, and religion – some of the most frequently mentioned within resiliency research (Resnick, 2000; Resnick et al., 1997).

**Resilience and religiosity.** Religious connectedness, religiosity and/or religious factors have been noted in the literature as a source of resiliency for children and adolescents, especially when referring to their involvement in delinquency and crime (Agnew, 2005; Hartman, et al., 2009; Windham, Hooper & Hudson, 2005). They may help individuals enhance their sense of meaning, coping strategies and resources (Chatters, 2000; Garbarino, 1999; Windham et al., 2005). As an external factor,

participating in religious activities may support resilience among children and adolescents (Howard, 1996; Karapetian-Alvord & Johnson-Grados, 2005; Masten & Coatsworth, 1998; Smith & Carlson, 1997), exposing them “to more conventional beliefs, opportunities, and connections with others through church attendance may be the mechanism by which religiosity serves as a protective factor (p. 378)” (Bernat & Resnick, 2009).

An analysis of the National Longitudinal Study of Adolescent Health (Add Health) data found that both private (i.e., frequency of prayer and importance of religion) and public (i.e., frequency of attendance at religious services, and/or youth group activities) religiosity were associated with lower likelihoods of violence during the past year (Nonnemaker et al., 2003). This contrasts with Good and Willoughby’s (2006) research, which found that spirituality (i.e., personal beliefs in God or higher power) is not as significant as religiosity (i.e., church attendance) in influencing adolescents’ behaviors. Additionally, children who report weekly church attendance have been found to be less likely to be involved in physical fights – as per self, parents and teachers’ reporting (Abbotts et al., 2004). Religiosity’s impact may also vary according to the child’s gender; being potentially more significant in protecting females than males for delinquency (Hartman et al., 2009).

### **Religiosity**

The role of religious factors on deviance and crime has been the focus of long-time debates and multiple controversies. The literature generally identifies Emile Durkheim’s positivist writings and consideration of religion as a basic mechanism for maintaining order in society as the origin of these controversies. Religiosity, as an

element of social support and control, is a classic central theme within Durkheim's thoughts on social cohesion and morality. He believed that individuals were less likely to participate in crime and deviance if they engaged in family, religious and community life (Durkheim, 1897, 1951).

Not all theorists shared his beliefs. For example, Lombroso stated that there were fewer criminals among atheists, and Merton questioned whether it was not a matter of being religious but of differences in behaviors among religious and non-religious people (Benda, 1995; Benda & Toombs, 2000). Others thought religiosity was just irrelevant in the matter.

In 1969, a climax point of this controversy was reached, when Hirschi and Stark published their study titled "Hellfire and Delinquency." In it they dismissed religion as an important element of social control, and concluded that religiosity (i.e., church attendance or belief in supernatural sanctions) does not influence adolescent delinquent behavior. While some accepted Hirschi and Stark's findings as the conclusion for the long-standing debate on the relationship between religion and delinquency, others questioned it and were motivated to pursue further research on the topic (e.g., Burkett & White, 1974). Hirschi and Stark's study has been criticized in terms of: a) the conclusions drawn, b) the lack of generalizability of its findings for youth living within other community contexts, geographical or socio-cultural locations, and c) the inappropriateness of using a single-item or such limited measures of religiosity (Burkett, 1993; Evans et al., 1995; Higgins & Albrecht, 1977; Tittle & Welch, 1983).

Ever since, the literature has been expanded on this topic with multiple original research, meta-analyses, and systematic literature reviews; these focus mostly on

delinquency and crime, but also include studies on health and other topic areas (e.g., Burkett, 1993; Evans et al., 1995; Johnson et al., 2000; Tittle & Welch, 1983). Generally, research supports the existing relationship between religiosity and deviance, delinquency and crime, and religiosity's overall protective nature. For example, a meta-analysis of 60 studies published between 1962 and 1998 found that religious beliefs and behaviors have a moderate effect on deterring criminal behavior (Baier & Wright, 2001). Inconsistencies in research findings on the effect of religiosity on crime have been historically based on methodological, theoretical and conceptual considerations; the impact of religiosity could vary according to the type of crime (Baier & Wright, 2001; Benda & Corwyn, 1997) and the role religion plays in the context under study (Krohn, Lanza-Kaduce, & Akers, 1984; Tittle & Welch, 1983).

**Defining religiosity.** Many different approaches have been used in the classification of religiosity – whether in terms of the individual's motives (i.e., extrinsic vs. intrinsic religiosity) (Woodroof, 1985); ritualistic and relational participation (i.e. church attendance, church participation) (Pickering & Vazsonyi, 2010); by distinguishing beliefs from experiences and actions (Abbotts et al., 2004); or thru general religious indexes (e.g., Hartman et al., 2009). In their systematic literature review on religiosity and delinquency, Johnson and colleagues (2000) found 6 dimensions of religious measures: attendance, denomination, prayer, salience/importance, Bible study, and religious activities. While church attendance and salience are the most frequently utilized ones, their limited standardization across research is notable (Bridges & Moore, 2002a, 2002b). The Association of Religion Data Archives recognizes the variety of religiosity

measures available, and recommends classifying them as public and private behaviors, beliefs, and affiliation (Scheitle, n.d.).

In an extensive literature review on religion and health, Chatters (2000) distinguished between the subjective and behavioral components of religious expression. Subjective components of religiosity refer to those attitudes, beliefs, experiences, self-perceptions and attributions involving religious or spiritual content (i.e., feeling close to God). On the other hand, she explains that behavioral components of religiosity consist of public (e.g., church attendance) and private (e.g., prayer, importance given to religion) religiosity factors. Nonnemaker and colleagues (2003) define public religiosity as a combination of the frequency of attendance to religious services – including youth group activities –, and private religiosity as the frequency of prayer, and the self-reported importance given to religion.

***Religiosity is multidimensional.*** The significance of the relationships found between religiosity and deviance depend on the operationalization of its measures (Benda & Corwyn, 1997). Chatters' (2000) systematic literature review on religiosity and health found that “systematic empirical work in the development of conceptual definitions of religious involvement indicate that it is a multidimensional construct (p.339).” Still and for over 30 years, less than 50% of studies on religiosity and delinquency and other disciplines have utilized three or more factors to measure religiosity (Johnson et al., 2000). Corwyn and Benda's (2000) literature review concluded that “studies that fail to find support for a relationship between religion and delinquency... almost invariably operationalize religiosity with single-item measures (p. 253).” The inappropriateness of

measuring religiosity unidimensionally has been noted (Higgins & Albrecht, 1977; Tittle & Welch, 1983; Woodroof, 1985).

It is also necessary to consider how frequently the individual engages in religiosity-related behaviors, his/her commitment in participation, and whether the individual attends because he/she wants to, his parents take him/her, or if he/she attends only to comply with social norms and expectations (Benda & Corwyn, 2001; Cretacci, 2003; Shah, 2004; Welch, Tittle & Petee, 1991). It cannot be assumed that higher frequency of engaging in religious acts is indicative of higher commitment to religiosity.

**Religiosity and children.** Most studies published by year 2000 (N=approx 1,200) on religion and health show there is a positive association between religious factors and various adult health indicators (Mallin & Hull, 2008). In his extensive review of original research from the social, psychological, behavioral, nursing, medicine and public health sciences published since the 1800s, Koenig (2008) found that “as many as 3,000 quantitative studies have now examined relationships between religion/spirituality and health (mental and physical), the majority reporting positive findings (p.1)”.

Unfortunately, most of the available research on religiosity and health is focused on adults (e.g., Derosé et al., 2000); research on religiosity and children is scarce and/or focuses on older adolescents (Bridges & Moore, 2002a, b). It has been suggested that less than 1% of peer-reviewed articles on children and adolescents address religious factors’ impact on their development (Boyatzis, 2003). The converse is true for research on religiosity and delinquency – they mostly focus on juveniles (Evans et al., 1995). Still, the limited available research suggests significant associations between high levels of adolescent religiosity and low levels of delinquency (weak to moderate associations)

and teenage drug and alcohol use (strong association) (Bridges & Moore, 2002a, 2002b). Unfortunately, these studies usually consider property and non-violent offenses; differences in the significance of religiosity vary according to the type of crime (Benda & Corwyn, 1997; Benda et al., 2006). Although the potential protective role of religiosity has been noted in the literature, limited research has focused on exploring the role that religiosity may play in resilience, protecting children and enhancing their wellbeing.

*Family and/or parental religiosity.* Parents' religiosity has been linked to adolescents' reports of delinquency, substance use and other risk behaviors (Bridges & Moore, 2002a, 2002b; Burkett, 1993; Nonnemaker, et al., 2003), especially among females (Erickson, 1992). Still, some studies show that the impact of parental religiosity on children depend upon the quality of that parent-child relationship (Shah, 2004). In fact, the National Study of Youth and Religion found that positive relationships with fathers are more likely among religious than non-religious youth (Smith & Kim, 2002).

Family religiosity may also act as a mediating factor against deviance by motivating adolescents to be engaged in traditional values and associate with conventional peers (Simons, Simons & Conger, 2004), especially among contexts that highly value religious beliefs (Shah, 2004). It is important to consider the interaction and combined influences of religious and related variables (e.g. parental religiosity) on children's behavior, rather than considering each variable individually. This is consistent with research on resilience, which suggests that the strongest predictor of resiliency is the accumulation of protective factors, not the presence of any particular one (Hartman et al., 2009; Jessor et al., 1995).

## **Religiosity in Puerto Rico**

In terms of religion, the U.S. Central Intelligence Agency's (CIA) World Fact Book reports that Christianity is the vastly predominant religion among PR's population, comprising Catholicism (85%) and Protestant denominations (<15%; including independent evangelicals and multiple Christian denominations) (CIA, 2012). Notwithstanding, experts on religiosity, congregations, and FBOs in Puerto Rico consider this CIA estimate to be vastly outdated. According to Rv. Miguel Cintrón (personal communication), Director of the Office of Community and Faith Based initiatives at the Puerto Rico Governor's Office, it is estimated that there are between 8,000 and 10,000 Christian (i.e., Catholic and Protestant) congregations in Puerto Rico, and that about 49% (1,800,000) of PR's population is Protestant.

In spite of their doctrinal differences, Christian denominations share similar values in terms of community, fellowship and serving others (e.g., C&MA, n.d.; Presbyterian Church USA, 2007; SBC, 1999; USCCB, n.d.; Wesleyan Church, 2008). Throughout history, PR Christian churches (from now on, churches) have served their communities via soup kitchens, peer education, tutoring, mentoring, and in other socio-health related areas.

PR churches and FBOs have also been active in multiple public advocacy efforts, including the end and prevention of child abuse, maltreatment and neglect, domestic violence, and other forms of violence. One of the most recent examples is their public and active participation in the *Pero Hoy No Es El Día* (But Today is Not the Day) marches and events at each of the 78 PR municipalities on Thursday, January 26, 2012. This event was organized by a non-profit organization (i.e., *Forjando un Nuevo*



*Comienzo, Corp.*) that serves female victims of domestic violence, to help communities raise their voices against corruption, crime, and violence against children, women, men, and the elderly (CyberNews, 2012; Pero Hoy No Es El Día, 2012). Its creator – Ms. Moraima Oyola – was recently selected as the “US Latina Leader of the Year” by the Congressional Hispanic Caucus Institute (Office of the Resident Commissioner of Puerto Rico, 2012). To the authors’ knowledge, no peer-reviewed studies have been published on the impact of specific violence-prevention programs, awareness or intervention efforts conducted by PR churches or FBOs.

### **Children’s Resilience, Religiosity and Bullying**

Limited research has examined the role of religiosity in children’s bullying, and the role of religiosity as a source of conventional connectedness and resilience against children’s violence. Furthermore, children’s connectedness and bullying research is limited to the impact of school connectedness, and fail to explore other pro-social/conventional associations the child may have. Children’s conventional connectedness to others may counterbalance unconventional connections that increase their risk for violence during adolescence (Karcher, 2002). In fact and specifically in terms of bullying prevention, the U.S. Office of Juvenile Justice and Delinquency Prevention (2011) recommend increasing the opportunity for students to be mentored by adults (i.e., teachers, staff, counselors) and pro-social peers at school. Karcher’s (2005) research on mentoring supports the positive outcomes that adult-to-youth mentoring programs may have in increasing connectedness, social skills, and others pro-social assets among school-children.

Generally, involvement in religious activities supports resilience against violence (Fergus & Zimmerman, 2005; Griffin et al., 1999; Howard, 1996; Howard et al., 2003; Karcher, 2002). It is therefore important to consider the role that religiosity may play on bullying. As explained by the *Stop Bullying Now* initiative, “as children grow in faith, they often develop an understanding of how best to relate to others” therefore “children’s participation in spiritual communities of faith often has a profound influence on how they react when confronted with bullying and other forms of aggression or violence” (HRSA, 2010). This is consistent with the role that empathy plays in children’s decision to engage in bullying and their reactions as bystanders; empathy has also been associated with children’s increased connectedness, which may enhance their resilience against bullying (Karcher, 2002).

Church attendance – as an indicator of public religiosity – may serve as a distal protective factor for youth violence and other risk behaviors (Jessor et al., 1998; Mallin & Hull, 2008; Méndez et al., 2003; Mercado-Crespo, 2006; Parrilla et al., 1997), and a source of conventional connectedness that positively orients the child against violence (Karcher, 2002). It may indirectly promote healthy behaviors, and may serve as a buffer to reduce the impact of negative factors that could hinder the child and community’s health (Jessor et al., 1998; Mallin & Hull, 2008; Smith, 2003), through learning of moral values and normative beliefs that reject bullying and support empathy towards others. Lower levels of moral disengagement and higher levels of affective empathy, moral affect or cognition have been associated to positive attitudes towards defending victims (Almeida, Correia & Marinho, 2010; Gini, Albiero, Benelli & Altoe, 2007). Research suggests that the reinforcement of empathy, sense of peer justice and moral factors as a

bullying prevention strategy is needed (Rayburn, 2004), and can potentially be effective among younger children who have not yet been desensitized from their peer's victimization (Jeffrey, Miller & Linn, 2001).

## Chapter 3

### Methods

Data for this cross-sectional research study came from a quantitative survey questionnaire for preadolescents. Specifically, this study was conducted in Puerto Rico – U.S. territory of Commonwealth status located in the Caribbean –, and in partnership with a community-based organization that serves at-risk low-income children across the Island.

#### Subjects and Setting

According to the most recent U.S. decennial census, the vast majority (98.8%) of Puerto Rico's residents are Hispanic (U.S. Census Bureau, 2010a). Around 25% of PR's population is composed of children under the age of 18 years, most (56%) of whom live under the U.S. poverty threshold (AECF, 2010a). Census data analyses conducted by the KIDS COUNT national project found that PR's child poverty rate (56%) is three times higher than that of the U.S. overall. Additionally, half (51%) of all PR's children live in families where no parent has full-time employment year-round (AECF, 2010a). Even though the 2006-08 American Community Survey (ACS) estimated that 66.4% of PR adults ages 25 years and older completed at least a high school degree, 84.1% of 16-18 year old PR adolescents are also estimated to be school drop-outs (AECF, 2010b; U.S. Census Bureau, 2010b).

**Research population.** The research population for this study is composed of preadolescent children ages 10-12 years that live in Puerto Rico. Specifically, this study

focused on high-risk children that regularly attend an afterschool program at low-income communities throughout the Island. This sample was obtained from the 2012 membership at all Boys & Girls Clubs of Puerto Rico (BGCPR) units – part of the Boys & Girls Clubs of America (see Appendix C for more information; BGCA, 2011a, 2011b). The BGCPR President served as the gatekeeper for this study (see BGCPR letter of support on Appendix D).

BGCPR serves around 5,000 children each year at its 11 unit locations across Puerto Rico. There are BGCPR units located in the following municipalities: Aguas Buenas, Arecibo, Carolina, Isabela, Loíza, Mayagüez, San Juan (PR capital), and San Lorenzo (Figure 3). Sixty three percent of its members are between the ages of 6 and 12 years old, most of whom are males (53%). Its over 150 full-time staff are highly trained at the undergraduate or graduate levels. BGCPR units operate after school programs on a daily basis at their specific locations; these may be BGCPR owned, at a school or a community housing complex.

BGCPR is a place where children find consistency and stability, while learning how to positively invest their free time in a productive manner. Its current program offerings focus on the following areas: a) education and professional development, b) character and leadership development, c) health and life skills, d) the arts, and e) sports, physical fitness and recreation (BGCPR, 2009). According to a recently released study on the social and economic impact of BGCPR, 87% of all BGCPR participants complete high school and 84% of them continue higher education training. This study also estimates that for every dollar invested in BGCPR's work, PR received about \$2.86 in economic benefits. BGCPR's impact can clearly be seen in 4 population groups: a) Club

members, b) their families, c) their served communities, and d) Puerto Rico as a whole (BGCPR, 2012).

**Sampling.** All active BGCPR units (N=11) were eligible to participate in this research study. These are mostly located within walking distance of elementary public schools and public housing complexes. All BGCPR units agreed to comply with the study's protocol, timeline, parental authorization and child assent process, and all other research requirements; therefore, no units were excluded from the study.

In terms of individual participants, all 10-12 year old, school-attending, Spanish-speaking boys and girls that regularly attend each of the participating BGCPR units were eligible to participate. Based on the most recent data provided by BGCPR, the total number of children served by all active BGCPR units (N=8) during the June 2010 thru June 2011 period was 4,170. Of those, 30.98% (N=1,292) were preadolescents ages 10-12 years old (BGCPR, 2011a, 2011b, 2011c, 2011d, 2011e, 2011f, 2011g, 2011h).

In terms of exclusion criteria, preadolescents with developmental or learning disabilities, non-Spanish speaking preadolescents, and those who report not being Hispanic were not eligible to participate. Additionally, all recruited preadolescents who were absent on the day the questionnaire is administered, refused to participate or did not bring the signed parental authorization form were not allowed to participate. All BGCPR preadolescent members who participated in any of the pre-dissertation instrument development research activities were also ineligible to participate. Non-participant preadolescents continued with their regular Club activities during the data collection period; the services they receive at BGCPR were not affected in any way.

The aforementioned BGCPR membership data were used for reference in calculating the final sample size for this study. Assuming a 95% confidence level, a 5% margin of error, and a 16% response distribution – based on the most recent available data on bullying victimization released (González, Suárez, Pedrosa & Ortiz, 2011; López-Cabán, 2011) by the time of the study’s implementation –, an overall sample of at least 179 preadolescents was required to conduct appropriate overall (i.e., all BGCPR units) analyses within this study.

A larger number of preadolescent participants was required to make comparisons across geographical areas; of the total 1,292 preadolescent (10-12 year old) BGCPR members, 590 attend San Juan Metropolitan Area BGCPR units, and the remaining 702 attend BGCPR units elsewhere (i.e., Other Municipalities). Based on the aforementioned sampling criteria, the minimum sample size needed to conduct both PR-wide analyses and by geographical location as part of this study was 314 (i.e., San Juan Metropolitan Area (n=154), Other Municipalities (n=160)), or at least 40 participants per BGCPR Unit (Table 3).

Assuming a response rate of 80%, at least 50 participants were recruited per location in order to obtain the minimum sample size; that is, a maximum of 550-600 participants were recruited to obtain at least the minimum sample size needed for this study. The principal investigator kept track of all completed questionnaires during the data collection process, and ensured the minimum sample size was reached.

Given some membership reductions and extraordinary circumstances encountered by distinct BGCPR Units during the research process (to be explained during the discussion section of this document) a total of 443 preadolescents were recruited for this

study. The final sample excluded those recruited preadolescents who were absent on the data collection day, did not bring their signed parental authorization form, were not within the age-range specified for the study or were enrolled in a special education program. The final sample size for this study was 426, for a 96% participants' response rate. Based on the previously published bullying victimization prevalence (16%; González et al., 2011), the sample's bullying victimization prevalence obtained (22.3%; see results section for more information about these findings), and the stated sample size, this study reflects a statistical power of 95.6%.

**Recruitment of participants.** The Club Director at each BGCPR unit served as the initial contact person at each of the study locations. He/she designated a BGCPR unit staff member (i.e. Social Worker, School Psychologist, him/herself) as Project Liaison for this project (Appendices E-F). The Club Director and/or Project Liaison, and Principal Investigator met in person or via telephone to discuss the recruitment and data collection activities pertaining to this project, and set up the most appropriate dates for the survey's administration. On average 2-3 site visits were required at each BGCPR Unit site to complete the data collection process.

An invitation packet was given to each potential participant, to take home to his or her parents/guardians. Each packet included the following documents: a) Invitation letter for parents – explaining the purpose of the interview; and b) Parental authorization form – for the parent/guardian to complete and authorize his/her child to participate (Appendices G-J). Parents were asked to provide an answer within one week of receipt of the invitation packet, by returning the completed documents to the Principal Investigator at their son or daughter's BGCPR unit. Verbal child assent was required



(Appendices K-L), and also collected by the Principal Investigator before starting data collection during each site visit.

### **Instrumentation**

The researcher attempted to utilize previously validated measures of bullying, connectedness and religiosity as part of this doctoral dissertation. Unfortunately, the availability of such validated measures among Spanish speaking preadolescents in Puerto Rico is unpublished or non-existent. A pre-dissertation research study was conducted independently from the hereby proposed research, to develop the survey questionnaire to be utilized in this dissertation. This instrument development process comprised 5 stages: 1) creation of an initial pool of items, 2) selection of items by an expert panel, 3) cognitive interviewing with representatives from the target population, 4) statistical pilot testing with members of the target population (to be discussed in the “reliability and validity of data” section within this chapter), and 5) revision of the instrument.

**Selected measures.** The selected bullying, connectedness, religiosity and socio-demographic measures included in this study’s data collection instrument were selected from an initial pool of items identified through an extensive pre-dissertation literature review, based on the advice of an expert panel – that is, doctoral committee members and other researchers experienced in violence, community-focused and statistical research. Specifically, the selected measures were obtained from the Olweus Bully/Victim Questionnaire (Solberg & Olweus, 2003), the Hemingway-Measure of Adolescent Connectedness (Karcher & Sass, 2010), and multiple public and private religiosity items found in small and large peer-reviewed studies (Table 4). The selection of socio-

demographic measures was based on previously conducted studies, and the bullying risk factors identified as part of the literature review.

*Olweus Bully/Victim Questionnaire.* Beyond advocating for children's right to safety and protection from bullying, Dr. Dan Olweus developed a bullying prevention program in the early/mid 1980s (i.e., the Olweus Bullying Prevention Program), as well as an instrument to assess bullying victimization and perpetration among school-children – the Olweus Bully/Victim Questionnaire (OBVQ). For the purposes of this academic research study, Dr. Olweus provided the researcher with the full instrument and supplementary information in the English language (Appendix M).

The OBVQ is a self-response, close-ended survey questionnaire for school children ages 11-17 years, which assesses bullying victimization, bullying perpetration and other related behaviors during the past 3-4 months at school (Hamburger, Basile & Vivolo, 2011; Olweus & Solberg, 2003). It includes a definition of bullying for all children to read prior to answering the questionnaire, and has been utilized among late elementary, middle school and high school populations at multiple international locations. This is considered by many to be the best known and most widely cited bullying victimization and perpetration instrument available in the English language.

Different types of measures are included within the OBVQ. These include global measures on bullying perpetration and victimization, and measures on 7 specific types of bullying perpetration and victimization. These allow for the identification of participants either as bullying perpetrators, bullying victims, bully/victims, and non-involved or potential bystanders (Solberg & Olweus, 2003).

A respondent is identified as a bullying perpetrator if he/she specifies having engaged in this behavior at least “2 or 3 times a month”. Similarly, a respondent is identified as a bullying victim if he/she specified having been a bullying victim at least “2 or 3 times a month”. If the respondent is identified both as a bullying perpetrator and a victim in these global measures, then he/she is noted as a bully/victim. If the respondent is neither categorized as a bullying perpetrator nor victim based on the aforementioned criteria, then he/she is noted as non-involved or a bystander (Solberg & Olweus, 2003).

The OBVQ also includes measures that help better understand the bullying scenario encountered by the participants. Specifically, these allow the researchers to describe: a) bullying perpetrators (i.e., age, sex, quantity); b) bullying incidents (i.e., length, location); c) participants’ response to bullying (i.e., whom they have talked to about it, potential exposure to and/or participation in bullying, how they feel upon witnessing it); and d) others’ response to bullying (i.e., frequency of school-adults, students or family adults’ involvement in trying to stop their bullying perpetration or victimization) (Solberg & Olweus, 2003).

While most of the psychometric testing information on the OBVQ has yet to be published, Olweus has released sample studies on its adequate utilization among Scandinavian populations (e.g., Olweus, 2011) and a general statement on the overall psychometric testing conducted as of March 2006 (Olweus, 2006). According to Olweus, multiple reliability (e.g., internal consistency), test-retest reliability, and validity tests of the OBVQ have been conducted with representative samples of over 5,000 students (Olweus, 2006). At the institutional level – that is, schools being the unit of analyses instead of individual students –, internal consistency rates have been established at

Cronbach's alpha=.90 or higher. At the individual level, the internal consistency of the bullying perpetration and bullying victimization scales have been established at Cronbach's alpha=.80 or higher. More recently, the internal consistency of the bullying perpetration and victimization scales has been estimated to be 0.88 and 0.87, respectively (Hamburger, Basile & Vivolo, 2011; Solberg & Olweus, 2003).

In terms of validity, different European studies have found Pearson correlations of items in the bullying victimization and perpetration scales to be within the .40-.60 range, for individual students. Validity has also been assessed in order to conduct comparisons across grade/class levels; it has been found to be within the .60-.70 range (Olweus, 1973, 1978; Olweus, 1977; Olweus, 1994).

Support for construct validity has been found through strong linear relations between the scores of the OBVQ bullying victimization scale and those of validated scales for depression, poor self-esteem and peer rejection. Strong linear relations have also been found between the OBVQ bullying perpetration scales and validated scales for several dimensions of antisocial behaviors (Bendixen & Olweus, 1999).

The first known published concurrent validity assessment of the OBVQ – conducted with a moderate sample of high school students in Virginia – found moderate evidence of concurrent validity of the OBVQ bullying perpetration and victimization scales. Self-report of bullying was strongly correlated ( $r = .12, p < .05$ ) to peer-nominated bullying and lower academic grades, while self-report of victimization was correlated with peer-nominated victimization ( $r = -.15, p < .05$ ) and academic grades ( $r = -.12, p < .01$ ) (Lee & Cornell, 2010).

*Hemingway Measure of Adolescent Connectedness.* This is one of the most complete instruments available to measure connectedness among adolescent and child populations. The Hemingway-Measure of Adolescent Connectedness (H-MAC) was created to respond to the need for an instrument to measure the impact of a school-based mentoring program, but its applicability and utility has gone beyond a specific program's scope. The H-MAC, currently in its 5.5 version, is available in English, Spanish, Chinese and French (Karcher, n.d.). It comprises a total of 78 items, and is estimated to take 15-20 minutes for completion at a 3<sup>rd</sup> grade reading level.

The H-MAC includes 15 subscales pertaining to the child's connectedness to self, others and society. These ecological subscales are: community, friends, self-in the present/self-esteem/identity, parents, siblings, school, teachers, peers, self-in the future/future orientation/hope, reading, kids from other cultures, religion, romantic partner, mother-specific, and father-specific (Karcher, 2005).

Considering the theoretical framework for this research and its emphasis on the differential associations the child has at multiple socio-ecological levels, this study will only focus on those subscales that measure preadolescent connectedness to others or society. Specifically, the research instrument will include the subscales for connectedness to his/her friends (6 items; Cronbach's alpha=.71), parents (6 items; Cronbach's alpha=.87), mother-specific (5 items; Cronbach's alpha=.83), father-specific (5 items; Cronbach's alpha=.92), teachers (6 items; Cronbach's alpha=.84), community (6 items; Cronbach's alpha=.73), school (6 items; Cronbach's alpha=.80), and religion (3 items; Cronbach's alpha=.91) scales. Scoring for each subscale is conducted manually, via the average of the items in each. The lower the average score obtained, the lower the level of

connectedness of the child in that specific subscale area (Karcher, n.d.; Karcher, 2005). The SPSS syntax for recoding, reliability estimates and scale creation for the H-MAC is provided in the scoring manual (Karcher, 2005).

Consistent with the literature, H-MAC's subscales and measures were designed considering connectedness as actions or affects pertaining specific relationships, activities and contexts (Barber & Schluterman, 2008; Karcher & Sass, 2010; Townsend & McWhirter, 2005). Furthermore, it was developed with culturally diverse child samples, and only items that were representative across diverse groups were included in the instrument (Karcher, 2005).

The predictive validity of the H-MAC has been confirmed by various studies, which have found inverse relationships between conventional connectedness subscales and recognized measures of risk behaviors in adolescents (e.g., Karcher, 2002; Karcher & Finn, 2005). Karcher and Sass (2010) conducted a study to assess the H-MAC measurement invariance across racial/ethnic groups and genders, with positive results: "subjects with equivalent latent construct scores respond similarly to items across ethnic/racial groups and gender (p.283)". In terms of the sub-scales' reliability, this same study yielded internal consistency values ranging from 0.68 thru 0.89.

***Religiosity measures.*** The religiosity-related measures included in this study's instrument were identified through a systematic literature review on children's violence and religious factors conducted via PsycINFO/OvidSP. Through it, the researcher identified different types of religiosity measures utilized in empirical research with children populations – all in the English language. The identified measures are presented on Table 4, and served as the pool of religiosity measures for this research. A final

selection was made of religiosity measures previously utilized in empirical research by Abbotts and colleagues (2004), Burkett (1993), Cretacci (2003), Ellison and colleagues (2001), Evans and colleagues (1995), and Nonnemaker and colleagues (2003).

Through the National Longitudinal Study of Adolescent Health (i.e., AddHealth), Nonnemaker, McNeely and Blum (2003) identify two main types of religious factors among adolescents – public and private religiosity. Consistent with AddHealth’s research, the current study will attempt to create scale measures for religiosity overall, public religiosity, and private religiosity.

Consistent with the reviewed literature, this study also inquired about preadolescents’ perceptions on their parents’ religiosity. A single, multiple-choice item measured parental religiosity. It was defined as the importance that parents give to church and religion, as reported by preadolescents (Cretacci, 2003).

**Adaptation of measures.** The selected instruments and measures for this study needed to be culturally adapted and/or translated into Spanish prior to its pilot testing among Puerto Rican preadolescents. To this purpose, a two-stage cognitive interview process was conducted as part of the aforementioned pre-dissertation research. Puerto Rican and Hispanic origin preadolescents from a Tampa, Florida community-based afterschool program served as Child Advisory Board members during this stage, and provided feedback on the Spanish translation and appropriateness of all measures. The items were revised based on the Child Advisory Board’s feedback, prior to conducting individual cognitive interviews with Puerto Rican preadolescents at an afterschool community-based program in San Juan, Puerto Rico. The “think-aloud” approach was used; that is, the student was asked to share with the researcher his/her thoughts about

each question, what he/she understands by it, how he/she decides to answer it, and why. The principal investigator revised the instrument based on the feedback provided by the participants. A research assistant reviewed the audio from these interviews to confirm the accuracy of the edits made, prior to its statistical pilot testing at one BGCPR unit in San Juan, Puerto Rico.

The official language for this research study is Spanish, the language most commonly spoken at the research location – Puerto Rico. All research materials and activities were developed and will be implemented in Spanish. An external linguistics specialist confirmed the translations as accurate (Appendix N). The final product of this pre-dissertation instrument development and pilot testing process is included in this proposal (Appendices O-P).

**Variables.** Table 1 presents a list of all the variables included in this survey questionnaire, including their conceptual and operational definitions. These are categorized as: a) Descriptive and socio-demographics, b) Role in bullying, c) Types of bullying victimization, d) Types of bullying perpetration, e) Characteristics of bullying perpetrators, f) Bullying incidents, g) Response to bullying, h) Others' response to bullying, i) Connectedness, and j) Religiosity related measures.

Items were scored based on the specific guidelines provided by the developers of each of the scales and measures included in the instrument. In compliance with SPSS statistical software analyses requirements, “Yes” was scored 1 and “No” was scored 0 for dichotomous response items. Categorical multiple-choice items and different types of Likert-scale items are also included in the instrument. After any reverse-scored items were properly recoded, higher Likert-scale scores indicated positive or stronger



agreement with the item-statement. Items were recoded into the same or new variables as needed, and as specified on Table 1.

### **Reliability and Validity of Data**

Professionals with demonstrated expertise in bullying, youth violence and PR children reviewed, refined, and assessed the content validity of the final instrument, prior to its statistical pilot testing. According to the classical test theory framework, the researchers aimed at identifying reliability and validity evidence for the use of each of the scales and index measures included in the questionnaire. In terms of content validity, doctoral dissertation committee members served as an expert panel to confirm the items to be included during the pre-dissertation instrument development phase. This panel included experts on family violence, youth violence, statistical measurement and school-aged children research.

Exploratory factor analyses (EFA) were utilized to assess the factorial validity of all scales for this study, by exploring the underlying structure of the collection of observed variables identified for each. EFA foremost served the purpose of data reduction – to identify and eliminate any questionnaire items that were irrelevant (i.e., construct irrelevant variance and construct over-representation). The factorability of the items within each of these scales was assessed through the calculation of inter-item correlations (e.g.,  $>.5$ ) and two measures of sampling adequacy (MSAs): Bartlett's test of sphericity, and Kaiser Myer Olkin (KMO) test. The following criteria for the selection of items was followed: a) statistically significant Bartlett's test of sphericity results; b) KMO approaching 1.0 (i.e.,  $>.5$ ); c) communalities preferred to be  $>.5$ ; d) maximum of

25 iterations for convergence; and e) Kaiser's criterion (eigenvalues greater than 1) (Table 5).

As part of the EFA and in order to adjust the factor axes to achieve a simpler and more adequate factor solution, principal axis factoring extraction and direct oblimin rotation was conducted, assuming shared variance among the items. The minimum sample size for this statistical pilot test was 42, in order to comply with the minimum of 3-5 cases per item in each scale required for the EFA analyses. Participants were preadolescents ages 10-12 who were members of the afterschool program at one of the BGCPR units in San Juan, Puerto Rico.

In terms of reliability, the Cronbach's alpha statistic was used to assess the internal consistency of each scale – that is, how do items within each scale correlate with one another to reflect a coherent construct. A statistically significant ( $p < .05$ ) Cronbach's alpha score of at least 0.6 was considered acceptable for each scale (Tavakol & Dennick, 2011). The instrument was revised as needed prior to the dissertation study's implementation.

**Bullying perpetration and victimization scales.** Statistical pilot test data showed that the bullying perpetration and victimization scales were moderately or highly reliable (Cronbach's alpha=.609 and 1.00, respectively) among PR preadolescents. These scales include items pertaining to bullying in the forms of physical aggression, social isolation, verbal violence, rumor spreading, stealing and damage to property, and threats. While including sexual, racial and other forms of bullying in the bullying victimization scale did not alter its internal consistency, their inclusion reduced the internal consistency level for the bullying perpetration scale (Cronbach's alpha=.574).

**Connectedness scale and sub-scales.** Statistical pilot test data showed that the overall connectedness scale was highly reliable (Cronbach's  $\alpha=.746$ ). The reliability of the connectedness sub-scales was found to be moderate to acceptable, with internal consistency values ranging from 0.60 thru 0.85 (Tavakol & Dennick, 2011). This includes subscales for connectedness to school (Cronbach's  $\alpha=.814$ , 6 items), parents (Cronbach's  $\alpha=.73$ , 3 out of the 6 original items), teachers (Cronbach's  $\alpha=.661$ , 4 out of the 5 original items), friends (Cronbach's  $\alpha=.849$ , 6 items total), community (Cronbach's  $\alpha=.791$ , 4 out of the 5 original items), and religion (Cronbach's  $\alpha=.60$ , 2 out of the 3 original items).

**Religiosity scales.** Two religiosity-related scales were identified via exploratory factor analyses: religious importance and commitment to religion. The scale on religious importance included items pertaining to how important it is for the participant to obey what God says or His commandments, and his/her practice of seeking help at church or religion when encountering problems (Cronbach's  $\alpha=.804$ , 2 items). Items considered for inclusion in this scale were selected from previously utilized one-item measures on this construct (e.g., Ellison, Boardman, Williams & Jackson, 2001; Cretacci, 2003; Evans, Cullen, Dunaway & Burton, 1995).

The scale on commitment to religion included items pertaining to the participants' self-reported frequency of participation in church-related activities and listening to religious programming on the radio (Cronbach's  $\alpha=.799$ , 2 items). This contrasts with a previous research study in which Evans, Dunaway and Burton (1995) created a scale of participation in religious activities that also inquired about religious affiliation, frequency of reading the Bible or religious sacred book, and frequency of tuning in to

religious broadcasts on television or radio (Cronbach's  $\alpha=.79$ , 4 items). More recently, Cretacci (2003) also created a 5-item scale on commitment to religious activities that inquired about the child's religious affiliation, attendance to church and church related events, importance given to religion, and frequency of prayer (Cronbach's  $\alpha=.87$ ).

The identified scales through the pre-dissertation research process were not specifically related to the two main aspects of religiosity of interest for this study – public religiosity and private religiosity. For the purpose of this dissertation research, these two specific religiosity scales were explored based on the literature reviewed. Public religiosity was defined as a scale that included responses to the following items: a) frequent (i.e., at least once a month or almost every week) church attendance during the past 12 months, b) frequent (i.e., at least once a month or almost every week) participation in church activities during the past 12 months, and c) engagement in at least 1 type of church activity during the past 12 months. Private religiosity referred to: a) importance given to church and religion, b) frequency of prayer, and c) frequency of Bible or sacred book reading. Religiosity overall was defined as a composite of public and private religiosity measures.

### **Data Collection**

Data were collected from participants through an individual, self-report, paper-and-pencil questionnaire that was administered in group settings. The Principal Investigator (PI) and a Research Assistant (RA) served as the lead facilitators for this survey. A BGCPR staff member was also present during the data collection process. The survey was designed to last 75 minutes, as per results from its statistical pilot test, and

included the following sections: 1) Child assent, instructions and definitions (10 minutes); 2) Part 1-Sociodemographic characteristics (5 minutes); 3) Part 2-Being bullied (20 minutes); 4) Part 3-Bullying others (15 minutes); 5) Part 4-Connectedness to others (15 minutes); and 6) Part 5-Religiosity (10 minutes).

The facilitator kept the time for each section, and advised students on when they could move on to the next. If there were any students that had not answered all items in any given section by the time that section's time is up, they were asked to move on to the next section along with the rest of the group. Consistent with the guidelines provided for the administration of the Olweus Bully/Victim Questionnaire (Olweus, 2001), additional time was given at the end of the survey for those students to go back and complete any missed items. This time-delimited sections format in answering the questionnaire was similar to the ones utilized on standardized testing of academic progress employed in PR public and private schools.

Prior to distributing the questionnaires, the PI read a child assent script (Appendices K-L), and instructions for participation (Appendices Q-R), and asked preadolescents whether they agreed and assented to participate. Survey instructions were read and discussed (see page 1 of the survey questionnaire on Appendices O-P). Any participants' questions on the research process were answered. Additionally, the researchers read standard definitions on bullying, connectedness, and religiosity to all participants, as presented on Appendices S-T. This was done based on the feedback received during the cognitive interviews, conducted as part of the pre-dissertation instrument development study.

All survey questionnaires were printed one-sided, on letter-sized (8 ½" x 11") white paper. The research team provided each participant with one numbered questionnaire and a pencil with eraser to complete it. The survey was administered behind closed doors, in classrooms that allowed each participant to have a chair and desk space. Classrooms were located within each BG CPR unit's installations. The BG CPR project liaison and the PI ensured the rooms had comfortable temperatures and were as quiet as possible for participants to complete the survey. Each participant completed his/her survey during one study visit.

**Incentives.** In appreciation of their time, all participating preadolescents at each BG CPR unit were invited to a pizza party at the end of the data collection process. The researcher covered all costs incurred. Different or additional incentives (e.g., cookies, other snacks) were given to participants at each BG CPR unit, as per the discretion of each Unit director.

**Timeline.** This research project was expected to last approximately 9 months, based on USF-IRB review time requirements and timing feasibility at the BG CPR units. Below is the final timeline followed for this research study. It was adapted and changed along the way, based on recommendations from the Doctoral Committee and BG CPR Units. Specific day-to-day data collection schedule changes were also considered due to weather conditions, political season campaigning events at the Units' communities, and violence-related incidents which occurred at some of the sites.

|              |   |
|--------------|---|
| March 2012   | Statistical pilot testing of the instrument, analyses and revisions to instrument (pre-dissertation research) |
| May 25, 2012 | Proposal presentation   |

|                       |  |
|-----------------------|--|
| June - July 2012      | IRB application submission and revisions |
| August 2012           | Recruitment of participants              |
| Aug 27 – Oct 23, 2012 | Data collection                          |
| Aug - Nov 2012        | Data entry and analyses                  |
| Dec 2012 – Jan 2013   | Dissertation write-up                    |
| February - March 2013 | Dissertation completion                  |
| March 7, 2013         | Dissertation defense                     |

### **Data Analyses**

Quantitative data was analyzed using the Statistical Package for the Social Sciences (SPSS) Statistics, version 20.0 (SPSS Statistics, n.d.). Descriptive statistics were assessed for all variables in this research, in order to assess the frequency and prevalence of different socio-demographic, bullying, connectedness and religiosity related measures among participants. Contingency table and Chi Square analyses evaluated the statistical relationship between these variables. The correlation between preadolescents and parents' religiosity was assessed. Regression analyses assessed the effect of the different types of connectedness on the likelihood of bullying or being a bullying victim. Additional emphasis was given to religious connectedness, individual and parental religiosity.

**Data entry, cleaning and refinement.** All data for this research was collected in paper-and-pencil format, and managed – including manual data entry, cleaning and analyses – by the Principal Investigator. As part of the data cleaning process, 10% of the completed questionnaires per BGCP unit location were randomly selected for review of data entry accuracy.

As with any type of quantitative research, there's a possibility of respondents choosing not to answer specific items within the survey questionnaire. In order to reduce inadvertent non-response to any of the questionnaire items, the facilitators asked each participant to review once again if he/she saw all questions and completed all the questions he/she wanted to answer before turning it in. Additionally, questions were printed on only one side of the questionnaire booklet's pages, to avoid the possibility of participants not realizing there were questions on the back of each sheet. In spite of these efforts, some missing values were still obtained.

As part of the data refinement process, multiple variables in this study needed to be recoded prior to data analyses. For example, the open ended responses provided for the participants' age (i.e., YEARS) was grouped into the following categories: 10 years, 11 years, or 12 years. The open-ended responses provided for the participant's DOB (i.e., date of birth) were utilized to confirm the age in years of each participant. In terms of the participants' family composition, the variable FAMILY was recoded to reflect the following categories: mother only; father only; mother and father; mother and siblings; father and siblings; mother, father and siblings; grandparent only; grandparent and siblings; grandparent, mom and siblings; grandparent, dad and siblings; and other.

The recoding of variables was not limited to socio-demographic measures. In terms of bullying and in order to distinguish the different types of bystander behaviors reported by the participants, questionnaire item 51 was recoded into new dichotomous yes/no answer variables to identify BS-DEFENDERS (i.e., answered yes to "*trato de ayudarlo(a) de alguna forma*"), BS-REINFORCER (i.e., answered yes to "*Me uno y participo del bullying en contra de ese(esos) estudiante(s)*"), BS-PASSIVE (i.e.,



answered yes to either “*no hago nada, porque pienso que el bullying está bien*”, “*miro a ver que pasa*”, or “*no hago nada, pero pienso que alguien debiera ayudarlo(a)*”), or BS-DISENGAGED (i.e., answered yes to “*nunca me he dado cuenta de que algun estudiante de mi edad haya sido víctima de bullying*”). Additional variables pertaining to participants’ role in bullying, types of bullying perpetration and victimization, connectedness and religiosity also were recoded prior to analysis – and as specified on Table 1.

**Analytical strategies and rationale.** After the data entry, clean-up and recoding process was complete, data analyses were conducted to address each of the research questions and objectives. The unit of analyses for this study was the individual preadolescent participant. Analyses were also stratified by the geographical location where the participants attend their BGCPR unit’s afterschool program (i.e., San Juan Metropolitan Area or Other Municipalities), their self-reported gender (i.e., male or female), age (i.e., 10 years, 11 years, 12 years), and church attendance (i.e., yes or no). The analytical strategies selected to address the research study’s purpose and their rationales are presented below, and summarized on Table 6.

**Descriptive analyses.** Participants were described in aggregate format in terms of their socio-demographic characteristics, including their age, gender, nationality, birth location, language spoken at home, family composition, grade level, type of school attended, number and quality of friends, and religious affiliation. Describing the participants in terms of these socio-demographic characteristics best helped interpret the research findings and its implications for this specific population group.

Descriptive, central tendency and dispersion statistics (i.e., frequency, proportions, mode, means and standard error) were calculated for all socio-demographic measures in this study, as appropriate for each type of variable. These were also calculated in terms of the prevalence of bullying victimization, bullying perpetration, bullying-related factors, participants' levels of connectedness to each differential association (i.e., parents, peers, teachers, school, church), individual religiosity, and perceived parental religiosity.

Contingency table analyses – as an appropriate method to display and analyze nominal data consisting of different variables with two potential outcomes, also known as cross-tabulation analyses (Rosner, 2000) – were used to evaluate the statistical relationship between bullying, connectedness and religiosity related indicators by location, and self-reported gender, age, and church-attendance of the respondent. Statistical significance for differences in proportions and means were established at  $p < .05$  and  $p < .001$ . Chi-Square ( $X^2$ ) was used to compare proportions between two or more binary or categorical groups (e.g., gender, church attendance, location, school type, location, role in bullying, type of bullying victimization and perpetration).

ANOVA analyses helped determine if any statistically significant mean differences existed in the levels of connectedness, by age and grade-level of participants. Its coefficient of determination ( $R^2$ ) helped explain how much of the variance in connectedness to each differential association is explained by the age and grade of participants. Conducting an ANOVA reduced the error from conducting independent t-tests for each age and grade level.

***Multivariate analyses.*** The strength and direction of the relationship between connectedness to selected differential associations and participants' role as a bullying victim or perpetrator was assessed via Pearson Correlation ( $r$ ) analyses. The original, non-recoded, continuous bullying victimization and bullying perpetration indicators were utilized for these analyses. Pearson Correlation analyses were also utilized to assess the strength and direction of the association between the preadolescents' perceived parental religiosity and their role as bullying perpetrators or victims.

Two separate Sequential Multiple Linear Regression (MLR) analyses were conducted, considering the original continuous bullying victimization and perpetration as its continuous dependent variables in each. These assessed how much the variance in bullying victimization and perpetration (i.e., MLR1-Victim and MLR2-Bully, respectively) was accounted for by the linear and sequential combination of connectedness to differential associations and other select characteristics of the participants.

Participants' connectedness to differential associations was included in the MLR analyses in a stepwise manner, based on the socio-ecological level they belong to, and as per the conceptual model for this study (Table 6 and Figure 2): a) Step 1: Individual level (i.e., age), b) Step 2: Interpersonal Level/Microsystem (i.e., C-Parents, C-Friends, C-Teachers), c) Step 3: School Level/Mesosystem (i.e., C-School), d) Step 4: Community Level/Exosystem (i.e., C-Neighb), and e) Step 5: Culture Level/Macrosystem (i.e., C-Rel). Apart from the connectedness-related variables, age will also be considered as a continuous independent variable for these MLR analyses. Other dichotomous independent variables included are location, self-reported gender, self-reported church-

attendance, having antisocial friends, having heard about bullying at school, church or BGCPR, and perception of parents, teachers and church leaders' disappointment if they were involved in bullying.

Logistic Regression (LR) analyses assessed the odds probability of participants engaging in different bullying roles (i.e., bullying perpetration, bullying victimization, being a bully/victim, and a bystander), as their levels of religiosity and select socio-demographic characteristics changed. Specifically, four LR models were created for this purpose with dichotomous measures of participants' role in bullying (i.e., victim (LR1), bully (LR2), bully/victim (LR3), or bystander (LR4)) as its respective dependent variable. The continuous and categorical independent variables for all logistic regression analyses were: public religiosity, private religiosity, religiosity overall, location, gender and age.

### **Human Subjects' Protections**

Approval from the University of South Florida Institutional Review Board (USF-IRB) was obtained prior to initiating this research project. Furthermore, the researcher obtained the support from the President of this PR-wide community-based organization prior to conducting any recruitment or data collection activities at their sites or with their members.

The researcher administered all survey questionnaires at each BGCPR unit. A trained graduate public health student and an alumni assisted during the survey administration. The major professor/doctoral committee chair, the principal investigator, and research assistant were the only persons with access to the participant's name and contact information.

Preadolescents were not forced, obliged or coerced in any way to participate in

this study. The only benefits will be potentially obtained in the long-term, when programs and policies based on the research findings are implemented at BGCPR and/or elsewhere. Informed parental authorization and verbal child assent was required.

The researcher ensured confidentiality during all data collection activities, and anonymity was ensured in the safekeeping and management of the data. Completed questionnaires and parental authorization forms were stored on separate locked file cabinets, at a locked room within the principal investigator's home. All electronic materials (e.g., analyses) were stored on a password protected computer. Additionally, the Principal Investigator saved a back-up of the electronic data on a USB removable hard-disk, which was stored in a locked file cabinet in a locked room. Only the PI had access to the key of the locked file cabinet, and the key to the room where it is located. In terms of electronic records, only the PI had access to the password to log in to the computer and access them.

All data, physical and electronic, will be stored for 5-7 years after the final report has been submitted to the USF IRB. At that time, physical documents will be destroyed via shredder, and the USB removable hard-disk will be erased and reformatted. Electronic data will be deleted from the password protected computer, secure server and all backups.

Only data essential to this study's purpose was collected. All research findings were presented in aggregate format.

Participants were not expected to be exposed to risks or threats beyond those encountered daily in life through their engagement in this study. In the case of any psychological or emotional stress encountered due to the topics discussed during the data

collection activities, referrals to counseling services were available to be offered by BG CPR. Additionally, the researcher was available to talk to parents, staff and students about bullying upon completion of data collection activities. BG CPR personnel and/or other local bullying experts were to be contacted to offer supplementary resources and assistance at participating schools, if needed.

**Language accuracy and cultural appropriateness.** All project materials were reviewed for Spanish language accuracy and cultural appropriateness. Parental authorization forms were originally developed in English as per the USF-IRB guidelines, and then translated to Spanish by a native Puerto Rican children's researcher who is fully bilingual (Spanish, English) and experienced in designing bilingual research instruments and health education materials for PR and US Hispanic audiences. Information letters for parents and the child assent scripts were developed initially in Spanish, and then translated into English for Doctoral Committee and USF-IRB review purposes. All Spanish-language materials and translations were reviewed and confirmed appropriate by an external language specialist (Appendix N).

## **Chapter 4**

### **Results**

The purpose of this study was to explore potential mechanisms to enhance resiliency against bullying among preadolescents from a community-based after school program (i.e., Boys and Girls Clubs of Puerto Rico, BGCPR) in Puerto Rico (PR). This inquiry specifically explored the roles of connectedness and religious factors, and addressed several gaps in the children's bullying, resilience and religiosity research literature. To this purpose, the sample was described socio-demographically, as well as in terms of participant's knowledge about bullying and friends' characteristics. Additionally, three research questions with their corresponding objectives were explored. For more information on the specific data analyses performed to address each research question and objective, please refer to Table 6.

#### **Socio-demographic Description of the Sample**

The sample included participants from BGCPR units within the San Juan Metropolitan Area (43.9%; SJ Metro), and Other Municipalities (56.1%) across PR. It was composed of slightly more boys (51.2%) than girls (48.8%). In terms of age, there were slightly more 11-year-old participants (36.2%) than 10 or 12 year olds.

The vast majority of participants said they were Puerto Rican (95.3%). Most were born in Puerto Rico (92.3%); 5.9% were born elsewhere within the United States, and 1.9% were born at an international location (e.g., Dominican Republic). Three quarters (75.6%) of all participants said that Spanish was their primary language; 22.1% said they

spoke both English and Spanish, and 2.1% spoke mostly English at home. Nearly half of them (46.7 %) lived within single mother households, and 55.9% reported not living with any siblings.

In terms of grade levels, most participants were either in 5<sup>th</sup> (23.5%), 6<sup>th</sup> (37.3%) or 7<sup>th</sup> (26.8%) grade; 12.2% reported being in 3<sup>rd</sup>, 4<sup>th</sup> and 8<sup>th</sup> grade. Most participants were enrolled at public schools (90.4%). Others regularly attended private (5.4%) or religious (i.e. Christian or Catholic, 3.5%) schools.

The majority of participants said they regularly attended church (70.7%). Still, only 65.5% reported being part of a specific religion. Most participants said they had no religion (34.5%), were Christian (32.2%) or Catholic (26.1%).

Only 6.6% of all participants did not report engaging in any BGCPR programs or activities. The types of BGCPR activities most frequently reported were tutoring (57.7%), summer camps (53.3%), sports teams (47.9%) and dance classes (42.7%).

**By location.** A larger proportion of participants within the San Juan Metropolitan Area (SJ Metro) subsample reported having siblings (63.1%) compared to participants from Other Municipalities (50.2%). These differences were statistically significant ( $X^2=7.073$ ,  $df=1$ ,  $p=0.005$ ) (Table 7).

Statistically significant differences were also found in the distribution of participants within the SJ Metro and Other Municipalities subsamples across grade levels ( $X^2=16.565$ ,  $df=6$ ,  $p=0.011$ ). Participants from SJ Metro represented lower grade levels than those from Other Municipalities (Table 7).

A significantly larger proportion of participants from SJ Metro (9.1%) said they were not engaged in any specific, formal BGCPR activities, clubs, teams or groups,



compared to their counterparts from Other Municipalities (4.6%;  $X^2=3.442$ ,  $df=1$ ,  $p=0.049$ ; Table 7). Larger proportions of participants from Other Municipalities reported engaging in tutoring or homework assistance programs (63.2%), field trips (32.6%) or leadership development activities (14.2%) at their respective BG CPR units, compared to participants from SJ Metro (50.8%, 24.1%, and 7.5%, respectively). Differences in participants' reporting of engaging in each of these activities were statistically significant ( $p<0.05$ ) (Table 7).

**By gender.** Statistically significant differences by gender were reported only in terms of their participation in specific BG CPR activities. A larger proportion of girls participated in dance (57.2% vs. 28.9%,  $p=0.000$ ), summer camp (59.6% vs. 47.2%,  $p=0.007$ ), field trips (36.1% vs. 22%,  $p=0.001$ ), art (21.6% vs. 14.2%,  $p=0.046$ ), and leadership development (15.4% vs. 7.3,  $p=0.009$ ) activities, compared to boys. More boys than girls reported participating in sports teams or classes at their BG CPR unit (53.7% vs. 41.8%;  $p<0.05$ ) (Table 8).

**By age.** As expected, older children were at higher grade levels ( $p=0.000$ ) (Table 9).

**By church attendance.** Statistically significant differences in church attendance were found by the birthplace of participants ( $X^2=6.610$ ,  $df=1$ ,  $p=0.037$ ). While the majority of both church attending (94%) and non-church attending (88%) participants reported being born in Puerto Rico, a larger proportion of non-church attending preadolescents said they were not born in Puerto Rico (12%, US-other and other location). The majority of the participants who reported attending church regularly said they were Christian (i.e., protestant/evangelical, 39.9%) or Catholic (31.2%).

Additionally, the majority of non-church attending participants (67.2%) said they did not belong to any religion, compared to 20.9% of church-attending participants. These differences were highly significant ( $X^2=87.905$ ,  $df=1$ ,  $p=0.000$ ) (Table 10).

Significant differences ( $X^2=3.277$ ,  $df=1$ ,  $p=0.049$ ) were also found between church attenders and non-attenders in terms of participants' non-engagement in BGCPR activities. A larger proportion of children who attended church regularly said they did not engage in any BGCPR activities (8%), compared to those participants who did not go to church (3.2%) (Table 10).

### **Participants' Knowledge About Bullying**

Most participants said they understood the bullying definition provided to them verbally by the Principal Investigator (PI) and written within the questionnaire (94.4%). Over 90% had heard about bullying before, whether it was at school (87.1%), BGCPR (65.3%) or church (24.9%). It is important to note that more than half of all participants categorically stated they had not heard about bullying at church (53.5%). In fact, 19.7% of all participants didn't know if they had heard about bullying at church, compared to 10.1% and 2.6% of participants who weren't sure if they had heard about it at BGCPR or school, respectively.

**By location.** Statistically significant differences were found ( $X^2=8.932$ ,  $df=3$ ,  $p=0.030$ ) in terms of participants' report of having heard about bullying at church according to their location. A larger proportion of SJ Metro participants said they had not heard about bullying at church (58.8%), compared to those participants from Other Municipalities (49.4%). Notwithstanding, a larger proportion of participants from Other

Municipalities were not sure whether they had heard about bullying at church (24.7% vs. 13.4% from SJ Metro) (Table 11).

**By gender and age.** No statistically significant differences by the participant's gender or age were found (Tables 12-13).

**By church attendance.** A larger proportion of those participants who attend church regularly said they had heard about bullying at BG CPR (68.4%), compared to 57.6% of those who do not attend church regularly. Also, a slightly larger proportion of the participants who do not attend church were not sure whether they had heard about bullying at BG CPR (11.2%), compared to participants who attend church regularly (9.6%;  $X^2=7.653$ ,  $df=3$ ,  $p<0.054$ ) (Table 14).

Surprisingly, a larger proportion of those participants who do not attend church regularly (31.6%) said they had heard about bullying at church, compared with 8.8% of those who do attend church on a regular basis. Furthermore, the majority of participants who attend church regularly said that they had not heard about bullying at church (65.6%) or they weren't sure (24.8%). These differences were highly significant ( $X^2=26.624$ ,  $df=3$ ,  $p=0.000$ ) (Table 14).

### **Friends' Characteristics**

Over half of all participants (54.2%) said they had 6 or more good friends, and a notable 3.8% said they had no good friends in their homeroom. While the majority of participants said their closest friends obey their parents and/or teachers (73.5%) and get good grades in school (55.6%), around 13% of participants reported that their friends disobey their parents and/or teachers, use drugs and/or alcohol, or do not go to school. Upon reclassifying participants' descriptions of their friends as prosocial (i.e., obey, good

grades) or antisocial (i.e., disobey, substance use, no school), it was found that the majority of participants report having prosocial friends (89.7%) and 12.9% have friends that engage in antisocial behaviors.

Less than half (42.7%) of all participants reported knowing of at least one friend who has been victimized by bullying, and a slightly larger percentage (47.4%) said that none of their friends have been a victim of bullying. Over a third (36.2%) of participants said that they know at least one friend who has been a bullying perpetrator, while more than half (54.9%) of participants say they don't have any bully friends.

Nearly half (46.5%) of participants said they had rarely seen their close friends do something to try to stop the bullying. Twenty percent (20.6%) said they have friends that many times or almost always do something to stop the bullying. In terms of other students, half of all participants (49.3%) said that they rarely do something to stop the bullying.

**By location.** More participants from Other Municipalities say their friends get good grades (59.8%), compared to participants from SJ Metro Area (50.3%). This difference is statistically significant ( $X^2=3.889$ ,  $df=1$ ,  $p=0.030$ ) (Table 15).

**By gender.** More female participants (77.9%) said their friends obey their parents and/or teachers, compared to 69.3% of male participants. This difference is statistically significant ( $X^2=4.057$ ,  $df=1$ ,  $p=0.028$ ). Additionally, significantly more females (38%) than males (35%) say that they have at least one friend who has bullied other children ( $X^2=11.599$ ,  $df=5$ ,  $p=0.041$ ) (Table 16).

**By age.** No statistically significant differences were found by the age of the participant (Table 17).

**By church attendance.** A larger proportion of non-church attending participants (15.2%) said their friends disobey their parents and/or teachers, compared to 8% of those participants who attend church regularly. This difference is statistically significant ( $X^2=5.083$ ,  $df=1$ ,  $p=0.021$ ) (Table 18).

Statistically significant differences were also found on the type of friends participants have, according to their church attendance. A larger proportion of church attending participants had prosocial friends (91.7%), compared to those who do not attend church (84.4%). Conversely, a larger proportion of non-church attending participants had antisocial friends (17.6%), compared to those who attend church regularly (11%). These differences were statistically significant ( $p=0.028$  and  $p=0.047$ , respectively) (Table 18).

### **Research Question 1**

After describing the sample socio-demographically and in terms of their knowledge about bullying and friends' characteristics, data analyses sought to answer the three research questions established for this study. The first research question asked: "How does bullying affect preadolescent members of an afterschool program in Puerto Rico?" Three objectives were established, and its findings are presented below.

**Objective 1a.** The first objective for this research question sought to estimate the prevalence of different types of bullying perpetration and victimization among a sample of PR preadolescents. As per Olweus guidelines (Solberg & Olweus, 2003), a child is considered to be involved in bullying if he/she has been engaged in this behavior at least 2 or 3 times per month. Considering this definition, half (49.7%) of all participants were identified to be bystanders of bullying situations. This means that they were not directly

involved in bullying as a victim, perpetrator or both. About 20% of all participants reported only having been a victim of bullying, while 5.2% reported only being a bullying perpetrator. Sixteen percent (16%) reported being both a bullying victim and perpetrator (Tables 19-22).

***Victimization.*** According to Olweus' guidelines and considering only those participants that reported some level of victimization – overall or by types – at least 2-3 times per month, the prevalence of victimization was estimated to be 20%. Participants reported different types of direct and indirect bullying victimization (Tables 23-27).

***Verbal.*** Nearly 27% (26.8%) of participants reported verbal victimization.

Twenty percent of all participants were verbally victimized at least 2 or 3 times a month.

***Social Isolation.*** About 19% (18.8%) of all participants reported social isolation as a form of victimization. Eleven percent (11.3%) said this happened at least 2 or 3 times a month.

***Physical.*** Ten percent (10.1%) of all participants reported physical victimization. Seven percent (6.8%) endured this type of bullying at least 2 or 3 times a month.

***Rumor Spreading.*** Nineteen percent (19.2%) of all participants were victimized by rumor spreading. Fourteen percent (14.3%) were victims of rumor spreading at least 2 or 3 times a month.

***Damage Property.*** Fourteen percent (14.1%) of all participants reported bullying via damage of their property. Ten percent (9.8%) said this happened at least 2 or 3 times a month.

*Threats.* Ten percent (10.3%) of all participants were victims of threats. Eight percent (7.7%) of all participants said this happened at least 2 or 3 times a month.

*Racist Comments.* About 23% (22.5%) of all participants said that they have been victimized via racist comments pertaining their origin or skin color. Sixteen percent (15.5%) of all participants said this happens at least 2 or 3 times a month.

*Sexual Comments.* Fifteen percent (14.8%) of participants have been victimized via sexual comments or gestures. Nine percent (9.4%) said this happened at least 2 or 3 times a month.

*Cyber.* Over a tenth (11%) of all participants said they have been victims of cyberbullying, either via cell phone or the Internet. Seven percent (6.8%) said this happened at least 2 or 3 times a month. Specifically, some students said they were victimized via cell phone (2.6%), the Internet (5.2%) or both (3.1%).

*Other.* Twelve percent (12%) of all participants said they have been victimized through other means that were not mentioned in the questionnaire. Seven percent (6.6%) said this has happened at least 2 or 3 times a month.

***Perpetration.*** Considering only those participants that reported some level of perpetration – overall or by types – at least 2 or 3 times per month, the prevalence of bullying perpetration was estimated to be 5%. Participants reported different types of bullying perpetration (Tables 28-32).

*Verbal.* Thirteen percent (12.7%) of all participants reported verbal perpetration. Eight percent (7.8%) of participants engaged in verbal bullying at least 2 or 3 times a month.

*Social Isolation.* Thirteen percent (13.1%) of participants reported social isolation. Seven percent (6.9%) said this happened at least 2 or 3 times a month.

*Physical.* Over a tenth (11%) of participants reported physical perpetration. Seven percent (7.1%) said they engaged in this at least 2 or 3 times a month.

*Rumor Spreading.* Thirteen percent (12.7%) of all participants said they had been engaged in rumor spreading. Eight percent (7.8%) said this happened at least 2 or 3 times a month.

*Damage Property.* Under 10% (9.2%) of all participants reported bullying via damage of their property. Six percent (5.9%) said this happened at least 2 or 3 times a month.

*Threats.* Seven percent (6.8%) of all participants were perpetrators of threats. Four percent (4%) said this happened at least 2 or 3 times a month.

*Racist Comments.* Ten percent (10.1%) of all participants said that they had committed bullying via racist comments referring to other children's origin or skin color. Six percent (5.9%) said they do this at least 2 or 3 times a month.

*Sexual Comments.* Ten percent (10.1%) of participants committed bullying via sexual comments or gestures. Six percent (5.9%) said this happened at least 2 or 3 times a month.

*Cyber.* Nine percent (8.7%) of all participants said they have been perpetrators of cyber-bullying, either via cell phone or the Internet. Six percent (6.4%) said this happened at least 2 or 3 times a month. Specifically, some students said they were perpetrators of cyber-bullying via cell phone (2.8%), the Internet (3%) or both (3.5%).



*Other.* Nine percent (8.5%) of all participants said they have been bullying perpetrators through other means that were not mentioned in the questionnaire.

Six percent (5.9%) said this has happened at least 2 or 3 times a month.

***Adult bystanders.*** About forty two percent (41.8%) of participants said that they had rarely seen their teachers do something to try to stop children's bullying. In fact, nearly half of all participants (49.6%) think that their teachers have done little or nothing to stop the bullying. Similar proportions of all participants said that their teachers had not talked to them about their bullying (9.6%), talked to them only once about it (9.9%) or had talked to them several times about it (9.2%) (Tables 33-36).

One in 10 participants (10.1%) said that their parents and/or family adults have not called or gone to school to try to stop their bullying victimization, whereas 22.5% said their parents have contacted the school at least once to this purpose. Upon further analyses it was found that slightly over half (53.1%) of those participants that had told their parents about their victimization also report that their parents have contacted the school about this. In fact, 62% of the parents of participants that have – both – been identified as victims and had told their parents about their victimization have gone to or called the school to address this problem. Parents have talked to participants about their own bullying several times (12.4%), once (9.2%) or not at all (6.8%); no statistically significant differences were found by participant's perpetration of bullying (Tables 33-37).

More than half of all participants (56.6%) think that their parents would feel disappointed if they bullied other children. Half of all participants (49.8%) thought their church leaders would feel disappointed, and 48.6% thought their teachers would feel

disappointed. It is important to note that between 16% and 20% of participants did not know whether their parents (15.9%), teachers (20%), or church leaders (20%) would feel disappointed if they bullied other children (Tables 33-36).

**Objective 1b.** The second objective for research question 1 sought to assess any differences by geographical location, gender and other socio-demographic characteristics of the participants. A larger proportion of participants from SJ Metro (21.9%) reported being both a bullying victim and perpetrator during the past 3 months, compared to 12.6% of participants from Other Municipalities. This difference was statistically significant ( $X^2=6.636$ ,  $df=1$ ,  $p=0.007$ ) (Table 19).

Statistically significant differences by gender were also found in terms of the participants' involvement in bullying victimization, perpetration or both. A larger proportion of females reported only being bullying victims (26%), compared to 16.7% of males ( $X^2=5.475$ ,  $df=1$ ,  $p=0.013$ ). Conversely, a larger proportion of males reported only being bullying perpetrators (8.7% vs. 1.9% females) or having been both bullying victims and perpetrators (19.7% vs. 13.5% females) during the past 3 months ( $p=0.001$  and  $p=0.054$ , respectively) (Table 20). No statistically significant differences by age or church attendance of the participant were found (Tables 21-22).

**Victimization.** Compared to those from Other Municipalities, larger proportions of participants from the SJ Metro Area reported having been bullying victims via social isolation (24.6%), racist (27.8%) and sexual (19.3%) comments. These differences were statistically significant ( $p=0.007$ ,  $p=0.015$ , and  $p=0.016$ , respectively). More specifically in terms of the frequency of victimization, a larger proportion of participants from SJ Metro reported being victims of bullying via social isolation (16.9%), rumor spreading

(16.3%), racist comments (20%), sexual comments (13.3%), and cyber-bullying (9.1%) once per week or several times per week. These differences were statistically significant ( $p=0.003$ ,  $p=0.033$ ,  $p=0.034$ ,  $p=0.001$ , and  $p=0.006$ , respectively) (Table 24).

Compared to females, a larger proportion of male participants reported having been victims of bullying via physical aggression (12.8%), sexual comments (9.2%), cyber-bullying (15.1%) and other forms not mentioned within the questionnaire (14.7%). These differences were statistically significant ( $p=0.038$ ,  $p=0.041$ ,  $p=0.004$ , and  $p=0.053$ , respectively). A larger proportion of females (83%) than males (78%) said that they had never or only 1-2 times been victimized via rumor spreading. This difference was statistically significant ( $X^2=12.602$ ,  $df=4$ ,  $p=0.013$ ) (Table 25).

A larger proportion of the youngest participants (i.e., 10 year olds) reported having been victimized by different forms of bullying during the past 3 months, followed by 11 year olds and 12 year olds. Age differences in physical aggression, damage to property and threat variations of bullying victimization were statistically significant ( $p=0.035$ ,  $p=0.011$ , and  $p=0.019$ , respectively). Consistently a larger proportion of the youngest participants (i.e., 10 year olds) most frequently reported physical aggression, threats, racist and sexual comments' victimization (i.e., once per week or several times per week), followed by 11 year olds and 12 year olds. These differences were statistically significant ( $p=0.05$ ,  $p=0.042$ ,  $p=0.007$ , and  $p=0.008$ , respectively) (Table 26).

A larger proportion of church attending participants reported bullying victimization via racist comments (25.6%), compared to 15.2% of non church attending participants. This difference was statistically significant ( $X^2=5.453$ ,  $df=1$ ,  $p=0.012$ ). In terms of bullying frequency, a larger proportion of church attending participants said that

they were victims of cyber-bullying (8.6%) once per week or several times per week. This difference was statistically significant ( $X^2=13.423$ ,  $df=5$ ,  $p=0.020$ ) (Table 27).

**Perpetration.** A larger proportion of participants from SJ Metro specified having engaged in different forms of bullying perpetration during the past three months. Specifically, more participants from SJ Metro than Other Municipalities reported being perpetrators of verbal (16.6%), social isolation (19.3%), physical (14.4%), rumor spreading (18.2%), threats (10.7%), sexual comments (13.4%), cyber (13.4%), and other (11.2%) types of bullying. These differences by location were statistically significant ( $p=0.023$ ,  $p=0.001$ ,  $p=0.034$ ,  $p=0.002$ ,  $p=0.004$ ,  $p=0.035$ ,  $p=0.002$ , and  $p=0.05$ , respectively). A larger proportion of participants from the SJ Metro Area stated that they were frequent (i.e., once per week or several times per week) perpetrators of social isolation (10.6%), threats (7%), and cyber (10.1%) forms of bullying, compared to their Other Municipalities' counterparts. These differences were statistically significant ( $p=0.033$ ,  $p=0.045$ , and  $p=0.043$ , respectively) (Table 29).

Compared to females, a larger proportion of male participants reported engaging in specific types of bullying perpetration. More males reported engaging in verbal (16.5%), social isolation (17.9%), physical (15.1%), rumor spreading (18.8%), damage to property (13.3%), threats (9.6%), racist comments (14.2%), sexual comments (12.8%), cyber (5%), and other forms (11%) of bullying perpetration. These differences were statistically significant ( $p=0.001-0.038$ ). In terms of the frequency of the perpetration, males stated that they engaged in physical bullying (11%) and rumor spreading (11%) once per week or several times per week. Differences by gender were statistically

significant ( $p=0.017$  and  $p=0.006$ , respectively) (Table 30). There were no statistically significant differences by the age or church attendance of the participant (Tables 31-32).

**Adult bystanders.** While no statistically significant differences were found by location, age and church attendance of the participants (Tables 33, 35-36), statistically significant differences were found by gender on whether the participants thought their parents ( $X^2=14.997$ ,  $df=3$ ,  $p=0.005$ ) or church leaders ( $X^2=13.513$ ,  $df=3$ ,  $p=0.009$ ) would feel disappointed if they knew they were bullying others (Table 34).

While 65.4% of female participants thought their parents would be disappointed if they were bullying others, only 48.2% of male participants thought so. A third of all male participants (33%) said that their parents would not be disappointed if they were involved in bullying, compared to 19.7% of female participants. Furthermore, 55.6% of male participants did not know whether their parents would be disappointed or not, compared to only 14.4% of female participants (Table 34).

Similarly, while 54.3% of female participants thought their church leaders would be disappointed if they were bullying others, only 45.4% of male participants thought so. Additionally, more male participants (37.6%) than female participants (21.6%) said that their church leaders would not be disappointed if they were bullying others. Twenty four percent (23.5%) of female and 16.5% of male participants did not know whether their church leaders would feel disappointed if they were bullying others (Table 34).

**Objective 1c.** The third objective for research question 1 sought to describe the nature of the bullying incidents experienced by participants. Under a quarter of participants (23.3%) stated that bullies are usually in their same grade level, either at their same homeroom (14.8%) or a different homeroom (8.5%). The gender of the bullies may

vary. Thirteen percent (12.7%) of participants said that bullies comprise a group of boys and girls. More participants reported girls to be the bullies (19.7%) – either one girl (11%) or 2 or more girls (8.7%) – than boys (13%). Under a third (30.1%) of participants said that during bullying incidents there are usually 1 to 3 bullies present.

The most frequently reported length of bullying victimization is 1 to 2 weeks (13.4%). Still, it is important to note that 7.5% of the participants said that they had suffered from bullying victimization during several years.

The locations where bullying most frequently occurs are the classroom (14.1%), school park (12.4%), classroom when the teacher is not present (10.3%), and at the school's hallway or staircase (10.1%). Nearly 9% said that bullying occurs outside of school (8.9%).

Participants have told parents (11.5%) about their bullying victimization, followed by their friends (10.8%) and their homeroom teacher (8.5%). About eleven percent (10.8%) have told no one they have been victims of bullying. Considering only those participants identified as victims, only 23.3% have told their parents about it ( $X^2=15.706$ ,  $df=2$ ,  $p=0.000$ ), 18.9% have told their friends ( $X^2=7.859$ ,  $df=2$ ,  $p=0.02$ ), 17.8% have told no one ( $X^2=5.901$ ,  $df=2$ ,  $p=0.05$ ), and 16.7% have told their homeroom teacher ( $X^2=10.054$ ,  $df=2$ ,  $p=0.007$ ).

While 63.9% said they have never feared being a victim of bullying, 35.3% of participants had feared being victimized a few times, sometimes, several times, frequently or very frequently.

Participants reported having served in multiple bystanding roles during bullying. The majority of participants (97.3%) said that there have been instances when bullying

may have occurred but they were not aware of it. These are considered to be disengaged bystanders. Nearly half (46.8%) of all participants said they would do something to try to help the victims of bullying; these are considered defender bystanders. Slightly over a quarter (25.9%) of participants said that if they knew a child was being bullied they would stay put, watch and see what happens; these are considered passive bystanders. Finally, 14.5% of participants said they would join in and support the bullying of another child, becoming reinforcer bystanders.

Half of all participants (50.7%) said that they would not (“no”) or definitely would not (“definitely not”) engage in the bullying of another child. A quarter of all participants (25.6%) would engage in the bullying of others.

Over half of all participants (58%) said they could empathize with bullying victims by feeling a little sad for him/her (20.4%) or feeling sad and wanting to help him/her (37.6%). Still, 26.1% thought that if a child is being bullied, he/she probably deserves it. Fifteen percent (15%) feel nothing upon witnessing victimization.

**By location.** A larger proportion of participants from the SJ Metro Area stated that victimization usually lasts 1-2 weeks (17.6% vs. 10%). On the other hand, more participants from Other Municipalities stated that victimization lasts several years (9.2% vs. 5.3%). These differences are statistically significant ( $X^2=14.746$ ,  $df=6$ ,  $p=0.022$ ). More participants from SJ Metro Area stated that they can encounter bullying victimization on the way to or from school (7%) compared to participants from Other Municipalities (2.1%). This difference is statistically significant ( $X^2=7.462$ ,  $df=2$ ,  $p=0.024$ ) (Table 38).

**By gender.** It is interesting to note that participants are more prone to identify bullies to be mostly of the gender they belong to. More female participants reported bullies to be one girl (14.4%) or 2 or more girls (10.6%), and more male participants reported bullies to be one boy (11.5%) or 2 or more boys (3.2%). A similar percentage of female (12.9%) and male (12.4%) participants stated that bullies are groups of boys and girls. These differences by gender are statistically significant ( $X^2=21.610$ ,  $df=7$ ,  $p=0.003$ ) (Table 39).

A larger proportion of female participants reported more extensive duration of bullying victimization (i.e., 6 months to several years), compared to male participants (18.3% vs. 11.9%). These differences were statistically significant ( $X^2=12.720$ ,  $df=6$ ,  $p=0.048$ ) (Table 39).

Gender differences were also found in terms of the location where the bullying incidents may occur. More females than males reported that bullying can occur inside the classroom (19.7% vs. 8.7%) or at the school hallway or staircase (13.5% vs. 6.9%). These differences were statistically significant ( $p=0.003$  and  $p=0.051$ , respectively) (Table 39).

A larger proportion of females (14.4%) than males (7.3%) have told their friends about their bullying victimization ( $X^2=6.425$ ,  $df=2$ ,  $p=0.040$ ). Additionally, more females (30.8%) than males (19.8%) self report engaging as a bystander defender upon witnessing a child being bullied ( $X^2=6.585$ ,  $df=1$ ,  $p=0.007$ ). More males (57%) than females (47.8%) self report not being aware of bullying situations that are going on with their peers, or being disengaged bystanders ( $X^2=3.494$ ,  $df=1$ ,  $p=0.038$ ). While the largest proportion of female participants say they feel sad and want to help bullying victims



(42.8%), the largest proportion of male participants say that if a child is being bullied he/she probably deserves it (33%). This gender difference is highly significant ( $X^2=20.681$ ,  $df=4$ ,  $p=0.000$ ) (Table 39).

**By age and church attendance.** Oldest participants (i.e., 12 year olds) less frequently report that bullying occurs during physical education class (2.9%), compared to 11 year olds (12.3%) and 10 year olds (7.6%). This difference by age of the participant is statistically significant ( $X^2=11.097$ ,  $df=4$ ,  $p=0.025$ ) (Table 40). No statistically significant differences were found by church attendance (Table 41).

## **Research Question 2**

The second research question explored the following: “How does connectedness to others impact preadolescents’ exposure to and/or roles in bullying?” To answer this specific question, four objectives were established and its findings are presented below.

**Objective 2a.** The first objective for this second research question sought to estimate preadolescents’ connectedness to others at different socio-ecological levels, namely: parents, friends, teachers, school, community, and religion. Different aspects of connectedness were measured via a 5 point Likert scale (i.e., 1=not at all, 2=maybe no, 3=more or less, 4=maybe yes, and 5=absolutely true). Eight connectedness scales were created to this purpose (Tables 42-46).

**Connectedness to parents.** Participants reported a mean of 26.38 (s.e.=0.20, 95% CI=26.00-26.78, M range=6.00-30.00) for this 6 item scale. The means per items ranged from 3.26 to 4.74.

***Connectedness to father.*** Participants reported a mean of 19.77 (s.e.=0.25, 95% CI=19.28-20.26, M range=0-25.00) for this 5 item scale. The means per items ranged from 3.48 to 4.38.

***Connectedness to mother.*** Participants reported a mean of 21.65 (s.e.=0.17, 95% CI=21.31-21.99, M range=0-25.00) for this 5 item scale. The means per items ranged from 3.51 to 4.72.

***Connectedness to friends.*** Participants reported a mean of 24.92 (s.e.=0.29, 95% CI=24.34-25.50, M range=6.00-78.00) for this 6 item scale. The means per items ranged from 3.41 to 4.54.

***Connectedness to teachers.*** Participants reported a mean of 21.72 (s.e.=0.21, 95% CI=21.31-22.12, M range=5.00-25.00) for this 5 item scale. The means per items ranged from 4.01 to 4.58.

***Connectedness to school.*** Participants reported a mean of 26.79 (s.e.=0.22, 95% CI=26.36-27.20, M range=6.00-30.00) for this 10 item scale. The means per items ranged from 3.90 to 4.68.

***Connectedness to community.*** Participants reported a mean of 26.65 (s.e.=0.28, 95% CI=24.09-25.21, M range=6.00-30.00) for this 6 item scale. The means per items ranged from 3.78 to 4.30.

***Connectedness to religion.*** Participants reported a mean of 11.89 (s.e.=0.16, 95% CI=11.57-12.18, M range=2.00-15.00) for this 3 item scale. The means per items ranged from 3.74 to 4.36.

The lowest mean item pertained to participants' connectedness to parents (i.e., "I do not argue with my parents", M=3.26, s.e.=0.79, 95% CI=3.11-3.42). The highest mean

item also pertained to participants' connectedness to parents (i.e., "I care a lot about my parents",  $M=4.74$ ,  $s.e.=0.04$ , 95%  $CI=4.67-4.82$ ) (Table 42).

**Objective 2b.** The second objective for the second research question of this study assessed any differences in preadolescents' connectedness to others by socio-demographic characteristics of the participants. Statistically significant differences were found in multiple connectedness scales by location, gender, age and church attendance (Tables 43-46).

**By location.** Statistically significant differences by location were found for the scales of connectedness to parents ( $F=4.46$ ,  $p=0.035$ ), connectedness to fathers ( $F=4.26$ ,  $p=0.04$ ), and connectedness to mothers ( $F=6.37$ ,  $p=0.012$ ) (Table 43).

*Connectedness to parents.* Statistically significant differences by location were found for two of its included items. In terms of the item stating that "It is important for my parents to trust me", participants from Other Municipalities reported a higher mean ( $M=4.81$ ,  $s.e.=0.04$ ) than participants from SJ Metro Area ( $M=4.65$ ,  $s.e.=0.07$ ). This difference was statistically significant ( $F=3.83$ ,  $p=0.051$ ). In terms of the item stating that "I do not argue with my parents", participants from Other Municipalities ( $M=3.40$ ,  $s.e.=0.10$ ) reported a higher mean than participants from SJ Metro ( $M=3.09$ ,  $s.e.=0.12$ ). This difference was also statistically significant ( $F=3.92$ ,  $p=0.048$ ).

*Connectedness to fathers.* Statistically significant differences by location were found for only one of its included items – "I do not argue with my dad".

Participants from Other Municipalities reported a higher mean ( $M=3.65$ ,

s.e.=0.11) than participants from SJ Metro (M=2.65, p=0.13). This difference was statistically significant (F=5.27, p=0.022).

*Connectedness to mothers.* Statistically significant differences by location were found for three of its included items. For the item stating that “I like spending time with my mom”, participants from Other Municipalities reported a higher mean (M=4.77, s.e.=0.05) than participants from SJ Metro (M=4.53, p=0.78). This difference was statistically significant (F=7.66, p=0.006). For the item stating that “My mom and I are very close”, participants from Other Municipalities reported a higher mean (M=4.76, s.e.=0.04) than participants from SJ Metro (M=4.48, p=0.08) with statistical significance (F=11.51, p=0.001). For the item stating that “My mom cares a lot about me”, participants from Other Municipalities also reported a higher mean (M=4.82, s.e.=0.04) than participants from SJ Metro (M=4.59, s.e.=0.07). This difference was statistically significant (F=8.60, p=0.004).

While no statistically significant differences by location were found for the scales of connectedness to friends, teachers, and school, differences by the participants’ location were found for specific items within those scales (Table 43).

*“I have friends I’m really close to and trust completely”.* Participants from Other Municipalities reported a higher mean (M=4.39, s.e.=0.07) than participants from SJ Metro (M=4.08, s.e.=0.10), with statistical significance (F=6.99, p=0.009).

*“I want my teachers to respect me”.* Participants from Other Municipalities reported a higher mean (M=4.67, s.e.=0.06) than participants from SJ Metro (M=4.47, s.e.=0.08), with statistical significance (F=4.69, p=0.03).

*“I do not have problems at school”*. Participants from Other Municipalities reported a higher mean ( $M=4.15$ ,  $s.e.=0.09$ ) than participants from SJ Metro ( $M=3.84$ ,  $s.e.=0.11$ ), with statistical significance ( $F=4.91$ ,  $p=0.027$ ).

**By gender.** Statistically significant differences were found for the connectedness to mother scale ( $F=5.41$ ,  $p=0.021$ ). Within this scale were also two items for which statistically significant differences by gender were found (Table 44).

*“My mom cares a lot about me”*. Female participants reported a higher mean ( $M=4.80$ ,  $s.e.=0.04$ ) than male participants ( $M=4.64$ ,  $s.e.=0.06$ ). This difference was statistically significant ( $F=4.27$ ,  $p=0.039$ ).

*“I talk with my mom about personal things”*. Female participants reported a higher mean ( $M=4.29$ ,  $s.e.=0.08$ ) than male participants ( $M=3.95$ ,  $s.e.=0.10$ ). This difference was statistically significant ( $F=6.45$ ,  $p=0.011$ ).

While no statistically significant differences by gender were found for any of the remaining scales, differences by the participants' gender were found for specific items within the connectedness to parents, father, friends, teachers and school scales (Table 44).

*“I do not argue with my parents”*. Female participants reported a higher mean ( $M=3.49$ ,  $s.e.=0.11$ ) than male participants ( $M=3.05$ ,  $s.e.=0.11$ ). This difference was statistically significant ( $F=7.9$ ,  $p=0.005$ ).

*“I do not argue with my dad”*. Female participants reported a higher mean ( $M=3.66$ ,  $s.e.=0.11$ ) than male participants ( $M=3.31$ ,  $s.e.=0.12$ ). This difference was statistically significant ( $F=4.28$ ,  $p=0.039$ ).

*“I talk with my dad about personal things”*. Male participants reported a higher mean ( $M=3.67$ ,  $s.e.=0.11$ ) than female participants ( $M=3.29$ ,  $s.e.=0.12$ ). This difference was statistically significant ( $F=5.58$ ,  $p=0.019$ ).

*“My friends and I talk openly with each other about personal things”*. Female participants reported a higher mean ( $M=3.57$ ,  $s.e.=0.11$ ) than male participants ( $M=3.26$ ,  $s.e.=0.11$ ). This difference was statistically significant ( $F=3.99$ ,  $p=0.047$ ).

*“I care what my teachers think of me”*. Female participants reported a higher mean ( $M=4.19$ ,  $s.e.=0.10$ ) than male participants ( $M=3.87$ ,  $s.e.=0.11$ ). This difference was statistically significant ( $F=3.97$ ,  $p=0.047$ ).

*“I want my teachers to respect me”*. Female participants reported a higher mean ( $M=4.70$ ,  $s.e.=0.06$ ) than male participants ( $M=4.48$ ,  $s.e.=0.07$ ). This difference was statistically significant ( $F=5.52$ ,  $p=0.019$ ).

*“Doing well in school is important to me”*. Female participants reported a higher mean ( $M=4.71$ ,  $s.e.=0.06$ ) than male participants ( $M=4.46$ ,  $s.e.=0.08$ ). This difference was statistically significant ( $F=6.14$ ,  $p=0.014$ ).

**By age.** Statistically significant differences by age were only found for the connectedness to religion scale ( $F=3.76$ ,  $p=0.024$ ). Within this scale, only one of the items presented statistically significant differences by age – “I am religious”. For this item, 10 year old participants reported higher means ( $M=4.01$ ,  $s.e.=0.11$ ) than 11 year olds ( $M=3.91$ ,  $s.e.=0.11$ ) and 12 year old participants ( $M=3.39$ ,  $s.e.=0.13$ ). This difference was statistically significant ( $F=7.56$ ,  $p=0.001$ ) (Table 45).

While no statistically significant differences by gender were found for any of the remaining connectedness scales, differences by the participants' age were found for specific items within the connectedness to school and teachers scales (Table 45).

*"I feel good when I am in school"*. Twelve year old participants reported higher means (M=4.14, s.e.=0.10) than 11 year olds (M=4.17, s.e.=0.11) and 10 year olds (M=4.49, s.e.=0.08). This difference was statistically significant (F=3.85, p=0.022).

*"I work hard/put forth a lot of effort at school"*. Eleven year old participants reported higher means (M=4.69, s.e.=0.07) than 12 year olds (M=4.46, s.e.=0.09) and 10 year old participants (M=4.36, s.e.=0.11). This difference was statistically significant (F=3.63, p=0.027).

*"I like most of the teachers in my school"*. Ten year old participants reported higher means (M=4.36, s.e.=0.100) than 11 year olds (M=4.21, s.e.=0.10) and 12 year old participants (M=3.96, s.e.=0.12). This difference was statistically significant (F=3.55, p=0.03).

*"I care what my teachers think of me"*. Ten year old participants reported higher means (M=4.27, s.e.=0.11) than 11 year olds (M=3.97, s.e.=0.12) and 12 year old participants (M=3.81, s.e.=0.14). This difference was statistically significant (F=3.26, p=0.04).

***By church attendance.*** Statistically significant differences by church attendance were only found for the connectedness to religion scale (F=75.33, p=0.000). Within this scale, all three items also presented statistically significant differences by church attendance (Table 46).

*“Religion is very important for me”*. Participants who attended church reported higher means ( $M=4.50$ ,  $s.e.=0.06$ ) than non-church attending participants ( $M=4.04$ ,  $s.e.=0.13$ ). This difference was highly significant ( $F=13.25$ ,  $p=0.000$ ).

*“I attend religious services regularly”*. Participants who attended church reported higher means ( $M=4.15$ ,  $s.e.=0.07$ ) than non-church attending participants ( $M=2.74$ ,  $s.e.=0.14$ ). This difference was highly significant ( $F=109.36$ ,  $p=0.000$ ).

*“I am religious”*. Participants who attended church reported higher means ( $M=4.03$ ,  $s.e.=0.08$ ) than non-church attending participants ( $M=1.16$ ,  $s.e.=0.14$ ). This difference was highly significant ( $F=34.53$ ,  $p=0.000$ ).

While no statistically significant differences by church attendance were found for any of the remaining connectedness scales, differences by the participants' church attendance were found for specific items within those scales (Table 46).

*“I talk with my dad about personal things”*. Participants who attended church reported higher means ( $M=3.64$ ,  $s.e.=0.10$ ) than non-church attending participants ( $M=3.12$ ,  $s.e.=0.16$ ). This difference was statistically significant ( $F=8.521$ ,  $p=0.004$ ).

*“My friends and I spend a lot of time talking about things”*. Non church attending participants reported higher means ( $M=4.94$ ,  $s.e.=0.40$ ) than church-attending participants ( $M=4.371$ ,  $s.e.=0.07$ ). This difference was statistically significant ( $F=4.144$ ,  $p=0.042$ ).

*“School is not boring”*. Church attending participants reported higher means ( $M=4.00$ ,  $s.e.=0.08$ ) than non-church attending participants ( $M=3.68$ ,  $s.e.=0.14$ ). This difference was statistically significant ( $F=4.68$ ,  $p=0.031$ ).



*“I feel good when I am in school”*. Church attending participants reported higher means ( $M=4.34$ ,  $s.e.=0.06$ ) than non-church attending participants ( $M=4.06$ ,  $s.e.=0.07$ ). This difference was statistically significant ( $F=4.97$ ,  $p=0.026$ ).

*“I get along well with all the children in my neighborhood”*. Church attending participants reported a higher mean ( $M=4.33$ ,  $s.e.=0.06$ ) than non-church attending participants ( $M=4.08$ ,  $s.e.=0.11$ ). This difference was statistically significant ( $F=4.08$ ,  $p=0.044$ ).

**Objective 2c.** The third objective for the second research question of this study assessed the relationship between preadolescents’ connectedness to others and their role in bullying, namely as: perpetrators, victims, bully/victims, or bystanders. All connectedness scales were positively correlated to each other with high statistical significance ( $p \leq 0.001$ ).

Victimization-only was positively correlated to connectedness overall ( $r=0.114$ ,  $p \leq 0.05$ ), connectedness to mother ( $r=0.136$ ,  $p \leq 0.001$ ), connectedness to teachers ( $r=0.137$ ,  $p \leq 0.001$ ) and connectedness to school ( $r=0.102$ ,  $p \leq 0.05$ ). It was negatively correlated to bullying perpetration ( $r=-0.124$ ,  $p \leq 0.05$ ), bully-victimization ( $r=-0.233$ ,  $p \leq 0.001$ ), and being a bystander ( $r=-0.752$ ,  $p \leq 0.05$ ) (Table 47).

Perpetration-only was negatively correlated to connectedness to school ( $r=-0.122$ ,  $p \leq 0.05$ ), bully-victimization ( $r=-0.107$ ,  $p \leq 0.05$ ), and being a bystander ( $r=-0.340$ ,  $p \leq 0.001$ ). Bully-victimization-only was negatively correlated to connectedness overall ( $r=-0.184$ ,  $p \leq 0.001$ ), connectedness to parents ( $r=-0.157$ ,  $p \leq 0.001$ ), connectedness to mothers ( $r=-0.173$ ,  $p \leq 0.001$ ), connectedness to friends ( $r=-0.157$ ,  $p \leq 0.001$ ),

connectedness to teachers ( $r=-0.191$ ,  $p\leq 0.001$ ), and connectedness to school ( $r=-0.183$ ,  $p\leq 0.001$ ) (Table 47).

**Objective 2d.** The fourth objective for the second research question of this study assessed the magnitude of the impact of preadolescents' connectedness to others on their role in bullying. As part of a sequential multiple linear regression (MLR), variables pertaining to individual (i.e., age, gender, location, private religiosity), interpersonal (i.e., connectedness to mother, father, teachers, friends; antisocial friends, disappoint parents, teachers or church leaders), school (i.e., connectedness to school, talk about bullying at school), community (i.e., connectedness to community, talk about bullying at BGC), and culture/society (i.e., connectedness to religion, church attendance, public religiosity, and talk about bullying at church) socio-ecological levels were added into the model (Tables 48-53).

**MLR1-Victimization.** Sequential MLR analyses to assess the variance in bullying victimization were not statistically significant at any of the five steps for the full sample, church attending or non-church attending participants (Tables 48-50).

**MLR2-Perpetration.** Sequential MLR analyses to assess the variance in bullying perpetration for the full sample were statistically significant at steps 4 and 5. The predictor variables included up to step 4 add 6% to the variance in bullying perpetration (Change in  $R^2=0.059$ ). The model up to this step predicts 4% of the changes in bullying perpetration (Adj.  $R^2=0.037$ ) with statistical significance (Change in  $F=3.39$ ,  $p=0.038$ ) (Table 51).

The full model (i.e., step 5) is the one that best explains the variations in bullying perpetration for the full sample, with high significance (Change in  $F=7.359$ ,  $p=0.000$ ).

Collectively, predictors add 16% to the variance in bullying perpetration (Change in  $R^2=0.160$ ). This full sequential MLR model predicts 20% of the variance in bullying perpetration (Adj.  $R^2=0.198$ ). Changes in the following predictors significantly accounted for changes in the participants' bullying perpetration: a) A one unit change in whether they talk to the student about bullying at his/her BGCPR unit accounts for a 24% decrease in bullying perpetration when all other variables are held constant ( $Beta=-0.24$ ,  $p=0.015$ ); b) A one unit change in private religiosity accounts for a 24% decrease in bullying perpetration when all other variables are held constant ( $Beta=-0.235$ ,  $p=0.054$ ); c) A one unit change in public religiosity accounts for a 32% increase in bullying perpetration when all other variables are held constant ( $Beta=0.318$ ,  $p=0.006$ ); d) A one unit change in whether they talk to the student about bullying at church accounts for a 34% increase in bullying perpetration when all other variables are held constant ( $Beta=0.339$ ,  $p=0.000$ ) (Table 51). No connectedness variables within this model predicted increases or decreases in bullying perpetration among the full study sample.

*Church attending participants and bullying perpetration.* In order to clarify the religiosity related findings obtained for the MLR model for the full sample, analyses were conducted distinguishing by two population subgroups: church attending and non-church attending participants. In terms of church attending participants, analyses to assess the variance in bullying perpetration were also significant at steps 4 and 5. The predictor variables included up to step 4 add 11% to the variance in bullying perpetration (Change in  $R^2=0.113$ ). The model up to this step predicts only 2% of the changes in bullying perpetration (Adj.  $R^2=0.022$ ) with statistical significance (Change in  $F=3.86$ ,  $p=0.027$ ) (Table 52).

The full model (i.e., step 5) explains the variations in bullying perpetration, with high significance (Change in  $F=5.521$ ,  $p=0.002$ ). Collectively, predictors add 19% to the variance in bullying perpetration (Change in  $R^2=0.191$ ). This full sequential MLR model predicted 23% of the variance in bullying perpetration (Adj.  $R^2=0.227$ ). Within this final model for church attending preadolescents, a one unit change in whether they talk to the student about bullying at church accounts for a 49% increase in bullying perpetration when all other variables are held constant ( $Beta=0.489$ ,  $p=0.000$ ). No connectedness variables within this model predicted increases or decreases in bullying perpetration among church attending participants (Table 52).

*Non-church attending participants and bullying perpetration.* In terms of non-church attending participants, analyses to assess the variance in bullying perpetration were significant at steps 2 and 5. The predictor variables included up to step 2 add 33% to the variance in bullying perpetration (Change in  $R^2=0.325$ ). The model up to this step predicts 26% of the changes in bullying perpetration (Adj.  $R^2=0.255$ ) with statistical significance (Change in  $F=2.342$ ,  $p=0.043$ ) (Table 53).

The full model (i.e., step 5) is the one that best explains the variations in bullying perpetration, with high significance (Change in  $F=7.367$ ,  $p=0.001$ ). Collectively, predictors add 20% to the variance in bullying perpetration (Change in  $R^2=0.203$ ). This full sequential MLR model predicts a notable 61% of the variance in bullying perpetration (Adj.  $R^2=0.605$ ) (Table 53).

Within the final model, changes in the following predictors – including aspects of connectedness – significantly accounted for changes in the participants' bullying perpetration: a) A one unit change in the age of the participant accounts for a 29%

increase in bullying perpetration when all other variables are held constant ( $Beta=0.287$ ,  $p=0.028$ ); b) A one unit change in connectedness to mother accounts for a 60% decrease in bullying perpetration when all other variables are held constant ( $Beta=-0.604$ ,  $p=0.001$ ); c) A one unit change in having antisocial friends accounts for a 35% decrease in bullying perpetration when all other variables are held constant ( $Beta=-0.348$ ,  $p=0.008$ ); d) A one unit change in connectedness to community accounts for a 45% increase in bullying perpetration when all other variables are held constant ( $Beta=0.448$ ,  $p=0.039$ ); e) A one unit change in having heard about bullying at their BG CPR unit accounts for a 38% decrease in bullying perpetration when all other variables are held constant ( $Beta=-0.375$ ,  $p=0.007$ ); and f) A one unit change in public religiosity accounts for a 62% increase in bullying perpetration when all other variables are held constant ( $Beta=0.621$ ,  $p=0.000$ ) (Table 53).

### **Research Question 3**

The final research question assessed the following: “Does religiosity affect preadolescents’ exposure to and/or roles in bullying?” To answer this, the sample was described in terms of its public and private religiosity characteristics. Three objectives for this specific research question were also explored.

**Religiosity-descriptive characteristics of the sample.** A quarter of all participants (25.4%) stated that they do not like to participate in religious activities, while 33.1% said they like to participate in religious activities “a lot” (18.3%) and “pretty much” (14.8%). Over half of all participants (51.2%) stated that they care about church “a lot”, while 22.5% said they care about church “pretty much”, and 12% do not care about church at all. Most participants (81%) stated that they “very much agree” with the

statement that reads “obeying God and commandments is important for me,” while nearly half of all participants (49.1%) “very much agree” with the statement that reads “when I have problems, I seek help in church or religion” (Tables 54-57).

Over a third (34.7%) of participants attended church almost every week during the past 12 months; a quarter of participants (25.8%) never attended. While 39% said that they never participated in church activities during the past year, 23.5% participated in church activities almost every week, and 25.9% participated in church activities one or more times per month. Over a third of all participants (36.2%) said that they attend church or religious activities because they want to, and 20.2% said they go because their parents or guardians say they have to. Almost a tenth of participants (9.2%) say they go because their friends want them to, and only 4% do not know why they go to church (Tables 54-57).

While 21.6% of participants said they never pray, 40% said they pray every day. Over a third of participants (37.9%) said they never read their religious sacred book, while 36.7% said they read it every week (26.1%) or more than once per month (10.6%). Nearly half of participants never listened to religious programming on the radio (46%) or television (44.9%). Yet 22.1% of participants listened to religious radio and 16.2% watches religious television programming almost every week.

Over a third of all participants (34.1%) engaged in at least one type of public religious activity during the past year. The most frequently mentioned activities included: attending Sunday School or Bible School (27.3%), being baptized as a child (20%), attend to mass, preaching or sermon (18.4%), participate at Summer Camps (17.2%), and

engage in an arts ministry (16.2%; e.g., dance, worship, music, mime, acting) (Tables 54-57).

In terms of parental religiosity, nearly a third of participants (31.3%) said that religion is very important to their parents, and 15.8% said it is not important for their parents. While 17.9% said that religion is more important for their father than mother, 11.3% said religion is more important for their mother than their father (Tables 54-57).

**Objective 3a.** The first objective for the third research question of this study sought to describe the relationship between religious factors and preadolescents' role in bullying, by geographic location, gender and other socio-demographic characteristics of the participants.

**By location.** A larger proportion of participants from Other Municipalities (15.5%) reported attending church Family Days, compared to participants from SJ Metro (6.4%). This difference by location was statistically significant ( $X^2=8.770$ ,  $df=2$ ,  $p=0.012$ ) (Table 54).

**By gender.** While an equal proportion of female and male participants (28.8%) reported that they like to participate in religious activities a lot, a larger proportion of male participants (32.6%) than females (17.8%) said that they do not like to participate in religious activities. This difference by gender was statistically significant ( $X^2=15.950$ ,  $df=5$ ,  $p=0.007$ ) (Table 55).

A larger proportion of female participants said that they care about church pretty much (29.8%) or a lot (48.6%), compared to male participants (15.6% and 53.7%, respectively). This difference was statistically significant ( $X^2=20.485$ ,  $df=5$ ,  $p=0.001$ ) (Table 55).

A larger proportion of female participants said that they attended church almost every week during the past 12 months (39.4%), while a larger proportion of males said they never attended church during the past 12 months (29.4%). This difference was statistically significant ( $X^2=14.660$ ,  $df=5$ ,  $p=0.012$ ). A larger proportion of female participants (43.8%) than male participants (28.9%) said that they go to church or religious activities because they want to go. Conversely, a larger proportion of male participants than females said that they go to church because their friends want them to (12.4% vs. 5.8%) or they don't know why they go (5.5% vs. 2.4%) (Table 55).

Statistically significant differences by gender were also found in terms of the specific types of public religious activities that the participants engaged in during the past 12 months (Table 55).

*Arts.* A larger proportion of females (22.2%) than males (10.6%) engaged in an arts ministry ( $X^2=10.808$ ,  $df=2$ ,  $p=0.004$ ).

*Youth group.* A larger proportion of females (19.8%) than males (6.9%) participated of youth group activities at church ( $X^2=15.534$ ,  $df=2$ ,  $p=0.000$ ).

*Weekend retreats or camps.* A larger proportion of females (13.5%) than males (6.4%) participated in weekend retreats or camps ( $X^2=6.235$ ,  $df=2$ ,  $p=0.044$ ).

*Prayer services.* A larger proportion of females (15%) than males (6.9%) participated in prayer services ( $X^2=7.417$ ,  $df=2$ ,  $p=0.025$ ).

*Family days.* A larger proportion of females (16.9%) than males (6.4%) participated in church family day activities ( $X^2=11.633$ ,  $df=2$ ,  $p=0.003$ ).



**By age.** A larger proportion of 10 year old participants (57.6%) said that they very much agree with the statement that reads “when I have problems, I seek help in church or religion”, compared to 53.2% of 11 year old and 36% of 12 year old participants. This difference was statistically significant ( $X^2=27.598$ ,  $df=12$ ,  $p=0.006$ ) (Table 56).

**By church attendance.** While a larger proportion of non-church attending participants said they do not like to participate in religious activities (37.6% vs. 20.3%), a larger proportion of church attending participants said they like participating in church activities a lot (33.9% vs 16%). This difference was highly significant ( $X^2=36.216$ ,  $df=5$ ,  $p=0.000$ ). Consistently, while a larger proportion of non-church attending participants said they do not care about church at all (20.8% vs. 8.3%), a larger proportion of church attending participants said they care about church a lot (56.1% vs 39.2%). This difference was also highly significant ( $X^2=23.868$ ,  $df=5$ ,  $p=0.000$ ).

A larger proportion of church attending participants (54.8%) compared to non-church attending participants (35.2%) said that they very much agree with the statement that reads “when I have problems, I seek help in church or religion.” Conversely, a larger proportion of non-church attending participants (22.4%) than church-attending (9.3%) participants said that they very much disagree with this statement. This difference was statistically significant ( $X^2=21.452$ ,  $df=6$ ,  $p=0.002$ ) (Table 57).

A larger proportion of non-church attending participants (42.4%) than church-attending participants (18.9%) said that they never attended church during the past 12 months. Conversely, a larger proportion of church attending participants (43.5%) than non-church attending participants (13.6%) said that they went to church almost every week during the past 12 months. These differences were statistically significant

( $X^2=47.643$ ,  $df=5$ ,  $p=0.000$ ). While a larger proportion of non-church attending participants (61.2% vs. 29.4%) said that they did not participate of church activities during the past year, a larger proportion of church attending participants (41.2% vs. 17.8%) said that they participated in church activities more than once a month or almost every week during the past year. These differences were statistically significant ( $X^2=21.452$ ,  $df=6$ ,  $p=0.002$ ). Interestingly, the largest proportion of both church attending (39.9%) and non-church attending (27.2%) participants said that they attend church or religious activities because they want to. This difference was statistically significant ( $X^2=46.824$ ,  $df=6$ ,  $p=0.000$ ) (Table 57).

In terms of prayer, a larger proportion of non-church attending participants (29.8% vs. 18.3%) said that they never pray. Conversely, a larger proportion of church attending participants (44.9% vs. 28.2%) said they pray every day. These differences are statistically significant ( $X^2=14.774$ ,  $df=5$ ,  $p=0.011$ ). Similarly, a larger proportion of non-church attending participants (52.4% vs. 31.9%) said that they never read their religious sacred book, while a larger proportion of church attending participants (32.2% vs. 11.3%) said that they read their sacred book almost every week. These differences were statistically significant ( $X^2=26.528$ ,  $df=5$ ,  $p=0.000$ ).

The largest proportions of both church (40.7%) and non-church attending (58.9%) participants said that they do not listen to religious programming on the radio. Notwithstanding, a larger proportion of church attending participants (28.6% vs. 6.5%) said that they listened to religious radio almost every week. These differences were statistically significant ( $X^2=26.871$ ,  $df=5$ ,  $p=0.000$ ). Similarly, the largest proportions of both church (39.8%) and non-church attending (57.3%) participants said that they do not

watch religious programming on television, while a larger proportion of church attending participants (18.6% vs. 10.5%) said that they watched religious television programming almost every week. These differences were statistically significant ( $X^2=21.970$ ,  $df=5$ ,  $p=0.001$ ) (Table 57).

While a larger proportion of church attending participants (40.2%) than non-church attending participants (23.2%) said that they engaged in at least one type of religious activity during the past year, over half of all church attending participants (59.8%) said that they did not engage in any type of religious activity ( $X^2=9.331$ ,  $df=1$ ,  $p=0.001$ ). Statistically significant differences by church attendance were also found in terms of the specific types of public religious activities that the participants engaged in during the past 12 months (Table 57).

*Arts.* A larger proportion of church attending (19.9%) than non-church attending (7.3%) participants engaged in an arts ministry ( $X^2=10.377$ ,  $df=2$ ,  $p=0.006$ ).

*Sunday School or Bible School.* A larger proportion of church attending (31.9%) than non-church attending (16.1%) participants attended Sunday School or Bible School ( $X^2=10.999$ ,  $df=2$ ,  $p=0.004$ ).

*Weekend retreats or camps.* A larger proportion of church attending (12.3%) than non-church attending (4%) participants attended church weekend retreats or camps ( $X^2=6.736$ ,  $df=2$ ,  $p=0.034$ ).

*Prayer services.* A larger proportion of church attending (13.3%) than non-church attending (4.8%) participants attended prayer services ( $X^2=6.504$ ,  $df=2$ ,  $p=0.039$ ).

*Church concerts or plays.* A larger proportion of church attending (10.3%) than non-church attending (3.2%) participants attended church concerts or plays ( $\chi^2=5.824$ ,  $df=2$ ,  $p=0.054$ ).

**Objective 3b.** The second objective for the third research question of this study sought to assess the relationship between parental religiosity and preadolescents' role in bullying, by geographic location, gender and other socio-demographic characteristics of the participants. Parental religiosity was positively correlated to connectedness overall ( $r=0.150$ ,  $p\leq 0.05$ ), connectedness to parents ( $r=0.172$ ,  $p\leq 0.001$ ), connectedness to mothers ( $r=0.151$ ,  $p\leq 0.001$ ), connectedness to teachers ( $r=0.161$ ,  $p\leq 0.001$ ), and connectedness to school ( $r=0.180$ ,  $p\leq 0.001$ ) (Table 47).

A larger proportion of church-attending participants (33.2%) said that religion is very important for their parents, compared to non-church attending participants (26.6%). This difference was statistically significant ( $\chi^2=19.719$ ,  $df=6$ ,  $p=0.003$ ) (Table 56). No statistically significant differences in parental religiosity were found by geographic location, gender or age of the participants (Table 54-56).

**Objective 3c.** The third objective for the third research question sought to assess the probability of engaging in different bullying roles by the level of public or private religiosity of preadolescents, by geographic location, gender and other socio-demographic characteristics of the participants. Correlation and logistic regression analyses were conducted to explore this research objective.

In terms of correlational analyses, it was found that public religiosity is significantly correlated to private religiosity ( $r=0.559$ ,  $p\leq 0.001$ ), while private religiosity

is positively correlated to all connectedness scales. Religiosity overall is positively correlated to all connectedness scales with statistical significance (Table 47).

Significant associations were also found between different bullying roles, and public and/or private religiosity. Victimization-only was positively correlated to public religiosity ( $r=0.143$ ,  $p\leq 0.05$ ). Perpetration-only was negatively correlated to private religiosity ( $r=-0.238$ ,  $p\leq 0.001$ ), and religiosity overall ( $r=-0.202$ ,  $p\leq 0.05$ ). Being a bystander only is positively correlated to private religiosity ( $r=0.233$ ,  $p\leq 0.05$ ) (Table 47).

In terms of logistic regression analyses, no statistically significant findings were found in the odds of being a bullying perpetrator, victim or both, by the self-report of public religiosity, private religiosity or both (Tables 58-60).

***Odds of being a bystander-only.*** Statistically significant results were found in terms of the influence of private and public religiosity and the odds of being a bystander only (Table 61).

***Private Religiosity.*** Among participants from SJ Metro, self-reporting private religiosity significantly reduces the odds of being a bystander only (OR=0.169, 95% CI=0.034-0.847). In other words, it increases the odds of being a victim or bully by 83%. Among participants from the SJ Metro, a one-unit increase in private religiosity reduces the log odds of the participant being a bystander only by 1.78 times ( $B=-1.780$ ,  $s.e.=0.823$ ,  $df=1$ ,  $p=0.031$ ); that is, a one-unit increase in private religiosity increases by 78% the log odds of being a bully or victim.

***Public and Private Religiosity.*** Among participants from the San Juan Metropolitan area, for every one-unit increase in public and private religiosity, a

1.402 increase is expected in the log-odds of being a bystander only ( $B=1.402$ ,  $s.e.=0.716$ ,  $df=1$ ,  $p=0.05$ ).

## **Chapter 5**

### **Discussion, Conclusions and Recommendations**

The purpose of this research study was to explore potential factors that could enhance resiliency against bullying among preadolescents in Puerto Rico (PR). It specifically explored the roles of connectedness and religiosity to this purpose. This doctoral dissertation also addressed several gaps in the children's bullying, resilience and religiosity research literature.

A final sample of 426 preadolescents ages 10-12 years old from the Boys and Girls Clubs of Puerto Rico (BGCPR) participated in this exploratory, cross-sectional study, by completing a quantitative questionnaire in paper and pencil format. Data was collected from all BGCPR units across PR (n=11), and was analyzed overall, by location (i.e., San Juan Metropolitan Area (SJ Metro), Other Municipalities), gender, age, and church attendance.

This final chapter presents a discussion on its most salient research findings. It also presents the conclusions drawn from the study, as well as recommendations for public health research and practice. The limitations of this study's design, as well as its significance are also discussed.

#### **Discussion**

The sample for this study was composed of slightly more boys (51%) than girls, who lived at Other Municipalities (56%) or within the SJ Metro (44%). The majority of

participants spoke mostly Spanish (76%), and a surprising 22% of participants said they spoke both English and Spanish at home. This finding contrasts with the reported 2009-2011 American Community Survey estimate of 95% of people in PR speaking mostly Spanish at home (US Census Bureau, 2012).

The vast majority of participants were Puerto Rican (95%), and/or born in PR (92%). It is interesting to note that more church attending than non-church attending participants (94% vs 88%) said they were born in Puerto Rico, whereas a larger proportion of non-church attending participants (10.4% vs. 4%) said they were born elsewhere in the US. Differences in church attendance by birth location could be contextual in nature. While we do not have specific data to compare this assumption to, church attendance and religious congregation involvement appears to be a stronger cultural and family activity within PR.

The majority of all participants (71%) said they attended church regularly, mostly Christian-protestant (32%) or Catholic (26%) religious congregations. This strongly contrasts with the CIA (2010) World Book data, which states that 85% of the population in PR is Catholic and 15% is protestant. As previously mentioned in this document (Rv. Miguel Cintrón, personal communication, p. 50), current religious leaders in PR acknowledge this religion distribution is inaccurate, and informally estimate that 49% of the population in PR is protestant.

In terms of family composition, nearly half (47%) of the participants lived within single-mother households. This is nearly three times the 2009-2011 American Community Survey estimate of single-female households with own children present (12.5%; US Census Bureau, 2012). More than half (56%) of the participants did not live



with siblings. Interestingly, only-child scenarios were more frequent among participants from San Juan Metro (63.1%) than Other Municipalities (50.2%).

Most of the participants reported being between 5<sup>th</sup> and 7<sup>th</sup> grade, as expected from the specific age group (i.e., 10-12 year old) recruited for this study. Nonetheless, a notable 12.2% of the participants reported being in 3<sup>rd</sup>, 4<sup>th</sup> or 8<sup>th</sup> grade. Those 4% of participants who reported being in 8<sup>th</sup> grade had to write in that grade level within the questionnaire, as it was not included as part of the options. Upon asking how to report they were already in 8<sup>th</sup> grade, the participants voluntarily explained to the principal investigator that they were still 12 years old at the time of the study but would soon turn 13 years old. A higher proportion of participants from SJ Metro reported being in 3<sup>rd</sup> and 4<sup>th</sup> grade (12.8%) than those from Other Municipalities (4.6%). As expected, statistically significant differences in grade level by the age of the participants were found. Also as expected, the vast majority (90%) of participants attended public schools.

Apart from extracurricular religious activities, participants from this study engaged in extracurricular or afterschool program activities at the BGCPR. Within their BGCPR unit, they mostly reported engaging in tutoring (58%), summer camps (53%), sports (48%) or dance (43%) groups. Significant differences on the type of BGCPR activity engaged in by location could be due to the availability of activity offerings at each BGCPR unit; their unit's size, membership, installations, and years of operation could determine the type of activities offered at each site. Differences by gender are certainly related to the types of activities that children from different genders are more likely to engage in, whether due to social norms or personal preferences. Finally, significant differences in BGCPR activities by church attendance could indicate the

possibility of that child engaging in other extracurricular activities elsewhere (e.g., at church), which serve the need that engaging in activities at BGCPR could suffice.

**Bullying knowledge.** In terms of their knowledge about bullying, most participants (94%) said they understood the definition provided by the questionnaire and a similar proportion had heard about bullying before (92%). Most frequently participants had heard about bullying at school (87%), as expected from the literature reviewed and the bullying-awareness efforts that the researcher was made aware of through public knowledge. It is also important to note that slightly over half (65%) of participants had heard about bullying at their BGCPR unit. In fact, the principal investigator saw bullying prevention materials (e.g., posters) placed around many of the BGCPR installations.

Half of all participants (54%) said they had not heard about bullying at church. This finding is consistent with a previous study conducted among Christian denomination leaders in Puerto Rico. They stated that congregations are in need of getting more involved in non-doctrinal, life-teachings for children and their families (Mercado-Crespo et al., in review).

Interestingly, nearly a third (31.6%) of non-church attending participants said they had heard about bullying at church, compared to 8.8% of those participants who actually self-report going to church. On the contrary, a higher proportion of church-attending (65.5%) than non-church attending (48.5%) participants said they had not heard about bullying at church. Some confusion is certainly possible among participants on whether what they had heard at church relates to bullying or not.

Some participants were not sure whether they had heard about bullying at school (2.6%), BGCPR (10.1%) or at church (20%). It is notable that a similar proportion of

participants said they had not (25%) or were not sure if they had heard (20%) about bullying at church, suggesting lack of clarity on the messages received.

**Friends.** Upon evaluating participants' responses to the types of friends they have, only 13% identified having antisocial friends. Non-church attending participants (17.6%) were significantly more likely to have antisocial friends than church-attending participants (11%). This difference could be due to the type of children and families that attend church and with whom the participants have a relationship with. It could also be due to influence from the teachings obtained at church, or expectations from others. Such differences warrant additional and more in depth research.

Between a third and half of all participants have friends that have been involved in bullying as a victim (43%) or perpetrator (36%). In fact, 35% of all participants expressed some level of fear of being victimized by bullying. These findings suggest that participants' exposure to bullying is real, and justifies the need for developing interventions to enhance resilience against it. Furthermore, it is important to go beyond preventing their participation as bullies or victims, but also to enhance the ways in which they can empathize and contribute to its reduction. Providing external mechanisms beyond their peer ecology to enhance empathy could also create a domino effect – peers will see their empathy modeling and more frequently try to do something to stop the bullying.

### **How does bullying affect preadolescents from a PR afterschool program?**

Bullying is a serious public health problem that affects children in many aspects of their lives. According to Dan Olweus' recommendations for the Olweus Bully Victim Questionnaire (Solberg & Olweus, 2003) and in order to best reflect the repetition aspect

of bullying, a child should be considered a bully or a victim if he/she has engaged in or experienced bullying at least 2 or 3 times per month. This study found that 20% of the participants were victimized by bullying, 5% engaged in bullying perpetration, 16% were bully-victims, and 50% engaged in bullying as bystanders.

The prevalence of victimization found for this study (20%) is higher than the one reported by the 2011 PR Youth Risk Behavior Survey (YRBS; 12.7%; CDC, 2012e). It is important to note that PR YRBS data comprises high school student participants, whereas the sample for the current study was preadolescents ages 10-12 years old who were most likely enrolled in late elementary or middle school (i.e., 4<sup>th</sup> – 8<sup>th</sup> grade).

More participants were identified as bully-victims (16%) than bullies-only (5%). This may suggest that preadolescents are more frequently choosing bullying behaviors as a response to their own victimization. It may also be a reflection of social norms that allow for bullying behaviors to be common practice. Additional research on bully-victimization as well as the conceptualization of bullying among PR preadolescents may shed light in this matter.

Consistent with the literature (e.g., Carlyle & Steinman, 2007; Craig et al., 2009; Espelage & Holt, 2001), significantly more boys reported being bullies (8.7% vs. 1.9%) and bully-victims (19.7% vs. 13.5%) than girls. Conversely, a significantly larger proportion of girls (26%) reported being victims, compared to boys (16.7%); this is consistent with some studies that suggest girls are more likely to be victimized than boys (e.g., Dussich & Maekoya, 2007; Eisenberg, Neumark-Sztainer & Perry, 2003).

Given this study considered different direct and indirect types of bullying, the identified gender differences in bullying roles are important. This study distinguished

between physical and verbal or relational forms of bullying, which are most frequently associated to boys and girls, respectively (e.g., Carbone-Lopez et al., 2010; Fekkes et al., 2005; Nansel et al., 2001; Wang et al., 2009).

The most frequent type of bullying victimization reported was verbal, most closely followed by various forms of indirect bullying (i.e., racist comments, rumors, social isolation). The second to least frequently reported type of victimization was physical. This contrasts with the current bullying literature available, which mostly focuses on physical and cyber forms of bullying. It could also be a reflection of the fact that the prevalence of victimization overall was highest among females; males specifically reported higher levels of physical bullying victimization.

Younger participants and those living within the SJ Metro Area reported higher levels of victimization. Those participants who reported attending church regularly also reported higher levels of victimization overall and via racist comments. While this is consistent with the positive correlations found between religiosity and victimization, the reasons why church attending participants could be more subject to racist comments require additional research. It might be an instrument-related issue; no questionnaire items explored religious-related bullying or discrimination.

This study found a 5% prevalence of bullying perpetration (i.e., bullying another at least 2 or 3 times per month) for preadolescents. No representative estimates on bullying perpetration are available for children in PR to compare this finding to. As in the case for victimization, verbal bullying was the most frequently reported type of perpetration, closely followed by rumor spreading, social isolation, and physical aggression. Consistent with the literature, a higher prevalence of different forms of

bullying perpetration was found among males than females. Specifically in terms of threats, more non-church attending participants engaged in this type of bullying than church-attending ones.

As in the case for bullying victimization, higher prevalences of perpetration were found among SJ Metro participants, compared to those from Other Municipalities. While few community-level risk and protective factors for bullying have been identified in the literature, exposure to community and media violence have been associated to children's engagement in bullying and other forms of violence (e.g., Anderson, 2004; Bok, 1998; Ferguson et al., 2009; Huesmann et al., 2003; Zimmerman, Glew, Christakis & Katon, 2005). While all BG CPR units are located within or close to low-income and high community violence areas, more units within SJ Metro than Other Municipalities encountered severe community violence during the data collection stage of this study. This included drive by shootings, gang conflicts, aggravated assaults, robberies, homicides and other drug-related incidents; some of which involved BG CPR members not participating in this study during the data collection period.

Nearly a quarter (23%) of participants said bullies were usually in their same grade level, contrasting with the bullying power imbalance literature that states bullies are older than victims (Barboza et al., 2009; Craig et al., 2009; Espelage & Holt, 2001). This finding could be contextual in nature, given most schools in PR require students to take all courses with the same grade level and group of children. This limits the opportunity preadolescents may have to interact with older or younger children to recess, lunch and afterschool time.

Participants most frequently identified bullies to be girls (20%). This finding contrasts with the literature, which states that bullies are usually boys (e.g., Carlyle & Steinman, 2007; Craig et al., 2009; Espelage & Holt, 2001). Notwithstanding, this study also found statistically significant differences by gender in the report of bullies' gender – girls more frequently reported bullies to be girls, and boys more frequently reported bullies to be boys. This gender reporting difference and the fact that more girls than boys were identified as victims could help explain the higher report of female bullies, in spite of the prevalence of this study participants' perpetration being highest for boys.

Nearly a third of participants (30%) said that usually there are 1-3 bullies present during incidents. This finding supports our knowledge on the fact that bullies are not usually solitary, stand-alone perpetrators, but that they may have friends, followers or reinforcers that support each other (Olweus & Limber, 2010). There is power in numbers; a group of bullies creates a greater power imbalance between them and their victim(s).

The length of bullying victimization was also found to vary by location of the participants. Overall, 13% said victimization lasts 1 to 2 weeks, and 8% said victimization has lasted several years. A larger proportion of participants from Other Municipalities said that victimization has happened for nearly 1 year or several years (14.6%) compared to 9.6% of participants from SJ Metro. This could be due to population density issues. The three municipalities represented within SJ Metro for this study account for at least 16% of the total PR population, compared to the five represented within the Other Municipalities (8% of total PR population), as per calculations made from 2009-2011 American Community Survey estimates (CDC, 2012).

A larger population density implies the need for more schools to serve their children. Children within SJ Metro may move more frequently or be dispersed among more school locations. Limited student mobility among participants from Other Municipalities could facilitate bullying to transcend longer time periods. This and other potential explanations require additional research.

Even though emphasis has been given to school-based bullying prevention programs and interventions, participants most frequently reported that bullying occurs at school. It is important to note that the questionnaire distinguished between bullying in the classroom (14%) and bullying in the classroom when the teacher is not there (10%), being highest when the teacher is present. Given non-school locations (9%) was one of the top 5 most frequently mentioned locations where bullying occurs, it is also important to go beyond school-only bullying prevention interventions or research, and also assess the role that bullying plays in children's lives within the home and community (e.g., neighborhood, BGCP, churches).

It is important for preadolescents to know it is safe to seek help from parents, teachers, or others when encountering bullying. Yet only 23% of those participants identified as victims have told their parents about their victimization. In fact, more victims had talked to their friends about it (19%) than to their teachers (17%). The reasons why they chose not to tell anyone or why they told a specific person about it were not explored, and warrant more in depth study.

Children that are not bullies, victims or bully-victims are considered to be bystanders. While the literature has certainly discussed the important role of bystanders in bullying prevention, this study is one of the few (e.g., Barlinska, Szuster & Winiewski,



2013; Choi & Cho, 2013; Oberman, 2011; Schaber, 2008) that consider the different negative or positive roles that a bystander can engage in. Slightly over a quarter of participants (26%) were identified as passive bystanders and 15% were identified as reinforcers. In fact, 26% of participants said they would consider becoming a bully or joining in the bullying of another child regardless of whether they had been involved in bullying before or not.

Among the participants of this study, 58% of preadolescents were identified as potentially being able to empathize with victims; they said they feel sad upon hearing of another child's victimization, and some would even want to do something to help them. Furthermore, a larger proportion of girls than boys (30.8% vs 19.8%) were identified as having defended victims in some way (i.e., bystander-defenders). This finding is important, as it shows that empathy may play a notable role in the prevention of bullying among PR preadolescents. Yet it is also necessary to explore the reasons why girls are more significantly prone to report helping bullying victims, and assess how empathy can be increased among male preadolescents in this regards.

Not all bystanders are children. There are also adults in several roles that could bystand bullying situations, whether they are aware of it or not. In terms of teachers, 42% of participants had rarely seen them do something to stop the bullying, and 50% thought that teachers overall have done little or nothing to stop the bullying. These findings are significant, given most emphasis on bullying research and prevention has focused on school-based scenarios, where teachers and school-staff are the supervising/bystanding adults present.

While not at school during daytime, parents can also serve as bystanders to the bullying situations that their children face. Few parents (under 15%) had talked to their children about their bullying perpetration. Furthermore, only 23% of all participants said their parents had contacted the school to try to stop their victimization. While this only accounts for the parents of 36% of all victims, it does account for the parents of a notable 62% of victims that had told their parents about it. While many parents are taking action to stop their children's victimization, future efforts should assess the role of parent-child communication (e.g., connectedness to parents) in enhancing their and other family adult bystanders' active involvement in bullying prevention.

It is also important to understand the reasons why peer and adult bystanders do or do not become involved in the prevention of bullying. Such reasons could shed light on changes needed for current interventions. Beyond increasing awareness on bullying as a real problem, messages and interventions should prompt bystanders to action. This is consistent with US Department of Health and Human Services' recommendations for adults to "stop bullying on the spot" and children to learn how to "be more than a bystander" (USDHHS, 2012a, 2012b).

This study also assessed whether participants thought different types of adult bystanders might feel disappointed upon knowing they were bullying others. At least half of all participants thought their parents (57%), church leaders (50%) and teachers (49%) would certainly feel disappointed. Conversely, participants were not sure whether their teachers (20%), church leaders (20%) or parents (16%) would feel disappointed about their involvement in bullying. This finding is significant in light of social learning and socioecological constructs included within the integrated theoretical model

developed for this study. If participants are not sure whether their differential associations (i.e., teachers, church leaders, parents) at multiple socioecological levels would feel dissatisfied if they were bullying others, then they may not be clear on the differential reinforcements or definitions they are receiving from these sources. They could also be confused by the models they are being exposed to through their behavior, and their inconsistencies with other forms of reinforcements received.

**How does connectedness to others impact preadolescents' exposure to and/or roles in bullying?** Participants reported different levels of connectedness to differential others (i.e., people, places) at multiple socio-ecological levels. They reported the highest connectedness to school and the community, followed by connectedness to parents, teachers, mothers, religion, fathers, and friends. According to Karcher (2012), high connectedness to community and peers may signal a child's connection to antisocial others. Notwithstanding, given this study comprises a community-based organization sample – thus implying the participants are associated to a prosocial community entity – this conclusion cannot be unequivocally drawn. Their involvement at BGCPR could be the reason why one of the highest connectedness sources reported is the community.

Significant differences in connectedness levels were found by location. Participants from Other Municipalities reported higher levels of connectedness to parents, fathers and mothers, compared to children from SJ Metro. This difference could be contextually explained. For example, given participants come mostly from low income communities and living costs are much higher within SJ Metro, it is possible that parents need to spend more time away from their children in order to supply for the family's needs. This warrants additional research.

Additionally, girls reported higher connectedness to mothers than boys, and younger participants reported higher connectedness to religion than older participants. This latter finding could be due to older participants' choice in attending church activities. It is also consistent with a prior research interview study conducted with Christian denomination leaders in PR, which found that congregations usually serve more preadolescents than adolescents (Mercado-Crespo et al., 2012). As expected, those participants who report attending to church regularly had higher levels of connectedness to religion than those non-church attending.

Connectedness was significantly correlated with different bullying roles. Connectedness overall, to mothers, teachers and school was positively and significantly correlated to victimization-only, whereas connectedness to school was negatively correlated to perpetration-only. Having strong prosocial connections to these sources do not appear to have a reduction impact on participants' bullying victimization.

The fact that both connectedness to school and teachers were positively correlated to victimization raises a red flag on the need to evaluate whether school-focused bullying prevention interventions are appropriately being implemented within PR's schools and the PR Department of Education. While preadolescents are certainly hearing about bullying at school (87%), they also state that school is where they most frequently encounter bullying. Many times the incidents occur in the classroom when the teacher is present. This could be one of the reasons why most preadolescents think teachers overall do little to nothing to stop the bullying (50%) and the fact that only 9% of them have talked to teachers about their victimization. It is also important to explore whether higher

levels of connectedness to school and teachers make preadolescents a target for victimization in the eyes of their peers.

**Does religiosity affect preadolescents' exposure to and/or roles in bullying?**

The majority of participants (71%) said they attend church regularly, yet only 35% of all participants attended church almost every week during the past 12 months. Less than half of, specifically, church-attending participants (44%) said they go to church almost every week.

The frequency of preadolescents' church attendance may be related to their affinity for church activities. Findings from this study show that while preadolescents are attending church, the majority of them are not fully liking the experience; only 34% of church attending participants said they like attending church a lot. This finding has implications for PR congregations in terms of their approaches to child-related activities. Furthermore and in terms of this study's purpose, congregations that are interested in working towards the prevention of bullying among preadolescents need to evaluate their current approaches, strategies and tactics in working with children in order to best serve them. The evaluation of their approaches must also consider gender differences, as this study found that more males (33%) than females (18%) said they do not like to participate in religious activities.

In order to gain insight into what motivates preadolescents to attend and like attending churches, it is important to consider the reasons why preadolescents go to church. Over a third of participants (36%) – 44% of females and 30% of males – attend church because they want to. This prevalence is slightly higher than the percent of participants who said they like going to church a lot (34%). More in depth research is

needed to understand why do these preadolescents like going to church – are these reasons based on their personal convictions or faith, their parents’ influence in their beliefs and practices, the type of activities engaged in at church, or any benefits they obtain from attending? From this study we know that apart from going because they want to (36%), over a quarter of participants go to church because of parental (20%) or peer (9%) pressure, and 4% does not know why they go. More males than females go because their friends want them to go, or don’t know why they go. Once again, the need to assess gender differences in the reasons why preadolescents like or go to church must be assessed.

The role of parents in preadolescents’ church attendance and engagement in church activities, including parents’ own public and private religious practices, is also important to consider in more detail. Prior studies suggest that parental religiosity is significantly associated to adolescents’ report of delinquency, substance abuse and risk behaviors (Bridges & Moore, 2002a, 2002b; Burkett, 1993; Nonnemaker, et al., 2003). From this study we know that 51% of participants think religion is important for at least one of their parents, yet only 20% said they go to church because their parents want them to. This could mean that preadolescents are old enough to attend church on their own and not just because their parents want them to.

While parental religiosity was not correlated to connectedness to religion, it was significantly correlated to connectedness to parents, mothers, teachers and school. This finding suggests that parental religiosity could act as a mediator for increased levels of prosocial connectedness to individuals and entities, thus potentially serving as an indirect factor to increase preadolescents’ resilience. This is consistent with previous research

interviews conducted with PR Christian denomination leaders, who suggested one of the main influences that congregations can have in children's wellbeing is indirectly through their focus on strengthening families and relationships (Mercado-Crespo et al., in press).

It is also possible that participants' perceptions of their parents religiosity could serve as a reinforcer of their parents' expectations for their good behavior; for example, parents expecting their children to have good relationships with teachers and doing good in school. In depth research is needed to explore this and other parent-related factors that could interact with parental religiosity as a pro-resilience asset.

The vast majority of participants (81%) said that they very much agree with "obeying God and commandments being important". This finding is significant, especially in light of the fact that empathy and non-violence topics are considered by PR church leaders to be consistent with the Christian doctrines, values and beliefs they profess (Mercado-Crespo et al., 2012). Still, just about half of participants showed consistent private religiosity behaviors; only 51% said they care about church a lot, 49% seek help in church or religion when they have problems, and only about 40% of participants said they engage in those private religiosity practices encouraged by their Christian doctrines, values and beliefs (i.e., 40% pray every day, 37% read their sacred book every week or more than once per month).

In spite of this discrepancy, at least 40% of all participants reported engaging at some level in private religiosity, which was negatively correlated to being a bullying perpetrator, and positively correlated to being a bystander-only. These findings could be a reflection of the influence of prosocial, empathic and moral norms associated with participants' religious beliefs.

On the other hand, public religiosity was positively correlated to victimization. Given most participants from this specific study are likely to share common school and community environments, it is possible that bullying victimization transcends schools and continues elsewhere, for example, during public religiosity activities and locations (e.g., church attending, youth group, Sunday School). Another explanation for this finding could be that preadolescents become bullying targets due to their public religious practices that make them different from the norm. This is consistent with prior studies (e.g., Ferguson, San Miguel & Harley, 2009; Fitzpatrick, Dulin & Piko, 2007; Kulig, Hall & Grant-Kalischuk, 2008; Lumeng et al., 2010; Mooij, 2011; Nansel et al., 2001; Olweus, 1973, 1978; Poteat & DiGiovanni, 2010).

While there are certainly some limitations in terms of the likeability and impact that churches have on preadolescents as per the findings in this study, it is still worthwhile to explore ways in which to engage congregations in socio-behavioral prevention efforts for children. PR preadolescent participants of this study go to church regularly, consider church to be important, and recognize the importance of following the pro-social commandments and values promoted by their religion (e.g., obeying God and commandments). In fact, the most frequently mentioned type of public religious activity that participants engage in is Sunday School, which provides a weekly, school-like scenario that could be useful in consistently incorporating violence prevention messages and interventions. Still, it is imperative to first evaluate the effectiveness of the currently employed mechanisms through which churches work with preadolescents. Strategic changes may be needed before engaging in church-based or church-placed collaborative violence prevention efforts.



**Connectedness, religiosity and bullying.** Two types of multivariate analyses were conducted in order to assess the relationships between connectedness, religiosity and bullying – logistic regression analyses and multiple linear regression analyses.

*Probability of engaging in different bullying roles, by level of religiosity.* No significant findings were found via logistic regression analyses in terms of the odds of being a bullying perpetrator, victim or bully-victim, by the self-report of public religiosity, private religiosity or both. On the contrary, statistically significant findings were found in the odds of being a bystander, by private religiosity and public/private religiosity.

The self-report of private religiosity among SJ Metro participants significantly reduces the odds of being a bystander by 0.17 times. It is possible that the reduction in the odds of being a bystander implies an increase in the odds of being a victim; private religiosity can identify children as being different from the norm – considered the underlying general reason why a child is bullied (Olweus, 2005, 1993) –, and thus a target for victimization. This possible explanation is also consistent with the findings from this study's bivariate correlation analyses, which found a negative association between private religiosity and bullying perpetration. Yet, it could also be possible that a child's increased levels in private religiosity provoke self-righteous or superiority beliefs that move him/her to engage in bullying perpetration.

Additional research is required to assess whether this reduction in the odds of being a bystander indeed implies the participant has an increased odds of being involved in bullying as a victim or as a perpetrator. Further studies should also assess whether

there are any other non-location related factors moderating this association. It remains unclear why this finding is significant among SJ Metro participants and not elsewhere.

*Magnitude of the impact of preadolescents' connectedness to others on their role in bullying.* Multiple linear regression analyses did not find any significance in connectedness' prediction of victimization. Yet, the impact of connectedness and other covariates at multiple socio-ecological levels was significant in terms of bullying perpetration.

For the full sample, a 1-unit increase in hearing about bullying at BGCPR or reporting private religiosity may result in a 24% decrease in bullying perpetration. These findings are consistent with previously discussed correlation analyses. This model also suggests that a one-unit increase in having heard about bullying at church may result in a 34% increase in bullying perpetration among participants. Given PR Christian denomination leaders acknowledge that congregations may not be intentionally addressing the topic of bullying or youth violence at the moment (Mercado-Crespo et al., in review), and the fact that only 25% of the participants in this study stated that they had heard about bullying at church, it is possible that preadolescents have heard about bullying at church only when participants are already engaging in this behavior.

Findings from this model also showed that a 1-unit increase in engaging in church activities (i.e., public religiosity) may result in a 32% increase in bullying perpetration among all participants. This finding is contrary to the reviewed literature, which suggested that public religiosity could serve as a protective factor for youth violence (e.g., Jessor et al., 1998; Méndez et al., 2003; Mercado-Crespo, 2006; Parrilla et al., 1997), as a source of conventional connectedness that positively orients the child against

violence (Karcher, 2002), or as a buffer to reduce the impact of negative factors that could hinder the child and community's health (e.g., Mallin & Hull, 2008) through learning of moral values and normative beliefs that reject bullying and support empathy towards others.

Consistent with prior bivariate analyses and in an attempt to clarify these findings, additional sequential multiple linear regression analyses were conducted with two distinct population subgroups: church-attending and non-church attending participants. Statistically significant results were found only in terms of bullying perpetration.

The full multiple linear regression model was a stronger predictor of variance in bullying perpetration among non-church attending participants (61%) than church-attending participants (23%). Within the model for non-church attending participants, 6 predictors significantly accounted for changes in bullying perpetration, including two connectedness-related variables.

Consistent with the literature, being older and having higher levels of connectedness to the community accounted for 29% and 45% increases in bullying perpetration among non-church attending participants. Also consistent with the literature, having heard about bullying at BGCPR and having higher levels of connectedness to mother accounted for 60% and 38% decreases in bullying perpetration among non-church attending preadolescents.

Having antisocial friends was found to account for a 35% decrease in bullying perpetration. This unexpected finding could be related to the operationalization of the antisocial friends variable for this study, which only contemplated participants' friends obedience, academic achievement and substance use behaviors.

Some other explanations for this finding could lie on the social support received from friends. For example, it is possible that these kids seek antisocial friends (e.g., gang membership) as a source of social support, to suffice the need of belonging (e.g., Parker, McRant & Coleman, 2012), or as a means to be protected against others' violence, not because they want to engage in violence themselves. It is also possible that those non-church attending preadolescents that choose antisocial peers as friends do so in order to feel stronger and more powerful. Finally, this unexpected finding could just have been a reporting artifact – kids may have reported having antisocial friends in order to appear tougher. It is also important to remember that a larger proportion of non-church attending participants report having antisocial friends, compared to church attending participants.

Contrary to what was expected from the literature, showing higher levels of public religiosity was found to account for a 62% increase in bullying perpetration among non-church attending participants. The reason for such a high (62%) and perpetration-supporting impact of public religiosity among non-church attending participants could lay in the fact that these preadolescents self-reported not going to church regularly yet reported participating in some public religiosity activities. The type and frequency of participation in these public religiosity activities was not contemplated within this multiple linear regression.

Regardless of the frequency of their attendance, and their non-identification as religious, why do these kids attend some pro-socially oriented church activities? More detailed research is needed to understand why these non-religious kids attend church activities. While going to church because parents want them to was not the reason most

frequently mentioned, it may be important for us to know why some parents tell their children they have to go to church. It also may be worthwhile to explore whether parents are taking their bully-identified kids to church as an attempt to try to change their behavior, as a help-seeking mechanism.

On the other hand, it may also be possible that bullies go to church voluntarily, as a means to seek more venues to perpetrate or continue the violence. Church then becomes a bullying venue, not a prosocial influence in their lives. For example, if these children were involved in gangs, then a reason to attend religious activities could be to act as informants on the activities being engaged in by some of these local, faith-based entities that operate within the same gang-controlled communities. While it is important to remember that many of the participants from this study were members of BGCPR units located in high-crime communities that have strong gang presence, being located within these communities do not necessarily mean that this study's participants are involved in gang or crime related activities.

While there is no peer-reviewed literature on the impact of irregular church attendance on children's wellbeing, participants' self-report of church attendance and actual participation in church-related activities shed some interesting and statistically significant light on the variance in bullying perpetration. Further research may provide new directions in terms of the settings where prevention efforts occur. Consistent with Olweus' beliefs and the socio-ecological perspective, bullying prevention requires multilevel and multifaceted efforts (Espelage & Swearer, 2003; Olweus, 2005, 1993). Within the context of this research study, PR churches could serve as intervention access points, especially for this newly identified special population subgroup – children who do

not self-identify as church-attending but participate of some public religious activities and are at risk for increased bullying perpetration.

While non-religious community based organizations (e.g., BGCPR's 11 units across PR) may already be engaged in bullying prevention and/or may be more readily prepared to start working in such efforts, their presence across PR communities is not as extensive as that of congregations. While there is no official data to confirm this, churches are considered to be the type of community based organization with highest presence across PR communities. Given their interest in serving their communities (Mercado-Crespo et al., in review) and the limited yet significant findings from this study, it is recommended that additional research be conducted to explore ways in which churches/FBOs can join other CBOs and schools in multilevel efforts to prevent children's bullying.

## **Conclusions**

While children's bullying has certainly been identified as a problem amidst different countries and cultures, the role that bullying risk factors play within each context may vary (Hilton, Anngela-Cole & Wakita, 2010). This exploratory study contributes to our understanding of bullying among PR preadolescents. Research on bullying in PR is limited, making it increasingly challenging for PR schools and others to create interventions that specifically target PR's children. Research on this type of violence also helps address one of PR's population main concerns; according to the 2007 Study of Puerto Rico's Social Needs – the most recent large scale mixed methods study on social problems in Puerto Rico (PR) –, violence is the primary concern among PR's population (Estudios Técnicos, 2007).

According to this study's findings, it is important for the PR Department of Education and others to re-evaluate their current efforts to prevent and reduce bullying within PR public schools. Additionally, the role of empathy in bullying prevention by gender, and the role of differential others (e.g., parents, teachers, congregations) in its prevention must be addressed. The uncertainty of participants on whether they had heard about bullying or not, and whether their parents/teachers/church leaders would feel disappointed or not may be a reflection of inconsistent or ineffective messages, definitions or reinforcements received from differential others at multiple socio-ecological levels. It is also important for research to be expanded on the potential role of religiosity – public and private – in the prevention of preadolescents bullying and the collaborative role that FBOs can play in such efforts at the community level.

**Strengths and significance of the study.** Inspired by community-based participatory research goals, going beyond solely school-based approaches to bullying prevention, and considering community-based efforts' utility in addressing children's bullying (Espelage et al., 2000; Fekkes et al., 2005; Nansel et al., 2003), this study utilized a non-school sample of low-income preadolescents who attend afterschool programs at local community-based organizations. The focus on a younger age group (i.e., preadolescents) is consistent with the resiliency literature on the importance of enhancing resilience factors earlier in childhood (Ungar, 2008a). Furthermore, conducting research amidst this community-based scenario is consistent with one of the Government of Puerto Rico's Social Improvement and Transformation Model goals (in effect during the data collection phase of this study) – prioritizing community-focused prevention strategies (Government of Puerto Rico, 2009).

Considering the multiplicity of actors involved in bullying, this study identified participants' exposure to bullying as perpetrators, victims, bully/victims, and/or bystanders. Direct and indirect types of bullying were also distinguished; this was especially important in order to assess gender differences and reduce the underestimation of bullying among females, as recommended by the literature (e.g., Crapanzano, Frick & Terranova, 2010, Espelage, et al., 2000). Furthermore, this study presented a high statistical power (95.6%) in the estimation of bullying victimization. All measures were validated with PR preadolescents, developed and adapted based on the results of multiple pre-dissertation research studies spanning over a 2-year period.

Consistent with the previous use of ecological models in children's bullying research (e.g., Barboza et al., 2009; Espelage et al., 2000), a socio-ecological approach was followed to explore the role of connectedness to others at the individual, family, school, peer, religious, and community levels. In addition to connectedness, religiosity was also considered as an external asset to enhance resilience in preadolescents. Exploring the role of different types of connectedness allows for the development of preadolescent bullying prevention efforts at different levels, to expand the cumulative access of children to bullying protective factors, and potentially enhance their resilience against it. This study also helps break ground in the exploration of the role of religiosity on PR children's wellbeing.

Public health continuously works in assurance, assessment, and policy development efforts that are grounded in research and aim to protect population's health (IOM, 1998), as explained through the 10 core public health service model (NPHSP, 2010; Public Health Functions Steering Committee, 1994). This research study



contributes in assessing and describing the problem of children's bullying, consistent with CDC-Veto Violence program's recommendation that violence prevention approaches should assess/describe the problem and identify risk/protective factors (CDC, 2011d). Findings from this research serve to inform the development of prevention programs, strategies and policies at the community level, consistent with CDC-STRYVE (Striving to Reduce Youth Violence Everywhere) recommendations for community-based youth violence prevention efforts (CDC, 2011c). Furthermore, findings from comparisons between SJ Metro participants and those from Other Municipalities allow for the identification of different bullying scenarios and/or potential connectedness or religiosity factors that may differentially affect children within these contexts.

Additionally, this study is one of the first to assess the role of religiosity in children's wellbeing and health. In fact, research on religiosity and children is scarce and/or focuses on older adolescents (Bridges & Moore, 2002a, b). This study goes beyond describing religiosity among a sample of PR preadolescents; it also distinguishes between public and private religiosity aspects via multi-item scales, and explores the potential protective role of religiosity for children's bullying.

**Limitations and weaknesses of the study.** This research study's design was cross-sectional, and findings were specific to the moment in time when the data was collected. Causality could not be inferred from the research findings. Additionally, it is important to note that this research focused on a very specific population group: preadolescents that regularly attend an afterschool program, which could serve as a source of pro-social connectedness. Findings are not generalizable to all preadolescents in Puerto Rico. Furthermore and due to sample size limitations, it is not possible to make

comparisons across specific BG CPR Units; it is possible to compare by location (i.e., SJ Metro, Other Municipalities).

The researchers also recognize the possibility to encounter social-desirability bias in the participants' responses; that is, participants may have leaned towards answering the questionnaire with the answers they believe the researchers and their afterschool program's staff expect them to. The PI addressed this limitation during the data collection process, by verbally emphasizing the importance of truthfulness in participants' responses before starting each questionnaire section.

There is also the possibility of recall bias from the participants. The data for this study was collected at the beginning of the Fall 2012 semester. Given the questionnaire asked participants to answer based on their experiences during the past 3 months, it is possible that the recent 2-month Summer break might have shaded their recollections of events that occurred towards the end of the 2011-2012 schoolyear. Also, given the time period of recollection that the participants had to consider included time at school and time off on vacation, it is not possible to know with certainty whether the children were referring to bullying encountered solely at school or elsewhere. Lastly, this study did not inquire about bullying that occurred specifically at non-school locations (i.e., BG CPR, church, other).

### **Contributions to Public Health**

Findings from this study can help increase our understanding of bullying among preadolescents in Puerto Rico, and could provide valuable support in the development of policies and programs to address this public health problem. Given this study specifically focused on preadolescents attending an afterschool program at a community based

organization (CBO), findings could enhance our understanding on the potential involvement of CBOs – including congregations and/or faith-based organizations – in the prevention of children’s bullying.

Findings also shed light on the potential role of different forms of pro-social connectedness in the prevention of bullying perpetration and/or victimization, including connectedness to religion. This latter contributes in this study’s exploration on the role of public and private religiosity on children’s wellbeing, specifically in terms of their role in bullying.

This study also contributes in addressing the need for more theoretically based research on children’s bullying and stronger explanatory theories regarding bullying (Dixon, 2008). The theoretical integration of Bronfenbrenner’s Socio Ecological Theory and Akers’ Social Learning Theory within this study may serve as a foundation for additional research on the role of risk and protective factors on children’s bullying at multiple levels. Furthermore, it is important to note that this theoretical integration-based study was developed after an extensive literature review process and prior qualitative and quantitative research studies with community leaders, and Hispanic and Puerto Rican children over a time span of 2 years.

Additionally, this research’s findings break ground in the study on religiosity and children’s wellbeing. While it is known that over 3,000 quantitative studies have examined the relationships between religion/spirituality and health (Koenig, 2008), little research – under 1% of peer-reviewed articles (Boyatzis, 2003) – is available on religiosity and children (Bridges & Moore, 2002a, b). No peer-reviewed studies on children’s religiosity among a solely Puerto Rico based sample were found at the time of

the development of this study. Going beyond describing preadolescents' public and private religiosity, this study also considers the direction, strength, and magnitude of the impact that religiosity may have on children's bullying behaviors.

Finally, this study's findings identify a critical, marginal child population subgroup that has rarely been studied nor intervened with. These are children who do not self-identify as church attending, but do participate on some public religiosity activities that account for an increase in their bullying perpetration. These are kids that may not be regular church visitors, but do visit or engage in activities from these prosocial, community-based institutions. Research and interventions focusing on these kids are lacking. Churches could provide a venue to intervene with them, yet it is necessary to learn more about the reasons behind their bullying, and assess why current efforts may not be bringing the expected results.

### **Recommendations**

Based on the findings from this dissertation research study, recommendations can be made in terms of generalizations, public health practice, and future research.

**Theory or generalizations.** While findings from this research study are not generalizable to all PR preadolescents, they certainly provide guidance on those areas that should be distinguished upon making bullying-related generalizations. First, gender and role differences should be included in statistical reporting on bullying perpetration or victimization. Gender could certainly contribute to differences in the reporting of connectedness and religiosity, as it was the case during this research study. The need for strong distinction on bullying, connectedness and religiosity behaviors by gender could

be contextually related, and based on the influence of gender-based social norms from this fully Hispanic US-based population group.

Beyond gender differences, generalizations should not be made that bullying rates are similar across races and ethnicities within the US. As noted by prior research (e.g., Mercado-Crespo & Mbah, in press), race and ethnicity – as an indicator of sociocultural differences – may moderate the impact of risk and protective factors on children’s violence. As it has been the case for gender and age, race/ethnicity could act as a moderating factor on the conceptualizations or definitions children have on what it means to be bullied and the types of behaviors that constitute bullying. While this research study’s findings does not provide for racial/ethnic comparisons, it does serve as a first step in this regards by focusing on a fully Hispanic sample from a US jurisdiction.

**Public health practice.** This research focused on a younger age group population (i.e., preadolescents ages 10-12 years old) than the one usually assessed through peer-reviewed published research. Consistent with previous findings from a representative sample of preadolescent schoolchildren in PR during the 2000-2002 period which found higher prevalences of physical aggression than the ones reported for adolescent high school students (Mercado-Crespo, 2006), the prevalence of bullying identified from this study was higher than the one reported for high school students through the 2011 YRBS survey (CDC, 2012e).

The researchers recommend that bullying and violence prevention interventions start at earlier ages (i.e., early elementary grade levels), prior to children reaching middle school and high school. It is recommended that the emphasis on adolescent based interventions – the peak age for bullying expression (e.g., Fitzpatrick et al., 2007; Powell

& Ladd, 2010) – be reconsidered, and current interventions subjected to short and long term evaluations on their effectiveness. Furthermore, a greater emphasis on verbal and social forms of bullying is also recommended.

Current bullying prevention programs, interventions and policies should be evaluated to ensure that they are having their intended effects. The US Department of Education recently conducted an evaluation of all bullying-related state laws (Stuart-Cassel, Bell & Springer, 2010). While we do know there are two laws in PR (i.e., PR Law 49 of 2008, PR Law 37 of 2008) that address children’s bullying within public and private schools, and federal guidelines require any federal funding recipient schools to address discrimination – including bullying-related discrimination – as a civil rights offense, the final product from this evaluation does not contain the PR-specific findings. A thorough evaluation of current PR bullying prevention policies and interventions is recommended.

It is also recommended that bullying prevention strategies focus on enhancing children’s resiliency, through strengthening those internal assets and external resources that may help them resist bullying and contribute to ending it. The strengthening of prosocial connectedness may be key in this purpose, and would require the employment of multi-level interventions. Collaborations between public health practitioners, education personnel (e.g., schools, teachers, social workers), and community based organizations (e.g., afterschool programs, churches and FBOs) are highly recommended and necessary for such a multilevel approach. Furthermore, their contributions are not limited to preventing bullying among the children, but also to increasing the skills of

adult bystanders (e.g., parents, teachers, Sunday School teachers, BGCPR staff, community members) to identify it and address it in an appropriate manner.

Beyond increasing awareness on bullying as a public health problem, it is imperative that we encourage people to take practical actions against it. Children themselves, teachers and school staff, parents and community leaders could all take different yet significant actions to stop and prevent bullying. The specific mechanisms through which they can influence others depend on the context of their influence.

Stronger emphasis needs to be given to develop interventions that target specifically what each of these population groups (i.e., children, parents, teachers, school staff, community leaders) can do to stop the bullying. In terms of community leaders, recommendations and interventions should be specific to the roles they play. These may include church leaders, Sunday School teachers and youth mentors; sports coaches; afterschool program staff; and others. The general recommendations provided by the U.S. Department of Health and Human Services (e.g., USDHHS, 2012a, 2012b) to this purpose need to be adapted to PR communities' context before enacted.

**Future research.** Given this study's participants identified more frequently engaging in verbal, rumor spreading and social isolation forms of bullying than the ones given most emphasis in the literature to date (e.g., physical, cyber), it is recommended that future research focuses on exploring the reasons why some types of bullying might be more prevalent among specific population groups (e.g., gender, age group, race/ethnicity).

This study is significant in that it comprised a sample of school-attending children that also participate in a community-based afterschool program. It is recommended that

this study be replicated with solely school-based populations. Given the study's secondary emphasis on children's religiosity and the fact that regular church attendance provides for another school- or afterschool program-like group scenario for bullying to repeatedly occur, future research could also consider replicating this study within church-based scenarios. Comparisons could then be attempted between bullying circumstances that occur at school, the afterschool program (e.g., BGCPR), church and within the community grounds.

Future research could also replicate this study with Puerto Rican and other Hispanic populations living outside of PR (i.e., stateside US). Findings could shed light into any societal and/or contextual factors that could influence the role of pro-resilience factors – such as connectedness and religiosity – in children's bullying perpetration.

Finally, it is important for future in-depth research to consider any differences in bullying conceptualization among Puerto Ricans living in PR. This could shed light on whether the lower than US overall bullying victimization prevalences found through this study and YRBS are real, or are they being moderated by cultural markers, which accept some bullying characteristics or types as the norm within some PR scenarios.

### **Final Words**

Bullying is a public health problem among PR preadolescents, that requires additional research for better understanding, and the development of gender-, age- and culture-specific interventions for its prevention. Some aspects of connectedness to prosocial others and religiosity could serve as a buffer for bullying perpetration, but not victimization. The role that faith and non-faith based community organizations can play in bullying prevention must be further explored, and actively pursued.



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## Appendices

## Appendix A: Tables

**Table 1. Definitions of Indicators**

| Descriptive/<br>Sociodemographic | Index of measures, by category |                       |              |           |              |             |               |                  |               |
|----------------------------------|--------------------------------|-----------------------|--------------|-----------|--------------|-------------|---------------|------------------|---------------|
|                                  | Bullying <sup>1</sup>          |                       |              |           | Perpetrators | Incidents   | Response      | Others' Response | Connectedness |
| Role in Bullying                 | Types of Victimization         | Types of Perpetration |              |           |              |             |               |                  |               |
| LOCATION                         | VICTIM                         | V-VERBAL              | B-VERBAL     | B-GRADE   | B-LENGTH     | TOLD        | FAM-TALK      | C-PARENTS        | R-BELIEF      |
| GENDER                           | BULLY                          | V-ISOLATION           | B-ISOLATION  | B-GENDER  | B-LOCATION   | FEEL        | STOP-STUDENTS | C-DAD            | R-COMMIT      |
| YEARS                            | BULLY-VICTIM                   | V-PHYSICAL            | B-PHYSICAL   | NUM-BULLY |              | FEAR        | TEACHERS      | C-MOM            | R-ACTS        |
| PR                               | BYSTANDER                      | V-RUMOR               | B-RUMOR      |           |              | POSSIBILITY | TEACHER-DONE  | C-FRIENDS        | PUBLIC-REL    |
| BIRTH                            | BS-DEFENDER                    | V-POSESSIONS          | B-POSESSIONS |           |              | T-FEEL      | STOP-FRIENDS  | C-TEACHERS       | PRIVATE-REL   |
| LANGUAGE                         | BS-REINFORCER                  | V-THREATS             | B-THREATS    |           |              | P-FEEL      | S-BULLYING    | C-SCHOOL         | RELIGIOSITY   |
| FAMILY                           | BS-PASSIVE                     | V-RACISM              | B-RACISM     |           |              | C-FEEL      | B-FRIENDS     | C-NEIGHB         | R-PARENT      |
| GRADE                            | BS-DISENGAGED                  | V-SEXUAL              | B-SEXUAL     |           |              |             | V-FRIENDS     | C-REL            | CHURCH        |
| SCHOOL                           | V-TYPES                        | V-CYBER               | B-CYBER      |           |              |             | TEACHTALK     |                  | RELIGION      |
| FRIENDS                          | B-TYPES                        | V-OTHER               | B-OTHER      |           |              |             | BGC-BULLY     |                  | R-SATISF      |
| FRIEND-TYPE                      |                                |                       |              |           |              |             | C-BULLYING    |                  | R-IMPORT      |
| KNOW                             |                                | V-CEL                 | B-CEL        |           |              |             |               |                  | R-OBEDY       |
| UNDERST                          |                                | V-WEB                 | B-WEB        |           |              |             |               |                  | R-HELP        |
| BCC-ACTS                         |                                | V-CELWEB              | B-CELWEB     |           |              |             |               |                  | R-12          |
|                                  |                                |                       |              |           |              |             |               |                  | R-BIBLE       |
|                                  |                                |                       |              |           |              |             |               |                  | R-RADIO       |
|                                  |                                |                       |              |           |              |             |               |                  | R-TV          |
|                                  |                                |                       |              |           |              |             |               |                  | R-WANT        |
|                                  |                                |                       |              |           |              |             |               |                  | R-TYPES       |

<sup>1</sup> Bullying indicators' operational definitions and scoring options not provided, due to the original instruments' copyright restrictions.

| Descriptive and Socio-demographics |  |   |                     |  |        |
|------------------------------------|--|---|---------------------|--|--------|
| Indicator Code                     | Conceptual Definition  | Operational Definition  | Format <sup>1</sup> | Scoring  | Item # |
| LOCATION                           | Geographical area of residence and afterschool program participation of the respondent, corresponding to the data collection site. | Collected administratively, based on the location of the BGCPR unit where data was collected. |                     | (1) San Juan Metropolitan Area<br>(If the respondent completed his/her questionnaire at BGCPR Carolina, Las Margaritas, Llorens Torres, Loíza, Ramos Antonini, or Torres de Sabana)<br>(0) Other Municipalities<br>(If the respondent completed his/her questionnaire at BGCPR Aguas Buenas, Arecibo, Isabela, Mayaguez, or San Lorenzo) | -      |
| GENDER                             | Self-reported gender of the respondent   | <i>Eres...</i>  | MC                  | (0) Niña (1) Niño  | 1      |
| YEARS                              | Age of the respondent in years   | <i>¿Cuántos años tienes?</i>  | O                   | Open ended answers are grouped into the following categories:<br>(1) ≤ 9 years<br>(2) 10 years<br>(3) 11 years<br>(4) 12 years<br>(5) ≥ 13 years   | 2      |
| DOB                                | Date of birth  | <i>¿Cuál es tu fecha de nacimiento?</i>   | O                   | Recalculate to confirm age in years  | 3      |
| PR                                 | Nationality of the respondent  | <i>¿Eres puertorriqueño(a)?</i>   | MC                  | (0) No (1) Sí  | 4      |
| BIRTH                              | Place of birth of the respondent   | <i>¿Dónde naciste?</i>  | MC                  | (1) Puerto Rico (2) Estados Unidos<br>(3) Otro lugar   | 5      |
| LANGUAGE                           | Language mostly spoken at home   | <i>¿Cuál es el idioma que más hablas cuándo estás en tu casa y con tu familia?</i>            | MC                  | (1) Español (2) Inglés<br>(3) Español e Inglés (4) Otro(s)   | 6      |

**Descriptive and Socio-demographics (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>         | <b>Operational Definition</b>                                 | <b>Format<sup>1</sup></b> | <b>Scoring</b>   | <b>Item #</b> |
|-----------------------|--------------------------------------|---|---------------------------|--|---------------|
|                       |                                      |   |                           | (1) Mother<br>(2) Father<br>(3) Adoptive parent<br>(4) Siblings<br>(5) Grandparents<br>(6) Aunt or Uncle<br>(7) Other  |               |
| FAMILY                | Family composition of the respondent | <i>¿Con quién vives? (puedes marcar más de una respuesta)</i> | MC                        | Recode to reflect the following categories:<br>(1) Mother only<br>(2) Father only<br>(3) Mother and father<br>(4) Mother and siblings<br>(5) Father and siblings<br>(6) Mother, father and siblings<br>(7) Grandparent only<br>(8) Grandparent and siblings<br>(9) Grandparent, mom, siblings<br>(10) Grandparent, dad, siblings<br>(11) Other | 7             |
| GRADE                 | Grade-level of the respondent        | <i>¿En qué grado estás?</i>                                   | MC                        | (1) 3er grado<br>(2) 4to grado<br>(3) 5to grado<br>(4) 6to grado<br>(5) 7mo grado  | 8             |

| Descriptive and Socio-demographics (cont.) |   |  |                     |  |        |
|--|---|--|---------------------|--|--------|
| Indicator Code                             | Conceptual Definition                                   | Operational Definition   | Format <sup>1</sup> | Scoring  | Item # |
| SCHOOL                                     | Type of school attended by the respondent               | <i>¿A qué tipo de escuela asistes?</i>                               | MC                  | (1) Escuela pública<br>(2) Escuela católica o Cristiana<br>(3) Escuela privada<br>(4) No voy a la escuela<br>(5) Otro  | 9      |
| FRIENDS                                    | Self-report on the number of friends of the respondent. | <i>¿Cuántos buenos amigos(as) tienes en tu grupo de salón hogar?</i> | MC                  | (0) Ninguno(a)<br>(1) 1 buen(a) amigo(a)<br>(2) 2-3 buenos(as) amigos(as)<br>(3) 4-5 buenos(as) amigos(as)<br>(4) 6 o más buenos(as) amigos(as)  | 10     |
| FRIEND-TYPE                                | Self-report on whether friends are prosocial or not.    | <i>Los amigos con los que pasas la mayor parte del tiempo...</i>     |                     | (1) Obedecen a sus padres y maestros.<br>(2) Desobedecen y se meten en problemas.<br>(3) No van a la escuela.<br>(4) Usan drogas o alcohol.<br>(5) Sacan buenas notas.<br>(6) Ninguna de las anteriores<br>Recode dichotomously as:<br>(0) Prosocial friends<br>(if respondent answered “(1) Obedecen a sus padres y maestros” or “(5) Sacan buenas notas”)<br>(1) Anti-social friends<br>(if respondent answered “(2) Desobedecen y se meten en problemas”, “(3) no van a la escuela” or “(4) usan drogas o alcohol”. | 11     |

| Descriptive and Socio-demographics (cont.) |   |   |                     |  |        |
|--|---|---|---------------------|--|--------|
| Indicator Code                             | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring  | Item # |
| KNOW                                       | Self-report of knowing about bullying prior to this study   | <i>¿Antes de hoy, habías escuchado hablar del bullying?</i>   | MC                  | (0) No<br>(1) Sí   | 16     |
| UNDER-<br>STAND                            | Self-report of understanding the bullying definition provided for this study  | <i>¿Entendiste esta definición?</i>   | MC                  | (0) No<br>(1) Sí   | 15     |
| BGC-<br>ACTS                               | Self-report of the different types of Boys & Girls Clubs activities that the respondent has participated in during the past year. | <i>Boys &amp; Girls Clubs ofrece diferentes tipos de actividades, servicios y programas. ¿En cuáles tu has participado durante los pasados 12 meses? (Puedes marcar más de una respuesta)</i> | MC                  | (0) Ninguna<br>(1) Grupo o clases de baile<br>(2) Grupo o clases de teatro<br>(3) Grupo o clases de artes plásticas<br>(4) Grupo o clases de música<br>(5) Equipo deportivo<br>(6) Campamento de verano<br>(7) Tutorías<br>(8) Pasadías familiares o excursiones<br>(9) Programa de liderazgo<br>(10) Joven del año<br>(11) Programa de servicio comunitario<br>(12) Programa de responsabilidad económica<br>(13) Otro: _____ | 14     |



| Role in Bullying |   |   |                     |  |        |
|------------------|---|---|---------------------|--|--------|
| Indicator Code   | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring  | Item # |
| VICTIM           | Self-report of bullying victimization during this academic semester   | <i>¿Cuántas veces has sido víctima o te han hecho bullying en la escuela durante este semestre?</i> | MC                  | (0) No me ha pasado este semestre<br>(1) Solo ha ocurrido 1 o 2 veces<br>(2) 2 o 3 veces por mes<br>(3) Una vez por semana<br>(4) Varias veces por semana<br>Recode dichotomously as:<br>(0) Non-bullying perpetrator (if the respondent answered “(1) no me ha pasado este semestre” or “(2) solo ha ocurrido 1 o 2 veces”, and V-TYPES=0)<br>(1) Bullying perpetrator (if the respondent answered “(3) 2 o 3 veces por mes”, “(4) una vez por semana”, or “(5) varias veces por semana”) | 20     |
| V-TYPES          | Self-identification of having suffered at least one type of bullying victimization, at least 2-3 times per month.<br><br>Cronbach’s alpha=.87 (students; Eng) and >.90 (schools; Eng) | <i>Recoded from answers provided to Items #21-30.</i>   |                     | Recode dichotomously as:<br>(0) No bullying victimization (V-VERBAL=0 and V-ISOLATION=0 and V-PHYSICAL=0 and V-RUMOR=0 and V-POSSESSIONS=0 and V-THREATS=0 and V-RACISM=0 and V-SEXUAL=0 and V-CYBER=0)<br>(1) Bullying victimization (V-VERBAL=1 and/or V-ISOLATION=1 and/or V-PHYSICAL=1 and/or V-RUMOR =1 and/or V-POSSESSIONS=1 and/or V-THREATS=1 and/or V-RACISM=1 and/or V-SEXUAL=1 and/or V-CYBER=0)   | 21-30  |

| Role in Bullying (cont.) |  |   |                     |         |           |
|--------------------------|--|---|---------------------|---------|-----------|
| Indicator Code           | Conceptual Definition  | Operational Definition  | Format <sup>1</sup> | Scoring | Item #    |
| BULLY                    | Self-report of <i>bullying</i> others during this academic semester  |   |                     |         | 43        |
| BULLY                    | Self-report of <i>bullying</i> others during this academic semester  |   |                     |         | 43        |
| B-TYPES                  | Self-identification of having engaged in at least one type of bullying perpetration, at least 2-3 times per month.<br><br>Cronbach's alpha=.88 (students; Eng) and >.90 (schools; Eng) | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                     |         | 44-53     |
| BULLY-VICTIM             | Self-report of engaging in both frequent bullying behaviors and victimization during the past 3-4 months (term).   |   |                     |         | 20 and 43 |
| BY-STANDER               | Self-report of not engaging in frequent bullying behaviors or victimization during the past 3-4 months (term).   |   |                     |         | 20 and 43 |

| <b>Role in Bullying (cont.)</b> |   |   |                |               |
|---------------------------------|---|---|----------------|---------------|
| <b>Indicator Code</b>           | <b>Conceptual Definition</b>  | <b>Operational Definition</b>   | <b>Scoring</b> | <b>Item #</b> |
| BS-DEFENDER                     | The respondent self-reports acting as a defender when witnessing the bullying of a peer.    |   |                |               |
| BS-REINFORCER                   | The respondent self-reports supporting bullying by engaging in it upon witnessing it.       | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                | 58            |
| BS-PASSIVE                      | The respondent self-reports doing nothing upon witnessing the bullying of a peer.           |   |                |               |
| BS-DISENGAGED                   | The respondent does not self-report being aware of peers being victimized through bullying. |   |                |               |

| Types of Bullying Victimization |   |   |                     |         |        |
|---------------------------------|---|---|---------------------|---------|--------|
| Indicator Code                  | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring | Item # |
| V-VERBAL                        | Self-report of verbal <i>bullying</i> victimization.  |   |                     |         | 21     |
| V-ISOLATION                     | Self-report of <i>bullying</i> victimization through social isolation.                      |   |                     |         | 22     |
| V-PHYSICAL                      | Self-report of physical <i>bullying</i> victimization.                                      |   |                     |         | 23     |
| V-RUMOR                         | Self-report of <i>bullying</i> victimization through rumor spreading                        |   |                     |         | 24     |
| V-POSESSIONS                    | Self-report of <i>bullying</i> victimization through the damage or stealing of possessions. | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                     |         | 25     |
| V-THREATS                       | Self-report of <i>bullying</i> victimization through threats of harm.                       |   |                     |         | 26     |
| V-RACISM                        | Self-report of <i>bullying</i> victimization through racist remarks.                        |   |                     |         | 27     |
| V-SEXUAL                        | Self-report of sexual <i>bullying</i> vicitmization   |   |                     |         | 28     |

**Types of Bullying Victimization (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>  | <b>Operational Definition</b>  | <b>Format<sup>1</sup></b> | <b>Scoring</b> | <b>Item #</b> |
|-----------------------|---|--|---------------------------|----------------|---------------|
| V-CYBER               | Self-report of cyberbullying victimization via cellphone or the Internet.                             |  |                           |                | 29            |
| V-OTHER               | Self-report of another form of <i>bullying</i> victimization, not previously mentioned in this study. | ** Omitted from this document due to the instruments' copyright restrictions. ** |                           |                | 30            |
| V-CEL                 | Self-report of cyberbullying via cellphone only.  |  |                           |                | 30a           |
| V-WEB                 | Self-report of cyberbullying via the Internet only.   |  |                           |                | 30a           |
| V-CELWEB              | Self-report of cyberbullying via cellphone and Internet   |  |                           |                | 30a           |

| Types of Bullying Perpetration |  |   |                     |         |        |
|--------------------------------|--|---|---------------------|---------|--------|
| Indicator Code                 | Conceptual Definition  | Operational Definition  | Format <sup>1</sup> | Scoring | Item # |
| B-VERBAL                       | Self-report of verbal <i>bullying</i> against others.                                |   |                     |         | 44     |
| B-ISOLATION                    | Self-report of <i>bullying</i> others through social isolation.                      |   |                     |         | 45     |
| B-PHYSICAL                     | Self-report of physical <i>bullying</i> against others.                              | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                     |         | 46     |
| B-RUMOR                        | Self-report of <i>bullying</i> others through rumor spreading                        |   |                     |         | 47     |
| B-POSESSIONS                   | Self-report of <i>bullying</i> others through the damage or stealing of possessions. |   |                     |         | 48     |
| B-THREATS                      | Self-report of <i>bullying</i> others through threats of harm.                       |   |                     |         | 49     |

**Types of Bullying Perpetration (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>   | <b>Operational Definition</b>  | <b>Format<sup>1</sup></b> | <b>Scoring</b> | <b>Item #</b> |
|-----------------------|--|--|---------------------------|----------------|---------------|
| B-RACISM              | Self-report of <i>bullying</i> others through racist remarks.  |  |                           |                | 50            |
| B-SEXUAL              | Self-report of sexual <i>bullying</i> against others   |  |                           |                | 51            |
| B-CYBER               | Self-report of cyberbullying others via cellphone or the Internet.                                     | ** Omitted from this document due to the instruments' copyright restrictions. ** |                           |                | 52            |
| B-OTHER               | Self-report of another form of <i>bullying</i> against others, not previously mentioned in this study. |  |                           |                | 53            |
| B-CEL                 | Self-report of cyberbullying others via cellphone only.  |  |                           |                |               |
| B-WEB                 | Self-report of cyberbullying others via the Internet only.   |  |                           |                | 52b           |
| B-CELWEB              | Self-report of cyberbullying others via cellphone and Internet   |  |                           |                |               |

**Characteristics of Bullying Perpetrators**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>  | <b>Operational Definition</b>   | <b>Format<sup>1</sup></b> | <b>Scoring</b> | <b>Item #</b> |
|-----------------------|---|---|---------------------------|----------------|---------------|
| B-GRADE               | Self-report of the grade level of the students that have bullied the respondent.                |   |                           |                | 31            |
| B-GENDER              | Self-report of the gender of the students that have bullied the respondent.                     | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                           |                | 32            |
| NUMBER-BULLY          | Self-report of the usual number of children that have bullied the respondent at any given time. |   |                           |                | 33            |



| Bullying Incidents |   |   |                     |         |        |
|--------------------|---|---|---------------------|---------|--------|
| Indicator Code     | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring | Item # |
| B-LENGTH           | Self-report of length of time that the respondent has been victimized through <i>bullying</i> . |   |                     |         | 34     |
|                    |   | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                     |         |        |
| B-LOCATION         | Self-report of the location where the respondent has been victimized through <i>bullying</i> .  |   |                     |         | 35     |

| Response to Bullying |  |   |                     |         |        |
|----------------------|--|---|---------------------|---------|--------|
| Indicator Code       | Conceptual Definition  | Operational Definition  | Format <sup>1</sup> | Scoring | Item # |
| TOLD                 | Self-report of whom the respondent has talked to about his/her <i>bullying</i> victimization.                |   |                     |         | 36     |
| FEEL                 | Self-report of the respondent's feelings upon witnessing the <i>bullying</i> of peers.                       |   |                     |         | 42     |
| FEAR                 | Self-report of fearing bullying victimization at school.   |   |                     |         | 59     |
| POSSIBILITY          | Self-report of whether it is possible for the respondent to be involved in bullying against an unliked peer. | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                     |         | 57     |
| T-FEEL               | Respondent's perception on how their teachers would feel if he/she were involved in bullying.                |   |                     |         | 61     |
| P-FEEL               | Respondent's perception on how their parents would feel if he/she were involved in bullying.                 |   |                     |         | 62     |
| C-FEEL               | Respondent's perception on how their church leaders would feel if he/she were involved in bullying.          |   |                     |         | 63     |

**Other's Response to Bullying (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>   | <b>Operational Definition</b>   | <b>Format<sup>1</sup></b> | <b>Scoring</b> | <b>Item #</b> |
|-----------------------|--|---|---------------------------|----------------|---------------|
| B-FRIENDS             | Self-perception of whether the participant thinks his/her friends engage in bullying others.                                 |   |                           |                | 54            |
| V-FRIENDS             | Self-perception of whether the participant thinks his/her friends have been victimized by bullying.                          |   |                           |                | 37            |
| FAM-TALK              | Self-report of whether any adult family member has talked to school officials to try to stop the respondent's victimization. | ** Ommitted from this document due to the instruments' copyright restrictions. ** |                           |                | 41            |
| TEACHER-DONE          | Perception on how much the respondent thinks his/her homeroom teacher has done to stop bullying this semester.               |   |                           |                | 60            |

| <b>Other's Response to Bullying (cont.)</b> |   |  |                           |                |               |
|---|---|--|---------------------------|----------------|---------------|
| <b>Indicator Code</b>                       | <b>Conceptual Definition</b>  | <b>Operational Definition</b>  | <b>Format<sup>1</sup></b> | <b>Scoring</b> | <b>Item #</b> |
| S-BULLYING                                  | Respondent's self-report of whether bullying has been directly discussed at his/her school.                 |  |                           |                | 17            |
| BGC-BULLY                                   | Respondent's self-report of whether bullying has been directly discussed at his/her Boys & Girls Club.      | ** Omitted from this document due to the instruments' copyright restrictions. ** |                           |                | 18            |
| C-BULLYING                                  | Respondent's self-report of whether bullying has been directly discussed at his/her church or congregation. |  |                           |                | 19            |

| Connectedness  |   |  |                     |   |         |
|----------------|---|--|---------------------|---|---------|
| Indicator Code | Conceptual Definition   | Operational Definition   | Format <sup>1</sup> | Scoring   | Item #  |
| C-PARENTS      | Scale of the level of connectedness to both parents, as self-reported by the respondent.<br><br>Cronbach's alpha=.87 (Eng); .73 (pilot) | <i>Mis padres y yo nos divertimos juntos.*</i>                 | L                   | (1) Para nada<br>(2) Tal vez no<br>(3) Más o menos<br>(4) Tal vez sí<br>(5) Absolutamente cierta                                    | 64-69   |
|                |   | <i>Es importante que papi y mami confíen en mi.</i>            |                     |   |         |
|                |   | <i>Disfruto pasando un buen tiempo con mi papá y mi mamá.*</i> |                     |   |         |
|                |   | <i>No discuto con mis padres.</i>                              |                     |   |         |
| C-DAD          | Scale of the level of connectedness to the respondent's father, as self-reported.<br><br>Cronbach's alpha=.92 (Eng); .64 (pilot)        | <i>Mi papá y yo somos muy unidos.</i>                          | L                   | No entiendo la pregunta<br><br>Recode each item by adding all scores obtained for items within the scale, and calculating its mean. | 70 – 74 |
|                |   | <i>Me gusta pasar tiempo con mi papá.</i>                      |                     |   |         |
|                |   | <i>Mi papá se preocupa mucho por mi.</i>                       |                     |   |         |
|                |   | <i>No discuto con mi papá.*</i>                                |                     |   |         |
| C-MOM          | Scale of the level of connectedness to the respondent's mother, as self-reported.<br><br>Cronbach's alpha=.83 (Eng); .83 (pilot)        | <i>Hablo con mi papá sobre temas personales.*</i>              | L                   | No entiendo la pregunta<br><br>Recode each item by adding all scores obtained for items within the scale, and calculating its mean. | 75 – 79 |
|                |   | <i>Disfruto compartiendo tiempo con mi mamá.</i>               |                     |   |         |
|                |   | <i>Mi mamá y yo somos muy unidas(os).</i>                      |                     |   |         |
|                |   | <i>Mi mamá se preocupa mucho por mi.</i>                       |                     |   |         |
|                |   | <i>No discuto con mi mamá.*</i>                                | L                   | No entiendo la pregunta<br><br>Recode each item by adding all scores obtained for items within the scale, and calculating its mean. | 75 – 79 |
|                |   | <i>Hablo con mi mamá sobre temas personales.*</i>              |                     |   |         |

| Connectedness (cont.)  |   |   |                     |   |         |
|--|---|---|---------------------|---|---------|
| Indicator Code   | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring   | Item #  |
| C-FRIENDS  | Scale of the level of connectedness to peers, as self-reported.<br><br>Cronbach's alpha=.71 (Eng); .85 (pilot)    | <i>La mejor parte de mi día es pasar tiempo con mis amigos(as).</i>           | L                   | (1) Para nada<br>(2) Tal vez no<br>(3) Más o menos<br>(4) Tal vez sí<br>(5) Absolutamente cierta<br><br>No entiendo la pregunta | 80 – 85 |
|  |   | <i>Tengo amigos(as) muy cercanos en los que confío mucho.</i>                 |                     |   |         |
|  |   | <i>Pasar tiempo con mis amigos(a) es una parte importante de mi vida.</i>     |                     |   |         |
|  |   | <i>Mis amigos(as) y yo hablamos abiertamente sobre temas personales.</i>      |                     |   |         |
|  |   | <i>Paso tanto tiempo como puedo con mis amigos(as).</i>                       |                     |   |         |
| C-TEACHERS   | Scale of the level of connectedness to teachers, as self-reported.<br><br>Cronbach's alpha=.84 (Eng); .66 (pilot) | <i>Mis amigos(as) y yo pasamos mucho tiempo hablando de diferentes cosas.</i> | L                   | Recode each item by adding all scores obtained for items within the scale, and calculating its mean.                            | 86 – 90 |
|  |   | <i>Me importa lo que mis maestros(as) piensen de mí.</i>                      |                     |   |         |
|  |   | <i>Me gustan la mayoría de mis maestros(as) en mi escuela.*</i>               |                     |   |         |
|  |   | <i>Yo quiero que mis maestros(as) me respeten.</i>                            |                     |   |         |
|  |   | <i>Trato de llevarme bien con mis maestros.</i>                               |                     |   |         |
| <i>Me esfuerzo por ganarme la confianza de mis maestros(as).</i> |   |   |                     |   |         |
|  |   | <i>Casi siempre me gustan mis maestros(as).*</i>                              |                     |   |         |

| Connectedness (cont.) |   |   |                     |   |          |  |  |  |  |         |
|-----------------------|---|---|---------------------|---|----------|--|--|--|--|---------|
| Indicator Code        | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring   | Item #   |  |  |  |  |         |
| C-SCHOOL              | Scale of the level of connectedness to school, as self-reported.<br><br>Cronbach's alpha=.80 (Eng); .81 (pilot)                                     | <i>Me esfuerzo mucho en la escuela.</i>                                     |                     |   |          |  |  |  |  |         |
|                       |   | <i>Me gusta estar en la escuela.</i>  |                     |   |          |  |  |  |  |         |
|                       |   | <i>No me aburro en la escuela.*</i>   |                     |   |          |  |  |  |  |         |
|                       |   | <i>Me va bien en la escuela.</i>  |                     |   |          |  |  |  |  |         |
|                       |   | <i>Me siento bien cuando estoy en la escuela.*</i>                          |                     |   |          |  |  |  |  |         |
|                       |   | <i>Estar bien en la escuela es importante.</i>                              |                     |   |          |  |  |  |  |         |
|                       |   | <i>No tengo problemas en la escuela.*</i>                                   |                     |   |          |  |  |  |  |         |
|                       |   | <i>Saco buenas notas en la escuela.*</i>                                    |                     |   |          |  |  |  |  |         |
|                       |   | <i>Sacar buenas notas es importante.</i>                                    |                     |   |          |  |  |  |  |         |
|                       |   | <i>No tener problemas en la escuela es importante.</i>                      |                     |   |          |  |  |  |  |         |
| C-NEIGHB              | Scale of the level of connectedness to the respondent's community or neighborhood, as self-reported.<br><br>Cronbach's alpha=.73 (Eng); .79 (pilot) | <i>Me gusta pasear por el lugar donde vivo (por ejemplo mi vecindario).</i> | L                   | (1) Para nada<br>(2) Tal vez no<br>(3) Más o menos<br>(4) Tal vez sí<br>(5) Absolutamente cierta<br>No entiendo la pregunta | 91 – 100 |  |  |  |  |         |
|                       |   | <i>Me gusta pasar mucho tiempo con los(as) niños(as) de mi vecindario.</i>  |                     |   |          |  |  |  |  |         |
|                       |   | <i>Me llevo bien con todos(as) los(as) niños(as) de mi vecindario.*</i>     |                     |   |          |  |  |  |  |         |
|                       |   | <i>Muchas veces paso tiempo jugando o haciendo cosas en mi vecindario.</i>  |                     |   |          |  |  |  |  |         |
|                       |   | <i>Paso mucho tiempo con los(as) niños(as) de mi vecindario.</i>            |                     |   |          |  |  |  |  |         |
|                       |   | <i>Mi vecindario no es aburrido.*</i>                                       |                     |   |          |  |  |  |  |         |
|                       |   | C-REL   |                     |   |          | Scale of the level of connectedness to the respondent's religion, as self-reported.<br><br>Cronbach's alpha=.91 (Eng); .60 (pilot) | <i>Mi religión es muy importante para mí.*</i> |  | Recode each item by adding all scores obtained for items within the scale, and calculating its mean. | 101-106 |
|                       |   |   |                     |   |          |  | <i>Yo voy a la iglesia frecuentemente.</i>     |  |  |         |
|                       |   |   |                     |   |          |  | <i>Soy una persona religiosa.</i>              |  |  |         |

| Religiosity    |   |   |                     |   |                            |
|----------------|---|---|---------------------|---|----------------------------|
| Indicator Code | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring   | Item #                     |
| R-COMMIT       | Self-report of the participant's commitment to religious or church-related activities.<br><br>Cronbach's alpha=.87 (Eng, 5 items); .80 (pilot, 2 items) | <i>Based on statistical pilot testing, this construct includes questionnaire items #110 and #120. May also consider including additional items pertaining religious activities (e.g., items #114-119, and 121).</i> |                     | Scored as the mean of the sum of all items in this scale (0-4). | 110, 120                   |
| R-IMPORT       | Self-report of the importance that participants give to church or religion.<br><br>Cronbach's alpha=.80 (pilot)   | <i>Based on statistical pilot testing, this construct includes questionnaire items #112 and #113.</i>   |                     | Scored as the mean of the sum of all items in this scale (0-5). | 112 – 113                  |
| PUBLIC-REL     | Self-report of participant's public engagement in religion-related activities or practices.   | <i>Recoded from answers provided to items #114, 116-117.</i>  |                     | Scored as the mean of the sum of all items in this scale (0-4). | 114, 116-117               |
| PRIVATE-REL    | Self-report of participant's private engagement in religion-related activities or practices.  | <i>Recoded from answers provided to items #111, 118. May also include item #119.</i>  |                     | Scored as the mean of the sum of all items in this scale (0-4). | 111, 118                   |
| RELIGIOSITY    | Self-report of participant's public and private engagement in religion-related activities or practices.   | <i>Recoded as an index of PUBLIC-REL and PRIVATE-REL.</i>   |                     | Scored as the mean of the sum of all items (0-4).               | PUBLIC-REL,<br>PRIVATE-REL |



| Religiosity (cont.) |   |  |                     |   |        |
|---------------------|---|--|---------------------|---|--------|
| Indicator Code      | Conceptual Definition   | Operational Definition   | Format <sup>1</sup> | Scoring   | Item # |
| CHURCH              | Self-report of regular attendance to church or place of worship.                  | <i>¿Asistes a una iglesia o lugar de adoración todas o casi todas las semanas?</i> | MC                  | (1) Sí<br>(0) No  | 12     |
| RELIGION            | Self-report of the religion the respondent is associated with or follows.         | <i>¿A qué religión perteneces?</i>   | MC                  | (1) Cristiana/Católica<br>(2) Cristiana/Evangélica<br>(3) Islam<br>(4) Judaísmo<br>(5) Otra<br>(6) Ninguna<br>Recode dichotomously as:<br>(0) No religion reported<br>(if the respondent specified “(6) Ninguna”.)<br>(1) Religion reported<br>(if the respondent did not specify “(6) Ninguna”.)       | 13     |
| R-SATISF            | Self-report of satisfaction in the respondent’s involvement in church activities. | <i>¿Cuánta satisfacción te da participar en actividades de la iglesia?</i>         | L                   | (0) Ninguna<br>(1) Poca<br>(2) Más o menos<br>(3) Bastante<br>(4) Mucha<br>Recode dichotomously as:<br>(0) Limited or no satisfaction<br>(if the respondent specified “(0) Nada”, “(1) Poca” or “(2) Más o menos”.)<br>(1) Satisfaction<br>(if the respondent specified “(3) Bastante” or “(4) Mucha”.) | 110    |

**Religiosity (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>  | <b>Operational Definition</b>  | <b>Format<sup>1</sup></b> | <b>Scoring</b>   | <b>Item #</b> |
|-----------------------|---|--|---------------------------|--|---------------|
| R-IMPORT              | Self-report of the importance given to church.                      | <i>¿Cuánto te importa la iglesia?</i>  | L                         | (0) Nada<br>(1) Poco<br>(2) Más o menos<br>(3) Bastante<br>(4) Mucho<br>Recode dichotomously as:<br>(0)Limited or no importance given<br>(if the respondent specified “(0) Nada”, “(1) Poco” or “(2) Más o menos”.)<br>(1)Importance given<br>(if the respondent specified “(3) Bastante” or “(4) Mucho”.)   | 111           |
| R-OBEY                | Self-report of the importance given to obey religious commandments. | <i>Hacer lo que Dios dice o seguir los mandamientos es importante para mi.</i> | L                         | (1) Muy en desacuerdo<br>(2) En desacuerdo<br>(3) Más o menos<br>(4) De acuerdo<br>(5) Muy de acuerdo<br>(99) No entiendo la pregunta<br>Recode dichotomously as:<br>(0)Limited or no agreement<br>(if the respondent specified “(1) Muy en desacuerdo”, “(2) En desacuerdo”, “(3) Más o menos” or “(99) No entiendo la pregunta”.)<br>(1)Agreement<br>(if the respondent specified “(4) De acuerdo” or “(5) Muy de acuerdo”.) | 112           |
| R-HELP                | Self-report of help-seeking behaviors at church or within religion. | <i>Cuando tengo problemas, busco ayuda en la iglesia o la religión.</i>        | L                         | (1) Agreement<br>(if the respondent specified “(4) De acuerdo” or “(5) Muy de acuerdo”.)   | 113           |

**Religiosity (cont.)**

| <b>Indicator Code</b> | <b>Conceptual Definition</b>   | <b>Operational Definition</b>  | <b>Format<sup>1</sup></b> | <b>Scoring</b>  | <b>Item #</b> |
|-----------------------|--|--|---------------------------|---|---------------|
| R-12                  | Self-report on how many times has the respondent attended church in the past 12 months.  | <i>En los pasados 12 meses, ¿cuántas veces fuiste a la iglesia?</i>  |                           | (0) Nunca<br>(1) Solo en días feriados o celebraciones importantes<br>(2) 1 vez al mes<br>(3) No todas las semanas, pero más de 1 vez al mes  | 114           |
| R-ACTS                | Self-report of how often the respondent participates in church activities.               | <i>En el pasado año, ¿con cuánta frecuencia participaste en actividades en la iglesia (por ejemplo: escuela Bíblica, pantomimas, el coro)?</i> |                           | (4) Casi todas las semanas<br>Recode dichotomously as:<br>(0) Not regularly   | 116           |
| R-BIBLE               | Self-report of respondent's reading of the Bible or religion's sacred book.              | <i>En los pasados 12 meses, ¿cuántas veces leíste el libro sagrado de tu religión (por ejemplo: La Biblia, las Escrituras)?</i>                | MC                        | (if the respondent specified "(0) Nunca", "(1) Solo en días feriado o celebraciones importantes", or "(2) 1 vez al mes".)   | 119           |
| R-RADIO               | Self-report of the respondent's habits of listening to religious radio.                  | <i>En los pasados 12 meses, ¿cuántas veces escuchaste programas religiosos en la radio?</i>  |                           | (1) Regularly (if the respondent specified "(3) No todas las semanas, pero más de 1 vez al mes" or "(4) Casi todas las semanas".)   | 120           |
| R-TV                  | Self-report of the respondent's habits of listening to religious television programs.    | <i>En los pasados 12 meses, ¿cuántas veces viste programas religiosos en la televisión?</i>  |                           | (1) Regularly (if the respondent specified "(3) No todas las semanas, pero más de 1 vez al mes" or "(4) Casi todas las semanas".)   | 121           |
| R-WANT                | Self-report of the participant's willingness to attend religious services or activities. | <i>La mayoría de las veces, ¿porqué vas a la iglesia o actividades religiosas?</i>   | MC                        | (0) No voy a la iglesia<br>(1) Yo quiero ir<br>(2) Mis padres o encargados dicen que tengo que ir<br>(3) Mis amigos(as) quieren que vaya<br>(4) No sé porque voy<br>(5) Otra razón: _____ | 115           |

| Religiosity (cont.) |   |   |                     |   |        |
|---------------------|---|---|---------------------|---|--------|
| Indicator Code      | Conceptual Definition   | Operational Definition  | Format <sup>1</sup> | Scoring   | Item # |
| R-TYPES             | Self-report of the different types of church-related activities that the respondent has participated in during the past year. | <i>Las iglesias tienen diferentes tipos de actividades, servicios y programas. ¿En cuáles has participado durante los pasados 12 meses? (Puedes seleccionar más de una respuesta)</i> | MC                  | (0) Ninguna<br>(1) Misa o predicación<br>(2) Escuela bíblica<br>(3) Catecismo<br>(4) Primera comunión<br>(5) Grupo o ministerio de artes (ej. Danza, adoración, música, pantomima, drama)<br>(6) Bautismo cuando era bebé<br>(7) Bautismo cuando era mayor<br>(8) Santa cena/communion<br>(9) Rosarios<br>(10) Grupo de jóvenes<br>(11) Equipo deportivo<br>(12) Retiros o campamentos de fin de semana<br>(13) Campamentos de verano<br>(14) Servicios de oración<br>(15) Tutorías<br>(16) Conciertos, Obras de Teatro<br>(17) Pasadías familiares<br>(18) Viajes misioneros o peregrinaciones<br>(19) Otro: | 117    |

| Religiosity (cont.) |   |  |                     |   |        |
|---------------------|---|--|---------------------|---|--------|
| Indicator Code      | Conceptual Definition   | Operational Definition   | Format <sup>1</sup> | Scoring   | Item # |
| R-PRAY              | Self-report of the respondent's prayer times.                           | <i>¿Cuántas veces tu oras, rezas, hablas o le pides a Dios?</i>      | MC                  | <p>(0) Nunca<br/>           (1) A veces, pero menos de 1 vez al mes<br/>           (2) Por lo menos 1 vez al mes<br/>           (3) Por lo menos 1 vez a la semana<br/>           (4) Todos los días</p> <p>Recode dichotomously as:<br/>           (0) No regular prayer<br/>           (if the respondent specified “(0) Nunca”, “(1) A veces, pero menos de 1 vez al mes”, or “(2) Por lo menos 1 vez al mes”.)<br/>           (1) Regular prayer<br/>           (if the respondent specified “(3) Por lo menos 1 vez a la semana” or “(4) Todos los días”.)</p> | 118    |
| R-PARENT            | Self-report of the respondent's belief in his/her parent's religiosity. | <i>¿Cuán importante es la iglesia o la religión para tus padres?</i> | MC                  | <p>(1) No importante<br/>           (2) De poca importancia<br/>           (3) Bastante importante<br/>           (4) Muy importante<br/>           (5) Es más importante para mi mamá que para mi papá<br/>           (6) Es más importante para mi papá que para mi mamá</p>  | 122    |

<sup>1</sup> MC: Multiple Choice, L: Likert Scale, O: Open-ended, R: Recoded variable

\* Removed from scale, based on findings from the statistical pilot test of the revised and adapted instrument for the target population. While these items will be included in the final study instrument, these may be ultimately deleted pending confirmation of pilot test results.

**Table 2. Theoretical integration of socio-ecological and social learning constructs to explain children’s bullying core elements**

| Social Learning Theory constructs | Bullying elements <sup>i</sup> | Ecological Systems Theory constructs  |  |  |  |  |
|-----------------------------------|--------------------------------|---|--|--|--|--|
|                                   |                                | Microsystem   | Mesosystem   | Exosystem  | Macrosystem  | Chronosystem   |
| Differential Associations         | R                              | The bully & victim <sup>ii</sup> relationship allows for the repetitive aggressions to occur. | Research is needed on non-school settings where repeated aggression or bullying may occur (e.g., after school programs, church youth group, sports teams, clubs).                    |  |  |  |
|                                   | PD                             | Differences in the characteristics of bullies and victims can cause power differentials.      |  | Most school programs focus on protecting the less-powerful children. |  | Child plays different roles within differential associations throughout time, which may alter power balance. |
| Imitation                         | R                              |   |  |  |  |  |
|                                   | I                              |   | Child may learn from parents that aggression is an effective mechanism to obtain benefits (e.g., IPV <sup>iii</sup> ), and apply the learned principle at school by bullying others. |  | Exposure to cultural models (i.e., media, real-life cases of public figures) that use violence to obtain benefits. |  |

PD

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|                             |    |  |  |  |
|-----------------------------|----|--|--|--|
|                             |    | The child is exposed to multiple and inter-related contexts, and each may reinforce differentially on the repeated use of aggression or bullying.  | A child is repeatedly exposed to reinforcements of bullying behaviors throughout time, and from different sources along his developmental continuum. The multiple and progressive exposure to reinforcements may enable the child to repeatedly engage in bullying aggression towards victims. |  |
| Differential Reinforcements | R  |  |  |  |
|                             | I  | In terms of peer contexts, the homophily theory establishes that children associate with similar peers. Therefore a child's relationship with peers can serve as a source of reinforcement for bullying behaviors. | A child can be exposed to models of the use of aggression across contexts, and as a way to obtain benefits, cope with stress or resolve conflicts.   | Cultural beliefs and traditions (e.g., cultural sayings) that support aggression or bullying can serve as a child's model on culturally acceptable behavior. |
|                             | PD | A perpetrator may bully others in order to maintain the power differential <i>status quo</i> between him/herself and the victim.   |  | At the policy level, civil rights violations can apply in certain cases of bullying at schools – specifically those caused by the                            |

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|             |    |   |  |
|-------------|----|---|--|
|             |    |   | implicit power differentials associated to discrimination (e.g., race/ethnicity, gender).  |
| Definitions | R  | There is no consistency in State and school-district level policies in defining bullying based on the 3 core factors. | Bullying is not a one-time behavior. As a child adopts a pro-bullying definition, he/she is prone to act accordingly in a repetitive manner. |
|             | I  |   | USDE recommends “intentionality” to be part of bullying definitions.   |
|             | PD |   |  |



**Table 3. Sampling of Boys & Girls Clubs of Puerto Rico Participants<sup>1</sup>**

| PR Region                         | BG CPR Unit (Location)                     | Total Membership | By Age, in years (% of total) |          |         | Total 10-12 y/o | Estimated Sample Size <sup>2</sup> (per Unit within region) |                       |
|-----------------------------------|--|------------------|-------------------------------|----------|---------|-----------------|---|-----------------------|
|                                   |  |                  | 10                            | 11       | 12      |                 | 16% response distrib. <sup>3</sup>                          | 50% response distrib. |
| <b>Puerto Rico</b>                | All units                                  | 4,170            | 467                           | 501      | 383     | 1,292           | 179   | 297                   |
|                                   |  | (100%)           | (11.20%)                      | (12.01%) | (9.18%) | (30.98%)        | (22)  | (37)                  |
| <b>San Juan Metropolitan Area</b> | Carolina (Carolina, PR)                    | 404              | 52                            | 56       | 28      | 77              | 57  | 65                    |
|                                   | Torres de Sabana (Carolina, PR)            | 197              | 21                            | 20       | 18      | 59              | 47  | 52                    |
|                                   | Ramos Antonini (Río Piedras, San Juan, PR) | 499              | 52                            | 46       | 47      | 145             | 86  | 106                   |
|                                   | Las Margaritas (Santurce, San Juan, PR)    | 680              | 121                           | 110      | 78      | 309             | 125   | 172                   |
|                                   | Llorens Torres (Isla Verde, San Juan)      | N.A.             | N.A.                          | N.A.     | N.A.    | N.A.            | N.A.  | N.A.                  |
|                                   | Loíza (Loíza, PR)                          | N.A.             | N.A.                          | N.A.     | N.A.    | N.A.            | N.A.  | N.A.                  |
|                                   | All units                                  | 1,780            | 246                           | 232      | 171     | 590             | 154   | 233                   |
|                                   |  | (100%)           | (13.82%)                      | (13.03%) | (9.61%) | (33.15%)        | (39)  | (58)                  |
| <b>Other Municipalities</b>       | Aguas Buenas, PR                           | 656              | 59                            | 56       | 45      | 160             | 91  | 114                   |
|                                   | Arecibo, PR                                | 532              | 57                            | 57       | 49      | 163             | 92  | 115                   |
|                                   | Mayaguez, PR                               | 680              | 60                            | 88       | 72      | 220             | 107   | 141                   |
|                                   | San Lorenzo, PR                            | 522              | 45                            | 68       | 46      | 159             | 91  | 113                   |
|                                   | Isabela, PR                                | N.A.             | N.A.                          | N.A.     | N.A.    | N.A.            | N.A.  | N.A.                  |
|                                   | All units                                  | 2390             | 221                           | 269      | 212     | 702             | 160   | 249                   |
|                                   |  | (100%)           | (9.24%)                       | (11.25%) | (8.87%) | (29.37%)        | (40)  | (62)                  |

<sup>1</sup> Based on membership data provided by Boys and Girls Clubs of Puerto Rico for the 7/1/2010 thru 6/30/2011 period.

<sup>2</sup> Calculated based on a 95% Confidence Interval, and a ±5% margin of error. Estimated sample needed per unit by region is based on the membership information available, and considers only units with data for its estimation (i.e., 4 out of 6 San Juan Metropolitan Area, and 4 out of 5 Other Municipalities BG CPR units).

<sup>3</sup> Based on the most recently published bullying victimization estimates published for San Juan Metropolitan Area schoolchildren (López-Caban, 2011).

**Table 4. Measuring religiosity (item pool)**

| Source                                    | Measures   | Item   | Response Options   |
|---|--|--|--|
| Abbotts et al., 2004                      | * Religious affiliation (parental)                       | What religious group or church does your child belong to?  | Church of Scotland<br>Catholic<br>Methodist<br>Baptist<br>Jewish<br>Muslim<br>Other<br>None, atheist or agnostic |
|   | Frequency of attendance at religious meetings (parental) | Here is a list of things that kids sometimes do in their free time, when they aren't at school. What about you?<br>- ...<br>- Go to the church, mosque or temple | 5 point scale<br>Every day<br>Most days<br>Weekly<br>Less often<br>Never   |
| Benda & Corwyn, 1997                      | Church Attendance  | Frequency of church attendance   | 5 = 3 times a week or more...<br>1 = once a month or less  |
|   |  | Frequency of Sunday School attendance  | 5 = 3 times a week or more...<br>1 = once a month or less  |
|   | Religiosity  | Involvement in activities at church  | 5 = very involved...<br>1 = never involved   |
|   |  | Time in prayer   | 5 = daily ... 1 = never  |
|   |  | Time of Bible study  | 5 = daily ... 1 = never  |
|   | Evangelism   | Financial contributions given  | 5 = regularly ... 1 = never  |
|   |  | Talk about religion with family/friends  | 5 = regularly ... 1 = never  |
| Share joys and problems of religious life |  | 5 = regularly ... 1 = never  |  |
|   |  | Try to convert someone   | 5 = regularly ... 1 = never  |
| Benda & Corwyn, 2001                      | Church Attendance  | Frequency of church attendance   | 5 = 3 times a week...<br>1 = once a month or less  |

|                              |  |   |  |
|------------------------------|--|---|--|
|                              |  | Frequency of Sunday School attendance                       | 5 = every week...<br>1 = never   |
|                              |  | Time in private prayer                                      | 5 = daily ... 1 = never  |
|                              |  | Time of Bible study   | 5 = daily ... 1 = never  |
|                              | Religiosity<br>(alpha=.83)             | Discussing faith in God                                     | 5 = frequently ... 1 = never   |
|                              |  | Talk about religion with others                             | 5 = frequently ... 1 = never   |
|                              |  | Try to convert someone to faith in God                      | 5 = frequently ... 1 = never   |
|                              | Church Attendance                      | Frequency of church attendance                              | 7 = 2 or more times weekly ... 0 = none                                  |
|                              |  | How religious are you?                                      | Unspecified 4-point Likert scale   |
|                              |  | How religious is your family?                               | Unspecified 4-point Likert scale   |
| Benda, Pope & Kelleher, 2006 | Religiousness<br>(alpha=.79)           | How religious do you wish your family would be?             | Unspecified 4-point Likert scale   |
|                              |  | How important is religion in your life?                     | Unspecified 4-point Likert scale   |
|                              |  | Do you believe in God?                                      | Unspecified 3-point scale  |
|                              |  | Time in private prayer                                      | 5 = daily ... 1 = never  |
|                              |  | Time of Bible study   | 5 = daily ... 1 = never  |
|                              | Religiosity<br>(alpha = .75)           | Church activity   | 5 = very involved...<br>1 = never  |
| Benda & Toombs, 2000         |  | Talk about religion with others                             | 5 = frequently ... 1 = never   |
|                              |  | Try to convert someone to faith in God                      | 5 = frequently ... 1 = never   |
|                              | Church Attendance                      | Frequency of church attendance                              | 5 = 3 times a week<br>...<br>1 = once a month or less                    |
|                              | Religious Commitment (alpha = .82)     |   |  |
| Burkett, 1993                | ** Religious Practice<br>(involvement) | On the average, how often do you attend religious services? | Never<br>Only on important holidays<br>Once a month<br>2-3 times a month |

|   |   |  |
|---|---|--|
|   |   | Once a week or more  |
| ** Experiential Religiosity               | How much satisfaction would you say you get from participating in church activities?                              | 1 = None at all...<br>5 = A great deal   |
| Attachment                                | Indicate the extent to which you identify yourself as a religious person.   | 1 = Not at all religious ...<br>5 = Very much so   |
|   | Situational item which posed the option of going to church on Sunday or doing something with their friends.       | 1 = Definitely go to church...<br>5 = Definitely go with friends   |
| Perceived Parents Religiosity (index 0-6) | Do you think your mother is a religious person?   | 0 = Not at all religious...<br>3 = Very much so  |
|   | How often does your mother attend church?   | Coded 0 to 3, unspecified  |
| Parental Religious Attachment             | ** How important is religion to you? (asked of adolescent's parents)  | 1 = Not important at all<br>2 = Fairly unimportant<br>3 = Fairly important<br>4 = Very important                   |
|   |   | 1 = Never<br>2 = Less than once a month<br>3 = Less than weekly, more than once a month<br>4 = Once a week or more |
| Religious Commitment (alpha = .87)        | ** In the past 12 months, how often did you attend religious services?  | 1 = Never<br>2 = Less than once a month<br>3 = Less than weekly, more than once a month<br>4 = Once a week or more |
|   | ** In the past year, how often have you participated in activities such as youth groups, Bible classes, or choir? | 1 = Never<br>2 = Less than once a month<br>3 = Less than weekly, more than once a month<br>4 = Once a week or more |
|   | ** How often do you pray?   | 1 = Never<br>2 = Sometimes, but less than once a month<br>3 = Once a month   |

Cretacci,  
2003

|   |  |   |  |
|---|--|---|--|
|   |  |   | at least<br>4 = Once a week at least<br>5 = Once a day at least                                  |
|   |  | What religion are you?  | List of ~30 responses  |
|   |  | ** How important is religion to you?  | 1 = Not important at all<br>2 = Fairly unimportant<br>3 = Fairly important<br>4 = Very important |
|   | Religious Belief                               | ** Do you agree or disagree with the statement that the Holy Scriptures of your religion are the word of God and completely without mistakes? | 0 = Religion has no sacred scriptures<br>1 = Disagree<br>2 = Unsure<br>3 = Agree                 |
| Ellison, Boardman, Williams & Jackson, 2001   | Church Attendance (organizational religiosity) | How often do you usually attend religious services?   | 1 = Less than once a year or never ...<br>5 = More than once a week                              |
|   | Prayer (non-organizational religiosity)        | ** How often do you usually engage in personal prayer?  | 1 = Never ...<br>6 = Several times a day   |
|   | Belief in Eternal Life (religious belief)      | ** Indicate your dis/agreement with the following statement: "I believe in eternal life."   | 1 = Strongly disagree...<br>4 = Strongly agree   |
| Evans, Cullen, Dunaway & Burton, 1995   | Religiosity                                    | ** Religious Activity (reliability = .79)   |  |
|   |  | - In the last 12 months, how often did you attend religious services?   | 5 = Never...<br>1 = About every week   |
|   |  | - In the last 12 months, how often did you attend social events at church?  |  |
|   |  | - In the last 12 months, how often did you read religious material?   |  |
| - In the last 12 months, how often did you listen to religious programs on radio or television? |  |   |  |
|   |  | ** Religious Salience (reliability  | Agreement-   |

|  |  |   |
|--|--|---|
|  | = .85)   | disagreement (6-<br>category scale)               |
|  | - Religion is a very important part of my life.  |   |
|  | - Following God's commandments is important to me.   |   |
|  | - In times of personal trouble, I turn to religion for guidance.   |   |
|  | Hellfire (reliability = .88)   |   |
|  | - After I do something wrong, I fear God's punishment.   |   |
|  | - People who are evil in this world will eventually suffer in Hell.  |   |
|  | - Following God's commandments is important to me.   | Agreement-<br>disagreement (6-<br>category scale) |
|  | - God knows everything a person does wrong.  |   |
|  | - In the end, God punishes all those who have sinned.  |   |
|  | - There is life after death.   |   |
|  | - Many people with diseases like AIDS are being punished by God for their sinfulness.  |   |
|  | Family and friends (reliability = .62)   |   |
|  | - Of your 5 closest friends, how many of them would you say attend church regularly (every week or every other week)?  | Unspecified                                       |
|  | - Of your 5 closest adult family members, how many of them would you say attend church regularly (every week or every other week)?                                   |   |
| Interpersonal<br>Religious<br>Networks     | Neighbors (reliability = .78)<br>In your community, how many of your neighbors would you estimate attend church on a regular basis (every week or every other week)? | 1 = nearly none...<br>4 = nearly all              |
|  | "Most people in my community are religious."   | Agreement-<br>disagreement (6-<br>category scale) |
| Denominational<br>Affiliation<br>(based on | Protestant denominations   | 3 = conservative<br>2 = moderate<br>1 = liberal   |

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|--|---|---|--|--|-------------|
|  | categories used<br>in the General<br>Social Survey<br>(Smith, 1990)         | Catholics   | continuum<br>2 = moderate                    |  |             |
|  |   | Jews  | 1 = liberal<br>continuum                     |  |             |
|  |   | My religion makes me feel<br>better about myself.   | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | My religion comforts me during<br>difficult times.  | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | I enjoy my religion.  | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | My religious beliefs influence<br>the way I interact with my<br>spouse.   | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | My religious beliefs influence<br>the way I interact with my<br>children (e.g., express affection,<br>discipline, etc.) | 1 = Never true ...<br>5 = Always true        |  |             |
| Gunnore,<br>Hetherington<br>& Reiss,<br>1999 | Parental<br>Religiosity<br>(alpha mothers<br>= .95; alpha<br>fathers = .96) | My religious beliefs influence<br>any difficult decisions I make.   | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | I try to provide my children with<br>religion in the home (e.g.,<br>prayers at meals, family<br>devotions, etc.).       | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | My social activities involve my<br>church and its members.  | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | I talk about my religious beliefs<br>in my interactions with my<br>family.  | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | I talk about my religious beliefs<br>in my social interactions with<br>my friends.                                      | 1 = Never true ...<br>5 = Always true        |  |             |
|  |   | Frequency of the parent's church<br>attendance  | 1 = Never ...<br>5 = 2 or 3 times a<br>week. |  |             |
|  |   | Hartman,<br>Turner,<br>Daigle,<br>Exum &<br>Cullen, 2009  | Religiosity<br>(alpha = .64)                 | Child's level of importance of<br>religion   | unspecified |
|  |   |   |  | Frequency of attending religious<br>services | unspecified |
| Nonnemaker<br>et al., 2003                   | Public<br>Religiosity   | ** During the past 12 months,<br>how often did you attend<br>religious services?  | 1 = never ...<br>4 = Once a week or<br>more  |  |             |
|  |   | **Many churches, synagogues,<br>and other places of worship have<br>special activities for teens – such                 | 1 = never ...<br>4 = Once a week or<br>more  |  |             |

|  |   |  |   |
|--|---|--|---|
|  |   | as youth groups, Bible classes, or choir. During the past 12 months, how often did you attend such religious activities? |   |
|  | Private Religiosity                             | ** How important is religion to you?   | 1 = Not important at all ...<br>4 = Very important  |
|  |   | ** How often do you pray?  | 1 = Never ...<br>5 = At least once a day  |
| Pickering & Vazsonyi, 2010                               | Ritualistic Participation (alpha = .67 - .74)   | How often do you attend the regularly scheduled services of a church?  | Unspecified   |
|  |   | How often do you read the Bible? (par)   | Unspecified   |
|  |   | Religious salience   | Unspecified   |
|  | Relational Practice (alpha = .74 - .76)         | How often do you pray?   | Unspecified   |
|  |   | Church status  | Unspecified   |
|  |   | Religious involvement  | Unspecified   |
| Resnick, et al., 1997; Resnick, Ireland & Borowski, 2004 | Religious Identity                              | Pray frequently  | Not specified   |
|  |   | View self as religious   | Not specified   |
|  |   | Affiliate with a religion  | Not specified   |
| Schreck, Burek & Clark-Miller, 2007                      | Low religiosity                                 | How often do you attend religious services?  | 1 = once a week or more ...<br>5 = (unspecified)  |
|  |   | How important is religion to you?  | 1 = very important ...<br>5 = (unspecified)   |
| Shah, 2004   | Self-Religiosity Scale (alpha = .76)            | 9 positive, 9 negative items (unspecified)   | 1 = Strongly disagree<br>2 = Disagree<br>3 = Do not know<br>4 = Agree<br>5 = Strongly agree |
|  | Father's Religious Attitude Scale (alpha = .67) | 9 positive, 6 negative items (unspecified)   | 1 = Strongly disagree<br>2 = Disagree<br>3 = Do not know<br>4 = Agree<br>5 = Strongly agree |
| Simons, Simons &   | Parents' and Child's                            | Religious Participation (e.g., How often do you attend   | Response categories varied  |



|                      |  |  |  |
|----------------------|--|--|--|
| Conger, 2004         | Religiosity (15-item scale each) (alpha > .80) | church?, How often do you lead religious services?, How often do you attend Sunday school or classes on religion?)   | by item; unspecified   |
|                      |  | Religious Commitment (e.g., How important is it to you to be a religious person?, How important are religious or spiritual beliefs to you in your everyday life?, When you have difficulties, how often do you seek spiritual comfort or support?, How often do you read the Bible?, How often do you pray?) | Response categories varied by item; unspecified  |
|                      |  |  | 1 = Never<br>2 = Once a year or less<br>3 = A few times a year<br>4 = Once a month<br>5 = 2-3 times a month<br>6 = Once a week<br>7 = Several times a week |
| Tittle & Welch, 1983 | Church Attendance                              | How often do you usually go to church?   |  |

Tαβλε 0. Adapted and included in the final instrument, as part of the socio-demographic measures to describe the sample of participants.

\*\* Adapted and included in the final instrument, to assess the participants' religiosity or religious involvement.

Note: This pool of children's religiosity measures were identified through a systematic literature review conducted on January 17, 2010 via PsycINFO/OvidSP, which searched the following databases: a) Ovid Medline ® 1948 to January Week 1 2011, b) PsycINFO 1806 to January Week 2 2011, c) EMB Reviews – Cochrane Database of Systematic Reviews 2005 to December 2010, and d) Health and Psychosocial Instruments 1985 to October 2010. The specific topics explored were "children's violence and Christian religious affiliation". Alternate search topics included: domestic violence, spirituality, faith, and faith-based organizations. This search was limited to Human populations comprising all child age groups (0-18 years), English and Spanish languages, and empirical research conducted during the childhood (birth-12 years) or adolescence (13-17 years) periods.

**Table 5. Scales identified via statistical pilot testing of the questionnaire**

| Scale                                     | Factors                              | Communalities<br>(after<br>extraction)                                     | Factor<br>Matrix | Corr.<br>Matrix<br>Deter-<br>minant | Eigen<br>Value | KMO   | Bartlett's<br>Test of<br>Sphericity<br>(X2, df,<br>sig) | Cronbach<br>'s Alpha  |       |
|---|--------------------------------------|--|------------------|-------------------------------------|----------------|-------|---|-----------------------|-------|
| Connectedness<br>Overall with<br>Cparents | Connect_<br>ParM_Fin<br>al           | Connectedness to<br>Parents (Mean<br>values of scale per<br>participant)   | 0.282            | 0.531                               |                |       |   |                       |       |
|   | Connect_<br>SchoolM_<br>Final        | Connectedness to<br>School (Mean<br>values of scale per<br>participant)    | 0.566            | 0.752                               |                |       |   |                       |       |
|   | Connect_<br>Teachers<br>M_Final      | Connectedness to<br>Teachers (Mean<br>values of scale per<br>participant)  | 0.68             | 0.824                               |                |       |   |                       |       |
|   | Connect_<br>FriendsM<br>_Final       | Connectedness to<br>Friends (Mean<br>values of scale per<br>participant)   | 0.326            | 0.571                               | 0.186          | 2.763 | 0.683   | (62.570,<br>15, .000) | 0.746 |
|   | Connect_<br>Communi<br>tyM_Fina<br>l | Connectedness to<br>Community (Mean<br>values of scale per<br>participant) | 0.196            | 0.442                               |                |       |   |                       |       |
|   | Connect_<br>Religion<br>M_Final      | Connectedness to<br>Religion (Mean<br>values of scale per<br>participant)  | 0.162            | 0.403                               |                |       |   |                       |       |
| Connectedness<br>to School                | Cschool1<br>RR                       | Me esfuerzo mucho<br>en la escuela.  | 0.746            | 0.864                               | 0.057          | 3.356 | 0.736   | (92.22, 15,<br>.000)  | 0.814 |

|                          |             |   |       |       |       |       |       |                   |       |
|--------------------------|-------------|---|-------|-------|-------|-------|-------|-------------------|-------|
|                          | Cschool2RR  | Me gusta estar en la escuela.                           | 0.335 | 0.578 |       |       |       |                   |       |
|                          | Cschool4RR  | Me va bien en la escuela.                               | 0.317 | 0.563 |       |       |       |                   |       |
|                          | Cschool6RR  | Estar bien en la escuela es importante para mí.         | 0.529 | 0.727 |       |       |       |                   |       |
|                          | Cschool9RR  | Sacar buenas notas en la escuela es importante para mi. | 0.485 | 0.696 |       |       |       |                   |       |
|                          | Cschool10RR | No tener problemas en la escuela es importante para mi. | 0.457 | 0.676 |       |       |       |                   |       |
| Connectedness to Parents | Cpar2RR     | Es importante que papi y mami confíen en mi.            | 0.497 | 0.705 |       |       |       |                   |       |
|                          | Cpar5RR     | Mis padres y yo nos llevamos bien.                      | 0.386 | 0.621 | 0.531 | 1.952 | 0.678 | (22.92, 3, .000)  | 0.73  |
|                          | Cpar6RR     | Mis padres me importan mucho.                           | 0.55  | 0.745 |       |       |       |                   |       |
| Connectedness to Father  | Cdad1RR     | Mi papá y yo somos muy unidos.                          | 0.158 | 0.494 |       |       |       |                   |       |
|                          | Cdad2RR     | Me gusta pasar tiempo con mi papá.                      | 0.25  | 0.652 | 0.653 | 1.773 | 0.637 | (15.830, 3, .001) | 0.636 |
|                          | Cdad3RR     | Mi papá se preocupa mucho por mi.                       | 0.272 | 0.725 |       |       |       |                   |       |
| Connectedness to Mother  | Cmom1RR     | Disfruto compartiendo tiempo con mi mamá.               | 0.552 | 0.743 |       |       |       |                   |       |
|                          | Cmom2RR     | Mi mamá y yo somos muy unidas(os).                      | 0.722 | 0.85  | 0.25  | 2.333 | 0.724 | (52.874, 3, .000) | 0.83  |

|                              |                 |   |       |       |       |       |       |                       |       |  |
|------------------------------|-----------------|---|-------|-------|-------|-------|-------|-----------------------|-------|--|
|                              | Cmom3R<br>R     | Mi mamá se<br>preocupa mucho por<br>mi.                                     | 0.735 | 0.857 |       |       |       |                       |       |  |
| Connectedness<br>to Teachers | Cteacher1<br>RR | Me importa lo que<br>mis maestros(as)<br>piensen de mí.                     | 0.298 | 0.546 |       |       |       |                       |       |  |
|                              | Cteacher3<br>RR | Yo quiero que mis<br>maestros(as) me<br>respeten.                           | 0.402 | 0.634 |       |       |       |                       |       |  |
|                              | Cteacher4<br>RR | Trato de llevarme<br>bien con mis<br>maestros.                              | 0.425 | 0.652 | 0.504 | 2.142 | 0.75  | (23.90, 6,<br>.001)   | 0.661 |  |
|                              | Cteacher5<br>RR | Me esfuerzo por<br>ganarme la<br>confianza de mis<br>maestros(as).          | 0.403 | 0.635 |       |       |       |                       |       |  |
|                              | Cfriends1<br>RR | Pasar tiempo con<br>mis amigos(as) es la<br>mejor parte de mi<br>día.       | 0.434 | 0.659 |       |       |       |                       |       |  |
| Connectedness<br>to Friends  | Cfriends2<br>RR | Tengo amigos(as)<br>muy cercanos en los<br>que confío mucho.                | 0.612 | 0.782 |       |       |       |                       |       |  |
|                              | Cfriends3<br>RR | Pasar tiempo con<br>mis amigos(a) es<br>una parte importante<br>de mi vida. | 0.826 | 0.909 | 0.065 | 3.505 | 0.826 | (90.829,<br>15, .000) | 0.849 |  |
|                              | Cfriends4<br>RR | Mis amigos(as) y yo<br>hablamos<br>abiertamente sobre<br>temas personales.  | 0.367 | 0.606 |       |       |       |                       |       |  |
|                              | Cfriends5<br>RR | Paso tanto tiempo<br>como puedo con mis                                     | 0.284 | 0.533 |       |       |       |                       |       |  |

|                               |                 |   |       |       |       |       |       |                      |       |
|-------------------------------|-----------------|---|-------|-------|-------|-------|-------|----------------------|-------|
|                               |                 | amigos(as).   |       |       |       |       |       |                      |       |
|                               | Cfriends6<br>RR | Mis amigos(as) y yo pasamos mucho tiempo hablando de diferentes cosas.  | 0.543 | 0.737 |       |       |       |                      |       |
| Connectedness<br>to Community | Ccom1R<br>R     | Me gusta pasear por el lugar donde vivo (por ejemplo mi vecindario).    | 0.422 | 0.65  |       |       |       |                      |       |
|                               | Ccom2R<br>R     | Me gusta pasar mucho tiempo con los(as) niños(as) de mi vecindario.     | 0.433 | 0.658 | 0.25  | 2.495 | 0.671 | (52.436, 6,<br>.000) | 0.791 |
|                               | Ccom4R<br>R     | Muchas veces paso tiempo jugando o haciendo cosas en mi vecindario.     | 0.61  | 0.781 |       |       |       |                      |       |
|                               | Ccom5R<br>R     | Paso mucho tiempo con los(as) niños(as) de mi vecindario                | 0.54  | 0.735 |       |       |       |                      |       |
|                               | Crel2RR         | Yo voy a la iglesia frecuentemente.                                     | 0.432 | 0.657 | 0.813 | 1.433 | 0.5   | (7.981, 1,<br>.005)  | 0.6   |
| Connectedness<br>to Religion  | Crel3RR         | Soy una persona religiosa.  | 0.432 | 0.657 |       |       |       |                      |       |
| Religious<br>Importance       | R_Obey          | Hacer lo que Dios dice o seguir los mandamientos es importante para mi. | 0.707 | 0.841 | 0.499 | 1.708 | 0.5   | (27.459, 1,<br>.000) | 0.804 |
|                               | R_Help          | Cuando tengo problemas, busco ayuda en la iglesia o la religión.        | 0.707 | 0.841 |       |       |       |                      |       |

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|                        |              |   |       |       |       |       |     |                   |       |  |
|------------------------|--------------|---|-------|-------|-------|-------|-----|-------------------|-------|--|
| Commitment to Religion | C_Activities | En el pasado año, ¿con cuánta frecuencia participaste en actividades en la iglesia (por ejemplo: escuela Bíblica, pantomimas, el coro)? | 0.667 | 0.817 |       |       |     |                   |       |  |
|                        |              |   |       |       | 0.554 | 1.668 | 0.5 | (23.361, 1, .000) | 0.799 |  |
|                        | R_Radio      | En los pasados 12 meses, ¿cuántas veces escuchaste programas religiosos en la radio?  | 0.667 | 0.817 |       |       |     |                   |       |  |

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**Table 6. Statistical Analyses Plan, by Research Questions and Objectives<sup>1</sup>**

| <b>Objective</b>      | <b>Variables, by Category<sup>2</sup></b>   | <b>Statistical Tests</b>  |
|-----------------------|---|---|
| Description of Sample | All “Descriptive and Socio-demographic”   | N, %, Mode, Mean, Standard Error, Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value |
| 1                     | O1a<br>All “Roles in Bullying”<br>All “Types of Bullying Victimization”<br>All “Types of Bullying Perpetration”   | N, %, Mode, Mean, Standard Error  |
|                       | O1b<br>All “Roles in Bullying”<br>All “Types of Bullying Victimization”<br>All “Types of Bullying Perpetration”<br>Location, Gender, Age, Church                    | Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value                                   |
|                       | O1c<br>All “Bullying Perpetrators”<br>All “Bullying Incidents”<br>All “Response to Bullying”<br>All “Others’ Response to Bullying”<br>Location, Gender, Age, Church | N, %, Mode, Mean, Standard Error, Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value |
| 2                     | O2a<br>All “Connectedness”  | N, %  |
|                       | O2b<br>All “Connectedness”<br>Location, Gender, Age, Church   | Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value                                   |
|                       | O2c<br>All “Connectedness”<br>Victim, Bully (non-recoded, continuous)<br>Location, Gender, Age, Church  | Pearson Correlation   |
|                       | O2d<br>All “Connectedness”<br>Victim, Bully (non-recoded, continuous)<br>Location, Gender, Age, Church  | Sequential Multiple Linear Regression<br>MLR1-Victim<br>MLR2-Bully                        |
| 3                     | O3a<br>All “Religiosity”<br>Victim, Bully (non-recoded, continuous)<br>Location, Gender, Age, Church  | N, %, Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value                             |
|                       | O3b<br>R-Parent (continuous only)<br>Victim, Bully (non-recoded, continuous)<br>Location, Gender, Age, Church   | Pearson Correlation, N, %, Cross-tabulations, Chi-Square ( $X^2$ ), ANOVA, p-value        |
|                       | O3c<br>Public-Rel<br>Private-Rel<br>Religiosity<br>Victim, Bully, Bully-Victim, Bystander<br>Location, Gender, Age  | Logistic Regression<br>LR1-Victim<br>LR2-Bully<br>LR3-BullyVictim<br>LR4-Bystander        |

<sup>1</sup> See Chapter 1 of this document to view this study’s research questions and corresponding objectives.

<sup>2</sup> Based on the variables’ categories indicated on Table 1.

**Table 7. Socio-demographic characteristics of participants, by location**

|                           | Total<br>(N=426) |      | Location of Data Collection                     |      |   |      | X <sup>2</sup> , df, p-<br>value |
|---------------------------|------------------|------|---|------|---|------|----------------------------------|
|                           |                  |      | San Juan<br>Metropolitan Area<br>(N=187, 43.9%) |      | Other<br>Municipalities<br>(N=239, 56.1%) |      |                                  |
|                           | N                | %    | N   | %    | N   | %    |                                  |
| <b>Gender</b>             |                  |      |   |      |   |      |                                  |
| Female                    | 208              | 48.8 | 86  | 46   | 122                                       | 51   | 1.074, 1,                        |
| Male                      | 218              | 51.2 | 101   | 54   | 117                                       | 49   | NS                               |
| <b>Age</b>                |                  |      |   |      |   |      |                                  |
| 10 years                  | 132              | 31   | 61  | 32.6 | 71  | 29.7 | 1.752, 3,                        |
| 11 years                  | 154              | 36.2 | 66  | 35.3 | 88  | 36.8 | NS                               |
| 12 years                  | 139              | 32.6 | 59  | 31.6 | 80  | 33.5 |                                  |
| <b>Puerto Rican</b>       |                  |      |   |      |   |      |                                  |
| Yes                       | 406              | 95.3 | 177   | 94.7 | 229                                       | 95.8 | 0.317, 1,                        |
| No                        | 20               | 4.7  | 10  | 5.3  | 10  | 2.3  | NS                               |
| <b>Birth Location</b>     |                  |      |   |      |   |      |                                  |
| Puerto Rico               | 393              | 92.3 | 174   | 93   | 219                                       | 91.6 | 5.731, 2,                        |
| US-other                  | 25               | 5.9  | 7   | 3.7  | 18  | 7.5  | NS                               |
| Other                     | 8                | 1.9  | 6   | 3.2  | 2   | 0.8  |                                  |
| <b>Language</b>           |                  |      |   |      |   |      |                                  |
| Spanish                   | 322              | 75.6 | 138   | 73.8 | 184                                       | 77   |                                  |
| English                   | 9                | 2.1  | 6   | 3.2  | 3   | 1.3  | 3.338, 3,                        |
| Both                      | 94               | 22.1 | 42  | 22.5 | 52  | 21.8 | NS                               |
| No response               | 1                | 0.2  | 1   | 0.5  | 0   | 0    |                                  |
| <b>Family Composition</b> |                  |      |   |      |   |      |                                  |
| Mom and dad               | 117              | 26.4 | 45  | 24.1 | 72  | 30.1 |                                  |
| Single parent-mom         | 207              | 46.7 | 98  | 52.4 | 109                                       | 45.6 |                                  |
| Single parent-dad         | 8                | 1.8  | 2   | 1.1  | 6   | 2.5  | 6.914, 7,                        |
| Grand-parents             | 8                | 1.8  | 2   | 1.5  | 6   | 2.5  | NS                               |
| Adoptive parent(s)        | 5                | 1.1  | 3   | 1.6  | 2   | 0.8  |                                  |
| Mom and stepdad           | 24               | 5.3  | 12  | 6.4  | 12  | 5    |                                  |
| Dad and stepmom           | 1                | 0.2  | 1   | 0.5  | 0   | 0    |                                  |
| Other                     | 73               | 16.5 | 24  | 12.8 | 32  | 13.4 |                                  |
| <b>Siblings</b>           |                  |      |   |      |   |      |                                  |
| Yes                       | 188              | 44.1 | 69  | 36.9 | 119                                       | 49.8 | 7.073, 1,                        |
| No                        | 238              | 55.9 | 118   | 63.1 | 120                                       | 50.2 | 0.005*                           |
| <b>Grade Level</b>        |                  |      |   |      |   |      |                                  |
| 3 <sup>rd</sup>           | 8                | 1.9  | 7   | 3.7  | 1   | 0.4  |                                  |
| 4 <sup>th</sup>           | 27               | 6.3  | 17  | 9.1  | 10  | 4.2  |                                  |
| 5 <sup>th</sup>           | 100              | 23.5 | 49  | 26.2 | 51  | 21.3 |                                  |
| 6 <sup>th</sup>           | 159              | 37.3 | 62  | 33.2 | 97  | 40.6 | 16.565,                          |
| 7 <sup>th</sup>           | 114              | 26.8 | 48  | 25.7 | 66  | 27.6 | 6, 0.011*                        |
| 8 <sup>th</sup>           | 17               | 4    | 4   | 2.1  | 13  | 5.4  |                                  |
| No response               | 1                | 0.2  | 0   | 0    | 1   | 0.4  |                                  |



|                         |     |      |     |      |     |      |                  |
|-------------------------|-----|------|-----|------|-----|------|------------------|
| Type of School          |     |      |     |      |     |      |                  |
| Public                  | 385 | 90.4 | 166 | 88.8 | 219 | 91.6 |                  |
| Christian or Catholic   | 15  | 3.5  | 6   | 3.2  | 9   | 3.8  | 5.015, 4,        |
| Private                 | 23  | 5.4  | 13  | 7    | 10  | 4.2  | NS               |
| No school               | 1   | 0.2  | 0   | 0    | 1   | 0.4  |                  |
| Other                   | 2   | 0.5  | 2   | 1.1  | 0   | 0    |                  |
| Church Attendance       |     |      |     |      |     |      |                  |
| Yes                     | 301 | 70.7 | 140 | 74.9 | 161 | 67.4 | 2.848, 1,        |
| No                      | 125 | 29.3 | 47  | 25.1 | 78  | 32.6 | NS               |
| Religion                |     |      |     |      |     |      |                  |
| None                    | 147 | 34.5 | 66  | 35.3 | 81  | 33.9 |                  |
| Catholic                | 111 | 26.1 | 42  | 22.5 | 69  | 28.9 |                  |
| Christian-other         | 137 | 32.2 | 64  | 34.2 | 73  | 30.5 | 5.138, 6,        |
| Islam                   | 6   | 1.4  | 2   | 1.1  | 4   | 1.7  | NS               |
| Judaism                 | 4   | 0.9  | 2   | 1.1  | 2   | 0.8  |                  |
| Other                   | 21  | 4.9  | 11  | 5.9  | 10  | 4.2  |                  |
| BG CPR Activities       |     |      |     |      |     |      |                  |
| None                    | 28  | 6.6  | 17  | 9.1  | 11  | 4.6  | 3.442, 1, 0.049* |
| Dance                   | 182 | 42.7 | 81  | 43.3 | 101 | 42.3 | 0.048, 1, NS     |
| Drama                   | 114 | 26.8 | 49  | 26.2 | 65  | 27.2 | 0.053, 1, NS     |
| Art                     | 76  | 17.8 | 32  | 17.1 | 44  | 18.4 | 0.121, 1, NS     |
| Music                   | 41  | 9.6  | 16  | 8.6  | 25  | 10.5 | 0.437, 1, NS     |
| Sports                  | 204 | 47.9 | 81  | 43.3 | 123 | 51.5 | 2.792, 1, 0.058* |
| Summer Camps            | 227 | 53.3 | 98  | 52.4 | 129 | 54   | 0.104, 1, NS     |
| Tutoring                | 246 | 57.7 | 95  | 50.8 | 151 | 63.2 | 6.588, 1, 0.007* |
| Field Trips             | 123 | 28.9 | 45  | 24.1 | 78  | 32.6 | 3.754, 1, 0.033* |
| Leadership Development  | 48  | 11.3 | 14  | 7.5  | 34  | 14.2 | 4.766, 2, 0.020* |
| Youth of the Year       | 47  | 11   | 24  | 12.8 | 23  | 9.6  | 1.102, 1, NS     |
| Community Service       | 42  | 9.9  | 16  | 8.6  | 26  | 10.9 | 0.637, 1, NS     |
| Economic Responsibility | 34  | 8    | 16  | 8.6  | 18  | 7.5  | 0.150, 1, NS     |
| Other                   | 37  | 8.7  | 13  | 7    | 24  | 10   | 1.226, 1, NS     |

\* p<0.05

NS: Not statistically significant

**Table 8. Socio-demographic characteristics of participants, by gender**

|                           | Total (N=426) |      | Gender of Participants |      |              |      | X <sup>2</sup> , df, p-value |
|---------------------------|---------------|------|------------------------|------|--------------|------|------------------------------|
|                           |               |      | Female (N=208)         |      | Male (N=218) |      |                              |
|                           | N             | %    | N                      | %    | N            | %    |                              |
| <b>Location</b>           |               |      |                        |      |              |      |                              |
| SJ Metro Area             | 187           | 43.9 | 86                     | 41.3 | 101          | 46.3 | 1.074, 1, NS                 |
| Other Municipalities      | 239           | 56.1 | 122                    | 58.7 | 117          | 53.7 |                              |
| <b>Age</b>                |               |      |                        |      |              |      |                              |
| 10 years                  | 132           | 31   | 69                     | 33.2 | 63           | 28.9 | 5.262, 3, NS                 |
| 11 years                  | 154           | 36.2 | 81                     | 38.9 | 73           | 33.5 |                              |
| 12 years                  | 139           | 32.6 | 58                     | 27.9 | 81           | 37.2 |                              |
| No response               | 1             | 0.2  | 0                      | 0    | 1            | 0.5  |                              |
| <b>Puerto Rican</b>       |               |      |                        |      |              |      |                              |
| Yes                       | 406           | 95.3 | 196                    | 94.2 | 210          | 96.3 | 1.049, 1, NS                 |
| No                        | 20            | 4.7  | 12                     | 5.8  | 8            | 3.7  |                              |
| <b>Birth Location</b>     |               |      |                        |      |              |      |                              |
| Puerto Rico               | 393           | 92.3 | 189                    | 90.9 | 204          | 93.6 | 2.379, 2, NS                 |
| US-other                  | 25            | 5.9  | 13                     | 6.2  | 12           | 5.5  |                              |
| Other                     | 8             | 1.9  | 6                      | 2.9  | 2            | 0.9  |                              |
| <b>Language</b>           |               |      |                        |      |              |      |                              |
| Spanish                   | 322           | 75.6 | 156                    | 75   | 166          | 76.1 | 2.247, 3, NS                 |
| English                   | 9             | 2.1  | 3                      | 1.4  | 6            | 2.8  |                              |
| Both                      | 94            | 22.1 | 49                     | 23.6 | 45           | 20.6 |                              |
| No response               | 1             | 0.2  | 0                      | 0    | 1            | 0.5  |                              |
| <b>Family Composition</b> |               |      |                        |      |              |      |                              |
| Mom and dad               | 117           | 26.4 | 59                     | 28.4 | 58           | 26.6 | 4.391, 7, NS                 |
| Single parent-mom         | 207           | 46.7 | 104                    | 50   | 103          | 47.2 |                              |
| Single parent-dad         | 8             | 1.8  | 5                      | 2.4  | 3            | 1.4  |                              |
| Grandparents              | 8             | 1.8  | 4                      | 1.9  | 4            | 1.8  |                              |
| Adoptive parent(s)        | 5             | 1.1  | 1                      | 0.5  | 4            | 1.8  |                              |
| Mom and stepdad           | 24            | 5.3  | 11                     | 5.3  | 13           | 6    |                              |
| Dad and stepmom           | 1             | 0.2  | 0                      | 0    | 1            | 0.5  |                              |
| Other                     | 73            | 16.5 | 24                     | 11.5 | 32           | 14.7 |                              |
| <b>Siblings</b>           |               |      |                        |      |              |      |                              |
| Yes                       | 188           | 44.1 | 100                    | 48.1 | 88           | 40.4 | 2.566, 1, NS                 |
| No                        | 238           | 55.9 | 108                    | 51.9 | 130          | 59.6 |                              |
| <b>Grade Level</b>        |               |      |                        |      |              |      |                              |
| 3 <sup>rd</sup>           | 8             | 1.9  | 2                      | 1    | 6            | 2.8  | 5.236, 6, NS                 |
| 4 <sup>th</sup>           | 27            | 6.3  | 12                     | 5.8  | 15           | 6.9  |                              |
| 5 <sup>th</sup>           | 100           | 23.5 | 51                     | 24.5 | 49           | 22.5 |                              |
| 6 <sup>th</sup>           | 159           | 37.3 | 83                     | 39.9 | 76           | 34.9 |                              |
| 7 <sup>th</sup>           | 114           | 26.8 | 54                     | 26   | 60           | 27.5 |                              |
| 8 <sup>th</sup>           | 17            | 4    | 6                      | 2.9  | 11           | 5    |                              |
| No response               | 1             | 0.2  | 0                      | 0    | 1            | 0.5  |                              |
| <b>Type of School</b>     |               |      |                        |      |              |      |                              |
| Public                    | 385           | 90.4 | 191                    | 91.8 | 194          | 89   | 3.782, 4, NS                 |
| Christian or Catholic     | 15            | 3.5  | 6                      | 2.9  | 9            | 4.1  |                              |

|                         |     |      |     |      |     |      |                    |
|-------------------------|-----|------|-----|------|-----|------|--------------------|
| Private                 | 23  | 5.4  | 10  | 4.8  | 13  | 6    |                    |
| No school               | 1   | 0.2  | 1   | 0.5  | 0   | 0    |                    |
| Other                   | 2   | 0.5  | 0   | 0    | 2   | 0.9  |                    |
| Church Attendance       |     |      |     |      |     |      |                    |
| Yes                     | 301 | 70.7 | 143 | 68.8 | 158 | 72.5 | 0.713, 1, NS       |
| No                      | 125 | 29.3 | 65  | 31.2 | 60  | 27.5 |                    |
| Religion                |     |      |     |      |     |      |                    |
| None                    | 147 | 34.5 | 66  | 31.7 | 81  | 37.2 |                    |
| Catholicism             | 111 | 26.1 | 59  | 28.4 | 52  | 23.9 |                    |
| Christian-other         | 137 | 32.2 | 71  | 34.1 | 66  | 30.3 | 4.017, 5, NS       |
| Islam                   | 6   | 1.4  | 2   | 1    | 4   | 1.8  |                    |
| Judaism                 | 4   | 0.9  | 1   | 0.5  | 3   | 1.4  |                    |
| Other                   | 21  | 4.9  | 9   | 4.3  | 12  | 5.5  |                    |
| BGCPR Activities        |     |      |     |      |     |      |                    |
| None                    | 28  | 6.6  | 12  | 5.8  | 16  | 7.3  | 0.427, 1, NS       |
| Dance                   | 182 | 42.7 | 119 | 57.2 | 63  | 28.9 | 34.868, 1, 0.000** |
| Drama                   | 114 | 26.8 | 64  | 30.8 | 50  | 22.9 | 3.333, 1, NS       |
| Art                     | 76  | 17.8 | 45  | 21.6 | 31  | 14.2 | 3.992, 1, 0.046*   |
| Music                   | 41  | 9.6  | 15  | 7.2  | 26  | 11.9 | 2.721, 1, NS       |
| Sports                  | 204 | 47.9 | 87  | 41.8 | 117 | 53.7 | 5.982, 1, 0.009*   |
| Summer Camps            | 227 | 53.3 | 124 | 59.6 | 103 | 47.2 | 6.541, 1, 0.007*   |
| Tutoring                | 246 | 57.7 | 127 | 61.1 | 119 | 54.6 | 1.826, 1, NS       |
| Field Trips             | 123 | 28.9 | 75  | 36.1 | 48  | 22   | 10.216, 1, 0.001** |
| Leadership Development  | 48  | 11.3 | 32  | 15.4 | 16  | 7.3  | 6.891, 1, 0.009*   |
| Youth of the Year       | 47  | 11   | 22  | 10.6 | 25  | 11.5 | 0.086, 1, NS       |
| Community Service       | 42  | 9.9  | 22  | 10.6 | 20  | 9.2  | 0.236, 1, NS       |
| Economic Responsibility | 34  | 8    | 17  | 8.2  | 17  | 7.8  | 0.020, 1, NS       |
| Other                   | 37  | 8.7  | 18  | 8.7  | 19  | 8.7  | 0.000, 1, NS       |

\* p<0.05

\*\* p<0.001

NS: Not statistically significant

**Table 9. Socio-demographic characteristics of participants, by age**

|                           | Total (N=426) |      | Age               |      |                   |      |                   |      | X <sup>2</sup> , df,<br>p-value   |
|---------------------------|---------------|------|-------------------|------|-------------------|------|-------------------|------|-----------------------------------|
|                           |               |      | 10 y/o<br>(N=132) |      | 11 y/o<br>(N=154) |      | 12 y/o<br>(N=139) |      |                                   |
|                           | N             | %    | N                 | %    | N                 | %    | N                 | %    |                                   |
| <b>Location</b>           |               |      |                   |      |                   |      |                   |      |                                   |
| SJ Metro Area             | 186           | 43.8 | 61                | 46.2 | 66                | 42.9 | 59                | 42.4 | 0.471,<br>2, NS                   |
| Other Municipalities      | 239           | 56.2 | 71                | 53.8 | 88                | 57.1 | 80                | 57.6 |                                   |
| <b>Gender</b>             |               |      |                   |      |                   |      |                   |      |                                   |
| Female                    | 208           | 48.9 | 69                | 52.3 | 81                | 52.6 | 58                | 41.7 | 4.305,<br>2, NS                   |
| Male                      | 217           | 51.1 | 63                | 47.7 | 73                | 47.4 | 81                | 58.3 |                                   |
| <b>Puerto Rican</b>       |               |      |                   |      |                   |      |                   |      |                                   |
| Yes                       | 405           | 95.3 | 126               | 95.5 | 147               | 95.5 | 132               | 95   | 0.050,<br>2, NS                   |
| No                        | 20            | 4.7  | 6                 | 4.5  | 7                 | 4.5  | 7                 | 5    |                                   |
| <b>Birth Location</b>     |               |      |                   |      |                   |      |                   |      |                                   |
| Puerto Rico               | 392           | 92.2 | 123               | 93.2 | 140               | 90.9 | 129               | 92.8 | 1.683,<br>4, NS                   |
| US-other                  | 25            | 5.9  | 8                 | 6.1  | 10                | 6.5  | 7                 | 5    |                                   |
| Other                     | 8             | 1.9  | 1                 | 0.8  | 4                 | 2.6  | 3                 | 2.2  |                                   |
| <b>Language</b>           |               |      |                   |      |                   |      |                   |      |                                   |
| Spanish                   | 321           | 75.5 | 102               | 77.3 | 115               | 74.7 | 104               | 74.8 | 3.540,<br>6, NS                   |
| English                   | 9             | 2.1  | 2                 | 1.5  | 5                 | 3.2  | 2                 | 1.4  |                                   |
| Both                      | 94            | 22.1 | 28                | 21.2 | 33                | 21.4 | 33                | 23.7 |                                   |
| No response               | 0             | 0    | 0                 | 0    | 1                 | 0.6  | 1                 | 0.2  |                                   |
| <b>Family Composition</b> |               |      |                   |      |                   |      |                   |      |                                   |
| Mom and dad               | 117           | 26.4 | 35                | 26.5 | 46                | 29.9 | 36                | 25.9 | 12.48<br>8, 14,<br>NS             |
| Single parent-mom         | 207           | 46.7 | 72                | 54.5 | 68                | 44.1 | 66                | 47.5 |                                   |
| Single parent-dad         | 8             | 1.8  | 1                 | 0.8  | 4                 | 2.6  | 3                 | 2.2  |                                   |
| Grandparents              | 8             | 1.8  | 1                 | 0.8  | 3                 | 1.9  | 4                 | 2.9  |                                   |
| Adoptive parent(s)        | 5             | 1.1  | 3                 | 2.3  | 2                 | 1.3  | 0                 | 0    |                                   |
| Mom and stepdad           | 24            | 5.3  | 5                 | 3.8  | 8                 | 5.2  | 11                | 7.9  |                                   |
| Dad and stepmom           | 1             | 0.2  | 0                 | 0    | 1                 | 0.6  | 0                 | 0    |                                   |
| Other                     | 73            | 16.5 | 15                | 11.4 | 22                | 14.3 | 19                | 13.7 |                                   |
| <b>Siblings</b>           |               |      |                   |      |                   |      |                   |      |                                   |
| Yes                       | 188           | 44.2 | 51                | 38.6 | 68                | 44.2 | 69                | 49.6 | 3.324,<br>2, NS                   |
| No                        | 237           | 55.8 | 81                | 61.4 | 86                | 55.8 | 70                | 50.4 |                                   |
| <b>Grade Level</b>        |               |      |                   |      |                   |      |                   |      |                                   |
| 3 <sup>rd</sup>           | 8             | 1.9  | 6                 | 4.5  | 1                 | 0.6  | 1                 | 0.7  | 355.7<br>29,<br>12,<br>0.000<br>* |
| 4 <sup>th</sup>           | 27            | 6.4  | 17                | 12.9 | 6                 | 3.9  | 4                 | 2.9  |                                   |
| 5 <sup>th</sup>           | 100           | 23.5 | 81                | 61.4 | 14                | 9.1  | 5                 | 3.6  |                                   |
| 6 <sup>th</sup>           | 159           | 37.4 | 25                | 18.9 | 110               | 71.4 | 24                | 17.3 |                                   |
| 7 <sup>th</sup>           | 113           | 26.6 | 2                 | 1.5  | 21                | 13.6 | 90                | 64.7 |                                   |
| 8 <sup>th</sup>           | 17            | 4    | 0                 | 0    | 2                 | 1.3  | 15                | 10.8 |                                   |
| No response               | 1             | 0.2  | 1                 | 0.2  | 0                 | 0    | 0                 | 0    |                                   |

|                         |     |      |     |      |     |      |     |      |        |  |
|-------------------------|-----|------|-----|------|-----|------|-----|------|--------|--|
| Type of School          |     |      |     |      |     |      |     |      |        |  |
| Public                  | 384 | 90.4 | 120 | 90.9 | 140 | 90.9 | 124 | 89.2 |        |  |
| Christian or Catholic   | 15  | 3.5  | 4   | 3    | 4   | 2.6  | 7   | 5    | 4.217, |  |
| Private                 | 23  | 5.4  | 8   | 6.1  | 8   | 5.2  | 7   | 5    | 8, NS  |  |
| No school               | 1   | 0.2  | 0   | 0    | 1   | 0.6  | 0   | 0    |        |  |
| Other                   | 2   | 0.5  | 0   | 0    | 1   | 0.6  | 1   | 0.7  |        |  |
| Church Attendance       |     |      |     |      |     |      |     |      |        |  |
| Yes                     | 300 | 70.6 | 97  | 73.5 | 110 | 71.4 | 93  | 66.9 | 1.493, |  |
| No                      | 125 | 29.4 | 35  | 26.5 | 44  | 28.6 | 46  | 33.1 | 2, NS  |  |
| Religion                |     |      |     |      |     |      |     |      |        |  |
| None                    | 147 | 34.6 | 42  | 31.8 | 51  | 33.1 | 54  | 38.8 |        |  |
| Catholicism             | 111 | 26.1 | 32  | 24.2 | 46  | 29.9 | 33  | 23.7 | 8.112, |  |
| Christian-other         | 137 | 32.2 | 47  | 35.6 | 48  | 31.2 | 42  | 30.2 | 10, NS |  |
| Islam                   | 6   | 1.4  | 1   | 0.8  | 3   | 1.9  | 2   | 1.4  |        |  |
| Judaism                 | 4   | 0.9  | 2   | 1.5  | 2   | 1.3  | 0   | 0    |        |  |
| Other                   | 20  | 4.7  | 8   | 6.1  | 4   | 2.6  | 8   | 5.8  |        |  |
| No response             |     |      |     |      |     |      |     |      |        |  |
| BGCPR Activities        |     |      |     |      |     |      |     |      |        |  |
| None                    | 28  | 6.6  | 6   | 4.5  | 11  | 7.1  | 11  | 7.9  | 1.369, |  |
| Dance                   | 182 | 42.8 | 54  | 40.9 | 75  | 48.7 | 53  | 38.1 | 2, NS  |  |
| Drama                   | 114 | 26.8 | 41  | 31.1 | 45  | 29.2 | 28  | 20.1 | 3.621, |  |
| Art                     | 76  | 17.9 | 25  | 18.9 | 32  | 20.8 | 19  | 13.7 | 2, NS  |  |
| Music                   | 41  | 9.6  | 9   | 6.8  | 20  | 13   | 12  | 8.6  | 4.818, |  |
| Sports                  | 204 | 48   | 56  | 42.4 | 76  | 49.4 | 72  | 51.8 | 2, NS  |  |
| Summer Camps            | 227 | 53.4 | 65  | 49.2 | 88  | 57.1 | 74  | 53.2 | 2.661, |  |
| Tutoring                | 246 | 57.9 | 80  | 60.6 | 94  | 61   | 72  | 51.8 | 2, NS  |  |
| Field Trips             | 123 | 28.9 | 32  | 24.2 | 46  | 29.9 | 45  | 32.4 | 3.141, |  |
| Leadership Development  | 48  | 11.3 | 11  | 8.3  | 18  | 11.7 | 19  | 13.7 | 2, NS  |  |
| Youth of the Year       | 47  | 11.1 | 12  | 9.1  | 20  | 13   | 15  | 10.8 | 1.961, |  |
| Community Service       | 41  | 9.6  | 7   | 5.3  | 17  | 11   | 17  | 12.2 | 2, NS  |  |
| Economic Responsibility | 34  | 8    | 8   | 6.1  | 16  | 10.4 | 10  | 7.2  | 1.112, |  |
| Other                   | 37  | 8.7  | 8   | 6.1  | 17  | 11   | 12  | 8.7  | 2, NS  |  |

\* p<0.001

NS: Not statistically significant

**Table 10. Socio-demographic characteristics of participants, by church attendance**

|  | Total<br>(N=426) |      | Church Attendance |      |            |      | X <sup>2</sup> , df, p-<br>value |
|--|------------------|------|-------------------|------|------------|------|----------------------------------|
|  | N                | %    | Yes (N=301)       |      | No (N=125) |      |                                  |
|  | N                | %    | N                 | %    | N          | %    |                                  |
| <b>Location</b>                          |                  |      |                   |      |            |      |                                  |
| SJ Metro Area                            | 187              | 43.9 | 140               | 46.5 | 47         | 37.6 | 2.848, 1,                        |
| Other Municipalities                     | 239              | 56.1 | 161               | 53.5 | 78         | 62.4 | NS                               |
| <b>Gender (M=1.51, s.e.=0.024)</b>       |                  |      |                   |      |            |      |                                  |
| Female                                   | 208              | 48.8 | 143               | 47.5 | 65         | 52   | 0.713, 1,                        |
| Male                                     | 218              | 51.2 | 158               | 52.5 | 60         | 48   | NS                               |
| <b>Age (M=11.0165, s.e.=0.03877)</b>     |                  |      |                   |      |            |      |                                  |
| 10 years                                 | 132              | 31   | 97                | 32.2 | 35         | 28   |                                  |
| 11 years                                 | 154              | 36.2 | 110               | 36.5 | 44         | 35.2 | 1.912, 3,                        |
| 12 years                                 | 139              | 32.6 | 93                | 30.9 | 46         | 36.8 | NS                               |
| No response                              | 1                | 0.2  | 1                 | 0.3  | 0          | 0    |                                  |
| <b>Puerto Rican</b>                      |                  |      |                   |      |            |      |                                  |
| Yes                                      | 406              | 93.3 | 290               | 96.3 | 116        | 92.8 | 2.481, 1,                        |
| No                                       | 20               | 4.7  | 11                | 3.7  | 9          | 7.2  | NS                               |
| <b>Birth Location</b>                    |                  |      |                   |      |            |      |                                  |
| Puerto Rico                              | 393              | 92.3 | 283               | 94   | 110        | 88   |                                  |
| US-other                                 | 25               | 5.9  | 12                | 4    | 13         | 10.4 | 6.610, 2,                        |
| Other                                    | 8                | 1.9  | 6                 | 2    | 2          | 1.6  | 0.037*                           |
| <b>Language</b>                          |                  |      |                   |      |            |      |                                  |
| Spanish                                  | 322              | 75.6 | 228               | 75.7 | 94         | 75.2 |                                  |
| English                                  | 9                | 2.1  | 5                 | 1.7  | 4          | 3.2  | 1.426, 3,                        |
| Both                                     | 94               | 22.1 | 67                | 22.3 | 27         | 21.6 | NS                               |
| No response                              | 1                | 0.2  | 1                 | 0.3  | 0          | 0    |                                  |
| <b>Family Composition</b>                |                  |      |                   |      |            |      |                                  |
| Mom and dad                              | 117              | 26.4 | 89                | 29.6 | 28         | 22.4 |                                  |
| Single parent-mom                        | 207              | 46.7 | 142               | 47.2 | 65         | 52   |                                  |
| Single parent-dad                        | 8                | 1.8  | 6                 | 2    | 2          | 1.6  |                                  |
| Grandparents                             | 8                | 1.8  | 6                 | 2    | 2          | 1.6  | 7.802, 7,                        |
| Adoptive parent(s)                       | 5                | 1.1  | 5                 | 1.7  | 0          | 0    | NS                               |
| Mom and stepdad                          | 24               | 5.3  | 17                | 5.6  | 7          | 5.6  |                                  |
| Dad and stepmom                          | 1                | 0.2  | 0                 | 0    | 1          | 0.8  |                                  |
| Other                                    | 73               | 16.5 | 36                | 12   | 28         | 16   |                                  |
| <b>Siblings</b>                          |                  |      |                   |      |            |      |                                  |
| Yes                                      | 188              | 44.1 | 128               | 42.5 | 60         | 48   | 1.074, 1,                        |
| No                                       | 238              | 55.9 | 173               | 57.5 | 65         | 52   | NS                               |
| <b>Grade Level (M=3.15, s.e.= 0.231)</b> |                  |      |                   |      |            |      |                                  |
| 3 <sup>rd</sup>                          | 8                | 1.9  | 7                 | 2.3  | 1          | 0.8  |                                  |
| 4 <sup>th</sup>                          | 27               | 6.3  | 21                | 7    | 6          | 4.8  |                                  |
| 5 <sup>th</sup>                          | 100              | 23.5 | 73                | 24.3 | 27         | 21.6 |                                  |
| 6 <sup>th</sup>                          | 159              | 37.3 | 114               | 37.9 | 45         | 36   | 4.969, 6,                        |
| 7 <sup>th</sup>                          | 114              | 26.8 | 75                | 24.9 | 39         | 31.2 | NS                               |
| 8 <sup>th</sup>                          | 17               | 4    | 10                | 3.3  | 7          | 5.6  |                                  |
| No response                              | 1                | 0.2  | 1                 | 0.3  | 0          | 0    |                                  |

|                         |     |      |     |      |     |      |                     |
|-------------------------|-----|------|-----|------|-----|------|---------------------|
| Type of School          |     |      |     |      |     |      |                     |
| Public                  | 385 | 90.4 | 269 | 89.4 | 116 | 92.8 |                     |
| Christian or Catholic   | 15  | 3.5  | 11  | 3.7  | 4   | 3.2  | 2.054, 4,           |
| Private                 | 23  | 5.4  | 18  | 6    | 5   | 4    | NS                  |
| No school               | 1   | 0.2  | 1   | 0.3  | 0   | 0    |                     |
| Other                   | 2   | 0.5  | 2   | 0.7  | 0   | 0    |                     |
| Religion                |     |      |     |      |     |      |                     |
| None                    | 147 | 34.5 | 63  | 20.9 | 84  | 67.2 |                     |
| Catholicism             | 111 | 26.1 | 94  | 31.2 | 17  | 13.6 |                     |
| Christian-other         | 137 | 32.2 | 120 | 39.9 | 17  | 13.6 | 87.905, 5,          |
| Islam                   | 6   | 1.4  | 6   | 2    | 0   | 0    | 0.000**             |
| Judaism                 | 4   | 0.9  | 2   | 0.7  | 2   | 1.6  |                     |
| Other                   | 21  | 4.9  | 16  | 5.3  | 5   | 4    |                     |
| BGCPR Activities        |     |      |     |      |     |      |                     |
| None                    | 28  | 6.6  | 24  | 8    | 4   | 3.2  | 3.277, 1,<br>0.049* |
| Dance                   | 182 | 42.7 | 130 | 43.2 | 52  | 41.6 | 0.091, 1,<br>NS     |
| Drama                   | 114 | 26.8 | 84  | 27.9 | 30  | 24   | 0.688, 1 NS         |
| Art                     | 76  | 17.8 | 53  | 17.6 | 23  | 18.4 | 0.038, 1,<br>NS     |
| Music                   | 41  | 9.6  | 28  | 9.3  | 13  | 10.4 | 0.122, 1,<br>NS     |
| Sports                  | 204 | 47.9 | 144 | 47.8 | 60  | 48   | 0.001, 1,<br>NS     |
| Summer Camps            | 227 | 53.3 | 154 | 51.2 | 73  | 58.4 | 1.858, 1,<br>NS     |
| Tutoring                | 246 | 57.7 | 172 | 57.1 | 74  | 59.2 | 0.153, 1, NS        |
| Field Trips             | 123 | 28.9 | 89  | 29.6 | 34  | 27.2 | 0.241, 1,<br>NS     |
| Leadership Development  | 48  | 11.3 | 34  | 11.3 | 14  | 11.2 | 0.001, 1,<br>NS     |
| Youth of the Year       | 47  | 11   | 33  | 11   | 14  | 11.2 | 0.005, 1,<br>NS     |
| Community Service       | 42  | 9.9  | 25  | 8.3  | 17  | 13.6 | 2.786, 1,<br>NS     |
| Economic Responsibility | 34  | 8    | 25  | 8.3  | 9   | 7.2  | 0.147, 1,<br>NS     |
| Other                   | 37  | 8.7  | 26  | 8.6  | 11  | 8.9  | 0.006, 1,<br>NS     |

\* P<0.05

\*\* P<0.001

NS Not statistically significant

**Table 11. Knowledge about bullying, by location**

|                                       | Location of Data Collection |      |   |      |   |      | X <sup>2</sup> , df, p-value |
|---------------------------------------|-----------------------------|------|---|------|---|------|------------------------------|
|                                       | Total<br>(N=426)            |      | San Juan<br>Metropolitan Area<br>(N=187, 43.9%) |      | Other<br>Municipalities<br>(N=239, 56.1%) |      |                              |
|                                       | N                           | %    | N   | %    | N   | %    |                              |
| <b>Understand definition provided</b> |                             |      |   |      |   |      |                              |
| Yes                                   | 401                         | 94.4 | 179   | 95.7 | 222                                       | 93.3 | 3.057, 2,<br>NS              |
| No                                    | 23                          | 5.4  | 7   | 3.7  | 16  | 6.7  |                              |
| No response                           | 1                           | 0.2  | 1   | 0.5  | 0   | 0    |                              |
| <b>Heard about bullying</b>           |                             |      |   |      |   |      |                              |
| Yes                                   | 391                         | 91.8 | 169   | 90.4 | 222                                       | 92.9 | 0.880, 2,<br>NS              |
| No                                    | 33                          | 7.7  | 17  | 9.1  | 16  | 6.7  |                              |
| No response                           | 2                           | 0.5  | 1   | 0.5  | 1   | 0.4  |                              |
| <b>Heard about bullying at...</b>     |                             |      |   |      |   |      |                              |
| <b>School</b>                         |                             |      |   |      |   |      |                              |
| Yes                                   | 371                         | 87.1 | 159   | 85   | 212                                       | 88.7 | 1.431, 3,<br>NS              |
| No                                    | 42                          | 9.9  | 22  | 11.8 | 20  | 8.4  |                              |
| Don't know                            | 11                          | 2.6  | 5   | 2.7  | 6   | 2.5  |                              |
| No response                           | 2                           | 0.5  | 1   | 0.5  | 1   | 0.4  |                              |
| <b>BGCPR</b>                          |                             |      |   |      |   |      |                              |
| Yes                                   | 278                         | 65.3 | 132   | 70.6 | 146                                       | 61.1 | 4.544, 3,<br>NS              |
| No                                    | 101                         | 23.7 | 38  | 20.3 | 63  | 26.4 |                              |
| Don't know                            | 43                          | 10.1 | 15  | 8    | 28  | 11.7 |                              |
| No response                           | 4                           | 0.9  | 2   | 1.1  | 2   | 0.8  |                              |
| <b>Church</b>                         |                             |      |   |      |   |      |                              |
| Yes                                   | 106                         | 24.9 | 49  | 26.2 | 57  | 23.8 | 8.932, 3,<br>0.030*          |
| No                                    | 228                         | 53.5 | 110   | 58.8 | 118                                       | 49.4 |                              |
| Don't know                            | 84                          | 19.7 | 25  | 13.4 | 59  | 24.7 |                              |
| No response                           | 8                           | 1.9  | 3   | 1.6  | 5   | 2.1  |                              |

\* p<0.05

NS: Not statistically significant



**Table 12. Knowledge about bullying, by gender of the participant**

|                                       | Total<br>(N=426) |      | Gender            |      |                 |      | X <sup>2</sup> , df, p-value |
|---------------------------------------|------------------|------|-------------------|------|-----------------|------|------------------------------|
|                                       |                  |      | Female<br>(N=208) |      | Male<br>(N=218) |      |                              |
|                                       | N                | %    | N                 | %    | N               | %    |                              |
| <b>Understand definition provided</b> |                  |      |                   |      |                 |      |                              |
| Yes                                   | 401              | 94.4 | 198               | 95.7 | 203             | 93.1 | 1.866, 2, NS                 |
| No                                    | 23               | 5.4  | 9                 | 4.3  | 14              | 6.4  |                              |
| No response                           | 1                | 0.2  | 0                 | 0    | 1               | 0.5  |                              |
| <b>Heard about bullying</b>           |                  |      |                   |      |                 |      |                              |
| Yes                                   | 391              | 91.8 | 196               | 94.2 | 195             | 89.4 | 4.225, 2, NS                 |
| No                                    | 33               | 7.7  | 12                | 5.8  | 21              | 9.6  |                              |
| No response                           | 2                | 0.5  | 0                 | 0    | 2               | 0.9  |                              |
| <b>Heard about bullying at...</b>     |                  |      |                   |      |                 |      |                              |
| <b>School</b>                         |                  |      |                   |      |                 |      |                              |
| Yes                                   | 371              | 87.1 | 185               | 88.9 | 186             | 85.3 | 6.226, 3, NS                 |
| No                                    | 42               | 9.9  | 21                | 10.1 | 21              | 9.6  |                              |
| Don't know                            | 11               | 2.6  | 2                 | 1    | 9               | 4.1  |                              |
| No response                           | 2                | 0.5  | 0                 | 0    | 2               | 0.9  |                              |
| <b>BGCPR</b>                          |                  |      |                   |      |                 |      |                              |
| Yes                                   | 278              | 65.3 | 134               | 64.4 | 144             | 66.1 | 0.424, 3, NS                 |
| No                                    | 101              | 23.7 | 52                | 25   | 49              | 22.5 |                              |
| Don't know                            | 43               | 10.1 | 20                | 9.6  | 23              | 10.6 |                              |
| No response                           | 4                | 0.9  | 2                 | 1    | 2               | 0.9  |                              |
| <b>Church</b>                         |                  |      |                   |      |                 |      |                              |
| Yes                                   | 106              | 24.9 | 46                | 22.1 | 60              | 27.5 | 3.877, 3, NS                 |
| No                                    | 228              | 53.5 | 116               | 55.8 | 112             | 51.4 |                              |
| Don't know                            | 84               | 19.7 | 44                | 21.2 | 40              | 18.3 |                              |
| No response                           | 8                | 1.9  | 2                 | 1    | 6               | 2.8  |                              |

NS: Not statistically significant

**Table 13. Knowledge about bullying, by age of the participant**

|                                | Total<br>(N=426) |      | Age               |      |                   |      |                   |      | X <sup>2</sup> , df, p-<br>value |
|--------------------------------|------------------|------|-------------------|------|-------------------|------|-------------------|------|----------------------------------|
|                                |                  |      | 10 y/o<br>(N=132) |      | 11 y/o<br>(N=154) |      | 12 y/o<br>(N=139) |      |                                  |
|                                | N                | %    | N                 | %    | N                 | %    | N                 | %    |                                  |
| Understand definition provided |                  |      |                   |      |                   |      |                   |      |                                  |
| Yes                            | 400              | 94.3 | 122               | 93.1 | 144               | 93.5 | 134               | 96.4 | 4.636, 4, NS                     |
| No                             | 23               | 5.4  | 9                 | 6.9  | 10                | 6.5  | 4                 | 2.9  |                                  |
| Heard about bullying           |                  |      |                   |      |                   |      |                   |      |                                  |
| Yes                            | 390              | 91.8 | 120               | 90.9 | 140               | 90.9 | 130               | 93.5 | 2.335, 4, NS                     |
| No                             | 33               | 7.8  | 11                | 8.3  | 14                | 9.1  | 8                 | 5.8  |                                  |
| No response                    | 2                | 0.5  | 1                 | 0.8  | 0                 | 0    | 1                 | 0.7  |                                  |
| Heard about bullying at...     |                  |      |                   |      |                   |      |                   |      |                                  |
| School                         |                  |      |                   |      |                   |      |                   |      |                                  |
| Yes                            | 371              | 87.3 | 111               | 84.1 | 137               | 89   | 123               | 88.5 | 3.430, 6, NS                     |
| No                             | 41               | 9.6  | 16                | 12.1 | 13                | 8.4  | 12                | 8.6  |                                  |
| Don't know                     | 11               | 2.6  | 5                 | 3.8  | 3                 | 1.9  | 3                 | 2.2  |                                  |
| No response                    | 2                | 0.5  | 0                 | 0    | 1                 | 0.6  | 1                 | 0.7  |                                  |
| BG CPR                         |                  |      |                   |      |                   |      |                   |      |                                  |
| Yes                            | 278              | 65.4 | 84                | 63.6 | 97                | 63   | 97                | 69.8 | 5.441, 6, NS                     |
| No                             | 100              | 23.5 | 31                | 23.5 | 39                | 25.3 | 30                | 21.6 |                                  |
| Don't know                     | 43               | 10.1 | 14                | 10.6 | 17                | 11   | 12                | 8.6  |                                  |
| No response                    | 4                | 0.9  | 3                 | 2.3  | 1                 | 0.6  | 0                 | 0    |                                  |
| Church                         |                  |      |                   |      |                   |      |                   |      |                                  |
| Yes                            | 105              | 24.7 | 34                | 25.8 | 43                | 27.9 | 28                | 20.1 | 4.912, 6, NS                     |
| No                             | 228              | 53.6 | 72                | 54.5 | 80                | 51.9 | 76                | 54.7 |                                  |
| Don't know                     | 84               | 19.8 | 23                | 17.4 | 30                | 19.5 | 31                | 22.3 |                                  |
| No response                    | 8                | 1.9  | 3                 | 2.3  | 1                 | 0.6  | 4                 | 2.9  |                                  |

NS: Not statistically significant

**Table 14. Knowledge on bullying, by church attendance**

|                                | Total<br>(N=426) |      | Church Attendance |      |            |      | X <sup>2</sup> , df, p-<br>value |
|--------------------------------|------------------|------|-------------------|------|------------|------|----------------------------------|
|                                | N                | %    | Yes (N=301)       |      | No (N=125) |      |                                  |
|                                | N                | %    | N                 | %    | N          | %    |                                  |
| Understand definition provided |                  |      |                   |      |            |      |                                  |
| Yes                            | 401              | 94.4 | 286               | 95.3 | 115        | 92   | 2.713, 2,<br>NS                  |
| No                             | 23               | 5.4  | 13                | 4.3  | 10         | 8    |                                  |
| No response                    | 1                | 0.2  | 1                 | 0.3  | 0          | 0    |                                  |
| Heard about bullying           |                  |      |                   |      |            |      |                                  |
| Yes                            | 391              | 91.8 | 277               | 92   | 114        | 91.2 | 1.091, 2,<br>NS                  |
| No                             | 33               | 7.7  | 22                | 7.3  | 11         | 8.8  |                                  |
| No response                    | 2                | 0.5  | 2                 | 0.7  | 0          | 0    |                                  |
| Heard about bullying at...     |                  |      |                   |      |            |      |                                  |
| School                         |                  |      |                   |      |            |      |                                  |
| Yes                            | 371              | 87.1 | 264               | 87.7 | 107        | 85.6 | 0.802, 3,<br>NS                  |
| No                             | 42               | 9.9  | 28                | 9.3  | 14         | 11.2 |                                  |
| Don't know                     | 11               | 2.6  | 8                 | 2.7  | 3          | 2.4  |                                  |
| No response                    | 2                | 0.5  | 1                 | 0.3  | 1          | 0.8  |                                  |
| BGCPR                          |                  |      |                   |      |            |      |                                  |
| Yes                            | 278              | 65.3 | 206               | 68.4 | 72         | 57.6 | 7.653, 3,<br>0.054               |
| No                             | 101              | 23.7 | 62                | 20.6 | 39         | 31.2 |                                  |
| Don't know                     | 43               | 10.1 | 29                | 9.6  | 14         | 11.2 |                                  |
| No response                    | 4                | 0.9  | 4                 | 1.3  | 0          | 0    |                                  |
| Church                         |                  |      |                   |      |            |      |                                  |
| Yes                            | 106              | 24.9 | 11                | 8.8  | 95         | 31.6 | 26.624, 3,<br>0.000**            |
| No                             | 228              | 53.5 | 82                | 65.6 | 146        | 48.5 |                                  |
| Don't know                     | 84               | 19.7 | 31                | 24.8 | 53         | 17.6 |                                  |
| No response                    | 8                | 1.9  | 1                 | 0.8  | 7          | 2.3  |                                  |

\* p<0.05

\*\* p<0.001

NS: Not statistically significant

**Table 15. Friends' characteristics, by location**

|                                 | Location of Data Collection |      |   |      |   |      | X <sup>2</sup> , df,<br>p-value |
|---------------------------------|-----------------------------|------|---|------|---|------|---------------------------------|
|                                 | Total<br>(N=426)            |      | San Juan<br>Metropolitan Area<br>(N=187, 43.9%) |      | Other<br>Municipalities<br>(N=239, 56.1%) |      |                                 |
|                                 | N                           | %    | N   | %    | N   | %    |                                 |
| <b>Good friends at homeroom</b> |                             |      |   |      |   |      |                                 |
| None                            | 16                          | 3.8  | 6   | 3.2  | 10  | 4.2  |                                 |
| 1 good friend                   | 55                          | 12.9 | 26  | 13.9 | 29  | 12.1 |                                 |
| 2-3 good friends                | 67                          | 15.7 | 34  | 18.2 | 33  | 13.8 | 2.212, 4,                       |
| 4-5 good friends                | 57                          | 13.4 | 24  | 12.8 | 33  | 13.8 | NS                              |
| 6 or more good friends          | 231                         | 54.2 | 97  | 51.9 | 134                                       | 56.1 |                                 |
| <b>Friends' behaviors</b>       |                             |      |   |      |   |      |                                 |
| Obey parents/teachers           | 313                         | 73.5 | 133   | 71.1 | 180                                       | 75.3 | 0.945, 1,<br>NS                 |
| Disobey parents/teachers        | 43                          | 10.1 | 19  | 10.2 | 24  | 10   | 0.002, 1,<br>NS                 |
| Do not go to school             | 8                           | 1.9  | 3   | 1.6  | 5   | 2.1  | 0.135, 1,<br>NS                 |
| Use drugs/alcohol               | 10                          | 2.3  | 2   | 1.1  | 8   | 3.3  | 2.375, 1,<br>NS                 |
| Get good grades                 | 237                         | 55.6 | 94  | 50.3 | 143                                       | 59.8 | 3.889, 1,<br>0.030*             |
| None of the above               | 26                          | 6.1  | 15  | 8    | 11  | 4.6  | 2.140, 1,<br>NS                 |
| <b>Type of friends</b>          |                             |      |   |      |   |      |                                 |
| Prosocial                       | 382                         | 89.7 | 165   | 88.2 | 217                                       | 90.8 | 0.742, 1,<br>NS                 |
| Antisocial                      | 55                          | 12.9 | 24  | 12.8 | 31  | 13   | 0.002, 1,<br>NS                 |
| <b>Friends' victimization</b>   |                             |      |   |      |   |      |                                 |
| None                            | 202                         | 47.4 | 96  | 51.3 | 106                                       | 44.4 |                                 |
| One                             | 122                         | 28.6 | 46  | 24.6 | 76  | 31.8 |                                 |
| Several                         | 40                          | 9.4  | 15  | 8    | 25  | 10.5 | 5.642, 6,<br>NS                 |
| Most                            | 20                          | 4.7  | 9   | 4.8  | 11  | 4.6  |                                 |
| I don't know                    | 39                          | 9    | 19  | 10.2 | 20  | 8.3  |                                 |
| No answer                       | 3                           | 0.7  | 2   | 1.1  | 1   | 0.4  |                                 |
| <b>Friends' perpetration</b>    |                             |      |   |      |   |      |                                 |
| None                            | 234                         | 54.9 | 104   | 55.6 | 130                                       | 54.4 |                                 |
| One                             | 96                          | 22.5 | 42  | 22.5 | 54  | 22.6 |                                 |
| Several                         | 42                          | 9.9  | 17  | 9.1  | 25  | 10.5 | 0.412, 5,<br>N.S.               |
| Most                            | 16                          | 3.8  | 7   | 3.7  | 9   | 3.8  |                                 |
| I don't know                    | 35                          | 8.2  | 16  | 8.6  | 19  | 7.9  |                                 |
| No answer                       | 3                           | 0.7  | 1   | 0.5  | 2   | 0.8  |                                 |

| Have seen friends do something to stop the bullying        |     |      |    |      |     |      |                 |
|--|-----|------|----|------|-----|------|-----------------|
| Never  | 0   | 0    | 0  | 0    | 0   | 0    |                 |
| Rarely   | 198 | 46.5 | 86 | 46   | 112 | 46.9 |                 |
| Once in a while  | 82  | 19.2 | 28 | 15   | 54  | 22.6 | 6.898, 5,<br>NS |
| Sometimes  | 54  | 12.7 | 30 | 16   | 24  | 10   |                 |
| Many times   | 44  | 10.3 | 19 | 10.2 | 25  | 10.5 |                 |
| Almost always  | 44  | 10.3 | 22 | 11.8 | 22  | 9.2  |                 |
| No response  | 4   | 0.9  | 2  | 1.1  | 2   | 0.8  |                 |
| Have seen other students do something to stop the bullying |     |      |    |      |     |      |                 |
| Never  | 0   | 0    | 0  | 0    | 0   | 0    |                 |
| Rarely   | 210 | 49.3 | 92 | 49.2 | 118 | 49.4 |                 |
| Once in a while  | 80  | 18.8 | 28 | 15   | 52  | 21.8 | 8.696, 5,<br>NS |
| Sometimes  | 61  | 14.3 | 33 | 17.6 | 28  | 11.7 |                 |
| Many times   | 30  | 7    | 16 | 8.6  | 14  | 5.9  |                 |
| Almost always  | 41  | 9.6  | 15 | 8    | 26  | 10.9 |                 |
| No response  | 4   | 0.9  | 3  | 1.6  | 1   | 0.4  |                 |

\*p<0.05

NS: Not statistically significant

**Table 16. Friends' characteristics, by gender**

|  | Total (N=426) |      | Gender of the Participant |      |              |      | X <sup>2</sup> , df, p-value |
|--|---------------|------|---------------------------|------|--------------|------|------------------------------|
|  |               |      | Female (N=208)            |      | Male (N=218) |      |                              |
|  | N             | %    | N                         | %    | N            | %    |                              |
| <b>Good friends at homeroom</b>                            |               |      |                           |      |              |      |                              |
| None   | 16            | 3.8  | 4                         | 1.9  | 12           | 5.5  |                              |
| 1 good friend  | 55            | 12.9 | 23                        | 11.1 | 32           | 14.7 |                              |
| 2-3 good friends   | 67            | 15.7 | 35                        | 16.8 | 32           | 14.7 | 5.818, 4,<br>NS              |
| 4-5 good friends   | 57            | 13.4 | 31                        | 14.9 | 26           | 11.9 |                              |
| 6 or more good friends                                     | 231           | 54.2 | 115                       | 55.3 | 116          | 53.2 |                              |
| <b>Friends' behaviors</b>                                  |               |      |                           |      |              |      |                              |
| Obey parents/teachers                                      | 313           | 73.5 | 162                       | 77.9 | 151          | 69.3 | 4.057, 1,<br>0.028*          |
| Disobey parents/teachers                                   | 43            | 10.1 | 22                        | 10.6 | 21           | 9.6  | 0.104, 1,<br>NS              |
| Do not go to school  | 8             | 1.9  | 5                         | 2.4  | 3            | 1.4  | 0.610, 1,<br>NS              |
| Use drugs/alcohol  | 10            | 2.3  | 7                         | 3.4  | 3            | 1.4  | 1.837, 1,<br>NS              |
| Get good grades  | 237           | 55.6 | 122                       | 58.7 | 115          | 52.8 | 1.502, 1,<br>NS              |
| None of the above  | 26            | 6.1  | 10                        | 4.8  | 16           | 7.3  | 1.191, 1,<br>NS              |
| <b>Type of friends</b>                                     |               |      |                           |      |              |      |                              |
| Prosocial  | 382           | 89.7 | 189                       | 90.9 | 193          | 88.5 | 0.626, 1,<br>NS              |
| Antisocial   | 55            | 12.9 | 29                        | 13.9 | 26           | 11.9 | 0.385, 1,<br>NS              |
| <b>Friends' victimization</b>                              |               |      |                           |      |              |      |                              |
| None   | 202           | 47.4 | 89                        | 42.8 | 113          | 51.8 |                              |
| One  | 122           | 28.6 | 60                        | 28.8 | 62           | 28.4 |                              |
| Several  | 40            | 9.4  | 26                        | 12.5 | 14           | 6.4  | 8.008, 6,<br>NS              |
| Most   | 20            | 4.7  | 10                        | 4.8  | 10           | 4.6  |                              |
| I don't know   | 39            | 9    | 22                        | 10.6 | 17           | 7.8  |                              |
| No answer  | 3             | 0.7  | 1                         | 0.2  | 2            | 0.5  |                              |
| <b>Friends' perpetration</b>                               |               |      |                           |      |              |      |                              |
| None   | 234           | 54.9 | 107                       | 51.4 | 127          | 58.3 |                              |
| One  | 96            | 22.5 | 47                        | 22.6 | 49           | 22.5 |                              |
| Several  | 42            | 9.9  | 27                        | 13   | 15           | 6.9  | 11.599, 5,<br>0.041*         |
| Most   | 16            | 3.8  | 4                         | 1.9  | 12           | 5.5  |                              |
| I don't know   | 35            | 8.2  | 22                        | 10.6 | 13           | 6    |                              |
| No answer  | 3             | 0.7  | 1                         | 0.5  | 2            | 0.9  |                              |
| <b>Have seen friends do something to stop the bullying</b> |               |      |                           |      |              |      |                              |
| Never  | 0             | 0    | 0                         | 0    | 0            | 0    |                              |
| Rarely   | 198           | 46.5 | 95                        | 45.7 | 103          | 47.2 |                              |
| Once in a while  | 82            | 19.2 | 44                        | 21.1 | 38           | 17.4 | 1.437, 5,<br>NS              |
| Sometimes  | 54            | 12.7 | 27                        | 13   | 27           | 12.4 |                              |
| Many times   | 44            | 10.3 | 21                        | 10.1 | 23           | 10.6 |                              |

|  |     |      |     |      |     |      |  |
|--|-----|------|-----|------|-----|------|--|
| Almost always  | 44  | 10.3 | 19  | 9.1  | 25  | 11.5 |  |
| No response  | 4   | 0.9  | 2   | 1    | 2   | 0.9  |  |
| Have seen other students do something to stop the bullying |     |      |     |      |     |      |  |
| Never  | 0   | 0    | 0   | 0    | 0   | 0    |  |
| Rarely   | 210 | 49.3 | 100 | 48.1 | 110 | 60.5 |  |
| Once in a while  | 80  | 18.8 | 39  | 18.8 | 41  | 18.8 |  |
| Sometimes  | 61  | 14.3 | 34  | 16.3 | 27  | 12.4 |  |
| Many times   | 30  | 7    | 14  | 6.7  | 16  | 7.3  |  |
| Almost always  | 41  | 9.6  | 19  | 9.1  | 22  | 10.1 |  |
| No response  | 4   | 0.9  | 2   | 1    | 2   | 0.9  |  |

1.448, 5,  
NS

\*p<0.05

NS: Not statistically significant

**Table 17. Friends' characteristics, by age of the participant**

|  | Total<br>(N=426) |      | Age               |      |                   |      |                   |      | X <sup>2</sup> , df, p-<br>value |
|--|------------------|------|-------------------|------|-------------------|------|-------------------|------|----------------------------------|
|  |                  |      | 10 y/o<br>(N=132) |      | 11 y/o<br>(N=154) |      | 12 y/o<br>(N=139) |      |                                  |
|  | N                | %    | N                 | %    | N                 | %    | N                 | %    |                                  |
| <b>Good friends at homeroom</b>                            |                  |      |                   |      |                   |      |                   |      |                                  |
| None   | 16               | 3.8  | 4                 | 3    | 6                 | 3.9  | 6                 | 4.3  |                                  |
| 1 good friend  | 55               | 12.9 | 22                | 16.7 | 17                | 11   | 16                | 11.5 |                                  |
| 2-3 good friends   | 67               | 15.8 | 21                | 15.9 | 27                | 17.5 | 19                | 13.7 | 7.556, 8,<br>NS                  |
| 4-5 good friends   | 56               | 13.2 | 21                | 15.9 | 22                | 14.3 | 13                | 9.4  |                                  |
| 6 or more good friends                                     | 231              | 54.4 | 64                | 48.5 | 82                | 53.2 | 85                | 61.2 |                                  |
| <b>Friends' behaviors</b>                                  |                  |      |                   |      |                   |      |                   |      |                                  |
| Obey parents/teachers                                      | 313              | 73.6 | 94                | 71.2 | 116               | 75.3 | 103               | 74.1 | 0.641, 2,<br>NS                  |
| Disobey parents/teach.                                     | 43               | 10.1 | 10                | 7.6  | 18                | 11.7 | 15                | 10.8 | 1.425, 2,<br>NS                  |
| Do not go to school  | 8                | 1.9  | 1                 | 0.8  | 4                 | 1.9  | 3                 | 2.9  | 1.653, 2,<br>NS                  |
| Use drugs/alcohol  | 9                | 2.1  | 3                 | 2.3  | 3                 | 1.9  | 3                 | 2.2  | 0.038, 2,<br>NS                  |
| Get good grades  | 237              | 55.8 | 72                | 54.5 | 80                | 51.9 | 85                | 61.2 | 2.624, 2,<br>NS                  |
| None of the above  | 26               | 6.1  | 11                | 8.3  | 8                 | 5.2  | 7                 | 5    | 1.640, 2,<br>NS                  |
| <b>Type of friends</b>                                     |                  |      |                   |      |                   |      |                   |      |                                  |
| Prosocial  | 382              | 89.9 | 119               | 90.2 | 138               | 89.6 | 125               | 89.9 | 0.023, 2,<br>NS                  |
| Antisocial   | 54               | 12.7 | 13                | 9.8  | 22                | 14.3 | 19                | 13.7 | 1.434, 2,<br>NS                  |
| <b>Friends' victimization</b>                              |                  |      |                   |      |                   |      |                   |      |                                  |
| None   | 201              | 47.3 | 65                | 49.2 | 70                | 45.5 | 66                | 47.5 |                                  |
| One  | 122              | 28.7 | 38                | 28.8 | 50                | 32.5 | 34                | 24.5 |                                  |
| Several  | 40               | 9.4  | 9                 | 6.8  | 11                | 7.1  | 20                | 14.4 | 11.766,<br>12, N.S.              |
| Most   | 20               | 4.7  | 7                 | 5.3  | 8                 | 5.2  | 5                 | 3.6  |                                  |
| I don't know   | 39               | 9.1  | 12                | 9.1  | 15                | 9.7  | 12                | 8.6  |                                  |
| No answer  | 3                | 0.7  | 1                 | 0.8  | 0                 | 0    | 2                 | 1.4  |                                  |
| <b>Friends' perpetration</b>                               |                  |      |                   |      |                   |      |                   |      |                                  |
| None   | 234              | 54.9 | 77                | 58.3 | 83                | 53.9 | 74                | 53.2 |                                  |
| One  | 96               | 22.5 | 31                | 23.5 | 38                | 24.7 | 27                | 19.4 |                                  |
| Several  | 42               | 9.9  | 13                | 9.8  | 12                | 7.8  | 16                | 11.5 | 9.265, 10,<br>N.S.               |
| Most   | 16               | 3.8  | 3                 | 2.3  | 6                 | 3.9  | 7                 | 5    |                                  |
| I don't know   | 35               | 8.2  | 6                 | 4.5  | 15                | 9.7  | 14                | 10.1 |                                  |
| No answer  | 3                | 0.7  | 2                 | 1.5  | 0                 | 0    | 1                 | 0.7  |                                  |
| <b>Have seen friends do something to stop the bullying</b> |                  |      |                   |      |                   |      |                   |      |                                  |
| Never  | 0                | 0    | 0                 | 0    | 0                 | 0    | 0                 | 0    |                                  |
| Rarely   | 198              | 46.6 | 56                | 42.4 | 73                | 47.4 | 69                | 49.6 | 11.749,<br>10, NS                |
| Once in a while  | 82               | 19.3 | 21                | 15.9 | 28                | 18.2 | 33                | 23.7 |                                  |



|  |     |      |    |      |    |      |    |      |            |
|--|-----|------|----|------|----|------|----|------|------------|
| Sometimes  | 54  | 12.7 | 22 | 16.7 | 18 | 11.7 | 14 | 10.1 |            |
| Many times   | 44  | 10.4 | 13 | 9.8  | 20 | 13   | 11 | 7.9  |            |
| Almost always  | 43  | 10.1 | 19 | 14.4 | 14 | 9.1  | 10 | 7.2  |            |
| No response  | 4   | 0.9  | 1  | 0.8  | 1  | 0.6  | 2  | 1.4  |            |
| Have seen other students do something to stop the bullying |     |      |    |      |    |      |    |      |            |
| Never  | 0   | 0    | 0  | 0    | 0  | 0    | 0  | 0    |            |
| Rarely   | 209 | 49.2 | 61 | 46.2 | 75 | 48.7 | 73 | 52.5 |            |
| Once in a while  | 80  | 18.8 | 21 | 15.9 | 30 | 19.5 | 29 | 20.9 |            |
| Sometimes  | 61  | 14.4 | 23 | 17.4 | 19 | 12.3 | 19 | 13.7 | 9.216, 10, |
| Many times   | 30  | 7.1  | 9  | 6.8  | 14 | 9.1  | 7  | 5    | NS         |
| Almost always  | 41  | 9.6  | 16 | 12.1 | 16 | 10.4 | 9  | 6.5  |            |
| No response  | 4   | 0.9  | 2  | 1.5  | 0  | 0    | 2  | 1.4  |            |

\*p<0.05

NS: Not statistically significant

**Table 18. Friends' characteristics, by church attendance**

|   | Total<br>(N=426) |      | Church Attendance |      |            |      | X <sup>2</sup> , df, p-value |
|---|------------------|------|-------------------|------|------------|------|------------------------------|
|   | N                | %    | Yes (N=301)       |      | No (N=125) |      |                              |
|   | N                | %    | N                 | %    | N          | %    |                              |
| <b>Good friends at homeroom</b>                                   |                  |      |                   |      |            |      |                              |
| None  | 16               | 3.8  | 12                | 4    | 4          | 3.2  |                              |
| 1 good friend   | 55               | 12.9 | 39                | 13   | 16         | 12.8 |                              |
| 2-3 good friends  | 67               | 15.7 | 42                | 14   | 25         | 20   | 2.684, 4, NS                 |
| 4-5 good friends  | 57               | 13.4 | 40                | 13.3 | 17         | 13.6 |                              |
| 6 or more good friends  | 231              | 54.2 | 168               | 55.8 | 63         | 50.4 |                              |
| <b>Friends' behaviors</b>   |                  |      |                   |      |            |      |                              |
| Obey parents/teachers   | 313              | 73.5 | 227               | 75.4 | 86         | 68.8 | 1.983, 1, NS                 |
| Disobey parents/teach.  | 43               | 10.1 | 24                | 8    | 19         | 15.2 | 5.083, 1, 0.021*             |
| Do not go to school   | 8                | 1.9  | 6                 | 2    | 2          | 1.6  | 0.074, 1, NS                 |
| Use drugs/alcohol   | 10               | 2.3  | 5                 | 1.7  | 5          | 4    | 2.108, 1, NS                 |
| Get good grades   | 237              | 55.6 | 171               | 56.8 | 66         | 52.8 | 0.576, 1, NS                 |
| None of the above   | 26               | 6.1  | 21                | 7    | 5          | 4    | 1.366, 1, NS                 |
| <b>Type of friends</b>  |                  |      |                   |      |            |      |                              |
| Prosocial   | 382              | 89.7 | 276               | 91.7 | 106        | 84.4 | 4.533, 1, 0.028*             |
| Antisocial  | 55               | 12.9 | 33                | 11   | 22         | 17.6 | 3.460, 1, 0.047*             |
| <b>Friends' victimization</b>                                     |                  |      |                   |      |            |      |                              |
| None  | 202              | 47.4 | 140               | 46.5 | 62         | 49.6 |                              |
| One   | 122              | 28.6 | 91                | 30.2 | 31         | 24.8 |                              |
| Several   | 40               | 9.4  | 29                | 9.6  | 11         | 8.8  |                              |
| Most  | 20               | 4.7  | 15                | 5    | 5          | 4    | 3.655, 6, NS                 |
| I don't know  | 39               | 9.1  | 24                | 7.9  | 15         | 12   |                              |
| No answer   | 3                | 0.7  | 2                 | 0.7  | 1          | 0.8  |                              |
| <b>Friends' perpetration</b>                                      |                  |      |                   |      |            |      |                              |
| None  | 234              | 54.9 | 164               | 54.5 | 70         | 56   |                              |
| One   | 96               | 22.5 | 73                | 24.3 | 23         | 18.4 |                              |
| Several   | 42               | 9.9  | 27                | 9    | 15         | 12   |                              |
| Most  | 16               | 3.8  | 11                | 3.7  | 5          | 4    | 2.326, 5, NS                 |
| I don't know  | 35               | 8.2  | 24                | 8    | 11         | 8.8  |                              |
| No answer   | 3                | 0.7  | 2                 | 0.7  | 1          | 0.8  |                              |
| <b>Have seen friends do something to stop the bullying</b>        |                  |      |                   |      |            |      |                              |
| Never   | 0                | 0    | 0                 | 0    | 0          | 0    |                              |
| Rarely  | 198              | 46.5 | 135               | 44.9 | 63         | 50.4 |                              |
| Once in a while   | 82               | 19.2 | 54                | 17.9 | 28         | 22.4 |                              |
| Sometimes   | 54               | 12.7 | 41                | 13.6 | 13         | 10.4 | 6.088, 5, NS                 |
| Many times  | 44               | 10.3 | 33                | 11   | 11         | 8    |                              |
| Almost always   | 44               | 10.3 | 36                | 12   | 8          | 6.4  |                              |
| No response   | 4                | 0.9  | 2                 | 0.7  | 2          | 1.6  |                              |
| <b>Have seen other students do something to stop the bullying</b> |                  |      |                   |      |            |      |                              |
| Never   | 0                | 0    | 0                 | 0    | 0          | 0    |                              |
| Rarely  | 210              | 49.3 | 146               | 48.5 | 64         | 51.2 |                              |
| Once in a while   | 80               | 18.8 | 61                | 20.3 | 19         | 15.2 | 3.598, 5, NS                 |
| Sometimes   | 61               | 14.3 | 42                | 14   | 19         | 15.2 |                              |
| Many times  | 30               | 7    | 18                | 6    | 12         | 9.6  |                              |

|               |    |     |    |      |    |     |
|---------------|----|-----|----|------|----|-----|
| Almost always | 41 | 9.6 | 31 | 10.3 | 10 | 8   |
| No response   | 4  | 0.9 | 3  | 1    | 1  | 0.8 |

---

\*p<0.05

NS: Not statistically significant

**Table 19. Participants' role in bullying situations, by location**

| Description       | Location      |      |   |      |                                     |      | X <sup>2</sup> , df, p-value |
|-------------------|---------------|------|---|------|-------------------------------------|------|------------------------------|
|                   | Total (N=426) |      | San Juan Metropolitan Area (N=187, 43.9%) |      | Other Municipalities (N=239, 56.1%) |      |                              |
|                   | N             | %    | N   | %    | N                                   | %    |                              |
| Victim only       | 90            | 20.3 | 37  | 19.8 | 53                                  | 22.4 | 0.415, 1, NS                 |
| Bully only        | 23            | 5.2  | 6   | 3.2  | 17                                  | 7.1  | 3.131, 1, NS                 |
| Bully-Victim only | 71            | 16   | 41  | 21.9 | 30                                  | 12.6 | 6.636, 1, 0.007*             |
| Bystander only    | 220           | 49.7 | 93  | 63.7 | 127                                 | 61.4 | 0.201, 1, NS                 |

\*p ≤ 0.05

\*\*p ≤ 0.001

**Table 20. Participants' role in bullying situations, by gender**

| Description       | Total (N=426) |      | Gender         |      |              |      | X <sup>2</sup> , df, p-value |
|-------------------|---------------|------|----------------|------|--------------|------|------------------------------|
|                   |               |      | Female (N=208) |      | Male (N=218) |      |                              |
|                   | N             | %    | N              | %    | N            | %    |                              |
| Victim only       | 90            | 20.3 | 54             | 26   | 36           | 16.7 | 5.475, 1, 0.013*             |
| Bully only        | 23            | 5.2  | 4              | 1.9  | 19           | 8.7  | 9.615, 1, 0.001**            |
| Bully-Victim only | 71            | 16   | 28             | 13.5 | 43           | 19.7 | 3.006, 1, 0.054*             |
| Bystander only    | 220           | 49.7 | 114            | 63.3 | 106          | 61.3 | 0.160, 1, NS                 |

\*p ≤ 0.05

\*\*p ≤ 0.001

**Table 21. Participants' role in bullying situations, by age of the participant**

| Description       | Total (N=426) |      | Age (in years) |      |                |      |                |      | X <sup>2</sup> , df, p-value |
|-------------------|---------------|------|----------------|------|----------------|------|----------------|------|------------------------------|
|                   |               |      | 10 y/o (N=132) |      | 11 y/o (N=154) |      | 12 y/o (N=139) |      |                              |
|                   | N             | %    | N              | %    | N              | %    | N              | %    |                              |
| Victim only       | 90            | 20.3 | 29             | 22   | 37             | 24   | 24             | 17.5 | 1.888, 2, NS                 |
| Bully only        | 23            | 5.2  | 6              | 4.5  | 6              | 3.9  | 11             | 7.9  | 2.584, 2, NS                 |
| Bully-Victim only | 71            | 16   | 28             | 21.2 | 24             | 15.6 | 18             | 12.9 | 3.497, 2, NS                 |
| Bystander only    | 220           | 49.7 | 64             | 61.5 | 83             | 63.8 | 73             | 61.3 | 0.204, 2, NS                 |

\*p ≤ 0.05

\*\*p ≤ 0.001

**Table 22. Participants' role in bullying situations, by church attendance**

| Description       | Total   |      | Church Attendance |      |            |      | X <sup>2</sup> , df, p-value |
|-------------------|---------|------|-------------------|------|------------|------|------------------------------|
|                   | (N=426) |      | Yes (N=301)       |      | No (N=125) |      |                              |
|                   | N       | %    | N                 | %    | N          | %    |                              |
| Victim only       | 90      | 20.3 | 24                | 19.4 | 66         | 22   | 0.367, 1, NS                 |
| Bully only        | 23      | 5.2  | 6                 | 4.8  | 17         | 5.6  | 0.124, 1, NS                 |
| Bully-Victim only | 71      | 16   | 18                | 14.4 | 53         | 17.6 | 0.654, 1, NS                 |
| Bystander only    | 220     | 49.7 | 70                | 66   | 150        | 60.7 | 0.890, 1, NS                 |

\*p≤ 0.05

\*\*p≤ 0.001

**Table 23. Self-reports of bullying victimization (N=426)**

|                                      | Victimization |      |     |      |      |   | Frequency of Victimization |      |           |      |                     |     |               |     |                        |      |      |     |  |
|--------------------------------------|---------------|------|-----|------|------|---|----------------------------|------|-----------|------|---------------------|-----|---------------|-----|------------------------|------|------|-----|--|
|                                      | Yes*          |      | No  |      | N.R. |   | Never                      |      | 1-2 times |      | 2-3 times per month |     | Once per week |     | Several times per week |      | N.R. |     |  |
|                                      | N             | %    | N   | %    | N    | % | N                          | %    | N         | %    | N                   | %   | N             | %   | N                      | %    | N    | %   |  |
| Victimization by types               |               |      |     |      |      |   |                            |      |           |      |                     |     |               |     |                        |      |      |     |  |
| Verbal (M=1.32, s.e.=0.242)          | 114           | 26.8 | 311 | 73.2 | 0    | 0 | 233                        | 54.8 | 78        | 18.4 | 28                  | 6.6 | 14            | 3.3 | 71                     | 16.7 | 1    | 0.2 |  |
| Social Isolation (M=0.76, s.e.=0.60) | 80            | 18.8 | 346 | 81.2 | 0    | 0 | 267                        | 62.7 | 79        | 18.5 | 32                  | 7.5 | 12            | 2.8 | 36                     | 8.5  | 0    | 0   |  |
| Physical (M=0.67, s.e.=0.236)        | 43            | 10.1 | 383 | 89.9 | 0    | 0 | 325                        | 76.3 | 58        | 13.6 | 13                  | 3.1 | 12            | 2.8 | 17                     | 4    | 1    | 0.2 |  |
| Rumor Spreading (M=0.81, s.e.=0.065) | 82            | 19.2 | 344 | 80.8 | 0    | 0 | 276                        | 64.8 | 68        | 16   | 21                  | 4.9 | 11            | 2.6 | 50                     | 11.7 | 0    | 0   |  |
| Damage Property (M=0.56, s.e.=0.057) | 60            | 14.1 | 366 | 85.9 | 0    | 0 | 324                        | 76.1 | 42        | 9.9  | 18                  | 4.2 | 9             | 2.1 | 33                     | 7.7  | 0    | 0   |  |
| Threats (M=0.45, s.e.=0.052)         | 44            | 10.3 | 382 | 89.7 | 0    | 0 | 336                        | 78.9 | 46        | 10.8 | 11                  | 2.6 | 7             | 1.6 | 26                     | 6.1  | 0    | 0   |  |
| Racist comments (M=1.55,             | 96            | 22.5 | 330 | 77.5 | 0    | 0 | 263                        | 61.7 | 567       | 15.7 | 27                  | 6.3 | 21            | 4.9 | 45                     | 10.6 | 3    | 0.7 |  |



|  |    |      |     |      |   |     |     |      |    |     |    |     |    |     |    |     |   |     |     |
|--|----|------|-----|------|---|-----|-----|------|----|-----|----|-----|----|-----|----|-----|---|-----|-----|
| s.e.=<br>0.403)<br>Sexual<br>comments<br>(M=1.00,<br>s.e.=<br>0.332) | 63 | 14.8 | 362 | 85.2 | 0 | 0   | 324 | 76.2 | 38 | 8.9 | 21 | 4.9 | 15 | 3.5 | 25 | 5.9 | 2 | 0.5 |     |
| Cyber-all<br>types<br>(M=1.08,<br>s.e.=0.403)                        | 47 | 11   | 379 | 89   | 0 | 0   | 353 | 82.9 | 26 | 6.1 | 15 | 3.5 | 11 | 2.6 | 18 | 4.2 | 3 | 0.7 |     |
| Cyber-Cel<br>(M=0.26,<br>s.e.=0.232)                                 | 11 | 2.6  | 414 | 97.2 | 1 | 0.2 |     |      |    |     |    |     |    |     |    |     |   |     | N/A |
| Cyber-<br>Web<br>(M=0.28,<br>s.e.=0.233)                             | 22 | 5.2  | 403 | 94.6 | 1 | 0.2 |     |      |    |     |    |     |    |     |    |     |   |     | N/A |
| Cyber-<br>Cel/Web<br>(M=0.26,<br>s.e.=0.232)                         | 13 | 3.1  | 412 | 96.7 | 1 | 0.2 |     |      |    |     |    |     |    |     |    |     |   |     | N/A |
| Other<br>(M=0.67,<br>s.e.=0.236)                                     | 51 | 12   | 375 | 88   | 0 | 0   | 337 | 79.1 | 38 | 8.9 | 22 | 5.2 | 9  | 2.1 | 19 | 4.5 | 1 | 0.2 |     |

\*According to Olweus' definition, bullying victimization is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

N/A: Not applicable

N.R.: No response

**Table 24. Self-reports of bullying victimization, by location (N=426)**

|                        | Victimization |      |     |      |      |   |                                     | Frequency of Victimization |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
|------------------------|---------------|------|-----|------|------|---|-------------------------------------|----------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|------|------|-----|-------------------------------------|
|                        | Yes*          |      | No  |      | N.R. |   | X <sup>2</sup> ,<br>df, p-<br>value | Never                      |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |      | N.R. |     | X <sup>2</sup> ,<br>df, p-<br>value |
|                        | N             | %    | N   | %    | N    | % |                                     | N                          | %    | N         | %    | N                      | %   | N                | %   | N                            | %    | N    | %   |                                     |
| Victimization by types |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| Verbal                 |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| SJ                     | 50            | 26.7 | 137 | 73.3 | 0    | 0 | 0.001<br>, 1,<br>NS                 | 104                        | 55.6 | 33        | 17.6 | 11                     | 5.9 | 7                | 3.7 | 32                           | 17.1 | 0    | 0   | 1.405<br>, 5,<br>NS                 |
| Metro                  | 64            | 26.9 | 174 | 73.1 | 0    | 0 |                                     | 129                        | 54.2 | 45        | 18.9 | 17                     | 7.1 | 7                | 2.9 | 39                           | 16.4 | 1    | 0.4 |                                     |
| Other Muni.            |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| Social Isolation       |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| SJ                     | 46            | 24.6 | 141 | 75.4 | 0    | 0 | 7.401<br>, 1,<br>0.007<br>**        | 113                        | 60.4 | 28        | 15   | 15                     | 8   | 11               | 5.9 | 20                           | 10.7 | 0    | 0   | 15.78<br>3, 4,<br>0.003<br>**       |
| Metro                  | 34            | 14.2 | 205 | 85.8 | 0    | 0 |                                     | 154                        | 64.4 | 51        | 21.3 | 17                     | 7.1 | 1                | 0.4 | 16                           | 6.7  | 0    | 0   |                                     |
| Other Muni.            |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| Physical               |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| SJ                     | 22            | 11.8 | 165 | 88.2 | 0    | 0 | 1.025<br>, 1,<br>NS                 | 135                        | 72.2 | 30        | 16   | 6                      | 3.2 | 6                | 3.2 | 10                           | 5.3  | 0    | 0   | 4.706<br>, 5,<br>NS                 |
| Metro                  | 21            | 8.8  | 218 | 91.2 | 0    | 0 |                                     | 190                        | 79.5 | 28        | 11.7 | 7                      | 2.9 | 6                | 2.5 | 7                            | 2.9  | 1    | 0.4 |                                     |
| Other Muni.            |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| Rumor Spreading        |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| SJ                     | 41            | 21.9 | 146 | 78.1 | 0    | 0 | 1.536<br>, 1,<br>NS                 | 116                        | 62   | 30        | 16   | 10                     | 5.3 | 10               | 5.3 | 21                           | 11.2 | 0    | 0   | 10.45<br>5, 4,<br>0.033<br>**       |
| Metro                  | 41            | 17.2 | 198 | 82.8 | 0    | 0 |                                     | 160                        | 66.9 | 38        | 15.9 | 11                     | 4.6 | 1                | 0.4 | 29                           | 12.1 | 0    | 0   |                                     |
| Other Muni.            |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| Damage Property        |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |
| SJ                     | 30            | 16   | 157 | 84   | 0    | 0 | 1.056<br>, 1,                       | 139                        | 74.3 | 18        | 9.6  | 8                      | 4.3 | 4                | 2.1 | 18                           | 9.6  | 0    | 0   | 1.672<br>, 4,                       |
| Metro                  |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |      |     |                                     |

|                 |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
|-----------------|----|------|-----|------|---|-----|---------|-----|------|----|------|----|-----|-----|-----|----|------|---|-----|----------|
| Other Muni.     | 30 | 12.6 | 209 | 87.4 | 0 | 0   | NS      | 185 | 77.4 | 24 | 10   | 10 | 4.2 | 5   | 2.1 | 15 | 6.3  | 0 | 0   | NS       |
| Threats         |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 24 | 12.8 | 163 | 87.2 | 0 | 0   | 2.259   | 144 | 77   | 19 | 10.2 | 4  | 2.1 | 4   | 2.1 | 16 | 8.6  | 0 | 0   | 4.311    |
| Other Muni.     | 20 | 8.4  | 219 | 91.6 | 0 | 0   | NS      | 192 | 80.3 | 27 | 11.3 | 7  | 2.9 | 3   | 1.3 | 10 | 4.2  | 0 | 0   | NS       |
| Racist comments |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 52 | 27.8 | 135 | 72.2 | 0 | 0   | 5.307   | 99  | 52.9 | 36 | 19.3 | 13 | 7   | 13  | 7   | 24 | 12.8 | 2 | 1.1 | 12.03    |
| Other Muni.     | 44 | 18.4 | 195 | 81.6 | 0 | 0   | 0.015** | 164 | 68.6 | 31 | 13   | 14 | 5.9 | 8   | 3.3 | 21 | 8.8  | 1 | 0.4 | 0.034**  |
| Sexual comments |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 36 | 19.3 | 151 | 80.7 | 0 | 0   | 5.185   | 125 | 66.8 | 26 | 13.9 | 9  | 4.8 | 10  | 5.3 | 15 | 8    | 2 | 1.1 | 21.34    |
| Other Muni.     | 27 | 11.3 | 211 | 88.7 | 0 | 0   | 0.016** | 199 | 83.6 | 12 | 5    | 12 | 5   | 5   | 2.1 | 10 | 4.2  | 0 | 0   | 0.001*** |
| Cyber-all types |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 26 | 13.9 | 161 | 86.1 | 0 | 0   | 2.799   | 143 | 76.5 | 18 | 9.6  | 6  | 3.2 | 8   | 4.3 | 9  | 4.8  | 3 | 1.6 | 16.33    |
| Other Muni.     | 21 | 8.8  | 218 | 91.2 | 0 | 0   | NS      | 210 | 87.9 | 8  | 3.3  | 9  | 3.8 | 3   | 1.3 | 9  | 3.8  | 0 | 0   | 0.006**  |
| Cyber-Cel       |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 8  | 4.3  | 178 | 95.2 | 1 | 0.5 | 5.127   |     |      |    |      |    |     |     |     |    |      |   |     |          |
| Other Muni.     | 3  | 1.3  | 236 | 98.7 | 0 | 0   | NS      |     |      |    |      |    |     | N/A |     |    |      |   |     | N/A      |
| Cyber-Web       |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |
| SJ Metro        | 12 | 6.4  | 174 | 93   | 1 | 0.5 | 2.376   |     |      |    |      |    |     |     |     |    |      |   |     |          |
| Other Muni.     | 10 | 4.2  | 229 | 95.8 | 0 | 0   | NS      |     |      |    |      |    |     | N/A |     |    |      |   |     | N/A      |
| Cyber-Cel/Web   |    |      |     |      |   |     |         |     |      |    |      |    |     |     |     |    |      |   |     |          |



**Table 25. Victimization, by gender (N=426)**

|                        | Victimization |      |     |      |      |   | $X^2$ ,<br>df, p-<br>value | Frequency of Victimization |      |           |      |                        |     |                  |     |                              |      | $X^2$ ,<br>df, p-<br>value |      |                      |
|------------------------|---------------|------|-----|------|------|---|----------------------------|----------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|------|----------------------------|------|----------------------|
|                        | Yes*          |      | No  |      | N.R. |   |                            | Never                      |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |      |                            | N.R. |                      |
|                        | N             | %    | N   | %    | N    | % |                            | N                          | %    | N         | %    | N                      | %   | N                | %   | N                            | %    |                            | N    | %                    |
| Victimization by types |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Verbal                 |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Female                 | 57            | 27.4 | 151 | 72.6 | 0    | 0 | 0.070                      | 111                        | 53.4 | 40        | 19.2 | 15                     | 7.2 | 7                | 3.4 | 35                           | 16.8 | 0                          | 0    | 1.538                |
| Male                   | 57            | 26.3 | 160 | 73.7 | 0    | 0 | , 1,<br>NS                 | 122                        | 56.2 | 38        | 17.5 | 13                     | 6   | 7                | 3.2 | 36                           | 16.6 | 1                          | 0.5  | , 5,<br>NS           |
| Social Isolation       |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Female                 | 42            | 20.2 | 166 | 79.8 | 0    | 0 | 0.532                      | 118                        | 56.7 | 48        | 23.1 | 15                     | 7.2 | 8                | 3.8 | 19                           | 9.1  | 0                          | 0    | 8.597                |
| Male                   | 38            | 17.4 | 180 | 82.6 | 0    | 0 | , 1,<br>NS                 | 149                        | 68.3 | 31        | 14.2 | 17                     | 7.8 | 4                | 1.8 | 17                           | 7.8  | 0                          | 0    | , 4,<br>NS           |
| Physical               |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Female                 | 15            | 7.2  | 193 | 92.8 | 0    | 0 | 3.721                      | 165                        | 79.3 | 28        | 13.5 | 4                      | 1.9 | 4                | 1.9 | 6                            | 2.9  | 1                          | 0.5  | 5.641                |
| Male                   | 28            | 12.8 | 190 | 87.2 | 0    | 0 | , 1,<br>0.038<br>**        | 160                        | 73.4 | 30        | 13.8 | 9                      | 4.1 | 8                | 3.7 | 11                           | 5    | 0                          | 0    | , 5,<br>NS           |
| Rumor Spreading        |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Female                 | 35            | 16.8 | 173 | 83.2 | 0    | 0 | 1.534                      | 131                        | 63   | 42        | 20.2 | 5                      | 2.4 | 3                | 1.4 | 27                           | 13   | 0                          | 0    | 12.60                |
| Male                   | 47            | 21.6 | 171 | 78.4 | 0    | 0 | , 1,<br>NS                 | 145                        | 66.5 | 26        | 11.9 | 16                     | 7.3 | 8                | 3.7 | 23                           | 10.6 | 0                          | 0    | 2, 4,<br>0.013<br>** |
| Damage Property        |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |
| Female                 | 25            | 12   | 183 | 88   | 0    | 0 | 1.433                      | 164                        | 78.8 | 19        | 9.1  | 6                      | 2.9 | 4                | 1.9 | 15                           | 7.2  | 0                          | 0    | 2.581                |
| Male                   | 35            | 16.1 | 183 | 83.9 | 0    | 0 | , 1,<br>NS                 | 160                        | 73.4 | 23        | 10.6 | 12                     | 5.5 | 5                | 2.3 | 18                           | 6.3  | 0                          | 0    | , 4,<br>NS           |
| Threats                |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |                      |

|                 |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
|-----------------|----|------|-----|------|---|-----|---------------------|-----|------|----|------|----|-----|-----|-----|----|------|---|-----|-------------|
| Female          | 16 | 7.7  | 192 | 92.3 | 0 | 0   | 3.050               | 164 | 78.8 | 28 | 13.5 | 6  | 2.9 | 1   | 0.5 | 9  | 4.3  | 0 | 0   | 8.258       |
| Male            | 28 | 12.8 | 190 | 87.2 | 0 | 0   | , 1,<br>NS          | 172 | 78.9 | 18 | 8.3  | 5  | 2.3 | 6   | 2.8 | 17 | 7.8  | 0 | 0   | , 4,<br>NS  |
| Racist comments |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 46 | 22.1 | 162 | 77.9 | 0 | 0   | 0.041               | 125 | 60.1 | 37 | 17.8 | 12 | 5.8 | 10  | 4.8 | 22 | 10.6 | 2 | 1   | 1.877       |
| Male            | 50 | 22.9 | 168 | 77.1 | 0 | 0   | , 1,<br>NS          | 138 | 63.3 | 30 | 13.8 | 15 | 6.9 | 11  | 5   | 23 | 10.6 | 1 | 0.5 | , 5,<br>NS  |
| Sexual comments |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 24 | 5.6  | 184 | 88.5 | 0 | 0   | 3.482               | 167 | 80.3 | 17 | 8.2  | 10 | 4.8 | 6   | 2.9 | 8  | 3.8  | 0 | 0   | 6.430       |
| Male            | 39 | 9.2  | 178 | 82   | 0 | 0   | , 1,<br>0.041<br>** | 157 | 72.4 | 21 | 9.7  | 11 | 5.1 | 9   | 4.1 | 17 | 7.8  | 2 | 0.9 | , 5,<br>NS  |
| Cyber-all types |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 14 | 6.7  | 194 | 93.3 | 0 | 0   | 7.664               | 182 | 87.5 | 12 | 5.8  | 6  | 2.9 | 2   | 1   | 6  | 2.9  | 0 | 0   | 10.32       |
| Male            | 33 | 15.1 | 185 | 84.9 | 0 | 0   | , 1,<br>0.004<br>** | 171 | 78.4 | 14 | 6.4  | 9  | 4.1 | 9   | 4.1 | 12 | 5.5  | 3 | 1.4 | 2, 5,<br>NS |
| Cyber-Cel       |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 4  | 1.9  | 204 | 98.1 | 0 | 0   | 1.671               |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Male            | 7  | 3.2  | 210 | 96.3 | 1 | 0.5 | , 2,<br>NS          |     |      |    |      |    |     | N/A |     |    |      |   |     | N/A         |
| Cyber-Web       |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 11 | 5.3  | 197 | 94.7 | 0 | 0   | 0.967               |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Male            | 11 | 5    | 206 | 94.5 | 1 | 0.5 | , 2,<br>NS          |     |      |    |      |    |     |     |     |    |      |   |     | N/A         |
| Cyber-Cel/Web   |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 3  | 1.4  | 205 | 98.6 | 0 | 0   | 4.547               |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Male            | 10 | 4.6  | 207 | 95   | 1 | 0.5 | , 2,<br>NS          |     |      |    |      |    |     |     |     |    |      |   |     | N/A         |
| Other           |    |      |     |      |   |     |                     |     |      |    |      |    |     |     |     |    |      |   |     |             |
| Female          | 19 | 9.1  | 189 | 90.9 | 0 | 0   | 3.105               | 167 | 80.3 | 22 | 10.6 | 8  | 3.8 | 4   | 1.9 | 7  | 3.4  | 0 | 0   | 4.805       |
| Male            | 32 | 14.7 | 186 | 85.3 | 0 | 0   | , 1,<br>0.053<br>** | 170 | 78   | 16 | 7.3  | 14 | 6.4 | 5   | 2.3 | 12 | 5.5  | 1 | 0.5 | , 5,<br>NS  |

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\*According to Olweus' definition, bullying victimization is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\*  $p \leq 0.05$

\*\*\* $p \leq 0.001$

N/A: Not applicable

N.R.: No response

**Table 26. Self-reports of bullying victimization, by age of the participant (N=426)**

|                        | Victimization |      |     |      |      |   | X <sup>2</sup> ,<br>df, p-<br>value | Frequency of Victimization |      |           |      |                        |     |                  |     |                              |      | X <sup>2</sup> ,<br>df, p-<br>value |      |        |
|------------------------|---------------|------|-----|------|------|---|-------------------------------------|----------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|------|-------------------------------------|------|--------|
|                        | Yes*          |      | No  |      | N.R. |   |                                     | Never                      |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |      |                                     | N.R. |        |
|                        | N             | %    | N   | %    | N    | % |                                     | N                          | %    | N         | %    | N                      | %   | N                | %   | N                            | %    |                                     | N    | %      |
| Victimization by types |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| Verbal                 |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 42            | 31.8 | 90  | 68.2 | 0    | 0 | 3.506                               | 64                         | 48.5 | 26        | 19.7 | 10                     | 7.6 | 8                | 6.1 | 24                           | 18.2 | 0                                   | 0.0  | 14.49  |
| 11 y.o                 | 41            | 26.6 | 113 | 73.4 | 0    | 0 | , 2,                                | 85                         | 55.2 | 28        | 18.2 | 7                      | 4.5 | 2                | 1.3 | 31                           | 20.1 | 1                                   | 0.2  | 4, 10, |
| 12 y/o                 | 30            | 21.7 | 108 | 78.3 | 0    | 0 | NS                                  | 84                         | 60.9 | 24        | 17.4 | 11                     | 8.0 | 4                | 2.9 | 15                           | 10.9 | 0                                   | 0.0  | NS     |
| Social Isolation       |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 28            | 21.2 | 104 | 78.8 | 0    | 0 | 1.307                               | 76                         | 57.6 | 28        | 21.2 | 12                     | 9.1 | 5                | 3.8 | 11                           | 8.3  | 0                                   | 0.0  | 7.501  |
| 11 y.o                 | 29            | 18.8 | 125 | 81.2 | 0    | 0 | , 2,                                | 95                         | 61.7 | 30        | 19.5 | 11                     | 7.1 | 2                | 1.3 | 16                           | 10.4 | 0                                   | 0.0  | , 8,   |
| 12 y/o                 | 22            | 15.8 | 117 | 84.2 | 0    | 0 | NS                                  | 96                         | 69.1 | 21        | 15.1 | 9                      | 6.5 | 5                | 3.6 | 8                            | 5.8  | 0                                   | 0.0  | NS     |
| Physical               |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 19            | 14.4 | 113 | 85.6 | 0    | 0 | 6.727                               | 90                         | 68.2 | 23        | 17.4 | 3                      | 2.3 | 7                | 5.3 | 9                            | 6.8  | 0                                   | 0.0  | 18.28  |
| 11 y.o                 | 16            | 10.4 | 138 | 89.6 | 0    | 0 | , 2,                                | 117                        | 76.0 | 21        | 13.6 | 7                      | 4.5 | 3                | 1.9 | 5                            | 3.2  | 1                                   | 0.6  | 2, 10, |
| 12 y/o                 | 7             | 5    | 132 | 95   | 0    | 0 | 0.035<br>*                          | 118                        | 84.9 | 14        | 10.1 | 3                      | 2.2 | 2                | 1.4 | 2                            | 1.4  | 0                                   | 0.0  | 0.05*  |
| Rumor Spreading        |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 31            | 23.5 | 101 | 76.5 | 0    | 0 | 3.088                               | 85                         | 64.4 | 16        | 12.1 | 8                      | 6.1 | 5                | 3.8 | 18                           | 13.6 | 0                                   | 0.0  | 5.109  |
| 11 y.o                 | 29            | 18.8 | 125 | 81.2 | 0    | 0 | , 2,                                | 97                         | 63.0 | 28        | 18.2 | 7                      | 4.5 | 4                | 2.6 | 18                           | 11.7 | 0                                   | 0.0  | , 8,   |
| 12 y/o                 | 21            | 15.1 | 118 | 84.9 | 0    | 0 | NS                                  | 94                         | 67.6 | 24        | 17.3 | 6                      | 4.3 | 2                | 1.4 | 13                           | 9.4  | 0                                   | 0.0  | NS     |
| Damage Property        |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 26            | 19.7 | 106 | 80.3 | 0    | 0 | 9.077                               | 91                         | 68.9 | 15        | 11.4 | 10                     | 7.6 | 4                | 3.0 | 12                           | 9.1  | 0                                   | 0.0  | 12.97  |
| 11 y.o                 | 23            | 14.9 | 131 | 85.1 | 0    | 0 | , 2,                                | 116                        | 75.3 | 15        | 9.7  | 5                      | 3.2 | 3                | 1.9 | 15                           | 9.1  | 0                                   | 0.0  | 6, 8,  |
| 12 y/o                 | 10            | 7.2  | 129 | 92.8 | 0    | 0 | 0.011<br>*                          | 117                        | 84.2 | 12        | 8.6  | 3                      | 2.2 | 2                | 1.4 | 5                            | 3.6  | 0                                   | 0.0  | NS     |
| Threats                |               |      |     |      |      |   |                                     |                            |      |           |      |                        |     |                  |     |                              |      |                                     |      |        |
| 10 y/o                 | 21            | 15.9 | 111 | 84.1 | 0    | 0 | 7.956                               | 90                         | 68.2 | 21        | 15.9 | 6                      | 4.5 | 3                | 2.3 | 12                           | 9.1  | 0                                   | 0.0  | 16.01  |



|                 |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
|-----------------|----|------|-----|------|---|-----|--------------|-----|------|----|------|----|-----|----|-----|----|------|---|-----|--------------|
| 11 y.o          | 14 | 9.1  | 140 | 90.9 | 0 | 0   | , 2,         | 125 | 81.2 | 15 | 9.7  | 3  | 1.9 | 2  | 1.3 | 9  | 9.1  | 0 | 0.0 | 2, 8,        |
| 12 y/o          | 8  | 5.8  | 131 | 94.2 | 0 | 0   | 0.019*       | 121 | 87.1 | 10 | 7.2  | 2  | 1.4 | 2  | 1.4 | 4  | 2.9  | 0 | 0.0 | 0.042*       |
| Racist comments |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 33 | 25   | 99  | 75   | 0 | 0   | 1.232        | 69  | 52.3 | 30 | 22.7 | 8  | 6.1 | 10 | 7.6 | 15 | 11.4 | 0 | 0.0 | 24.20        |
| 11 y.o          | 35 | 22.7 | 119 | 77.3 | 0 | 0   | , 2,         | 100 | 64.9 | 19 | 12.3 | 7  | 4.5 | 8  | 5.2 | 20 | 13.0 | 0 | 0.0 | 2, 10,       |
| 12 y/o          | 27 | 19.4 | 112 | 80.6 | 0 | 0   | NS           | 94  | 67.6 | 18 | 12.9 | 12 | 8.6 | 3  | 2.2 | 9  | 6.5  | 3 | 2.2 | 0.007*       |
| Sexual comments |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 26 | 19.7 | 106 | 80.3 | 0 | 0   | 4.953        | 88  | 66.7 | 18 | 13.6 | 5  | 3.8 | 8  | 6.1 | 13 | 9.8  | 0 | 0.0 | 23.86        |
| 11 y.o          | 22 | 14.3 | 132 | 85.7 | 0 | 0   | , 2,         | 122 | 79.2 | 10 | 6.5  | 11 | 7.1 | 3  | 1.9 | 8  | 5.2  | 0 | 0.0 | 0, 10,       |
| 12 y/o          | 14 | 10.1 | 124 | 89.9 | 0 | 0   | NS           | 114 | 82.6 | 10 | 7.2  | 5  | 3.6 | 3  | 2.2 | 4  | 2.9  | 2 | 1.4 | 0.008*       |
| Cyber-all types |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 21 | 15.9 | 111 | 84.1 | 0 | 0   | 5.235        | 105 | 79.5 | 6  | 4.5  | 7  | 5.3 | 5  | 3.8 | 9  | 6.8  | 0 | 0.0 | 9.658        |
| 11 y.o          | 14 | 9.1  | 140 | 90.9 | 0 | 0   | , 2,         | 129 | 83.8 | 11 | 7.1  | 4  | 2.6 | 3  | 1.9 | 5  | 3.2  | 2 | 1.3 | , 10,        |
| 12 y/o          | 11 | 7.9  | 128 | 92.1 | 0 | 0   | NS           | 119 | 85.6 | 9  | 6.5  | 4  | 2.9 | 3  | 2.2 | 3  | 2.2  | 1 | 0.7 | NS           |
| Cyber-Cel       |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 3  | 2.3  | 129 | 97.7 | 0 | 0   | 3.864        |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 11 y.o          | 6  | 3.9  | 148 | 96.1 | 0 | 0   | , 4,         |     |      |    |      |    | N/A |    |     |    |      |   |     | N/A          |
| 12 y/o          | 2  | 1.4  | 136 | 97.8 | 0 | 0   | NS           |     |      |    |      |    |     |    |     |    |      |   |     |              |
| Cyber-Web       |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 9  | 6.8  | 123 | 93.2 | 0 | 0   | 4.063        |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 11 y.o          | 5  | 3.2  | 149 | 96.8 | 0 | 0   | , 4,         |     |      |    |      |    | N/A |    |     |    |      |   |     | N/A          |
| 12 y/o          | 8  | 5.8  | 130 | 93.5 | 1 | 0.7 | NS           |     |      |    |      |    |     |    |     |    |      |   |     |              |
| Cyber-Cel/Web   |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 5  | 3.8  | 127 | 96.2 | 0 | 0   | 3.553        |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 11 y.o          | 5  | 3.2  | 149 | 96.8 | 0 | 0   | , 4,         |     |      |    |      |    | N/A |    |     |    |      |   |     | N/A          |
| 12 y/o          | 2  | 1.4  | 136 | 97.8 | 1 | 0.7 | NS           |     |      |    |      |    |     |    |     |    |      |   |     |              |
| Other           |    |      |     |      |   |     |              |     |      |    |      |    |     |    |     |    |      |   |     |              |
| 10 y/o          | 22 | 16.7 | 110 | 83.3 | 0 | 0   | <u>4.500</u> | 100 | 75.8 | 10 | 7.6  | 8  | 6.1 | 3  | 2.3 | 11 | 8.3  | 0 | 0.0 | <u>16.81</u> |

|        |    |      |     |      |   |   |      |     |      |    |      |   |     |   |     |   |     |   |     |        |
|--------|----|------|-----|------|---|---|------|-----|------|----|------|---|-----|---|-----|---|-----|---|-----|--------|
| 11 y.o | 14 | 9.1  | 140 | 90.9 | 0 | 0 | , 2, | 124 | 80.5 | 16 | 10.4 | 5 | 3.2 | 2 | 1.3 | 7 | 4.5 | 0 | 0.0 | 4, 10, |
| 12 y/o | 14 | 10.1 | 125 | 89.9 | 0 | 0 | NS   | 113 | 81.3 | 12 | 8.6  | 9 | 6.5 | 4 | 2.9 | 0 | 0.0 | 1 | 0.7 | NS     |

\*According to Olweus' definition, bullying victimization is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\*  $p \leq 0.05$

\*\*\*  $p \leq 0.001$

N/A: Not applicable

N.R.: No response

**Table 27. Self-reports of bullying victimization, by church attendance (N=426)**

|                        | Victimization |      |     |      |      |   | $X^2$ ,<br>df, p-<br>value | Frequency of Victimization |      |           |      |                        |     |                  |     |                              |      | $X^2$ ,<br>df, p-<br>value |      |            |
|------------------------|---------------|------|-----|------|------|---|----------------------------|----------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|------|----------------------------|------|------------|
|                        | Yes*          |      | No  |      | N.R. |   |                            | Never                      |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |      |                            | N.R. |            |
|                        | N             | %    | N   | %    | N    | % |                            | N                          | %    | N         | %    | N                      | %   | N                | %   | N                            | %    |                            | N    | %          |
| Victimization by types |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Verbal                 |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Church-Yes             | 84            | 27.9 | 217 | 72.1 | 0    | 0 | 0.617                      | 163                        | 54.2 | 54        | 17.9 | 18                     | 6   | 10               | 3.3 | 55                           | 18.3 | 1                          | 0.3  | 2.690      |
| Church-No              | 30            | 24.2 | 94  | 75.8 | 0    | 0 | , 1,<br>NS                 | 70                         | 56.5 | 24        | 19.4 | 10                     | 8.1 | 4                | 3.2 | 16                           | 12.9 | 0                          | 0    | , 5,<br>NS |
| Social Isolation       |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Church-Yes             | 58            | 19.3 | 243 | 80.7 | 0    | 0 | 0.161                      | 187                        | 62.1 | 56        | 18.6 | 20                     | 6.6 | 10               | 3.3 | 28                           | 9.3  | 0                          | 0    | 2.889      |
| Church-No              | 22            | 17.6 | 103 | 82.4 | 0    | 0 | , 1,<br>NS                 | 80                         | 64   | 23        | 18.4 | 12                     | 9.6 | 2                | 1.6 | 8                            | 6.4  | 0                          | 0    | , 4,<br>NS |
| Physical               |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Church-Yes             | 31            | 10.3 | 270 | 89.7 | 0    | 0 | 0.048                      | 228                        | 75.7 | 42        | 14   | 12                     | 4   | 7                | 2.3 | 11                           | 3.7  | 1                          | 0.3  | 4.650      |
| Church-No              | 12            | 9.6  | 113 | 90.4 | 0    | 0 | , 1,<br>NS                 | 97                         | 77.6 | 16        | 12.8 | 1                      | 0.8 | 5                | 4   | 6                            | 4.8  | 0                          | 0    | , 5,<br>NS |
| Rumor Spreading        |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Church-Yes             | 64            | 21.3 | 237 | 78.7 | 0    | 0 | 2.676                      | 191                        | 63.5 | 46        | 15.3 | 17                     | 5.6 | 11               | 3.7 | 36                           | 12   | 0                          | 0    | 6.264      |
| Church-No              | 18            | 14.4 | 107 | 85.6 | 0    | 0 | , 1,<br>NS                 | 85                         | 68   | 22        | 17.6 | 4                      | 3.2 | 0                | 0   | 14                           | 11.2 | 0                          | 0    | , 4,<br>NS |
| Damage Property        |               |      |     |      |      |   |                            |                            |      |           |      |                        |     |                  |     |                              |      |                            |      |            |
| Church-Yes             | 45            | 15   | 256 | 85   | 0    | 0 | 0.635                      | 227                        | 75.4 | 29        | 9.6  | 11                     | 3.7 | 7                | 2.3 | 27                           | 9    | 0                          | 0    | 3.102      |
|                        |               |      |     |      |      |   | , 1,                       |                            |      |           |      |                        |     |                  |     |                              |      |                            |      | , 4,       |

|                 |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
|-----------------|----|------|-----|------|---|-----|--------|-----|------|----|------|----|-----|-----|-----|----|------|---|-----|--------|
| Church-<br>No   | 15 | 12   | 110 | 88   | 0 | 0   | NS     | 97  | 77.6 | 13 | 10.4 | 7  | 5.6 | 2   | 1.6 | 6  | 4.8  | 0 | 0   | NS     |
| Threats         |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 35 | 11.6 | 266 | 88.4 | 0 | 0   | 1.870  | 234 | 77.7 | 32 | 10.6 | 9  | 3   | 5   | 1.7 | 21 | 7    | 0 | 0   | 2.138  |
| Church-<br>No   | 9  | 7.2  | 116 | 92.8 | 0 | 0   | NS     | 102 | 81.6 | 14 | 11.2 | 2  | 1.6 | 2   | 1.6 | 5  | 4    | 0 | 0   | NS     |
| Racist comments |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 77 | 25.6 | 224 | 74.4 | 0 | 0   | 5.453  | 178 | 59.1 | 46 | 15.3 | 21 | 7   | 19  | 6.3 | 34 | 11.3 | 3 | 1   | 7.659  |
| Church-<br>No   | 19 | 15.2 | 106 | 84.8 | 0 | 0   | 0.012* | 85  | 68   | 21 | 16.8 | 6  | 4.8 | 2   | 1.6 | 11 | 8.8  | 0 | 0   | NS     |
| Sexual comments |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 48 | 16   | 252 | 84   | 0 | 0   | 1.118  | 220 | 73.3 | 32 | 10.7 | 14 | 4.7 | 14  | 4.7 | 19 | 6.3  | 1 | 0.3 | 9.178  |
| Church-<br>No   | 15 | 12   | 110 | 88   | 0 | 0   | NS     | 104 | 83.2 | 6  | 4.8  | 7  | 5.6 | 1   | 0.8 | 6  | 4.8  | 1 | 0.8 | NS     |
| Cyber-all types |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 37 | 12.3 | 264 | 87.7 | 0 | 0   | 1.658  | 241 | 80.1 | 23 | 7.6  | 8  | 2.7 | 10  | 3.3 | 16 | 5.3  | 3 | 1   | 13.42  |
| Church-<br>No   | 10 | 8    | 115 | 92   | 0 | 0   | NS     | 112 | 89.6 | 3  | 2.4  | 7  | 5.6 | 1   | 0.8 | 2  | 1.6  | 0 | 0   | 0.020* |
| Cyber-Cel       |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 3  | 2.4  | 122 | 97.6 | 0 | 0   | 0.441  |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>No   | 8  | 2.7  | 292 | 97   | 1 | 0.3 | NS     |     |      |    |      |    |     | N/A |     |    |      |   |     | N/A    |
| Cyber-Web       |    |      |     |      |   |     |        |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>Yes  | 14 | 4.7  | 286 | 95   | 1 | 0.3 | 0.957  |     |      |    |      |    |     |     |     |    |      |   |     |        |
| Church-<br>No   | 8  | 6.4  | 117 | 93.6 | 0 | 0   | NS     |     |      |    |      |    |     | N/A |     |    |      |   |     | N/A    |

|                   |    |      |     |      |   |     |       |     |      |    |      |    |     |   |     |    |     |   |     |       |
|-------------------|----|------|-----|------|---|-----|-------|-----|------|----|------|----|-----|---|-----|----|-----|---|-----|-------|
| Cyber-<br>Cel/Web |    |      |     |      |   |     |       |     |      |    |      |    |     |   |     |    |     |   |     |       |
| Church-<br>Yes    | 9  | 3    | 291 | 96.7 | 1 | 0.3 | 0.428 |     |      |    |      |    |     |   |     |    |     |   |     |       |
| Church-<br>No     | 4  | 3.2  | 121 | 96.8 | 0 | 0   | NS    |     |      |    |      |    |     |   |     |    |     |   |     | N/A   |
| Other             |    |      |     |      |   |     |       |     |      |    |      |    |     |   |     |    |     |   |     |       |
| Church-<br>Yes    | 35 | 11.6 | 266 | 88.4 | 0 | 0   | 0.115 | 236 | 78.4 | 30 | 10.0 | 13 | 4.3 | 7 | 2.3 | 14 | 4.7 | 1 | 0.3 | 3.463 |
| Church-<br>No     | 16 | 12.8 | 109 | 87.2 | 0 | 0   | NS    | 101 | 80.8 | 8  | 6.4  | 9  | 7.2 | 2 | 1.6 | 5  | 4   | 0 | 0   | NS    |

\*According to Olweus' definition, bullying victimization is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\*  $p \leq 0.05$

\*\*\*  $p \leq 0.001$

N/A: Not applicable

N.R.: No response

**Table 28. Self-reports of bullying perpetration (N=426)**

|  | Perpetration |      |     |      |             |   | Frequency of Perpetration |      |           |      |                     |     |               |     |                        |     |             |     |
|--|--------------|------|-----|------|-------------|---|---------------------------|------|-----------|------|---------------------|-----|---------------|-----|------------------------|-----|-------------|-----|
|  | Yes*         |      | No  |      | No response |   | Never                     |      | 1-2 times |      | 2-3 times per month |     | Once per week |     | Several times per week |     | No Response |     |
|  | N            | %    | N   | %    | N           | % | N                         | %    | N         | %    | N                   | %   | N             | %   | N                      | %   | N           | %   |
| Perpetration by types                          |              |      |     |      |             |   |                           |      |           |      |                     |     |               |     |                        |     |             |     |
| Verbal<br>(M=1.02,<br>s.e.=0.330)              | 54           | 12.7 | 372 | 87.3 | 0           | 0 | 293                       | 68.8 | 79        | 18.5 | 19                  | 4.5 | 13            | 3.1 | 20                     | 4.7 | 2           | 0.5 |
| Social<br>Isolation<br>(M=0.95,<br>s.e.=0.330) | 56           | 13.1 | 370 | 86.9 | 0           | 0 | 318                       | 74.6 | 52        | 12.2 | 25                  | 5.9 | 13            | 3.1 | 16                     | 3.8 | 2           | 0.5 |
| Physical<br>(M=0.90,<br>s.e.=0.330)            | 47           | 11   | 379 | 89   | 0           | 0 | 332                       | 77.9 | 47        | 11   | 15                  | 3.5 | 13            | 3.1 | 17                     | 4   | 2           | 0.5 |
| Rumor<br>Spreading<br>(M=0.96,<br>s.e.=0.331)  | 54           | 12.7 | 372 | 87.3 | 0           | 0 | 321                       | 75.4 | 51        | 12   | 19                  | 4.5 | 11            | 2.6 | 22                     | 5.2 | 2           | 0.5 |
| Damage<br>Property<br>(M=0.78,<br>s.e.=0.330)  | 39           | 9.2  | 387 | 90.8 | 0           | 0 | 369                       | 86.6 | 18        | 4.2  | 12                  | 2.8 | 9             | 2.1 | 16                     | 3.8 | 2           | 0.5 |
| Threats<br>(M=0.72,<br>s.e.=0.330)             | 29           | 6.8  | 397 | 93.2 | 0           | 0 | 368                       | 86.4 | 29        | 6.8  | 10                  | 2.3 | 8             | 1.9 | 9                      | 2.1 | 2           | 0.5 |
| Racist<br>comments                             | 43           | 10.1 | 383 | 89.9 | 0           | 0 | 325                       | 76.3 | 59        | 13.8 | 15                  | 3.5 | 9             | 2.1 | 16                     | 3.8 | 2           | 0.5 |

(M=0.91,  
s.e.=  
0.331)

Sexual  
comments

(M=0.81,  
s.e.=  
0.330)

Cyber-all  
types

(M=0.75,  
s.e.=0.330)

Cyber-Cel  
(M=0.49,  
s.e.=0.328)

Cyber-  
Web  
(M=0.50,  
s.e.=0.328)

Cyber-  
Cel/Web  
(M=0.51,  
s.e.=0.328)

Other  
(M=0.81,  
s.e.=0.330)

|    |      |     |      |   |     |     |      |    |     |    |     |    |     |    |     |   |     |
|----|------|-----|------|---|-----|-----|------|----|-----|----|-----|----|-----|----|-----|---|-----|
| 43 | 10.1 | 383 | 89.9 | 0 | 0   | 358 | 84   | 25 | 5.9 | 16 | 3.8 | 9  | 2.1 | 16 | 3.8 | 2 | 0.5 |
| 37 | 8.7  | 389 | 91.3 | 0 | 0   | 379 | 89   | 10 | 2.3 | 8  | 1.9 | 13 | 3.1 | 14 | 3.3 | 2 | 0.5 |
| 12 | 2.8  | 412 | 96.7 | 2 | 0.5 |     |      |    |     |    |     |    |     |    |     |   |     |
| 13 | 3    | 411 | 96.5 | 2 | 0.5 |     |      |    |     |    |     |    |     |    |     |   |     |
| 15 | 3.5  | 408 | 95.8 | 3 | 0.7 |     |      |    |     |    |     |    |     |    |     |   |     |
| 36 | 8.5  | 390 | 91.5 | 0 | 0   | 357 | 83.8 | 33 | 7.7 | 9  | 2.1 | 6  | 1.4 | 19 | 4.5 | 2 | 0.5 |

\*According to Olweus' definition, bullying perpetration is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

N/A: Not applicable

**Table 29. Self-reports of bullying perpetration, by location (N=426)**

|                       | Perpetration |      |     |      |      |   | $X^2$ ,<br>df, p-<br>value | Frequency of Perpetration |      |           |      |                        |     |                  |     |                              |     | $X^2$ ,<br>df, p-<br>value |      |                              |
|-----------------------|--------------|------|-----|------|------|---|----------------------------|---------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|-----|----------------------------|------|------------------------------|
|                       | Yes*         |      | No  |      | N.R. |   |                            | Never                     |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |     |                            | N.R. |                              |
|                       | N            | %    | N   | %    | N    | % |                            | N                         | %    | N         | %    | N                      | %   | N                | %   | N                            | %   |                            | N    | %                            |
| Perpetration by types |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| Verbal                |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| SJ Metro              | 31           | 16.6 | 156 | 83.4 | 0    | 0 | 4.583                      | 116                       | 62   | 40        | 21.4 | 13                     | 7   | 7                | 3.7 | 10                           | 5.3 | 1                          | 0.5  | 9.157<br>, 5,<br>N.S.        |
| Other<br>Muni.        | 23           | 9.6  | 216 | 90.4 | 0    | 0 | 0.023<br>*                 | 177                       | 74.1 | 39        | 16.3 | 6                      | 2.5 | 6                | 2.5 | 10                           | 4.2 | 1                          | 0.4  |                              |
| Social Isolation      |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| SJ Metro              | 36           | 19.3 | 151 | 80.7 | 0    | 0 | 10.88                      | 129                       | 69   | 22        | 11.8 | 15                     | 8   | 10               | 5.3 | 10                           | 5.3 | 1                          | 0.5  | 12.15<br>4, 5,<br>0.033<br>* |
| Other<br>Muni.        | 20           | 8.4  | 219 | 91.6 | 0    | 0 | 0.001<br>**                | 189                       | 79.1 | 30        | 12.6 | 10                     | 4.2 | 3                | 1.3 | 6                            | 2.5 | 1                          | 0.4  |                              |
| Physical              |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| SJ Metro              | 27           | 14.4 | 160 | 85.6 | 0    | 0 | 3.939                      | 138                       | 73.8 | 22        | 11.8 | 8                      | 4.3 | 10               | 5.3 | 8                            | 4.3 | 1                          | 0.5  | 7.293<br>, 5,<br>N.S.        |
| Other<br>Muni.        | 20           | 8.4  | 219 | 91.6 | 0    | 0 | 0.034<br>*                 | 194                       | 81.2 | 25        | 10.5 | 7                      | 2.9 | 3                | 1.3 | 9                            | 3.8 | 1                          | 0.4  |                              |
| Rumor Spreading       |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| SJ Metro              | 34           | 18.2 | 153 | 81.8 | 0    | 0 | 9.128                      | 130                       | 69.5 | 23        | 12.3 | 12                     | 6.4 | 8                | 4.3 | 13                           | 7   | 1                          | 0.5  | 10.20<br>2, 5,<br>N.S.       |
| Other<br>Muni.        | 20           | 8.4  | 219 | 91.6 | 0    | 0 | 0.002<br>*                 | 191                       | 79.9 | 28        | 11.7 | 7                      | 2.9 | 3                | 1.3 | 9                            | 3.8 | 1                          | 0.4  |                              |
| Damage Property       |              |      |     |      |      |   |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |                              |
| SJ Metro              | 22           | 11.8 | 165 | 88.2 | 0    | 0 | 2.730                      | 155                       | 82.9 | 10        | 5.3  | 6                      | 3.2 | 6                | 3.2 | 9                            | 4.8 | 1                          | 0.5  | 4.627<br>, 5,                |
| Other                 | 17           | 7.1  | 222 | 92.9 | 0    | 0 | , 1,                       | 214                       | 89.5 | 8         | 3.3  | 6                      | 2.5 | 3                | 1.3 | 7                            | 2.9 | 1                          | 0.4  |                              |



|                 |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
|-----------------|----|------|-----|------|---|-----|--------------------|------|------|----|------|----|-----|-----|-----|---|-----|---|-----|--------------|------------|-----|
| Muni.           |    |      |     |      |   |     |                    | N.S. |      |    |      |    |     |     |     |   |     |   |     |              | N.S.       |     |
| Threats         |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 20 | 10.7 | 167 | 89.3 | 0 | 0   | 7.941              | 152  | 81.3 | 15 | 8    | 6  | 3.2 | 5   | 2.7 | 8 | 4.3 | 1 | 0.5 | 11.33        |            |     |
| Other Muni.     | 9  | 3.8  | 230 | 96.2 | 0 | 0   | , 1,<br>0.004<br>* | 216  | 90.4 | 14 | 5.9  | 4  | 1.7 | 3   | 1.3 | 1 | 0.4 | 1 | 0.4 | 0.045        | , 5,<br>*  |     |
| Racist comments |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 23 | 12.3 | 164 | 87.7 | 0 | 0   | 1.787              | 130  | 69.5 | 35 | 18.7 | 8  | 4.3 | 5   | 2.7 | 8 | 4.3 | 1 | 0.5 | 9.699        |            |     |
| Other Muni.     | 20 | 8.4  | 219 | 91.6 | 0 | 0   | , 1,<br>N.S.       | 195  | 81.6 | 24 | 10   | 7  | 2.9 | 4   | 1.7 | 8 | 3.3 | 1 | 0.4 | , 5,<br>N.S. |            |     |
| Sexual comments |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 25 | 13.4 | 162 | 86.6 | 0 | 0   | 3.940              | 150  | 80.2 | 12 | 6.4  | 10 | 5.3 | 5   | 2.7 | 9 | 4.8 | 1 | 0.5 | 4.518        |            |     |
| Other Muni.     | 18 | 7.5  | 221 | 92.5 | 0 | 0   | , 1,<br>0.035<br>* | 208  | 87   | 13 | 5.4  | 6  | 2.5 | 4   | 1.7 | 7 | 2.9 | 1 | 0.4 | , 5,<br>N.S. |            |     |
| Cyber-all types |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 25 | 13.4 | 162 | 86.6 | 0 | 0   | 9.219              | 156  | 83.4 | 6  | 3.2  | 5  | 2.7 | 10  | 5.3 | 9 | 4.8 | 1 | 0.5 | 11.48        |            |     |
| Other Muni.     | 12 | 5    | 227 | 95   | 0 | 0   | , 1,<br>0.002<br>* | 223  | 93.3 | 4  | 1.7  | 3  | 1.3 | 3   | 1.3 | 5 | 2.1 | 1 | 0.4 | 0.043        | 0, 5,<br>* |     |
| Cyber-Cel       |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 6  | 3.2  | 180 | 96.3 | 1 | 0.5 | 0.219              |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| Other Muni.     | 6  | 2.5  | 232 | 97.1 | 1 | 0.4 | , 2,<br>N.S.       |      |      |    |      |    |     | N/A |     |   |     |   |     |              |            | N/A |
| Cyber-Web       |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 9  | 4.8  | 177 | 94.7 | 1 | 0.5 | 3.950              |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| Other Muni.     | 4  | 1.7  | 234 | 97.9 | 1 | 0.4 | , 2,<br>N.S        |      |      |    |      |    |     |     |     |   |     |   |     |              |            | N/A |
| Cyber-Cel/Web   |    |      |     |      |   |     |                    |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| SJ Metro        | 8  | 4.3  | 177 | 94.7 | 2 | 1   | 1.895              |      |      |    |      |    |     |     |     |   |     |   |     |              |            |     |
| Other Muni.     | 7  | 2.9  | 231 | 96.7 | 1 | 0.4 | , 2,<br>N.S.       |      |      |    |      |    |     |     |     |   |     |   |     |              |            | N/A |

|          |    |      |     |      |   |   |       |     |      |    |      |   |     |   |     |    |     |   |     |              |
|----------|----|------|-----|------|---|---|-------|-----|------|----|------|---|-----|---|-----|----|-----|---|-----|--------------|
| Other    |    |      |     |      |   |   |       |     |      |    |      |   |     |   |     |    |     |   |     |              |
| SJ Metro | 21 | 11.2 | 166 | 88.8 | 0 | 0 | 3.328 | 147 | 78.6 | 19 | 10.2 | 4 | 2.1 | 4 | 2.1 | 12 | 6.4 | 1 | 0.5 | 7.737        |
| Other    |    |      |     |      |   |   | , 1,  |     |      |    |      |   |     |   |     |    |     |   |     |              |
| Muni.    | 15 | 6.3  | 224 | 93.7 | 0 | 0 | 0.050 | 210 | 87.9 | 14 | 5.9  | 5 | 2.1 | 2 | 0.8 | 7  | 2.9 | 1 | 0.4 | , 5,<br>N.S. |

\*According to Olweus' definition, bullying perpetration is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\* p≤0.05

\*\*\*p≤0.001

N/A: Not applicable

N.R.: No response

SJ Metro: San Juan Metropolitan Area

Other Muni.: Other Municipalities

**Table 30. Self-reports of bullying perpetration, by gender of the participant (N=426)**

|                              | Perpetration |      |     |      |      |   | $X^2$ ,<br>df, p-<br>value | Frequency of Perpetration |           |    |                        |    |                  |    |                              |    |      | $X^2$ ,<br>df, p-<br>value |     |                              |
|------------------------------|--------------|------|-----|------|------|---|----------------------------|---------------------------|-----------|----|------------------------|----|------------------|----|------------------------------|----|------|----------------------------|-----|------------------------------|
|                              | Yes*         |      | No  |      | N.R. |   |                            | Never                     | 1-2 times |    | 2-3 times<br>per month |    | Once per<br>week |    | Several<br>times per<br>week |    | N.R. |                            |     |                              |
|                              | N            | %    | N   | %    | N    | % |                            | N                         | %         | N  | %                      | N  | %                | N  | %                            | N  | %    |                            | N   | %                            |
| <b>Perpetration by types</b> |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| <b>Verbal</b>                |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| Female                       | 18           | 8.7  | 190 | 91.3 | 0    | 0 | 5.941                      | 146                       | 70.2      | 44 | 21.2                   | 7  | 3.4              | 3  | 1.4                          | 7  | 3.4  | 1                          | 0.5 | 7.683<br>, 5,<br>N.S.        |
| Male                         | 36           | 16.5 | 182 | 83.5 | 0    | 0 | 0.011<br>*                 | 147                       | 67.4      | 35 | 16.1                   | 12 | 5.5              | 10 | 4.6                          | 13 | 6    | 1                          | 0.5 |                              |
| <b>Social Isolation</b>      |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| Female                       | 17           | 8.2  | 191 | 91.8 | 0    | 0 | 8.802                      | 163                       | 78.4      | 28 | 13.5                   | 9  | 4.3              | 2  | 1                            | 5  | 2.4  | 1                          | 0.5 | 10.72<br>1, 5,<br>0.057<br>* |
| Male                         | 39           | 17.9 | 179 | 82.1 | 0    | 0 | 0.002<br>*                 | 155                       | 71.1      | 24 | 11                     | 16 | 7.3              | 11 | 5                            | 11 | 5    | 1                          | 0.5 |                              |
| <b>Physical</b>              |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| Female                       | 14           | 6.7  | 194 | 93.3 | 0    | 0 | 7.664                      | 174                       | 83.7      | 20 | 9.6                    | 7  | 3.4              | 1  | 0.5                          | 5  | 2.4  | 1                          | 0.5 | 13.84<br>3, 5,<br>0.017<br>* |
| Male                         | 33           | 15.1 | 185 | 84.9 | 0    | 0 | 0.004<br>*                 | 158                       | 72.5      | 27 | 12.4                   | 8  | 3.7              | 12 | 5.5                          | 12 | 5.5  | 1                          | 0.5 |                              |
| <b>Rumor Spreading</b>       |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| Female                       | 13           | 6.2  | 195 | 93.8 | 0    | 0 | 15.16                      | 168                       | 80.8      | 27 | 13                     | 3  | 1.4              | 3  | 1.4                          | 6  | 2.9  | 1                          | 0.5 | 16.36<br>5, 5,<br>0.006<br>* |
| Male                         | 41           | 18.8 | 177 | 81.2 | 0    | 0 | 0.000<br>**                | 153                       | 70.2      | 24 | 11                     | 16 | 7.3              | 8  | 3.7                          | 16 | 7.3  | 1                          | 0.5 |                              |
| <b>Damage Property</b>       |              |      |     |      |      |   |                            |                           |           |    |                        |    |                  |    |                              |    |      |                            |     |                              |
| Female                       | 10           | 4.8  | 198 | 95.2 | 0    | 0 | 9.236                      | 189                       | 90.9      | 9  | 4.3                    | 4  | 1.9              | 1  | 0.5                          | 4  | 1.9  | 1                          | 0.5 | 10.76<br>8, 5,<br>0.056<br>* |
| Male                         | 29           | 13.3 | 189 | 86.7 | 0    | 0 | 0.002<br>*                 | 180                       | 82.6      | 9  | 4.1                    | 8  | 3.7              | 8  | 3.7                          | 12 | 5.5  | 1                          | 0.5 |                              |

|                 |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
|-----------------|----|------|-----|------|---|-----|-------------|-----|------|----|------|----|-----|-----|-----|----|-----|---|-----|--------------|
| Threats         |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 8  | 3.8  | 200 | 96.2 | 0 | 0   | 5.619       | 188 | 90.4 | 12 | 5.8  | 3  | 1.4 | 1   | 0.5 | 3  | 1.4 | 1 | 0.5 | 7.906        |
| Male            | 21 | 9.6  | 197 | 90.4 | 0 | 0   | 0.014       | 180 | 82.6 | 17 | 7.8  | 7  | 3.2 | 7   | 3.2 | 6  | 2.8 | 1 | 0.5 | ,5,<br>N.S.  |
| Racist comments |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 12 | 5.8  | 196 | 94.2 | 0 | 0   | 8.377       | 165 | 79.3 | 31 | 14.9 | 5  | 2.4 | 2   | 1   | 4  | 1.9 | 1 | 0.5 | 9.568        |
| Male            | 31 | 14.2 | 187 | 85.8 | 0 | 0   | 0.003       | 160 | 73.4 | 28 | 12.9 | 10 | 4.6 | 7   | 3.2 | 12 | 5.5 | 1 | 0.5 | ,5,<br>N.S.  |
| Sexual comments |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 15 | 7.2  | 193 | 92.8 | 0 | 0   | 3.721       | 181 | 87   | 12 | 5.8  | 6  | 2.9 | 1   | 0.5 | 7  | 3.4 | 1 | 0.5 | 6.548        |
| Male            | 28 | 12.8 | 190 | 87.2 | 0 | 0   | 0.038       | 177 | 81.2 | 13 | 6    | 10 | 4.6 | 8   | 3.7 | 9  | 4.1 | 1 | 0.5 | ,5,<br>N.S.  |
| Cyber-all types |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 9  | 4.3  | 199 | 95.7 | 0 | 0   | 9.736       | 194 | 93.3 | 5  | 2.4  | 2  | 1   | 3   | 1.4 | 3  | 1.4 | 1 | 0.5 | 10.32        |
| Male            | 28 | 12.8 | 190 | 87.2 | 0 | 0   | 0.001       | 185 | 84.9 | 5  | 2.3  | 6  | 2.8 | 10  | 4.6 | 11 | 5   | 1 | 0.5 | 5,5,<br>N.S. |
| Cyber-Cel       |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 1  | 0.5  | 206 | 99   | 1 | 0.2 | 8.103       |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Male            | 11 | 5    | 206 | 94.5 | 1 | 0.2 | 0.017       |     |      |    |      |    |     | N/A |     |    |     |   |     | N/A          |
| Cyber-Web       |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 5  | 2.4  | 202 | 97.1 | 1 | 0.2 | 1.296       |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Male            | 7  | 3.2  | 210 | 96.3 | 1 | 0.2 | ,2,<br>N.S. |     |      |    |      |    |     | N/A |     |    |     |   |     | N/A          |
| Cyber-Cel/Web   |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Female          | 6  | 2.9  | 201 | 96.9 | 1 | 0.2 | 1.523       |     |      |    |      |    |     |     |     |    |     |   |     |              |
| Male            | 9  | 4.1  | 208 | 95.4 | 1 | 0.2 | ,2,<br>N.S. |     |      |    |      |    |     | N/A |     |    |     |   |     | N/A          |
| Other           |    |      |     |      |   |     |             |     |      |    |      |    |     |     |     |    |     |   |     |              |

|        |    |     |     |      |   |   |       |     |      |    |     |   |     |   |     |    |     |   |     |       |
|--------|----|-----|-----|------|---|---|-------|-----|------|----|-----|---|-----|---|-----|----|-----|---|-----|-------|
| Female | 12 | 5.8 | 196 | 94.2 | 0 | 0 | 3.778 | 182 | 87.5 | 14 | 6.7 | 3 | 1.4 | 1 | 0.5 | 7  | 3.4 | 1 | 0.5 | 5.646 |
| Male   | 24 | 11  | 194 | 89   | 0 | 0 | 0.038 | 175 | 80.3 | 19 | 8.7 | 6 | 2.8 | 5 | 2.3 | 12 | 5.5 | 1 | 0.5 | 5.5   |
|        |    |     |     |      |   |   | *     |     |      |    |     |   |     |   |     |    |     |   |     | N.S.  |

\*According to Olweus' definition, bullying perpetration is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\*  $p \leq 0.05$

\*\*\*  $p \leq 0.001$

N/A: Not applicable

N.R.: No response

**Table 31. Self-reports of bullying perpetration, by age of the participant (N=426)**

|                       | Perpetration |      |     |      |      |   |       | $X^2$ ,<br>df, p-<br>value | Frequency of Perpetration |    |                        |    |                  |   |                              |    |      |   | $X^2$ ,<br>df, p-<br>value |        |
|-----------------------|--------------|------|-----|------|------|---|-------|----------------------------|---------------------------|----|------------------------|----|------------------|---|------------------------------|----|------|---|----------------------------|--------|
|                       | Yes*         |      | No  |      | N.R. |   | Never |                            | 1-2 times                 |    | 2-3 times<br>per month |    | Once per<br>week |   | Several<br>times per<br>week |    | N.R. |   |                            |        |
|                       | N            | %    | N   | %    | N    | % | N     |                            | %                         | N  | %                      | N  | %                | N | %                            | N  | %    | N |                            | %      |
| Perpetration by types |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| Verbal                |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| 10 y/o                | 16           | 12.1 | 116 | 87.9 | 0    | 0 | 0.839 | 91                         | 68.9                      | 25 | 18.9                   | 5  | 3.8              | 3 | 2.3                          | 7  | 5.3  | 1 | 0.8                        | 4.798  |
| 11 y.o                | 22           | 14.3 | 132 | 85.7 | 0    | 0 | , 2,  | 104                        | 67.5                      | 28 | 18.2                   | 7  | 4.5              | 5 | 3.2                          | 10 | 6.5  | 0 | 0.0                        | , 10,  |
| 12 y/o                | 15           | 10.8 | 124 | 89.2 | 0    | 0 | N.S.  | 98                         | 70.5                      | 26 | 18.7                   | 7  | 5.0              | 4 | 2.9                          | 3  | 2.2  | 1 | 0.7                        | N.S.   |
| Social Isolation      |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| 10 y/o                | 21           | 15.9 | 111 | 84.1 | 0    | 0 | 1.652 | 94                         | 71.2                      | 17 | 12.9                   | 10 | 7.6              | 3 | 2.3                          | 7  | 5.3  | 1 | 0.8                        | 5.888  |
| 11 y.o                | 19           | 12.3 | 135 | 87.7 | 0    | 0 | , 2,  | 120                        | 77.9                      | 15 | 9.7                    | 8  | 5.2              | 5 | 3.2                          | 6  | 3.9  | 0 | 0.0                        | , 10,  |
| 12 y/o                | 15           | 10.8 | 124 | 89.2 | 0    | 0 | N.S.  | 104                        | 74.8                      | 20 | 14.4                   | 7  | 5.0              | 4 | 2.9                          | 3  | 2.2  | 1 | 0.7                        | N.S.   |
| Physical              |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| 10 y/o                | 14           | 10.6 | 118 | 89.4 | 0    | 0 | 0.014 | 104                        | 78.8                      | 14 | 10.6                   | 4  | 3.0              | 5 | 3.8                          | 4  | 3.0  | 1 | 0.8                        | 11.56  |
| 11 y.o                | 17           | 11   | 137 | 89   | 0    | 0 | , 2,  | 119                        | 77.3                      | 18 | 11.7                   | 6  | 3.9              | 1 | 0.6                          | 10 | 6.5  | 0 | 0.0                        | 5, 10, |
| 12 y/o                | 15           | 10.8 | 124 | 89.2 | 0    | 0 | N.S.  | 109                        | 78.4                      | 15 | 10.8                   | 5  | 3.6              | 7 | 5.0                          | 2  | 1.4  | 1 | 0.7                        | N.S.   |
| Rumor Spreading       |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| 10 y/o                | 17           | 12.9 | 115 | 87.1 | 0    | 0 | 0.030 | 99                         | 75.0                      | 16 | 12.1                   | 4  | 3.0              | 3 | 2.3                          | 9  | 6.8  | 1 | 0.8                        | 11.19  |
| 11 y.o                | 19           | 12.3 | 135 | 87.7 | 0    | 0 | , 2,  | 119                        | 77.3                      | 16 | 10.4                   | 4  | 2.6              | 6 | 3.9                          | 9  | 5.8  | 0 | 0.0                        | 5, 10, |
| 12 y/o                | 18           | 12.9 | 127 | 87.1 | 0    | 0 | N.S.  | 103                        | 74.1                      | 18 | 12.9                   | 11 | 7.9              | 2 | 1.4                          | 4  | 2.9  | 1 | 0.7                        | N.S.   |
| Damage Property       |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |
| 10 y/o                | 13           | 9.8  | 119 | 90.2 | 0    | 0 | 0.176 | 114                        | 86.4                      | 5  | 3.8                    | 6  | 4.5              | 3 | 2.3                          | 3  | 2.3  | 1 | 0.8                        | 4.445  |
| 11 y.o                | 13           | 8.4  | 141 | 91.6 | 0    | 0 | , 2,  | 134                        | 87.0                      | 7  | 4.5                    | 3  | 1.9              | 3 | 1.9                          | 7  | 4.5  | 0 | 0.0                        | , 10,  |
| 12 y/o                | 13           | 9.4  | 126 | 90.6 | 0    | 0 | N.S.  | 120                        | 86.3                      | 6  | 4.3                    | 3  | 2.2              | 3 | 2.2                          | 6  | 3.8  | 2 | 0.7                        | N.S.   |
| Threats               |              |      |     |      |      |   |       |                            |                           |    |                        |    |                  |   |                              |    |      |   |                            |        |

|                 |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
|-----------------|----|------|-----|------|---|-----|--------------|-----|------|----|------|---|-----|---|-----|---|-----|---|-----|--------------|
| 10 y/o          | 12 | 9.1  | 120 | 90.9 | 0 | 0   | 1.549        | 111 | 84.1 | 9  | 6.8  | 3 | 2.3 | 3 | 2.3 | 5 | 3.8 | 1 | 0.8 | 11.03        |
| 11 y.o          | 9  | 5.8  | 145 | 94.2 | 0 | 0   | , 2,         | 138 | 89.6 | 7  | 4.5  | 6 | 3.9 | 1 | 0.6 | 2 | 1.3 | 0 | 0.0 | 0, 10,       |
| 12 y/o          | 8  | 5.8  | 131 | 94.2 | 0 | 0   | N.S.         | 119 | 85.6 | 12 | 8.6  | 1 | 0.7 | 4 | 2.9 | 2 | 1.4 | 1 | 0.7 | N.S.         |
| Racist comments |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 13 | 9.8  | 119 | 90.2 | 0 | 0   | 0.009        | 100 | 75.8 | 19 | 14.4 | 4 | 3.0 | 2 | 1.5 | 6 | 4.5 | 1 | 0.8 | 9.112        |
| 11 y.o          | 15 | 9.7  | 139 | 90.3 | 0 | 0   | , 2,         | 119 | 77.3 | 21 | 13.5 | 3 | 1.9 | 4 | 2.6 | 7 | 4.5 | 0 | 0.0 | , 10,        |
| 12 y/o          | 14 | 10.1 | 125 | 89.9 | 0 | 0   | N.S.         | 106 | 76.3 | 19 | 13.7 | 8 | 5.8 | 3 | 2.2 | 2 | 1.4 | 1 | 0.7 | N.S.         |
| Sexual comments |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 15 | 11.4 | 117 | 88.6 | 0 | 0   | 0.770        | 110 | 83.3 | 7  | 5.3  | 5 | 3.8 | 1 | 0.8 | 8 | 6.1 | 1 | 0.8 | 12.51        |
| 11 y.o          | 13 | 8.4  | 141 | 91.6 | 0 | 0   | , 2,         | 132 | 85.7 | 9  | 5.8  | 2 | 1.3 | 5 | 3.2 | 6 | 3.9 | 0 | 0.0 | 8, 10,       |
| 12 y/o          | 15 | 10.8 | 124 | 89.2 | 0 | 0   | N.S.         | 115 | 82.7 | 9  | 6.5  | 9 | 6.5 | 3 | 2.2 | 2 | 1.4 | 1 | 0.7 | N.S.         |
| Cyber-all types |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 15 | 11.4 | 117 | 88.6 | 0 | 0   | 2.067        | 115 | 87.1 | 2  | 1.5  | 4 | 3.0 | 3 | 2.3 | 7 | 5.3 | 1 | 0.8 | 9.098        |
| 11 y.o          | 11 | 7.1  | 143 | 92.9 | 0 | 0   | , 2,         | 139 | 90.3 | 4  | 2.6  | 1 | 0.6 | 4 | 2.6 | 6 | 3.9 | 0 | 0.0 | , 10,        |
| 12 y/o          | 10 | 7.2  | 129 | 92.8 | 0 | 0   | N.S.         | 125 | 89.9 | 4  | 2.9  | 3 | 2.2 | 5 | 3.6 | 1 | 0.7 | 1 | 0.7 | N.S.         |
| Cyber-Cel       |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 3  | 2.3  | 128 | 97   | 1 | 0.8 | 6.840        |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 11 y.o          | 1  | 0.6  | 153 | 99.4 | 0 | 0   | , 4,         |     |      |    |      |   | N/A |   |     |   |     |   |     | N/A          |
| 12 y/o          | 7  | 5    | 131 | 94.2 | 1 | 0.7 | N.S.         |     |      |    |      |   |     |   |     |   |     |   |     |              |
| Cyber-Web       |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 5  | 3.8  | 126 | 95.5 | 1 | 0.8 | 6.481        |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 11 y.o          | 6  | 3.9  | 148 | 96.1 | 0 | 0   | , 4,         |     |      |    |      |   | N/A |   |     |   |     |   |     | N/A          |
| 12 y/o          | 1  | 0.7  | 137 | 98.4 | 1 | 0.7 | N.S.         |     |      |    |      |   |     |   |     |   |     |   |     |              |
| Cyber-Cel/Web   |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 6  | 4.5  | 125 | 94.7 | 1 | 0.8 | 5.798        |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 11 y.o          | 7  | 4.5  | 147 | 95.5 | 0 | 0   | , 4,         |     |      |    |      |   | N/A |   |     |   |     |   |     | N/A          |
| 12 y/o          | 2  | 1.4  | 135 | 97.1 | 2 | 1.3 | N.S.         |     |      |    |      |   |     |   |     |   |     |   |     |              |
| Other           |    |      |     |      |   |     |              |     |      |    |      |   |     |   |     |   |     |   |     |              |
| 10 y/o          | 13 | 9.8  | 119 | 90.2 | 0 | 0   | <u>1.102</u> | 104 | 78.8 | 15 | 11.4 | 2 | 1.5 | 2 | 1.5 | 8 | 6.1 | 1 | 0.8 | <u>9.402</u> |

|        |    |     |     |      |   |   |      |     |      |    |     |   |     |   |     |   |     |   |     |       |
|--------|----|-----|-----|------|---|---|------|-----|------|----|-----|---|-----|---|-----|---|-----|---|-----|-------|
| 11 y.o | 10 | 6.5 | 144 | 93.5 | 0 | 0 | , 2, | 131 | 85.1 | 13 | 8.4 | 3 | 1.9 | 2 | 1.3 | 5 | 3.2 | 0 | 0.0 | , 10, |
| 12 y/o | 12 | 8.6 | 127 | 91.4 | 0 | 0 | N.S. | 122 | 87.8 | 5  | 3.6 | 4 | 2.9 | 2 | 1.4 | 5 | 3.6 | 1 | 0.7 | N.S.  |

\*According to Olweus' definition, bullying perpetration is identified only when it is reported to occur regularly (i.e., 2-3 times per month, once per week, or several times per week).

\*\*  $p \leq 0.05$

\*\*\*  $p \leq 0.001$

N/A: Not applicable

N.R.: No response



**Table 32. Self-reports of bullying perpetration, by church attendance (N=426)**

|                       | Perpetration |      |     |      |      |     | $X^2$ ,<br>df, p-<br>value | Frequency of Perpetration |      |           |      |                        |     |                  |     |                              |     | $X^2$ ,<br>df, p-<br>value |      |       |
|-----------------------|--------------|------|-----|------|------|-----|----------------------------|---------------------------|------|-----------|------|------------------------|-----|------------------|-----|------------------------------|-----|----------------------------|------|-------|
|                       | Yes*         |      | No  |      | N.R. |     |                            | Never                     |      | 1-2 times |      | 2-3 times<br>per month |     | Once per<br>week |     | Several<br>times per<br>week |     |                            | N.R. |       |
|                       | N            | %    | N   | %    | N    | %   |                            | N                         | %    | N         | %    | N                      | %   | N                | %   | N                            | %   |                            | N    | %     |
| Perpetration by types |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Verbal                |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Church<br>-Yes        | 41           | 13.6 | 260 | 86.4 | 0    | 0.0 | 0.828                      | 204                       | 67.8 | 56        | 18.6 | 14                     | 4.7 | 11               | 3.7 | 15                           | 5   | 1                          | 0.3  | 2.052 |
| Church<br>-No         | 13           | 10.4 | 112 | 89.6 | 0    | 0.0 | , 1,<br>NS                 | 89                        | 71.2 | 23        | 18.4 | 5                      | 4   | 2                | 1.6 | 5                            | 4   | 1                          | 0.8  | NS    |
| Social Isolation      |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Church<br>-Yes        | 39           | 13.0 | 262 | 87.0 | 0    | 0.0 | 0.032                      | 228                       | 75.7 | 34        | 11.3 | 15                     | 5   | 13               | 4.3 | 10                           | 3.3 | 1                          | 0.3  | 8.557 |
| Church<br>-No         | 17           | 13.6 | 108 | 86.4 | 0    | 0.0 | , 1,<br>NS                 | 90                        | 72   | 18        | 14.4 | 10                     | 8   | 0                | 0   | 6                            | 4.8 | 1                          | 0.8  | NS    |
| Physical              |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Church<br>-Yes        | 33           | 11.0 | 268 | 89.0 | 0    | 0.0 | 0.005                      | 234                       | 77.7 | 34        | 11.3 | 11                     | 3.7 | 11               | 3.7 | 10                           | 3.3 | 1                          | 0.3  | 2.902 |
| Church<br>-No         | 14           | 11.2 | 111 | 88.8 | 0    | 0.0 | , 1,<br>NS                 | 98                        | 78.4 | 13        | 10.4 | 4                      | 3.2 | 2                | 1.6 | 7                            | 5.6 | 1                          | 0.8  | NS    |
| Rumor Spreading       |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Church<br>-Yes        | 43           | 14.3 | 258 | 85.7 | 0    | 0.0 | 2.401                      | 224                       | 74.4 | 34        | 11.3 | 14                     | 4.7 | 8                | 2.7 | 20                           | 6.6 | 1                          | 0.3  | 5.381 |
| Church<br>-No         | 11           | 8.8  | 114 | 91.2 | 0    | 0.0 | , 1,<br>NS                 | 97                        | 77.6 | 17        | 13.6 | 5                      | 4   | 3                | 2.4 | 2                            | 1.6 | 1                          | 0.8  | NS    |
| Damage Property       |              |      |     |      |      |     |                            |                           |      |           |      |                        |     |                  |     |                              |     |                            |      |       |
| Church<br>-Yes        | 27           | 9.0  | 274 | 91.0 | 0    | 0.0 | 0.042                      | 259                       | 86   | 15        | 5    | 8                      | 2.7 | 7                | 2.3 | 11                           | 3.7 | 1                          | 0.3  | 2.186 |
| Church                | 12           | 9.6  | 113 | 90.4 | 0    | 0.0 | , 1,<br>NS                 | 110                       | 88   | 3         | 2.4  | 4                      | 3.2 | 2                | 1.6 | 5                            | 4   | 1                          | 0.8  | NS    |

|                 |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
|-----------------|----|------|-----|------|---|-----|-------|-----|------|----|------|----|-----|-----|-----|----|-----|---|-----|-------|-----|
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Threats         |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 16 | 5.3  | 285 | 94.7 | 0 | 0.0 | 3.599 | 264 | 87.7 | 21 | 7    | 4  | 1.3 | 6   | 2   | 5  | 1.7 | 1 | 0.3 | 6.259 |     |
| -Yes            |    |      |     |      |   |     | , 1,  |     |      |    |      |    |     |     |     |    |     |   |     | , 5,  |     |
| Church          | 13 | 10.4 | 112 | 89.6 | 0 | 0.0 | 0.049 | 104 | 83.2 | 8  | 6.4  | 6  | 4.8 | 2   | 1.6 | 4  | 3.2 | 1 | 0.8 | NS    |     |
| -No             |    |      |     |      |   |     | *     |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Racist comments |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 32 | 10.6 | 269 | 89.4 | 0 | 0.0 | 0.326 | 230 | 76.4 | 39 | 13   | 10 | 3.3 | 6   | 2   | 15 | 5   | 1 | 0.3 | 7.448 |     |
| -Yes            |    |      |     |      |   |     | , 1,  |     |      |    |      |    |     |     |     |    |     |   |     | , 5,  |     |
| Church          | 11 | 8.8  | 114 | 91.2 | 0 | 0.0 | NS    | 95  | 76   | 20 | 15.8 | 5  | 4   | 3   | 2.4 | 1  | 0.8 | 1 | 0.8 | NS    |     |
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Sexual comments |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 32 | 10.6 | 269 | 89.4 | 0 | 0.0 | 0.326 | 250 | 83.1 | 19 | 6.3  | 12 | 4   | 6   | 2   | 13 | 4.3 | 1 | 0.3 | 1.954 |     |
| -Yes            |    |      |     |      |   |     | , 1,  |     |      |    |      |    |     |     |     |    |     |   |     | , 5,  |     |
| Church          | 11 | 8.8  | 114 | 91.2 | 0 | 0.0 | NS    | 108 | 86.4 | 6  | 4.8  | 4  | 3.2 | 3   | 2.4 | 3  | 2.4 | 1 | 0.8 | NS    |     |
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Cyber-all types |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 28 | 9.3  | 273 | 90.7 | 0 | 0.0 | 0.492 | 267 | 88.7 | 6  | 2    | 6  | 2   | 13  | 4.3 | 8  | 2.7 | 1 | 0.3 | 7.672 |     |
| -Yes            |    |      |     |      |   |     | , 1,  |     |      |    |      |    |     |     |     |    |     |   |     | , 5,  |     |
| Church          | 9  | 7.2  | 116 | 92.8 | 0 | 0.0 | NS    | 112 | 89.6 | 4  | 3.2  | 2  | 1.6 | 0   | 0   | 6  | 4.8 | 1 | 0.8 | NS    |     |
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Cyber-Cel       |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 8  | 2.7  | 292 | 97.0 | 1 | 0.3 | 0.513 |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| -Yes            |    |      |     |      |   |     | , 2,  |     |      |    |      |    |     | N/A |     |    |     |   |     |       | N/A |
| Church          | 4  | 3.2  | 120 | 96.0 | 1 | 0.8 | NS    |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Cyber-Web       |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 8  | 2.7  | 292 | 96.9 | 1 | 0.3 | 0.923 |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| -Yes            |    |      |     |      |   |     | , 2,  |     |      |    |      |    |     | N/A |     |    |     |   |     |       | N/A |
| Church          | 4  | 3.2  | 120 | 96.0 | 1 | 0.8 | NS    |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| -No             |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Cyber-Cel/Web   |    |      |     |      |   |     |       |     |      |    |      |    |     |     |     |    |     |   |     |       |     |
| Church          | 10 | 3.3  | 289 | 96.0 | 2 | 0.5 | 0.948 |     |      |    |      |    |     | N/A |     |    |     |   |     |       | N/A |



**Table 33. Role of adult bystanders, by location**

| Description  | Total<br>(N=426) |      | Location                         |      |                         |      | X <sup>2</sup> , df, p-value |
|--|------------------|------|----------------------------------|------|-------------------------|------|------------------------------|
|  |                  |      | San Juan<br>Metropolitan<br>Area |      | Other<br>Municipalities |      |                              |
|  | N                | %    | N                                | %    | N                       | %    |                              |
| Teacher's role in bullying prevention                  |                  |      |                                  |      |                         |      |                              |
| Have seen them do something to stop bullying           |                  |      |                                  |      |                         |      |                              |
| Never  | 1                | 0.2  | 0                                | 0    | 1                       | 0.4  | 7.187, 6,<br>NS              |
| Rarely   | 178              | 41.8 | 86                               | 46   | 92                      | 38.5 |                              |
| Once in a while  | 76               | 17.8 | 30                               | 16   | 46                      | 19.2 |                              |
| Sometimes  | 55               | 12.9 | 28                               | 15   | 27                      | 11.3 |                              |
| Many times   | 55               | 12.9 | 20                               | 10.7 | 35                      | 14.6 |                              |
| Almost always  | 58               | 13.6 | 21                               | 11.2 | 37                      | 15.5 |                              |
| No response  | 3                | 0.7  | 2                                | 1.1  | 1                       | 0.4  |                              |
| Teachers talked to you about your bullying             |                  |      |                                  |      |                         |      |                              |
| No   | 41               | 9.6  | 14                               | 7.5  | 27                      | 11.3 | 8.724, 4,<br>N.S.            |
| Once   | 42               | 9.9  | 25                               | 13.4 | 17                      | 7.1  |                              |
| Several times  | 39               | 9.2  | 12                               | 6.4  | 27                      | 11.3 |                              |
| Not happened<br>this semester                          | 301              | 70.7 | 135                              | 72.2 | 166                     | 69.5 |                              |
| No response  | 3                | 0.7  | 1                                | 0.5  | 2                       | 0.8  |                              |
| How much teachers have done to stop bullying           |                  |      |                                  |      |                         |      |                              |
| Little or nothing                                      | 211              | 49.6 | 99                               | 53   | 112                     | 46.9 | 4.508, 5,<br>N.S.            |
| Very little  | 43               | 10.1 | 18                               | 9.6  | 25                      | 10.5 |                              |
| Some   | 42               | 9.9  | 18                               | 9.6  | 24                      | 10   |                              |
| Enough   | 52               | 12.2 | 19                               | 10.2 | 33                      | 13.8 |                              |
| A lot  | 74               | 17.4 | 31                               | 16.6 | 43                      | 18   |                              |
| No response  | 4                | 0.9  | 2                                | 1.1  | 2                       | 0.8  |                              |
| Teachers would feel dissatisfied if you bullied others |                  |      |                                  |      |                         |      |                              |
| Yes  | 207              | 48.6 | 87                               | 46.5 | 120                     | 50.2 | 2.012, 3,<br>N.S.            |
| No   | 134              | 31.5 | 64                               | 34.2 | 70                      | 29.3 |                              |
| I don't know   | 81               | 20   | 34                               | 18.2 | 47                      | 19.6 |                              |
| No response  | 4                | 0.9  | 2                                | 1.1  | 2                       | 0.8  |                              |
| Family adult's role in bullying prevention             |                  |      |                                  |      |                         |      |                              |
| Actions taken to stop your victimization               |                  |      |                                  |      |                         |      |                              |
| Have not called<br>or gone to<br>school                | 43               | 10.1 | 21                               | 11.2 | 22                      | 9.2  | 2.599, 5,<br>NS              |
| They called or<br>went to school<br>once               | 59               | 13.8 | 28                               | 15   | 31                      | 13   |                              |
| Called or went<br>to school several<br>times           | 37               | 8.7  | 17                               | 9.1  | 20                      | 8.4  |                              |
| No response  | 4                | 0.9  | 2                                | 1.1  | 2                       | 0.8  |                              |
| Has not<br>happened this<br>semester                   | 283              | 66.4 | 119                              | 63.6 | 164                     | 68.6 |                              |

|  |     |      |     |      |     |      |           |
|--|-----|------|-----|------|-----|------|-----------|
| Family adults' talked to you about your bullying             |     |      |     |      |     |      |           |
| No   | 29  | 6.8  | 13  | 7    | 16  | 6.7  |           |
| Once   | 39  | 9.2  | 18  | 9.6  | 21  | 8.8  |           |
| Several times  | 53  | 12.4 | 24  | 12.8 | 29  | 12.1 | 0.216, 4, |
| Not happened<br>this semester                                | 303 | 71.1 | 131 | 70.1 | 172 | 72   | N.S.      |
| No response  | 2   | 0.5  | 1   | 0.5  | 1   | 0.4  |           |
| Parents would feel dissapointed if you bullied others        |     |      |     |      |     |      |           |
| Yes  | 241 | 56.6 | 97  | 51.9 | 144 | 60.3 |           |
| No   | 113 | 26.5 | 50  | 26.7 | 63  | 26.4 | 6.137, 3, |
| I don't know   | 68  | 15.9 | 38  | 20.2 | 30  | 12.6 | N.S.      |
| No response  | 4   | 0.9  | 2   | 1.1  | 2   | 0.8  |           |
| Church leaders' role in bullying prevention                  |     |      |     |      |     |      |           |
| Church leaders would feel dissapointed if you bullied others |     |      |     |      |     |      |           |
| Yes  | 212 | 49.8 | 90  | 48.1 | 122 | 51   |           |
| No   | 127 | 29.8 | 54  | 28.9 | 73  | 30.5 | 1.358, 3, |
| I don't know   | 85  | 20   | 42  | 22.4 | 43  | 18   | N.S.      |
| No response  | 2   | 0.5  | 1   | 0.5  | 1   | 0.4  |           |

\*p<.05

**Table 34. Role of adult bystanders, by gender**

| Description  | Total   |      | Gender |      |      |      | X <sup>2</sup> , df,<br>p-value |
|--|---------|------|--------|------|------|------|---------------------------------|
|  | (N=426) |      | Female |      | Male |      |                                 |
|  | N       | %    | N      | %    | N    | %    |                                 |
| <b>Teacher's role in bullying prevention</b>           |         |      |        |      |      |      |                                 |
| Have seen them do something to stop bullying           |         |      |        |      |      |      |                                 |
| Never  | 1       | 0.2  | 0      | 0    | 1    | 0.5  | 3.117,<br>6, NS                 |
| Rarely   | 178     | 41.8 | 87     | 41.8 | 91   | 41.7 |                                 |
| Once in a while  | 76      | 17.8 | 38     | 18.3 | 38   | 17.4 |                                 |
| Sometimes  | 55      | 12.9 | 23     | 11.1 | 32   | 14.7 |                                 |
| Many times   | 55      | 12.9 | 30     | 14.4 | 25   | 11.5 |                                 |
| Almost always  | 58      | 13.6 | 29     | 13.9 | 29   | 13.3 |                                 |
| No response  | 3       | 0.7  | 1      | 0.5  | 2    | 0.9  |                                 |
| Teachers talked to you about your bullying             |         |      |        |      |      |      |                                 |
| No   | 41      | 9.6  | 19     | 9.1  | 22   | 10.1 | 3.988,<br>4, N.S.               |
| Once   | 42      | 9.9  | 16     | 7.7  | 26   | 11.9 |                                 |
| Several times  | 39      | 9.2  | 23     | 11.1 | 16   | 7.3  |                                 |
| Not happened this semester                             | 301     | 70.7 | 149    | 71.6 | 152  | 69.7 |                                 |
| No response  | 3       | 0.7  | 1      | 0.5  | 2    | 0.9  |                                 |
| How much teachers have done to stop bullying           |         |      |        |      |      |      |                                 |
| Little or nothing                                      | 211     | 49.6 | 97     | 46.6 | 114  | 52.2 | 9.560,<br>6, N.S.               |
| Very little  | 43      | 10.1 | 18     | 8.7  | 25   | 11.5 |                                 |
| Some   | 42      | 9.9  | 18     | 8.7  | 24   | 11   |                                 |
| Enough   | 52      | 12.2 | 34     | 16.3 | 18   | 8.3  |                                 |
| A lot  | 74      | 17.4 | 40     | 19.2 | 34   | 15.6 |                                 |
| No response  | 4       | 0.9  | 1      | 0.5  | 3    | 1.4  |                                 |
| Teachers would feel dissatisfied if you bullied others |         |      |        |      |      |      |                                 |
| Yes  | 207     | 48.6 | 104    | 50   | 103  | 47.2 | 8.269,<br>3, N.S.               |
| No   | 134     | 31.5 | 54     | 26   | 80   | 36.7 |                                 |
| I don't know   | 81      | 20   | 48     | 23   | 33   | 15.1 |                                 |
| No response  | 4       | 0.9  | 2      | 1    | 2    | 0.9  |                                 |
| <b>Family adult's role in bullying prevention</b>      |         |      |        |      |      |      |                                 |
| Actions taken to stop your victimization               |         |      |        |      |      |      |                                 |
| Have not called or gone to school                      | 43      | 10.1 | 19     | 9.1  | 24   | 11   | 5.333,<br>5, NS                 |
| They called or went to school once                     | 59      | 13.8 | 25     | 12   | 34   | 15.6 |                                 |
| Called or went to school several times                 | 37      | 8.7  | 24     | 11.6 | 14   | 6.4  |                                 |
| No response  | 4       | 0.9  | 1      | 0.5  | 2    | 0.9  |                                 |
| Has not happened this semester                         | 283     | 66.4 | 139    | 66.8 | 144  | 66.1 |                                 |
| Family adults' talked to you about your bullying       |         |      |        |      |      |      |                                 |
| No   | 29      | 6.8  | 13     | 6.2  | 16   | 7.3  | 0.766,                          |
| Once   | 39      | 9.2  | 17     | 8.2  | 22   | 10.1 | 4, N.S.                         |

|  |     |      |     |      |     |      |                         |
|--|-----|------|-----|------|-----|------|-------------------------|
| Several times  | 53  | 12.4 | 27  | 13   | 26  | 11.9 |                         |
| Not happened this semester                                   | 303 | 71.1 | 150 | 72.1 | 153 | 70.2 |                         |
| No response  | 2   | 0.5  | 1   | 0.5  | 1   | 0.5  |                         |
| Parents would feel dissapointed if you bullied others        |     |      |     |      |     |      |                         |
| Yes  | 241 | 56.6 | 136 | 65.4 | 105 | 48.2 | 14.997,<br>3,<br>0.005* |
| No   | 113 | 26.5 | 41  | 19.7 | 72  | 33   |                         |
| I don't know   | 68  | 15.9 | 30  | 14.4 | 38  | 55.6 |                         |
| No response  | 4   | 0.9  | 1   | 0.5  | 3   | 1.4  |                         |
| Church leaders' role in bullying prevention                  |     |      |     |      |     |      |                         |
| Church leaders would feel dissapointed if you bullied others |     |      |     |      |     |      |                         |
| Yes  | 212 | 49.8 | 113 | 54.3 | 99  | 45.4 | 13.513,<br>3,<br>0.009* |
| No   | 127 | 29.8 | 45  | 21.6 | 82  | 37.6 |                         |
| I don't know   | 85  | 20   | 49  | 23.5 | 36  | 16.5 |                         |
| No response  | 2   | 0.5  | 1   | 0.5  | 1   | 0.5  |                         |

\*p<.05

\*\*P<0.001

**Table 35. Role of adult bystanders, by age of the participant**

| Description  | Total   |      | Age (in years) |      |        |      |        |      | X <sup>2</sup> , df, p-value |
|--|---------|------|----------------|------|--------|------|--------|------|------------------------------|
|  | (N=426) |      | 10 y/o         |      | 11 y/o |      | 12 y/o |      |                              |
|  | N       | %    | N              | %    | N      | %    | N      | %    |                              |
| Teacher's role in bullying prevention                  |         |      |                |      |        |      |        |      |                              |
| Have seen them do something to stop bullying           |         |      |                |      |        |      |        |      |                              |
| Never  | 1       | 0.2  | 0              | 0    | 1      | 0.6  | 0      | 0    | 10.120,<br>12, NS            |
| Rarely   | 178     | 41.8 | 56             | 42.4 | 71     | 46.1 | 51     | 36.7 |                              |
| Once in a while  | 76      | 17.8 | 20             | 15.2 | 30     | 19.5 | 25     | 18   |                              |
| Sometimes  | 55      | 12.9 | 17             | 12.9 | 17     | 11   | 21     | 15.1 |                              |
| Many times   | 55      | 12.9 | 16             | 12.1 | 20     | 13   | 19     | 13.7 |                              |
| Almost always  | 58      | 13.6 | 22             | 16.7 | 15     | 9.7  | 21     | 15.1 |                              |
| No response  | 3       | 0.7  | 1              | 0.8  | 0      | 0    | 2      | 1.4  |                              |
| Teachers talked to you about your bullying             |         |      |                |      |        |      |        |      |                              |
| No   | 41      | 9.6  | 15             | 11.4 | 13     | 8.4  | 13     | 9.4  | 6.692, 8,<br>NS              |
| Once   | 42      | 9.9  | 11             | 8.3  | 19     | 12.3 | 12     | 8.6  |                              |
| Several times  | 39      | 9.2  | 8              | 6.1  | 17     | 11   | 13     | 9.4  |                              |
| Not happened this semester                             | 301     | 70.7 | 96             | 72.7 | 105    | 68.2 | 100    | 71.9 |                              |
| No response  | 3       | 0.7  | 2              | 1.5  | 0      | 0    | 1      | 0.7  |                              |
| How much teachers have done to stop bullying           |         |      |                |      |        |      |        |      |                              |
| Little or nothing                                      | 211     | 49.6 | 70             | 53   | 81     | 52.4 | 59     | 42.4 | 20.559,<br>10, NS            |
| Very little  | 43      | 10.1 | 7              | 5.3  | 18     | 11.7 | 18     | 12.9 |                              |
| Some   | 42      | 9.9  | 7              | 5.3  | 18     | 11.7 | 17     | 12.2 |                              |
| Enough   | 52      | 12.2 | 19             | 14.4 | 18     | 11.7 | 15     | 10.8 |                              |
| A lot  | 74      | 17.4 | 27             | 20.5 | 19     | 12.3 | 28     | 20.1 |                              |
| No response  | 4       | 0.9  | 2              | 1.5  | 0      | 0    | 2      | 1.4  |                              |
| Teachers would feel dissapointed if you bullied others |         |      |                |      |        |      |        |      |                              |
| Yes  | 207     | 48.6 | 56             | 42.4 | 78     | 50.6 | 73     | 52.5 | 8.700, 7,<br>NS              |
| No   | 134     | 31.5 | 49             | 37.1 | 44     | 28.6 | 40     | 28.8 |                              |
| I don't know   | 81      | 20   | 25             | 18.8 | 32     | 20.8 | 24     | 17.3 |                              |
| No response  | 4       | 0.9  | 2              | 1.5  | 0      | 0    | 2      | 1.4  |                              |
| Family adult's role in bullying prevention             |         |      |                |      |        |      |        |      |                              |
| Actions taken to stop your victimization               |         |      |                |      |        |      |        |      |                              |
| Have not called or gone to school                      | 43      | 10.1 | 16             | 12.1 | 9      | 5.8  | 17     | 12.2 | 13.294,<br>10, NS            |
| They called or went to school once                     | 59      | 13.8 | 19             | 14.4 | 19     | 12.3 | 21     | 15.1 |                              |
| Called or went to school several times                 | 37      | 8.7  | 11             | 8.3  | 19     | 12.3 | 7      | 5    |                              |
| No response  | 4       | 0.9  | 2              | 1.5  | 1      | 0.6  | 1      | 0.7  |                              |
| Has not happened this semester                         | 283     | 66.4 | 84             | 63.6 | 106    | 68.8 | 93     | 66.9 |                              |
| Family adults' talked to you about your bullying       |         |      |                |      |        |      |        |      |                              |
| No   | 29      | 6.8  | 8              | 6.1  | 14     | 9.1  | 7      | 5    | 9.939, 8,<br>NS              |
| Once   | 39      | 9.2  | 9              | 6.8  | 18     | 11.7 | 12     | 8.6  |                              |



|  |     |      |     |      |    |      |     |      |           |
|--|-----|------|-----|------|----|------|-----|------|-----------|
| Several times  | 53  | 12.4 | 14  | 10.6 | 25 | 16.2 | 14  | 10.1 |           |
| Not happened<br>this semester                                | 303 | 71.1 | 100 | 75.8 | 97 | 63   | 105 | 75.5 |           |
| No response  | 2   | 0.5  | 1   | 0.8  | 0  | 0    | 1   | 0.7  |           |
| Parents would feel dissapointed if you bullied others        |     |      |     |      |    |      |     |      |           |
| Yes  | 241 | 56.6 | 63  | 47.7 | 90 | 58.4 | 88  | 63.3 |           |
| No   | 113 | 26.5 | 40  | 30.3 | 39 | 25.3 | 33  | 23.7 | 12.426,   |
| I don't know   | 68  | 15.9 | 26  | 19.6 | 25 | 16.2 | 17  | 12.2 | 7, NS     |
| No response  | 4   | 0.9  | 3   | 2.3  | 0  | 0    | 1   | 0.7  |           |
| Church leaders' role in bullying prevention                  |     |      |     |      |    |      |     |      |           |
| Church leaders would feel dissapointed if you bullied others |     |      |     |      |    |      |     |      |           |
| Yes  | 212 | 49.8 | 59  | 44.7 | 82 | 53.2 | 71  | 51.1 |           |
| No   | 127 | 29.8 | 45  | 34.1 | 45 | 29.2 | 36  | 25.9 | 5.606, 7, |
| I don't know   | 85  | 20   | 27  | 20.5 | 27 | 16.4 | 31  | 22.1 | NS        |
| No response  | 2   | 0.5  | 1   | 0.8  | 0  | 0    | 1   | 0.7  |           |

\*p<.05

\*\*P<0.001

**Table 36. Role of adult bystanders, by church attendance**

| Description  | Total   |      | Church Attendance |      |    |      | X <sup>2</sup> , df, p-value |
|--|---------|------|-------------------|------|----|------|------------------------------|
|  | (N=426) |      | Yes               |      | No |      |                              |
|  | N       | %    | N                 | %    | N  | %    |                              |
| <b>Teacher's role in bullying prevention</b>           |         |      |                   |      |    |      |                              |
| Have seen them do something to stop bullying           |         |      |                   |      |    |      |                              |
| Never  | 1       | 0.2  | 0                 | 0    | 1  | 0.4  | 7.187, 6,<br>NS              |
| Rarely   | 178     | 41.8 | 86                | 46   | 92 | 38.5 |                              |
| Once in a while  | 76      | 17.8 | 30                | 16   | 46 | 19.2 |                              |
| Sometimes  | 55      | 12.9 | 28                | 15   | 27 | 11.3 |                              |
| Many times   | 55      | 12.9 | 20                | 10.7 | 35 | 14.6 |                              |
| Almost always  | 58      | 13.6 | 21                | 11.2 | 37 | 15.5 |                              |
| No response  | 3       | 0.7  | 2                 | 1.1  | 1  | 0.4  |                              |
| Teachers talked to you about your bullying             |         |      |                   |      |    |      |                              |
| No   | 41      | 9.6  | 31                | 10.3 | 10 | 8    | 1.383, 4,<br>NS              |
| Once   | 42      | 9.9  | 32                | 10.6 | 10 | 8    |                              |
| Several times  | 39      | 9.2  | 27                | 9    | 12 | 9.6  |                              |
| Not happened this semester                             | 301     | 70.7 | 209               | 69.4 | 92 | 73.6 |                              |
| No response  | 3       | 0.7  | 2                 | 0.7  | 1  | 0.8  |                              |
| How much teachers have done to stop bullying           |         |      |                   |      |    |      |                              |
| Little or nothing                                      | 211     | 49.6 | 145               | 48   | 66 | 52.7 | 2.301, 5,<br>NS              |
| Very little  | 43      | 10.1 | 33                | 11   | 10 | 8    |                              |
| Some   | 42      | 9.9  | 30                | 10   | 12 | 9.6  |                              |
| Enough   | 52      | 12.2 | 35                | 11.6 | 17 | 13.6 |                              |
| A lot  | 74      | 17.4 | 55                | 18.3 | 19 | 15.2 |                              |
| No response  | 4       | 0.9  | 3                 | 1    | 1  | 0.8  |                              |
| Teachers would feel dissapointed if you bullied others |         |      |                   |      |    |      |                              |
| Yes  | 207     | 48.6 | 145               | 48.2 | 62 | 49.6 | 2.616, 3,<br>NS              |
| No   | 134     | 31.5 | 95                | 31.6 | 39 | 31.2 |                              |
| I don't know   | 81      | 20   | 58                | 19.3 | 23 | 18.3 |                              |
| No response  | 4       | 0.9  | 3                 | 1    | 1  | 0.8  |                              |
| Family adult's role in bullying prevention             |         |      |                   |      |    |      |                              |
| Actions taken to stop your victimization               |         |      |                   |      |    |      |                              |
| Have not called or gone to school                      | 43      | 10.1 | 32                | 10.6 | 11 | 8.8  | 7.464, 5,<br>NS              |
| They called or went to school once                     | 59      | 13.8 | 47                | 15.6 | 12 | 9.6  |                              |
| Called or went to school several times                 | 37      | 8.7  | 29                | 9.6  | 9  | 7.2  |                              |
| No response  | 4       | 0.9  | 2                 | 0.7  | 1  | 0.8  |                              |
| Has not happened this semester                         | 283     | 66.4 | 191               | 63.5 | 92 | 73.6 |                              |
| Family adults' talked to you about your bullying       |         |      |                   |      |    |      |                              |
| No   | 29      | 6.8  | 21                | 7    | 8  | 6.4  | 4.318, 4,<br>NS              |
| Once   | 39      | 9.2  | 29                | 9.6  | 10 | 8    |                              |

|  |     |      |     |      |    |      |           |
|--|-----|------|-----|------|----|------|-----------|
| Several times  | 53  | 12.4 | 43  | 14.3 | 8  | 10   |           |
| Not happened<br>this semester                                | 303 | 71.1 | 207 | 68.8 | 96 | 76.8 |           |
| No response  | 2   | 0.5  | 1   | 0.3  | 1  | 0.8  |           |
| Parents would feel dissapointed if you bullied others        |     |      |     |      |    |      |           |
| Yes  | 241 | 56.6 | 169 | 56.1 | 72 | 57.6 |           |
| No   | 113 | 26.5 | 81  | 26.9 | 32 | 25.6 | 0.550, 3, |
| I don't know   | 68  | 15.9 | 48  | 15.8 | 20 | 16   | NS        |
| No response  | 4   | 0.9  | 3   | 1    | 1  | 0.8  |           |
| Church leaders' role in bullying prevention                  |     |      |     |      |    |      |           |
| Church leaders would feel dissapointed if you bullied others |     |      |     |      |    |      |           |
| Yes  | 212 | 49.8 | 151 | 50.2 | 61 | 48.8 |           |
| No   | 127 | 29.8 | 91  | 30.2 | 36 | 28.8 | 5.346, 3, |
| I don't know   | 85  | 20   | 58  | 19.3 | 27 | 21.5 | NS        |
| No response  | 2   | 0.5  | 1   | 0.3  | 1  | 0.8  |           |

\*p<.05

\*\*P<0.001

**Table 37. Parental response to children's victimization**

|  |     | Parent has contacted the school about his/her child's victimization |      |     |      | $X^2$ , df, p-value  |
|--|-----|---|------|-----|------|----------------------|
|  |     | Yes   |      | No  |      |                      |
|  |     | N   | %    | N   | %    |                      |
| Child has told parent about victimization                  |     |   |      |     |      |                      |
|  | Yes | 26  | 53.1 | 23  | 46.9 | 29.612, 2,<br>0.000* |
|  | No  | 70  | 18.7 | 305 | 81.3 |                      |
| Child is a victim  |     |   |      |     |      |                      |
|  | Yes | 32  | 35.6 | 58  | 64.4 | 10.777, 1,<br>0.001* |
|  | No  | 64  | 19.2 | 269 | 80.8 |                      |
| Child is a victim, and has told parent about victimization |     |   |      |     |      |                      |
|  | Yes | 13  | 61.9 | 8   | 38.1 | 19.529, 1,<br>0.000* |
|  | No  | 83  | 20.5 | 321 | 79.5 |                      |

\* $p \leq 0.001$

**Table 38. Description of bullying incidents, by location**

| Description                    | Location      |      |                            |      |                      |      | X <sup>2</sup> , df, p-value |
|--------------------------------|---------------|------|----------------------------|------|----------------------|------|------------------------------|
|                                | Total (N=426) |      | San Juan Metropolitan Area |      | Other Municipalities |      |                              |
|                                | N             | %    | N                          | %    | N                    | %    |                              |
| <b>Grade of bullies</b>        |               |      |                            |      |                      |      |                              |
| Same homeroom                  | 63            | 14.8 | 35                         | 18.7 | 28                   | 11.7 | 7.447, 6, NS                 |
| Same grade, different homeroom | 36            | 8.5  | 15                         | 8    | 21                   | 8.8  |                              |
| Higher grade                   | 22            | 5.2  | 11                         | 5.9  | 11                   | 4.6  |                              |
| Lower grade                    | 7             | 1.6  | 3                          | 1.6  | 4                    | 1.7  |                              |
| Different grades               | 36            | 8.5  | 18                         | 9.6  | 18                   | 7.5  |                              |
| No response                    | 1             | 0.2  | 1                          | 0.5  | 0                    | 0    |                              |
| Has not happened this semester | 261           | 61.3 | 104                        | 55.6 | 157                  | 65.7 |                              |
| <b>Gender of bullies</b>       |               |      |                            |      |                      |      |                              |
| One girl                       | 47            | 11   | 24                         | 12.8 | 23                   | 9.6  | 6.461, 7, NS                 |
| One boy                        | 42            | 9.9  | 21                         | 11.2 | 21                   | 8.8  |                              |
| 2+ girls                       | 37            | 8.7  | 17                         | 9.1  | 20                   | 8.4  |                              |
| 2+ boys                        | 13            | 3.1  | 3                          | 1.6  | 10                   | 4.2  |                              |
| Group of boys and girls        | 54            | 12.7 | 26                         | 13.9 | 28                   | 11.7 |                              |
| No response                    | 1             | 0.2  | 1                          | 0.5  | 0                    | 0    |                              |
| Has not happened this semester | 232           | 54.5 | 95                         | 50.8 | 137                  | 57.3 |                              |
| <b>Quantity of bullies</b>     |               |      |                            |      |                      |      |                              |
| 1 student                      | 66            | 15.5 | 35                         | 18.7 | 31                   | 13   | 6.454, 6, NS                 |
| 2-3 students                   | 62            | 14.6 | 28                         | 15   | 34                   | 14.2 |                              |
| 4-9 students                   | 27            | 6.3  | 13                         | 7    | 14                   | 5.9  |                              |
| 9+ students                    | 10            | 2.3  | 5                          | 2.7  | 5                    | 2.1  |                              |
| Different students             | 19            | 4.5  | 10                         | 5.3  | 9                    | 3.8  |                              |
| No response                    | 1             | 0.2  | 1                          | 0.5  | 0                    | 0    |                              |
| Has not happened this semester | 241           | 56.6 | 95                         | 50.8 | 146                  | 61.1 |                              |
| <b>Length of victimization</b> |               |      |                            |      |                      |      |                              |
| 1-2 weeks                      | 57            | 13.4 | 33                         | 17.6 | 24                   | 10   | 14.746, 6, 0.022*            |
| 1 month                        | 18            | 4.2  | 11                         | 5.9  | 7                    | 2.9  |                              |
| 6 months                       | 11            | 2.6  | 8                          | 4.3  | 3                    | 1.3  |                              |
| Nearly 1 year                  | 21            | 4.9  | 8                          | 4.3  | 13                   | 5.4  |                              |
| Several years                  | 32            | 7.5  | 10                         | 5.3  | 22                   | 9.2  |                              |
| No response                    | 3             | 0.7  | 2                          | 1.1  | 1                    | 0.4  |                              |
| Has not happened               | 284           | 66.7 | 115                        | 61.5 | 169                  | 70.7 |                              |

| this semester                         |     |      |     |      |     |      |                     |
|---------------------------------------|-----|------|-----|------|-----|------|---------------------|
| Location of victimization             |     |      |     |      |     |      |                     |
| School Park                           | 53  | 12.4 | 26  | 13.9 | 27  | 11.3 | 1.970, 2,<br>NS     |
| School hallway or<br>staircase        | 43  | 10.1 | 17  | 9.1  | 26  | 10.9 | 1.629, 2,<br>NS     |
| Classroom                             | 60  | 14.1 | 26  | 13.9 | 34  | 14.2 | 1.286, 2,<br>NS     |
| Classroom, no<br>teacher present      | 44  | 10.3 | 19  | 10.2 | 25  | 10.5 | 1.288, 2,<br>NS     |
| School restroom                       | 27  | 6.3  | 12  | 6.4  | 15  | 6.3  | 1.286, 2,<br>NS     |
| Physical education<br>class           | 33  | 7.7  | 11  | 5.9  | 22  | 9.2  | 2.862, 2,<br>NS     |
| Lunchroom                             | 29  | 6.8  | 10  | 5.3  | 19  | 7.9  | 2.370, 2,<br>NS     |
| To/from school                        | 18  | 4.2  | 13  | 7    | 5   | 2.1  | 7.462, 2,<br>0.024* |
| Schoolbus stop                        | 10  | 2.4  | 5   | 2.7  | 5   | 2.1  | 1.432, 2,<br>NS     |
| Inside schoolbus                      | 5   | 1.2  | 3   | 1.6  | 2   | 0.8  | 1.839, 2,<br>NS     |
| Another place at<br>school            | 36  | 8.5  | 11  | 5.9  | 25  | 10.5 | 4.068, 2,<br>NS     |
| Not at school                         | 38  | 8.9  | 18  | 9.6  | 20  | 8.4  | 1.501, 2,<br>NS     |
| Who have you told about victimization |     |      |     |      |     |      |                     |
| No one                                | 46  | 10.8 | 22  | 11.8 | 24  | 10   | 1.627, 2,<br>NS     |
| Homeroom teacher                      | 36  | 8.5  | 20  | 10.7 | 16  | 6.7  | 3.501, 2,<br>NS     |
| Other school adult                    | 20  | 4.7  | 10  | 5.3  | 10  | 4.2  | 1.612, 2,<br>NS     |
| Parents                               | 49  | 11.5 | 20  | 10.7 | 29  | 12.1 | 1.477, 2,<br>NS     |
| Siblings                              | 13  | 3.1  | 6   | 3.2  | 7   | 2.9  | 1.312, 2,<br>NS     |
| Friends                               | 46  | 10.8 | 21  | 11.2 | 25  | 10.5 | 1.356, 2,<br>NS     |
| Another person                        | 12  | 2.8  | 9   | 4.8  | 3   | 1.3  | 6.173, 2,<br>0.046* |
| Fear of bullying victimization        |     |      |     |      |     |      |                     |
| Never                                 | 272 | 63.9 | 127 | 47.3 | 145 | 60.7 |                     |
| A few times                           | 62  | 14.6 | 24  | 12.8 | 38  | 15.9 |                     |
| Sometimes                             | 35  | 8.2  | 12  | 6.4  | 23  | 9.6  |                     |
| Several times                         | 29  | 6.8  | 10  | 5.3  | 19  | 7.9  | 6.645, 6,<br>N.S.   |
| Frequently                            | 8   | 1.9  | 4   | 2.1  | 4   | 1.7  |                     |
| Very frequently                       | 16  | 3.8  | 8   | 4.3  | 8   | 3.3  |                     |
| No response                           | 4   | 0.9  | 2   | 1.1  | 2   | 0.8  |                     |

|   |     |      |    |      |     |      |                   |
|---|-----|------|----|------|-----|------|-------------------|
| Involvement as a bystander                |     |      |    |      |     |      |                   |
| Defender                                  | 103 | 46.8 | 45 | 24.7 | 58  | 25   | 0.047, 1,<br>NS   |
| Reinforcer                                | 32  | 14.5 | 18 | 9.9  | 14  | 14   | 1.905, 1,<br>NS   |
| Passive                                   | 57  | 25.9 | 28 | 15.4 | 29  | 29   | 0.547, 1,<br>NS   |
| Disengaged                                | 214 | 97.3 | 90 | 49.5 | 124 | 124  | 1.186, 1,<br>NS   |
| Potential involvement in bullying others  |     |      |    |      |     |      |                   |
| Yes                                       | 109 | 25.6 | 47 | 25.1 | 62  | 25.9 |                   |
| Maybe                                     | 35  | 8.2  | 17 | 9.1  | 18  | 7.5  |                   |
| I don't know                              | 39  | 9.2  | 16 | 8.6  | 23  | 9.6  |                   |
| No, I don't think so                      | 24  | 5.6  | 14 | 7.5  | 10  | 4.2  | 4.210, 6,<br>N.S. |
| No  | 105 | 24.6 | 45 | 24.1 | 60  | 25.1 |                   |
| Definitely no                             | 111 | 26.1 | 46 | 24.6 | 65  | 27.2 |                   |
| No response                               | 3   | 0.7  | 2  | 1.1  | 1   | 0.4  |                   |
| Feelings towards witnessing victimization |     |      |    |      |     |      |                   |
| Probably deserves it                      | 111 | 26.1 | 54 | 28.9 | 57  | 23.8 |                   |
| Don't feel anything                       | 64  | 15   | 32 | 17.1 | 32  | 13.4 |                   |
| Feel a little sad for him/her             | 87  | 20.4 | 42 | 22.5 | 45  | 18.8 | 7.169, 4,<br>NS   |
| Feel sad, and want to help him/her        | 160 | 37.6 | 57 | 30.5 | 103 | 43.1 |                   |
| No response                               | 4   | 0.9  | 2  | 1.1  | 2   | 0.8  |                   |

\*p<.05

**Table 39. Description of bullying incidents, by gender**

| Description                      | Total<br>(N=426) |      | Gender |      |      |      | X <sup>2</sup> , df, p-value |
|----------------------------------|------------------|------|--------|------|------|------|------------------------------|
|                                  |                  |      | Female |      | Male |      |                              |
|                                  | N                | %    | N      | %    | N    | %    |                              |
| <b>Grade of bullies</b>          |                  |      |        |      |      |      |                              |
| Same homeroom                    | 63               | 14.8 | 38     | 18.3 | 25   | 11.5 | 9.705, 6, NS                 |
| Same grade, different homeroom   | 36               | 8.5  | 22     | 10.6 | 14   | 6.4  |                              |
| Higher grade                     | 22               | 5.2  | 8      | 3.8  | 14   | 6.4  |                              |
| Lower grade                      | 7                | 1.6  | 2      | 1    | 5    | 2.3  |                              |
| Different grades                 | 36               | 8.5  | 16     | 7.7  | 20   | 9.2  |                              |
| No response                      | 1                | 0.2  | 0      | 0    | 1    | 0.5  |                              |
| Has not happened                 | 261              | 61.3 | 122    | 58.7 | 139  | 63.8 |                              |
| <b>Gender of bullies</b>         |                  |      |        |      |      |      |                              |
| One girl                         | 47               | 11   | 30     | 14.4 | 17   | 7.8  | 21.610, 7, 0.003*            |
| One boy                          | 42               | 9.9  | 17     | 8.2  | 25   | 11.5 |                              |
| 2+ girls                         | 37               | 8.7  | 22     | 10.6 | 15   | 6.9  |                              |
| 2+ boys                          | 13               | 3.1  | 6      | 2.9  | 7    | 3.2  |                              |
| Group of boys and girls          | 54               | 12.7 | 27     | 12.9 | 27   | 12.4 |                              |
| No response                      | 1                | 0.2  | 0      | 0    | 1    | 0.5  |                              |
| Has not happened                 | 232              | 54.5 | 106    | 51   | 126  | 57.8 |                              |
| <b>Quantity of bullies</b>       |                  |      |        |      |      |      |                              |
| 1 student                        | 66               | 15.5 | 38     | 18.3 | 28   | 12.8 | 9.382, 6, NS                 |
| 2-3 students                     | 62               | 14.6 | 37     | 17.8 | 25   | 11.5 |                              |
| 4-9 students                     | 27               | 6.3  | 11     | 5.3  | 16   | 7.3  |                              |
| 9+ students                      | 10               | 2.3  | 3      | 1.4  | 7    | 3.2  |                              |
| Different students               | 19               | 4.5  | 10     | 4.8  | 9    | 4.1  |                              |
| No response                      | 1                | 0.2  | 0      | 0    | 1    | 0.5  |                              |
| Has not happened                 | 241              | 56.6 | 109    | 52.4 | 132  | 60.6 |                              |
| <b>Length of victimization</b>   |                  |      |        |      |      |      |                              |
| 1-2 weeks                        | 57               | 13.4 | 31     | 14.9 | 26   | 11.9 | 12.720, 6, 0.048*            |
| 1 month                          | 18               | 4.2  | 4      | 1.9  | 14   | 6.4  |                              |
| 6 months                         | 11               | 2.6  | 6      | 2.9  | 5    | 2.3  |                              |
| Nearly 1 year                    | 21               | 4.9  | 11     | 5.3  | 10   | 4.6  |                              |
| Several years                    | 32               | 7.5  | 21     | 10.1 | 11   | 5    |                              |
| No response                      | 3                | 0.7  | 0      | 0    | 3    | 1.4  |                              |
| Has not happened                 | 284              | 66.7 | 135    | 64.9 | 149  | 68.3 |                              |
| <b>Location of victimization</b> |                  |      |        |      |      |      |                              |
| School Park                      | 53               | 12.4 | 21     | 10.1 | 32   | 14.7 | 3.061, 2, NS                 |
| School hallway or staircase      | 43               | 10.1 | 28     | 13.5 | 15   | 6.9  | 5.966, 2, 0.051*             |
| Classroom                        | 60               | 14.1 | 41     | 19.7 | 19   | 8.7  | 11.471, 2, 0.003*            |



|   |     |      |     |      |     |      |                       |
|---|-----|------|-----|------|-----|------|-----------------------|
| Classroom, no teacher                     | 44  | 10.3 | 26  | 12.5 | 18  | 8.3  | 2.980, 2, NS          |
| School restroom                           | 27  | 6.3  | 17  | 8.2  | 10  | 4.6  | 3.225, 2, NS          |
| Physical education class                  | 33  | 7.7  | 18  | 8.7  | 15  | 6.9  | 1.406, 2, NS          |
| Lunchroom                                 | 29  | 6.8  | 18  | 8.7  | 11  | 5    | 3.103, 2, NS          |
| To/from school                            | 18  | 4.2  | 8   | 3.8  | 10  | 4.6  | 1.108, 2, NS          |
| Schoolbus stop                            | 10  | 2.4  | 4   | 1.9  | 6   | 2.8  | 1.271, 2, NS          |
| Inside schoolbus                          | 5   | 1.2  | 3   | 1.4  | 2   | 0.9  | 1.203, 2, NS          |
| Another place at school                   | 36  | 8.5  | 22  | 10.6 | 14  | 6.4  | 3.288, 2, NS          |
| Not at school                             | 38  | 8.9  | 23  | 11.1 | 15  | 6.9  | 3.198, 2, NS          |
| Who have you told about victimization     |     |      |     |      |     |      |                       |
| No one                                    | 46  | 10.8 | 21  | 10.1 | 25  | 11.5 | 1.180, 2, NS          |
| Homeroom teacher                          | 36  | 8.5  | 20  | 9.6  | 16  | 7.3  | 1.645, 2, NS          |
| Other school adult                        | 20  | 4.7  | 8   | 3.8  | 12  | 5.5  | 1.628, 2, NS          |
| Parents                                   | 49  | 11.5 | 31  | 14.9 | 18  | 8.3  | 5.505, 2, NS          |
| Siblings                                  | 13  | 3.1  | 9   | 4.3  | 4   | 1.8  | 3.166, 2, NS          |
| Friends                                   | 46  | 10.8 | 30  | 14.4 | 16  | 7.3  | 6.425, 2,<br>0.040*   |
| Another person                            | 12  | 2.8  | 6   | 2.9  | 6   | 2.8  | 0.962, 2, NS          |
| Fear of bullying victimization            |     |      |     |      |     |      |                       |
| Never                                     | 272 | 63.9 | 120 | 57.6 | 152 | 69.7 |                       |
| A few times                               | 62  | 14.6 | 37  | 17.8 | 25  | 11.5 |                       |
| Sometimes                                 | 35  | 8.2  | 16  | 7.7  | 19  | 8.7  | 12.187, 6,<br>N.S.    |
| Several times                             | 29  | 6.8  | 19  | 9.1  | 10  | 4.6  |                       |
| Frequently                                | 8   | 1.9  | 6   | 2.9  | 2   | 0.9  |                       |
| Very frequently                           | 16  | 3.8  | 9   | 4.3  | 7   | 3.2  |                       |
| No response                               | 4   | 0.9  | 1   | 0.5  | 3   | 1.4  |                       |
| Involvement as a bystander                |     |      |     |      |     |      |                       |
| Defender                                  | 103 | 46.8 | 62  | 30.8 | 41  | 19.8 | 6.585, 1,<br>0.007*   |
| Reinforcer                                | 32  | 14.5 | 12  | 6    | 20  | 9.7  | 1.923, 1, NS          |
| Passive                                   | 57  | 25.9 | 30  | 14.9 | 27  | 13   | 0.300, 1, NS          |
| Disengaged                                | 214 | 97.3 | 96  | 47.8 | 118 | 57   | 3.494, 1,<br>0.038*   |
| Potential involvement in bullying others  |     |      |     |      |     |      |                       |
| Yes                                       | 109 | 25.6 | 41  | 19.7 | 68  | 31.1 |                       |
| Maybe                                     | 35  | 8.2  | 19  | 9.1  | 16  | 7.3  |                       |
| I don't know                              | 39  | 9.2  | 22  | 10.6 | 17  | 7.8  | 12.686, 7,<br>N.S.    |
| No, I don't think so                      | 24  | 5.6  | 14  | 6.7  | 10  | 4.6  |                       |
| No  | 105 | 24.6 | 47  | 22.6 | 58  | 26.6 |                       |
| Definitely no                             | 111 | 26.1 | 64  | 30.8 | 47  | 21.6 |                       |
| No response                               | 3   | 0.7  | 1   | 0.5  | 2   | 0.9  |                       |
| Feelings towards witnessing victimization |     |      |     |      |     |      |                       |
| Probably deserves it                      | 111 | 26.1 | 39  | 18.8 | 72  | 33   |                       |
| Don't feel anything                       | 64  | 15   | 24  | 11.5 | 40  | 18.3 | 20.681, 4,<br>0.000** |
| Feel a little sad f                       | 87  | 20.4 | 54  | 26   | 33  | 15.1 |                       |
| Feel sad, want to help                    | 160 | 37.6 | 89  | 42.8 | 71  | 32.6 |                       |
| No response                               | 4   | 0.9  | 2   | 1    | 2   | 0.9  |                       |

\*p<.05 \*\*P<0.001

**Table 40. Description of bullying incidents, by age of the participant**

| Description                          | Total<br>(N=426) |      | Age             |      |                 |      |                 |      | X <sup>2</sup> , df,<br>p-<br>value |
|--------------------------------------|------------------|------|-----------------|------|-----------------|------|-----------------|------|-------------------------------------|
|                                      |                  |      | 10 years<br>old |      | 11 years<br>old |      | 12 years<br>old |      |                                     |
|                                      | N                | %    | N               | %    | N               | %    | N               | %    |                                     |
| <b>Grade of bullies</b>              |                  |      |                 |      |                 |      |                 |      |                                     |
| Same homeroom                        | 63               | 14.8 | 24              | 18.2 | 23              | 14.9 | 16              | 11.5 | 13.53<br>7, 12,<br>NS               |
| Same grade,<br>different<br>homeroom | 36               | 8.5  | 8               | 6.1  | 19              | 12.3 | 9               | 6.5  |                                     |
| Higher grade                         | 22               | 5.2  | 8               | 6.1  | 5               | 3.2  | 9               | 6.5  |                                     |
| Lower grade                          | 7                | 1.6  | 2               | 1.5  | 3               | 1.9  | 2               | 1.4  |                                     |
| Different grades                     | 36               | 8.5  | 14              | 10.6 | 13              | 8.4  | 8               | 5.8  |                                     |
| No response                          | 1                | 0.2  | 0               | 0    | 0               | 0    | 1               | 0.7  |                                     |
| Has not happened<br>this semester    | 261              | 61.3 | 76              | 57.6 | 91              | 59.1 | 94              | 67.6 |                                     |
| <b>Gender of bullies</b>             |                  |      |                 |      |                 |      |                 |      |                                     |
| One girl                             | 47               | 11   | 14              | 10.6 | 19              | 12.3 | 14              | 10.1 | 16.69<br>3, 14,<br>NS               |
| One boy                              | 42               | 9.9  | 16              | 12.1 | 12              | 7.8  | 13              | 9.4  |                                     |
| 2+ girls                             | 37               | 8.7  | 13              | 9.8  | 16              | 10.4 | 8               | 5.8  |                                     |
| 2+ boys                              | 13               | 3.1  | 2               | 1.5  | 9               | 5.8  | 2               | 1.4  |                                     |
| Group of boys and<br>girls           | 54               | 12.7 | 20              | 15.1 | 19              | 12.3 | 15              | 10.8 |                                     |
| No response                          | 1                | 0.2  | 0               | 0    | 0               | 0    | 1               | 0.7  |                                     |
| Has not happened<br>this semester    | 232              | 54.5 | 67              | 50.8 | 79              | 51.3 | 86              | 61.9 |                                     |
| <b>Quantity of bullies</b>           |                  |      |                 |      |                 |      |                 |      |                                     |
| 1 student                            | 66               | 15.5 | 26              | 19.7 | 25              | 16.2 | 15              | 10.8 | 17.65<br>3, 12,<br>NS               |
| 2-3 students                         | 62               | 14.6 | 18              | 13.6 | 28              | 18.2 | 16              | 11.5 |                                     |
| 4-9 students                         | 27               | 6.3  | 11              | 8.3  | 6               | 3.9  | 10              | 7.2  |                                     |
| 9+ students                          | 10               | 2.3  | 3               | 2.3  | 4               | 2.6  | 3               | 2.2  |                                     |
| Different students                   | 19               | 4.5  | 7               | 5.3  | 9               | 5.8  | 2               | 1.4  |                                     |
| No response                          | 1                | 0.2  | 0               | 0    | 0               | 0    | 1               | 0.7  |                                     |
| Has not happened                     | 241              | 56.6 | 67              | 50.8 | 82              | 53.2 | 92              | 66.2 |                                     |
| <b>Length of victimization</b>       |                  |      |                 |      |                 |      |                 |      |                                     |
| 1-2 weeks                            | 57               | 13.4 | 20              | 15.2 | 18              | 11.7 | 19              | 13.7 | 7.124,<br>12,<br>NS                 |
| 1 month                              | 18               | 4.2  | 7               | 5.3  | 5               | 3.2  | 6               | 4.3  |                                     |
| 6 months                             | 11               | 2.6  | 3               | 2.3  | 4               | 2.6  | 4               | 2.9  |                                     |
| Nearly 1 year                        | 21               | 4.9  | 9               | 6.8  | 8               | 5.2  | 4               | 2.9  |                                     |
| Several years                        | 32               | 7.5  | 7               | 5.3  | 16              | 10.4 | 8               | 5.8  |                                     |
| No response                          | 3                | 0.7  | 1               | 0.8  | 1               | 0.6  | 1               | 0.7  |                                     |
| Has not happened                     | 284              | 66.7 | 85              | 64.4 | 102             | 66.2 | 97              | 69.8 |                                     |
| <b>Location of victimization</b>     |                  |      |                 |      |                 |      |                 |      |                                     |
| School Park                          | 53               | 12.4 | 19              | 14.4 | 18              | 11.7 | 15              | 10.8 | 2.916,<br>4, NS                     |

|                                       |     |      |    |      |     |      |     |      |                     |
|---------------------------------------|-----|------|----|------|-----|------|-----|------|---------------------|
| School hallway or staircase           | 43  | 10.1 | 11 | 8.3  | 18  | 11.7 | 14  | 10.1 | 2.942, 4, NS        |
| Classroom                             | 60  | 14.1 | 21 | 15.9 | 23  | 14.9 | 16  | 11.5 | 3.216, 4, NS        |
| Classroom, no teacher present         | 44  | 10.3 | 14 | 10.6 | 20  | 13   | 10  | 7.2  | 4.648, 4, NS        |
| School restroom                       | 27  | 6.3  | 11 | 8.3  | 11  | 7.1  | 5   | 3.6  | 4.810, 4, NS        |
| Physical education class              | 33  | 7.7  | 10 | 7.6  | 19  | 12.3 | 4   | 2.9  | 11.09 7, 4, 0.025 * |
| Lunchroom                             | 29  | 6.8  | 10 | 7.6  | 10  | 6.5  | 9   | 6.5  | 2.226, 4, NS        |
| To/from school                        | 18  | 4.2  | 7  | 5.3  | 7   | 4.5  | 4   | 2.9  | 3.074, 4, NS        |
| Schoolbus stop                        | 10  | 2.4  | 2  | 1.5  | 4   | 2.6  | 4   | 2.9  | 2.660, 4, NS        |
| Inside schoolbus                      | 5   | 1.2  | 2  | 1.5  | 1   | 0.7  | 2   | 1.4  | 2.632, 4, NS        |
| Another place at school               | 36  | 8.5  | 10 | 7.6  | 16  | 10.4 | 10  | 7.2  | 3.195, 4, NS        |
| Not at school                         | 38  | 8.9  | 12 | 9.1  | 10  | 6.5  | 16  | 11.5 | 4.384, 4, NS        |
| Who have you told about victimization |     |      |    |      |     |      |     |      |                     |
| No one                                | 46  | 10.8 | 16 | 12.1 | 14  | 9.1  | 16  | 11.5 | 2.856, 4, NS        |
| Homeroom teacher                      | 36  | 8.5  | 13 | 9.8  | 12  | 7.8  | 11  | 7.9  | 2.521, 4, NS        |
| Other school adult                    | 20  | 4.7  | 3  | 2.3  | 7   | 4.5  | 10  | 7.2  | 5.786, 4, NS        |
| Parents                               | 49  | 11.5 | 10 | 7.6  | 24  | 15.6 | 15  | 10.8 | 6.627, 4, NS        |
| Siblings                              | 13  | 3.1  | 3  | 2.3  | 5   | 3.2  | 5   | 3.6  | 2.503, 4, NS        |
| Friends                               | 46  | 10.8 | 15 | 11.4 | 18  | 11.7 | 12  | 8.6  | 2.861, 4, NS        |
| Another person                        | 12  | 2.8  | 5  | 3.8  | 4   | 2.6  | 3   | 2.2  | 2.749, 4, NS        |
| Fear of bullying victimization        |     |      |    |      |     |      |     |      |                     |
| Never                                 | 272 | 63.9 | 86 | 65.1 | 101 | 65.4 | 272 | 63.9 |                     |
| A few times                           | 62  | 14.6 | 15 | 11.4 | 23  | 14.9 | 62  | 14.6 |                     |
| Sometimes                             | 35  | 8.2  | 9  | 6.8  | 11  | 7.1  | 34  | 8    | 9.872, 12, NS       |
| Several times                         | 29  | 6.8  | 12 | 9.1  | 8   | 5.2  | 29  | 6.8  |                     |
| Frequently                            | 8   | 1.9  | 3  | 2.3  | 3   | 1.9  | 8   | 1.9  |                     |
| Very frequently                       | 16  | 3.8  | 5  | 3.8  | 8   | 5.2  | 16  | 3.8  |                     |
| No response                           | 4   | 0.9  | 2  | 1.5  | 0   | 0    | 4   | 0.9  |                     |
| Involvement as a bystander            |     |      |    |      |     |      |     |      |                     |
| Defender                              | 103 | 46.8 | 27 | 21.8 | 33  | 22.4 | 42  | 30.9 | 3.701, 2, NS        |

|   |     |      |    |      |    |      |    |      |              |
|---|-----|------|----|------|----|------|----|------|--------------|
| Reinforcer                                | 32  | 14.5 | 12 | 9.7  | 12 | 8.2  | 8  | 5.9  | 1.318, 2, NS |
| Passive                                   | 57  | 25.9 | 13 | 10.5 | 23 | 15.6 | 21 | 15.4 | 1.838, 2, NS |
| Disengaged                                | 214 | 97.3 | 71 | 57.3 | 79 | 53.7 | 64 | 47.1 | 2.831, 2, NS |
| Potential involvement in bullying others  |     |      |    |      |    |      |    |      |              |
| Yes                                       | 109 | 25.6 | 38 | 28.8 | 42 | 27.3 | 29 | 20.2 |              |
| Maybe                                     | 35  | 8.2  | 9  | 6.8  | 15 | 9.7  | 11 | 7.9  |              |
| I don't know                              | 39  | 9.2  | 9  | 6.8  | 19 | 12.3 | 11 | 7.9  | 13.24        |
| No, I don't think so                      | 24  | 5.6  | 7  | 5.3  | 8  | 5.2  | 9  | 6.5  | 9, 12, NS    |
| No  | 105 | 24.6 | 35 | 26.5 | 36 | 23.4 | 33 | 23.7 |              |
| Definitely no                             | 111 | 26.1 | 33 | 25   | 34 | 22.1 | 44 | 31.7 |              |
| No response                               | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 2  | 1.4  |              |
| Feelings towards witnessing victimization |     |      |    |      |    |      |    |      |              |
| Probably deserves it                      | 111 | 26.1 | 33 | 25   | 42 | 27.3 | 35 | 25.2 |              |
| Don't feel anything                       | 64  | 15   | 28 | 21.2 | 16 | 10.4 | 20 | 14.4 | 14.44        |
| Feel a little sad for him/her             | 87  | 20.4 | 29 | 22   | 28 | 18.2 | 30 | 21.6 | 6, 8, NS     |
| Feel sad, and want to help him/her        | 160 | 37.6 | 39 | 29.5 | 68 | 44.2 | 53 | 38.1 |              |
| No response                               | 4   | 0.9  | 3  | 2.3  | 0  | 0    | 1  | 0.7  |              |

\*p<.005

\*\*P<0.001

**Table 41. Description of bullying incidents, by church attendance**

| Description                      | Total<br>(N=426) |      | Church Attendance |      |    |      | X <sup>2</sup> , df, p-value |
|----------------------------------|------------------|------|-------------------|------|----|------|------------------------------|
|                                  |                  |      | Yes               |      | No |      |                              |
|                                  | N                | %    | N                 | %    | N  | %    |                              |
| <b>Grade of bullies</b>          |                  |      |                   |      |    |      |                              |
| Same homeroom                    | 63               | 14.8 | 48                | 15.9 | 15 | 12   | 5.761, 6, NS                 |
| Same grade, different homeroom   | 36               | 8.5  | 28                | 9.3  | 8  | 6.4  |                              |
| Higher grade                     | 22               | 5.2  | 14                | 4.7  | 8  | 6.4  |                              |
| Lower grade                      | 7                | 1.6  | 5                 | 1.7  | 2  | 1.6  |                              |
| Different grades                 | 36               | 8.5  | 29                | 9.6  | 7  | 5.6  |                              |
| No response                      | 1                | 0.2  | 1                 | 0.3  | 0  | 0    |                              |
| Has not happened this semester   | 261              | 61.3 | 176               | 58.5 | 85 | 68   |                              |
| <b>Gender of bullies</b>         |                  |      |                   |      |    |      |                              |
| One girl                         | 47               | 11   | 32                | 10.6 | 15 | 12   | 7.015, 7, NS                 |
| One boy                          | 42               | 9.9  | 31                | 10.3 | 11 | 8.8  |                              |
| 2+ girls                         | 37               | 8.7  | 24                | 8    | 13 | 10.4 |                              |
| 2+ boys                          | 13               | 3.1  | 10                | 3.3  | 3  | 2.4  |                              |
| Group of boys and girls          | 54               | 12.7 | 45                | 14.9 | 9  | 7.2  |                              |
| No response                      | 1                | 0.2  | 1                 | 0.3  | 0  | 0    |                              |
| Has not happened this semester   | 232              | 54.5 | 158               | 52.5 | 74 | 59.2 |                              |
| <b>Quantity of bullies</b>       |                  |      |                   |      |    |      |                              |
| 1 student                        | 66               | 15.5 | 43                | 14.3 | 23 | 18.4 | 5.121, 6, NS                 |
| 2-3 students                     | 62               | 14.6 | 45                | 15   | 17 | 13.6 |                              |
| 4-9 students                     | 27               | 6.3  | 22                | 7.3  | 5  | 4    |                              |
| 9+ students                      | 10               | 2.3  | 9                 | 3    | 1  | 0.8  |                              |
| Different students               | 19               | 4.5  | 14                | 4.7  | 5  | 4    |                              |
| No response                      | 1                | 0.2  | 1                 | 0.3  | 0  | 0    |                              |
| Has not happened this semester   | 241              | 56.6 | 167               | 55.5 | 74 | 59.2 |                              |
| <b>Length of victimization</b>   |                  |      |                   |      |    |      |                              |
| 1-2 weeks                        | 57               | 13.4 | 41                | 13.6 | 16 | 12.8 | 5.791, 6, NS                 |
| 1 month                          | 18               | 4.2  | 14                | 4.7  | 4  | 3.2  |                              |
| 6 months                         | 11               | 2.6  | 10                | 3.3  | 1  | 0.8  |                              |
| Nearly 1 year                    | 21               | 4.9  | 17                | 5.6  | 4  | 3.2  |                              |
| Several years                    | 32               | 7.5  | 22                | 7.3  | 10 | 8    |                              |
| No response                      | 3                | 0.7  | 3                 | 1    | 0  | 0    |                              |
| Has not happened this semester   | 284              | 66.7 | 194               | 64.5 | 90 | 72   |                              |
| <b>Location of victimization</b> |                  |      |                   |      |    |      |                              |
| School Park                      | 53               | 12.4 | 35                | 11.6 | 18 | 14.4 | 1.021, 2, NS                 |

|   |     |      |     |      |     |      |              |
|---|-----|------|-----|------|-----|------|--------------|
| School hallway or staircase               | 43  | 10.1 | 28  | 9.3  | 15  | 12   | 1.107, 2, NS |
| Classroom                                 | 60  | 14.1 | 42  | 14   | 18  | 14.4 | 0.428, 2, NS |
| Classroom, no teacher present             | 44  | 10.3 | 32  | 10.6 | 12  | 9.6  | 0.525, 2, NS |
| School restroom                           | 27  | 6.3  | 18  | 6    | 9   | 7.2  | 0.630, 2, NS |
| Physical education class                  | 33  | 7.7  | 23  | 7.6  | 10  | 8    | 0.430, 2, NS |
| Lunchroom                                 | 29  | 6.8  | 20  | 6.6  | 9   | 7.2  | 0.456, 2, NS |
| To/from school                            | 18  | 4.2  | 14  | 4.7  | 4   | 3.2  | 0.885, 2, NS |
| Schoolbus stop                            | 10  | 2.4  | 8   | 2.7  | 2   | 1.6  | 0.861, 2, NS |
| Inside schoolbus                          | 5   | 1.2  | 5   | 1.7  | 0   | 0    | 2.507, 2, NS |
| Another place at school                   | 36  | 8.5  | 27  | 9    | 9   | 7.2  | 0.785, 2, NS |
| Not at school                             | 38  | 8.9  | 27  | 9    | 11  | 8.8  | 0.421, 2, NS |
| Who have you told about victimization     |     |      |     |      |     |      |              |
| No one                                    | 46  | 10.8 | 33  | 11   | 13  | 10.4 | 0.449, 2, NS |
| Homeroom teacher                          | 36  | 8.5  | 26  | 8.6  | 10  | 8    | 0.467, 2, NS |
| Other school adult                        | 20  | 4.7  | 13  | 4.3  | 7   | 5.6  | 0.732, 2, NS |
| Parents                                   | 49  | 11.5 | 33  | 11   | 16  | 12.8 | 0.697, 2, NS |
| Siblings                                  | 13  | 3.1  | 7   | 2.3  | 6   | 4.8  | 2.229, 2, NS |
| Friends                                   | 46  | 10.8 | 32  | 10.6 | 14  | 11.2 | 0.442, 2, NS |
| Another person                            | 12  | 2.8  | 8   | 2.7  | 4   | 3.2  | 0.508, 2, NS |
| Fear of bullying victimization            |     |      |     |      |     |      |              |
| Never                                     | 272 | 63.9 | 187 | 62.1 | 85  | 68   |              |
| A few times                               | 62  | 14.6 | 48  | 15.9 | 14  | 11.2 |              |
| Sometimes                                 | 35  | 8.2  | 23  | 7.6  | 12  | 9.6  |              |
| Several times                             | 29  | 6.8  | 21  | 7    | 8   | 6.4  | 4.526, 6, NS |
| Frequently                                | 8   | 1.9  | 7   | 2.3  | 1   | 0.8  |              |
| Very frequently                           | 16  | 3.8  | 12  | 4    | 4   | 3.2  |              |
| No response                               | 4   | 0.9  | 3   | 1    | 1   | 0.8  |              |
| Involvement as a bystander                |     |      |     |      |     |      |              |
| Defender                                  | 103 | 46.8 | 31  | 25.8 | 72  | 25   | 0.031, 1, NS |
| Reinforcer                                | 32  | 14.5 | 9   | 7.5  | 23  | 8    | 0.028, 1, NS |
| Passive                                   | 57  | 25.9 | 22  | 18.3 | 35  | 12.2 | 2.692, 1, NS |
| Disengaged                                | 214 | 97.3 | 57  | 47.5 | 157 | 54.5 | 1.671, 1, NS |
| Potential involvement in bullying others  |     |      |     |      |     |      |              |
| Yes                                       | 109 | 25.6 | 80  | 26.6 | 29  | 23.1 |              |
| Maybe                                     | 35  | 8.2  | 23  | 7.6  | 12  | 9.6  |              |
| I don't know                              | 39  | 9.2  | 26  | 8.6  | 13  | 10.4 |              |
| No, I don't think so                      | 24  | 5.6  | 15  | 5    | 9   | 7.2  | 4.659, 6, NS |
| No  | 105 | 24.6 | 75  | 24.9 | 30  | 24   |              |
| Definitely no                             | 111 | 26.1 | 80  | 26.6 | 31  | 24.8 |              |
| No response                               | 3   | 0.7  | 2   | 0.7  | 1   | 0.8  |              |
| Feelings towards witnessing victimization |     |      |     |      |     |      |              |
| Probably deserves it                      | 111 | 26.1 | 72  | 23.9 | 39  | 31.2 |              |
| Don't feel anything                       | 64  | 15   | 50  | 16.6 | 14  | 11.2 | 6.686, 4, NS |

|                                       |     |      |     |      |    |      |
|---------------------------------------|-----|------|-----|------|----|------|
| Feel a little sad for<br>him/her      | 87  | 20.4 | 68  | 22.6 | 19 | 15.2 |
| Feel sad, and want to<br>help him/her | 160 | 37.6 | 108 | 35.9 | 52 | 41.6 |
| No response                           | 4   | 0.9  | 3   | 1    | 1  | 0.8  |

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\*p<0.05

\*\*P<0.001

**Table 42. Self-reported connectedness overall and by types (N=426)**

|   | N   | Mean    | Std. Error | CI 95%            |
|---|-----|---------|------------|-------------------|
| Connectedness Overall<br>(M range: 7-31.75)                         | 402 | 22.2394 | 0.15802    | 21.9288 - 22.5501 |
| Connectedness to Parents<br>(M range: 6-30)                         | 421 | 26.3824 | 0.19506    | 25.9990 - 26.7658 |
| It is important that my parents trust me.                           | 422 | 4.7346  | 0.03828    | 4.6594 - 4.8098   |
| My parents and I get along well.                                    | 423 | 4.5532  | 0.05046    | 4.4540 - 4.6524   |
| I care a lot about my parents.                                      | 423 | 4.7423  | 0.03719    | 4.6692 - 4.8154   |
| My parents and I have fun together.                                 | 423 | 4.4823  | 0.04963    | 4.3847 - 4.5798   |
| I do not argue with my parents.                                     | 423 | 3.2624  | 0.7921     | 3.1067 - 3.4181   |
| I enjoy having a good time with my parents.                         | 422 | 4.5806  | 0.04702    | 4.4881 - 4.6730   |
| Connectedness to Father<br>(M range: 0-25)                          | 414 | 19.7729 | 0.24845    | 19.2846 - 20.2613 |
| My dad and I are close.   | 416 | 4.1082  | 0.06653    | 3.9774 - 4.2389   |
| I like spending time with my dad.                                   | 415 | 4.3422  | 0.06004    | 4.2241 - 4.4602   |
| My dad cares a lot about me.  | 415 | 4.3759  | 0.06119    | 4.2556 - 4.4962   |
| I do not argue with my dad.   | 416 | 3.4808  | 0.08267    | 3.3183 - 3.6433   |
| I talk with my dad about personal things.                           | 416 | 3.4832  | 0.08204    | 3.3219 - 3.6444   |
| Connectedness to Mother<br>(M range: 5-25)                          | 420 | 21.65   | 0.17182    | 21.3123 - 21.9877 |
| I like spending time with my mom.                                   | 421 | 4.6603  | 0.04323    | 4.5754 - 4.7453   |
| My mom and I are very close.  | 421 | 4.6366  | 0.04197    | 4.5541 - 4.7191   |
| My mom cares a lot about me.  | 421 | 4.7197  | 0.03929    | 4.6425 - 4.7969   |
| I do not argue with my mom.   | 421 | 3.5131  | 0.774      | 3.3609 - 3.6652   |
| I talk with my mom about personal things.                           | 420 | 4.1167  | 0.06765    | 3.9837 - 4.2496   |
| Connectedness to Friends<br>(M range: 6-78)                         | 421 | 24.9192 | 0.29369    | 24.3420 - 25.4965 |
| Spending time with my friends is the best time of my day.           | 423 | 4.2861  | 0.05914    | 4.1698 - 4.4023   |
| I have friends I'm really close to and trust completely.            | 421 | 4.2518  | 0.05899    | 4.1358 - 4.3677   |
| Spending time with my friends is an important part of life.         | 423 | 4.1844  | 0.0626     | 4.0613 - 4.3075   |
| My friends and I talk openly with each other about personal things. | 423 | 3.4137  | 0.0793     | 3.2578 - 3.5696   |
| I spend as much time as I can with my friends.                      | 423 | 4.234   | 0.06024    | 4.1156 - 4.3525   |
| My friends and I spend a lot of time talking about things.          | 423 | 4.5366  | 0.12665    | 4.2877 - 4.7856   |



|  |     |         |          |                   |
|--|-----|---------|----------|-------------------|
| Connectedness to Teachers<br>(M range: 5-25)                   | 419 | 21.716  | 0.20646  | 21.3102 - 22.1218 |
| I care what my teachers think of me.                           | 423 | 4.0118  | 0.07276  | 3.8688 - 4.1548   |
| I want my teachers to respect me.                              | 421 | 4.5843  | 0.04686  | 4.4922 - 4.6764   |
| I try to get along with my teachers.                           | 422 | 4.4455  | 0.05101  | 4.3452 - 4.5458   |
| I try to earn my teachers' trust.                              | 420 | 4.4571  | 0.05213  | 4.3547 - 4.5596   |
| I like most of the teachers in my school.                      | 422 | 4.173   | 0.06161  | 4.0519 - 4.2941   |
| Connectedness to School<br>(M range: 6-30)                     | 418 | 26.7847 | 0.21552  | 26.3610 - 27.2083 |
| I work hard/put forth a lot of effort at school.               | 422 | 4.5118  | 0.05238  | 4.4089 - 4.6148   |
| I enjoy being at school.                                       | 421 | 4.0903  | 0.06489  | 3.9627 - 4.2178   |
| I do well in school.   | 423 | 4.4303  | 0.05097  | 4.3301 - 4.5304   |
| Doing well in school is important to me.                       | 423 | 4.5768  | 0.04915  | 4.4802 - 4.6734   |
| Getting good grades is important.                              | 421 | 4.6817  | 0.0421   | 4.5990 - 4.7645   |
| Not having problems at school is important.                    | 423 | 4.4634  | 0.05557  | 4.3541 - 4.5726   |
| School is not boring.  | 422 | 3.9028  | 0.06756  | 3.7700 - 4.0356   |
| I feel good when I am in school.                               | 423 | 4.26    | 0.05677  | 4.1485 - 4.3716   |
| I do not have problems at school.                              | 421 | 4.0143  | 0.06867  | 3.8793 - 4.1492   |
| I get good grades at school.                                   | 422 | 4.4384  | 0.0501   | 4.3399 - 4.5369   |
| Connectedness to Community<br>(M range: 6-30)                  | 422 | 26.6493 | 0.28271  | 24.0936 - 25.2050 |
| I like hanging out around where I live.                        | 423 | 4.2955  | 0.06218  | 4.1733 - 4.4177   |
| I like hanging out a lot with kids in my neighborhood.         | 422 | 4.1896  | 0.06263  | 4.0665 - 4.3127   |
| I often spend time playing or doing things in my neighborhood. | 423 | 4.1418  | 0.06366  | 4.0167 - 4.2670   |
| I spend a lot of time with kids around where I live.           | 423 | 3.9811  | 0.06541  | 3.8525 - 4.1097   |
| I get along well with all the children in my neighborhood.     | 423 | 4.2577  | 0.05665  | 4.1463 - 4.3690   |
| My neighborhood is not boring.                                 | 423 | 3.7754  | 0.07453  | 3.6289 - 3.9219   |
| Connectedness to Religion<br>(M range: 2-15)                   | 423 | 11.8747 | 0.15539  | 11.5693 - 12.1801 |
| Religion is very important for me.                             | 423 | 4.3617  | 0.05767  | 4.2483 - 4.4751   |
| I attend religious services regularly.                         | 423 | 3.74    | 0.0689   | 3.6045 - 3.8754   |
| I am religious.  | 423 | 3.773   | 0.069966 | 3.6361 - 3.9100   |

**Table 43. Self-reported connectedness overall and by types, by location (N=426)**

|   | N   | Mean    | Std. Error | ANOVA |        |
|---|-----|---------|------------|-------|--------|
|   |     |         |            | F     | Sig.   |
| Connectedness Overall (M range: 7-31.75)    |     |         |            |       |        |
| San Juan Metro Area                         | 175 | 21.8879 | 0.26955    | 3.843 | 0.051* |
| Other Municipalities                        | 227 | 22.5105 | 0.18598    |       |        |
| Connectedness to Parents (M range: 6-30)    |     |         |            |       |        |
| San Juan Metro Area                         | 185 | 25.9189 | 0.32247    | 4.463 | 0.035* |
| Other Municipalities                        | 236 | 26.7458 | 0.23706    |       |        |
| It is important that my parents trust me.   |     |         |            |       |        |
| San Juan Metro Area                         | 186 | 4.6505  | 0.06696    | 3.827 | 0.051* |
| Other Municipalities                        | 236 | 4.8008  | 0.04323    |       |        |
| My parents and I get along well.            |     |         |            |       |        |
| San Juan Metro Area                         | 186 | 4.5108  | 0.08005    | 0.554 | NS     |
| Other Municipalities                        | 237 | 4.5865  | 0.06461    |       |        |
| I care a lot about my parents.              |     |         |            |       |        |
| San Juan Metro Area                         | 186 | 4.6882  | 0.06049    | 1.666 | NS     |
| Other Municipalities                        | 237 | 4.7848  | 0.04632    |       |        |
| My parents and I have fun together.         |     |         |            |       |        |
| San Juan Metro Area                         | 186 | 4.4462  | 0.08032    | 0.413 | NS     |
| Other Municipalities                        | 237 | 4.5105  | 0.06232    |       |        |
| I do not argue with my parents.             |     |         |            |       |        |
| San Juan Metro Area                         | 186 | 3.086   | 0.1211     | 3.919 | 0.048* |
| Other Municipalities                        | 237 | 3.4008  | 0.104      |       |        |
| I enjoy having a good time with my parents. |     |         |            |       |        |
| San Juan Metro Area                         | 185 | 4.5027  | 0.07896    | 2.147 | NS     |
| Other Municipalities                        | 237 | 4.6414  | 0.05649    |       |        |
| Connectedness to Father (M range: 0-25)     |     |         |            |       |        |
| San Juan Metro Area                         | 181 | 19.1934 | 0.39215    | 4.261 | 0.040* |
| Other Municipalities                        | 233 | 20.2232 | 0.31713    |       |        |
| My dad and I are close.                     |     |         |            |       |        |
| San Juan Metro Area                         | 183 | 4       | 0.10454    | 2.082 | NS     |
| Other Municipalities                        | 233 | 4.1931  | 0.08562    |       |        |
| I like spending time with my dad.           |     |         |            |       |        |
| San Juan Metro Area                         | 182 | 4.2198  | 0.09782    | 3.263 | NS     |
| Other Municipalities                        | 233 | 4.4378  | 0.07442    |       |        |
| My dad cares a lot about me.                |     |         |            |       |        |
| San Juan Metro Area                         | 182 | 4.2637  | 0.09938    | 2.635 | NS     |
| Other Municipalities                        | 233 | 4.4635  | 0.07621    |       |        |
| I do not argue with my dad.                 |     |         |            |       |        |
| San Juan Metro Area                         | 183 | 3.2678  | 0.12989    | 5.268 | 0.022* |
| Other Municipalities                        | 233 | 3.6481  | 0.10563    |       |        |

|   |     |         |         |        |         |  |
|---|-----|---------|---------|--------|---------|--|
| I talk with my dad about personal things.                           |     |         |         |        |         |  |
| San Juan Metro Area   | 183 | 3.4863  | 0.12564 | 0.001  | NS      |  |
| Other Municipalities  | 233 | 3.4807  | 0.10848 |        |         |  |
| Connectedness to Mother (M range: 5-25)                             |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 21.1667 | 0.29368 | 6.37   | 0.012*  |  |
| Other Municipalities  | 234 | 22.0342 | 0.19857 |        |         |  |
| I like spending time with my mom.                                   |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.5269  | 0.7782  | 7.663  | 0.006*  |  |
| Other Municipalities  | 235 | 4.766   | 0.04595 |        |         |  |
| My mom and I are very close.  |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.4785  | 0.07783 | 11.513 | 0.001** |  |
| Other Municipalities  | 235 | 4.7617  | 0.04149 |        |         |  |
| My mom cares a lot about me.  |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.5914  | 0.07331 | 8.596  | 0.004*  |  |
| Other Municipalities  | 235 | 4.8213  | 0.03873 |        |         |  |
| I do not argue with my mom.   |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 3.4839  | 0.11668 | 0.112  | NS      |  |
| Other Municipalities  | 235 | 3.5362  | 0.10362 |        |         |  |
| I talk with my mom about personal things.                           |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.086   | 0.10378 | 0.163  | NS      |  |
| Other Municipalities  | 234 | 4.141   | 0.08925 |        |         |  |
| Connectedness to Friends (M range: 6-78)                            |     |         |         |        |         |  |
| San Juan Metro Area   | 184 | 24.3804 | 0.41807 | 2.623  | NS      |  |
| Other Municipalities  | 237 | 25.3376 | 0.40713 |        |         |  |
| Spending time with my friends is the best time of my day.           |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.2527  | 0.09103 | 0.249  | NS      |  |
| Other Municipalities  | 237 | 4.3122  | 0.07784 |        |         |  |
| I have friends I'm really close to and trust completely.            |     |         |         |        |         |  |
| San Juan Metro Area   | 184 | 4.0761  | 0.09854 | 6.985  | 0.009*  |  |
| Other Municipalities  | 237 | 4.3882  | 0.07054 |        |         |  |
| Spending time with my friends is an important part of life.         |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.2204  | 0.09148 | 0.26   | NS      |  |
| Other Municipalities  | 237 | 4.1561  | 0.08575 |        |         |  |
| My friends and I talk openly with each other about personal things. |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 3.3602  | 0.11992 | 0.357  | NS      |  |
| Other Municipalities  | 237 | 3.4557  | 0.10586 |        |         |  |
| I spend as much time as I can with my friends.                      |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.172   | 0.09251 | 0.831  | NS      |  |
| Other Municipalities  | 237 | 4.2827  | 0.07934 |        |         |  |
| My friends and I spend a lot of time talking about things.          |     |         |         |        |         |  |
| San Juan Metro Area   | 186 | 4.2742  | 0.0894  | 3.389  | NS      |  |
| Other Municipalities  | 237 | 4.7426  | 0.21416 |        |         |  |

|  |     |         |         |       |        |  |
|--|-----|---------|---------|-------|--------|--|
| Connectedness to Teachers (M range: 5-25)        |     |         |         |       |        |  |
| San Juan Metro Area                              | 183 | 21.4809 | 0.30467 | 1.006 | NS     |  |
| Other Municipalities                             | 236 | 21.8983 | 0.28024 |       |        |  |
| I care what my teachers think of me.             |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 3.9731  | 0.11033 | 0.222 | NS     |  |
| Other Municipalities                             | 237 | 4.0422  | 0.09694 |       |        |  |
| I want my teachers to respect me.                |     |         |         |       |        |  |
| San Juan Metro Area                              | 185 | 4.4703  | 0.07856 | 4.685 | 0.031* |  |
| Other Municipalities                             | 236 | 4.6737  | 0.05599 |       |        |  |
| I try to get along with my teachers.             |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.3978  | 0.07672 | 0.687 | NS     |  |
| Other Municipalities                             | 236 | 4.4831  | 0.06833 |       |        |  |
| I try to earn my teachers' trust.                |     |         |         |       |        |  |
| San Juan Metro Area                              | 184 | 4.4022  | 0.08233 | 0.867 | NS     |  |
| Other Municipalities                             | 236 | 4.5     | 0.06701 |       |        |  |
| I like most of the teachers in my school.        |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.1559  | 0.09124 | 0.06  | NS     |  |
| Other Municipalities                             | 236 | 4.1864  | 0.08362 |       |        |  |
| Connectedness to School (M range: 6-30)          |     |         |         |       |        |  |
| San Juan Metro Area                              | 183 | 26.6066 | 0.34437 | 0.531 | NS     |  |
| Other Municipalities                             | 235 | 26.9234 | 0.27427 |       |        |  |
| I work hard/put forth a lot of effort at school. |     |         |         |       |        |  |
| San Juan Metro Area                              | 185 | 4.4595  | 0.0829  | 0.78  | NS     |  |
| Other Municipalities                             | 237 | 4.5527  | 0.0672  |       |        |  |
| I enjoy being at school.                         |     |         |         |       |        |  |
| San Juan Metro Area                              | 184 | 4.1902  | 0.09254 | 1.846 | NS     |  |
| Other Municipalities                             | 237 | 4.0127  | 0.08999 |       |        |  |
| I do well in school.                             |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.3763  | 0.08098 | 0.878 | NS     |  |
| Other Municipalities                             | 237 | 4.4726  | 0.0651  |       |        |  |
| Doing well in school is important to me.         |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.4892  | 0.08005 | 2.501 | NS     |  |
| Other Municipalities                             | 237 | 4.6456  | 0.06102 |       |        |  |
| Getting good grades is important.                |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.6398  | 0.06488 | 0.785 | NS     |  |
| Other Municipalities                             | 235 | 4.7149  | 0.05526 |       |        |  |
| Not having problems at school is important.      |     |         |         |       |        |  |
| San Juan Metro Area                              | 186 | 4.414   | 0.08475 | 0.619 | NS     |  |
| Other Municipalities                             | 237 | 4.5021  | 0.07363 |       |        |  |
| School is not boring.                            |     |         |         |       |        |  |
| San Juan Metro Area                              | 185 | 3.7784  | 0.11    | 2.659 | NS     |  |
| Other Municipalities                             | 237 | 4       | 0.08393 |       |        |  |

|  |     |         |         |       |        |  |
|--|-----|---------|---------|-------|--------|--|
| I feel good when I am in school.                               |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.3065  | 0.08096 | 0.524 | NS     |  |
| Other Municipalities   | 237 | 4.2236  | 0.07901 |       |        |  |
| I do not have problems at school.                              |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 3.8411  | 0.11028 | 4.905 | 0.027* |  |
| Other Municipalities   | 235 | 4.1489  | 0.0859  |       |        |  |
| I get good grades at school.                                   |     |         |         |       |        |  |
| San Juan Metro Area  | 185 | 4.4054  | 0.08231 | 0.338 | NS     |  |
| Other Municipalities   | 237 | 4.4641  | 0.06199 |       |        |  |
| Connectedness to Community (M range: 6-30)                     |     |         |         |       |        |  |
| San Juan Metro Area  | 185 | 24.4432 | 0.44278 | 0.414 | NS     |  |
| Other Municipalities   | 237 | 24.8101 | 0.36649 |       |        |  |
| I like hanging out around where I live.                        |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.1828  | 0.1014  | 2.589 | NS     |  |
| Other Municipalities   | 237 | 4.384   | 0.07705 |       |        |  |
| I like hanging out a lot with kids in my neighborhood.         |     |         |         |       |        |  |
| San Juan Metro Area  | 185 | 4.1135  | 0.09705 | 1.152 | NS     |  |
| Other Municipalities   | 237 | 4.2489  | 0.08181 |       |        |  |
| I often spend time playing or doing things in my neighborhood. |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.0645  | 0.10217 | 1.158 | NS     |  |
| Other Municipalities   | 237 | 4.2025  | 0.08048 |       |        |  |
| I spend a lot of time with kids around where I live.           |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.0215  | 0.0949  | 0.299 | NS     |  |
| Other Municipalities   | 237 | 3.9494  | 0.09003 |       |        |  |
| I get along well with all the children in my neighborhood.     |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.2849  | 0.08066 | 0.181 | NS     |  |
| Other Municipalities   | 237 | 4.2363  | 0.07897 |       |        |  |
| My neighborhood is not boring.                                 |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 3.7581  | 0.11284 | 0.042 | NS     |  |
| Other Municipalities   | 237 | 3.789   | 0.09947 |       |        |  |
| Connectedness to Religion (M range: 2-15)                      |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 11.914  | 0.24519 | 0.05  | NS     |  |
| Other Municipalities   | 237 | 11.8439 | 0.20018 |       |        |  |
| Religion is very important for me.                             |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 4.3011  | 0.09167 | 0.867 | NS     |  |
| Other Municipalities   | 237 | 4.4093  | 0.07364 |       |        |  |
| I attend religious services regularly.                         |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 3.7581  | 0.10483 | 0.054 | NS     |  |
| Other Municipalities   | 237 | 3.7257  | 0.09159 |       |        |  |
| I am religious.  |     |         |         |       |        |  |
| San Juan Metro Area  | 186 | 3.8548  | 0.103   | 1.082 | NS     |  |
| Other Municipalities   | 237 | 3.7089  | 0.09445 |       |        |  |

\*  $p \leq 0.05$  \*\*  $p \leq 0.001$  NS=Not statistically significant

**Table 44. Self-reported connectedness overall and by types, by gender (N=426)**

|   | N   | Mean    | Std. Error | ANOVA |            |
|---|-----|---------|------------|-------|------------|
|   |     |         |            | F     | Sig.       |
| Connectedness Overall (M range: 7-31.75)    |     |         |            |       |            |
| Female                                      | 200 | 22.331  | 0.21861    | 0.348 | NS         |
| Male  | 202 | 22.1467 | 0.22848    |       |            |
| Connectedness to Parents (M range: 6-30)    |     |         |            |       |            |
| Female                                      | 207 | 26.6957 | 0.27496    | 2.503 | NS         |
| Male  | 214 | 26.0794 | 0.27566    |       |            |
| It is important that my parents trust me.   |     |         |            |       |            |
| Female                                      | 207 | 4.7874  | 0.05048    | 1.839 | NS         |
| Male  | 215 | 4.6837  | 0.05719    |       |            |
| My parents and I get along well.            |     |         |            |       |            |
| Female                                      | 207 | 4.6135  | 0.06764    | 1.371 | NS         |
| Male  | 216 | 4.4954  | 0.007453   |       |            |
| I care a lot about my parents.              |     |         |            |       |            |
| Female                                      | 207 | 4.7681  | 0.05235    | 0.461 | NS         |
| Male  | 216 | 4.7176  | 0.05286    |       |            |
| My parents and I have fun together.         |     |         |            |       |            |
| Female                                      | 207 | 4.4203  | 0.07446    | 1.497 | NS         |
| Male  | 216 | 4.5417  | 0.06589    |       |            |
| I do not argue with my parents.             |     |         |            |       |            |
| Female                                      | 207 | 3.4879  | 0.10869    | 7.895 | 0.005<br>* |
| Male  | 216 | 3.0463  | 0.11324    |       |            |
| I enjoy having a good time with my parents. |     |         |            |       |            |
| Female                                      | 207 | 4.6184  | 0.06026    | 0.621 | NS         |
| Male  | 215 | 4.5442  | 0.07182    |       |            |
| Connectedness to Father (M range: 0-25)     |     |         |            |       |            |
| Female                                      | 202 | 19.7228 | 0.35981    | 0.039 | NS         |
| Male  | 212 | 19.8208 | 0.34412    |       |            |
| My dad and I are close.                     |     |         |            |       |            |
| Female                                      | 203 | 4.1281  | 0.09508    | 0.085 | NS         |
| Male  | 213 | 4.0892  | 0.09333    |       |            |
| I like spending time with my dad.           |     |         |            |       |            |
| Female                                      | 202 | 4.3416  | 0.08501    | 0     | NS         |
| Male  | 213 | 4.3427  | 0.08496    |       |            |
| My dad cares a lot about me.                |     |         |            |       |            |
| Female                                      | 203 | 4.335   | 0.09307    | 0.428 | NS         |
| Male  | 212 | 4.4151  | 0.08017    |       |            |
| I do not argue with my dad.                 |     |         |            |       |            |
| Female                                      | 203 | 3.6552  | 0.11216    | 4.275 | 0.039<br>* |
| Male  | 213 | 3.3146  | 0.12015    |       |            |

|   |     |         |         |       |        |
|---|-----|---------|---------|-------|--------|
| I talk with my dad about personal things.                           |     |         |         |       |        |
| Female  | 203 | 3.2857  | 0.11825 | 5.582 | 0.019* |
| Male  | 213 | 3.6714  | 0.11265 |       |        |
| Connectedness to Mother (M range: 5-25)                             |     |         |         |       |        |
| Female  | 207 | 22.0531 | 0.22162 | 5.406 | 0.021* |
| Male  | 213 | 21.2582 | 0.25924 |       |        |
| I like spending time with my mom.                                   |     |         |         |       |        |
| Female  | 207 | 4.715   | 0.05525 | 1.548 | NS     |
| Male  | 214 | 4.6075  | 0.06608 |       |        |
| My mom and I are very close.  |     |         |         |       |        |
| Female  | 207 | 4.6908  | 0.05568 | 1.618 | NS     |
| Male  | 214 | 4.5841  | 0.06249 |       |        |
| My mom cares a lot about me.  |     |         |         |       |        |
| Female  | 207 | 4.8019  | 0.04864 | 4.269 | 0.039* |
| Male  | 214 | 4.6402  | 0.06094 |       |        |
| I do not argue with my mom.   |     |         |         |       |        |
| Female  | 207 | 3.5556  | 0.10622 | 0.291 | NS     |
| Male  | 214 | 3.472   | 0.11254 |       |        |
| I talk with my mom about personal things.                           |     |         |         |       |        |
| Female  | 207 | 4.2899  | 0.08368 | 6.453 | 0.011* |
| Male  | 213 | 3.9484  | 0.10464 |       |        |
| Connectedness to Friends (M range: 6-78)                            |     |         |         |       |        |
| Female  | 207 | 25.1304 | 0.3857  | 0.5   | NS     |
| Male  | 214 | 24.715  | 0.44162 |       |        |
| Spending time with my friends is the best time of my day.           |     |         |         |       |        |
| Female  | 207 | 4.333   | 0.08303 | 0.612 | NS     |
| Male  | 216 | 4.2407  | 0.08423 |       |        |
| I have friends I'm really close to and trust completely.            |     |         |         |       |        |
| Female  | 207 | 4.2126  | 0.08806 | 0.427 | NS     |
| Male  | 214 | 4.2897  | 0.07894 |       |        |
| Spending time with my friends is an important part of life.         |     |         |         |       |        |
| Female  | 207 | 4.2271  | 0.08775 | 0.444 | NS     |
| Male  | 216 | 4.1435  | 0.08933 |       |        |
| My friends and I talk openly with each other about personal things. |     |         |         |       |        |
| Female  | 207 | 3.5749  | 0.11113 | 3.986 | 0.047* |
| Male  | 216 | 3.2583  | 0.11228 |       |        |
| I spend as much time as I can with my friends.                      |     |         |         |       |        |
| Female  | 207 | 4.3188  | 0.08317 | 1.903 | NS     |
| Male  | 216 | 4.1528  | 0.08681 |       |        |
| My friends and I spend a lot of time talking about things.          |     |         |         |       |        |
| Female  | 207 | 4.4638  | 0.07771 | 0.317 | NS     |
| Male  | 216 | 4.6065  | 0.23678 |       |        |

|  |     |         |         |       |            |
|--|-----|---------|---------|-------|------------|
| Connectedness to Teachers (M range: 5-25)        |     |         |         |       |            |
| Female   | 206 | 21.9466 | 0.30647 | 1.207 | NS         |
| Male   | 213 | 21.493  | 0.2775  |       |            |
| I care what my teachers think of me.             |     |         |         |       |            |
| Female   | 207 | 4.1594  | 0.0973  | 3.972 | 0.047<br>* |
| Male   | 216 | 3.8704  | 0.10707 |       |            |
| I want my teachers to respect me.                |     |         |         |       |            |
| Female   | 207 | 4.6957  | 0.06198 | 5.519 | 0.019<br>* |
| Male   | 214 | 4.4766  | 0.06938 |       |            |
| I try to get along with my teachers.             |     |         |         |       |            |
| Female   | 207 | 4.4589  | 0.07367 | 0.067 | NS         |
| Male   | 215 | 4.4326  | 0.07082 |       |            |
| I try to earn my teachers' trust.                |     |         |         |       |            |
| Female   | 206 | 4.4612  | 0.07804 | 0.006 | NS         |
| Male   | 214 | 4.4533  | 0.06964 |       |            |
| I like most of the teachers in my school.        |     |         |         |       |            |
| Female   | 207 | 4.1643  | 0.08505 | 0.019 | NS         |
| Male   | 215 | 4.1814  | 0.08918 |       |            |
| Connectedness to School (M range: 6-30)          |     |         |         |       |            |
| Female   | 206 | 27.0728 | 0.29399 | 1.74  | NS         |
| Male   | 212 | 26.5047 | 0.31409 |       |            |
| I work hard/put forth a lot of effort at school. |     |         |         |       |            |
| Female   | 207 | 4.5845  | 0.06609 | 1.858 | NS         |
| Male   | 215 | 4.4419  | 0.08062 |       |            |
| I enjoy being at school.                         |     |         |         |       |            |
| Female   | 206 | 4.0825  | 0.09279 | 0.014 | NS         |
| Male   | 215 | 4.0977  | 0.09099 |       |            |
| I do well in school.                             |     |         |         |       |            |
| Female   | 207 | 4.43    | 0.06996 | 0     | NS         |
| Male   | 216 | 4.4306  | 0.07409 |       |            |
| Doing well in school is important to me.         |     |         |         |       |            |
| Female   | 207 | 4.7005  | 0.058   | 6.139 | 0.014<br>* |
| Male   | 216 | 4.4583  | 0.07787 |       |            |
| Getting good grades is important.                |     |         |         |       |            |
| Female   | 207 | 4.7585  | 0.05347 | 3.232 | NS         |
| Male   | 214 | 4.6075  | 0.0644  |       |            |
| Not having problems at school is important.      |     |         |         |       |            |
| Female   | 207 | 4.5266  | 0.07833 | 1.241 | NS         |
| Male   | 216 | 4.4028  | 0.07874 |       |            |
| School is not boring.                            |     |         |         |       |            |
| Female   | 207 | 3.9565  | 0.08671 | 0.607 | NS         |
| Male   | 215 | 3.8512  | 0.10312 |       |            |



|  |     |         |         |       |    |
|--|-----|---------|---------|-------|----|
| I feel good when I am in school.                               |     |         |         |       |    |
| Female   | 207 | 4.2077  | 0.08075 | 0.813 | NS |
| Male   | 216 | 4.3102  | 0.07987 |       |    |
| I do not have problems at school.                              |     |         |         |       |    |
| Female   | 206 | 4.0097  | 0.09901 | 0.004 | NS |
| Male   | 215 | 4.0186  | 0.09553 |       |    |
| I get good grades at school.                                   |     |         |         |       |    |
| Female   | 206 | 4.4854  | 0.06555 | 0.841 | NS |
| Male   | 216 | 4.3935  | 0.07533 |       |    |
| Connectedness to Community (M range: 6-30)                     |     |         |         |       |    |
| Female   | 207 | 24.4155 | 0.419   | 0.658 | NS |
| Male   | 215 | 24.8744 | 0.38136 |       |    |
| I like hanging out around where I live.                        |     |         |         |       |    |
| Female   | 207 | 4.314   | 0.08671 | 0.085 | NS |
| Male   | 216 | 4.2778  | 0.08918 |       |    |
| I like hanging out a lot with kids in my neighborhood.         |     |         |         |       |    |
| Female   | 207 | 4.1159  | 0.0943  | 1.332 | NS |
| Male   | 215 | 4.2605  | 0.0828  |       |    |
| I often spend time playing or doing things in my neighborhood. |     |         |         |       |    |
| Female   | 207 | 4.0676  | 0.09552 | 1.303 | NS |
| Male   | 216 | 4.213   | 0.08458 |       |    |
| I spend a lot of time with kids around where I live.           |     |         |         |       |    |
| Female   | 207 | 3.9034  | 0.09782 | 1.353 | NS |
| Male   | 216 | 4.0556  | 0.08723 |       |    |
| I get along well with all the children in my neighborhood.     |     |         |         |       |    |
| Female   | 207 | 4.1836  | 0.0865  | 1.642 | NS |
| Male   | 216 | 4.3287  | 0.07361 |       |    |
| My neighborhood is not boring.                                 |     |         |         |       |    |
| Female   | 207 | 3.8309  | 0.10031 | 0.531 | NS |
| Male   | 216 | 3.7222  | 0.10994 |       |    |
| Connectedness to Religion (M range: 2-15)                      |     |         |         |       |    |
| Female   | 207 | 11.7729 | 0.23206 | 0.41  | NS |
| Male   | 216 | 11.9722 | 0.20803 |       |    |
| Religion is very important for me.                             |     |         |         |       |    |
| Female   | 207 | 4.2995  | 0.08655 | 1.115 | NS |
| Male   | 216 | 4.4213  | 0.07662 |       |    |
| I attend religious services regularly.                         |     |         |         |       |    |
| Female   | 207 | 3.7101  | 0.10072 | 0.179 | NS |
| Male   | 216 | 3.7685  | 0.09447 |       |    |
| I am religious.  |     |         |         |       |    |
| Female   | 207 | 3.7633  | 0.09846 | 0.019 | NS |
| Male   | 216 | 3.7824  | 0.09874 |       |    |

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Note: Range for the mean of all individual items is 1-5. The range for each of the connectedness scales is specified within the table.

\*  $p \leq 0.05$

\*\*  $p \leq 0.001$

NS=Not statistically significant

**Table 45. Self-reported connectedness overall and by types, by age (N=426)**

|   | N   | Mean    | Std. Error | ANOVA |      |
|---|-----|---------|------------|-------|------|
|   |     |         |            | F     | Sig. |
| Connectedness Overall (M range: 7-31.75)    |     |         |            |       |      |
| 10 years old                                | 124 | 22.2419 | 0.29709    | 0.258 | NS   |
| 11 years old                                | 148 | 22.3547 | 0.25083    |       |      |
| 12 years old                                | 129 | 22.0804 | 0.28006    |       |      |
| Connectedness to Parents (M range: 6-30)    |     |         |            |       |      |
| 10 years old                                | 128 | 26.5391 | 0.32507    | 0.345 | NS   |
| 11 years old                                | 154 | 26.4481 | 0.3243     |       |      |
| 12 years old                                | 138 | 26.1522 | 0.36493    |       |      |
| It is important that my parents trust me.   |     |         |            |       |      |
| 10 years old                                | 129 | 4.7519  | 0.06229    | 0.242 | NS   |
| 11 years old                                | 154 | 4.7532  | 0.06063    |       |      |
| 12 years old                                | 138 | 4.6957  | 0.07601    |       |      |
| My parents and I get along well.            |     |         |            |       |      |
| 10 years old                                | 130 | 4.5538  | 0.08943    | 0.782 | NS   |
| 11 years old                                | 154 | 4.6234  | 0.07546    |       |      |
| 12 years old                                | 138 | 4.471   | 0.09876    |       |      |
| I care a lot about my parents.              |     |         |            |       |      |
| 10 years old                                | 130 | 4.7385  | 0.06512    | 0.03  | NS   |
| 11 years old                                | 154 | 4.7532  | 0.0647     |       |      |
| 12 years old                                | 138 | 4.7319  | 0.06385    |       |      |
| My parents and I have fun together.         |     |         |            |       |      |
| 10 years old                                | 130 | 4.6077  | 0.07837    | 1.533 | NS   |
| 11 years old                                | 154 | 4.4481  | 0.08243    |       |      |
| 12 years old                                | 138 | 4.3986  | 0.09568    |       |      |
| I do not argue with my parents.             |     |         |            |       |      |
| 10 years old                                | 130 | 3.2     | 0.15029    | 0.442 | NS   |
| 11 years old                                | 154 | 3.2208  | 0.13199    |       |      |
| 12 years old                                | 138 | 3.3696  | 0.13175    |       |      |
| I enjoy having a good time with my parents. |     |         |            |       |      |
| 10 years old                                | 129 | 4.5969  | 0.08491    | 1.075 | NS   |
| 11 years old                                | 154 | 4.6494  | 0.07109    |       |      |
| 12 years old                                | 138 | 4.4855  | 0.0898     |       |      |
| Connectedness to Father (M range: 0-25)     |     |         |            |       |      |
| 10 years old                                | 128 | 19.8594 | 0.39927    | 1.87  | NS   |
| 11 years old                                | 150 | 20.2667 | 0.38758    |       |      |
| 12 years old                                | 135 | 19.1185 | 0.49876    |       |      |
| My dad and I are close.                     |     |         |            |       |      |
| 10 years old                                | 129 | 4.0853  | 0.11804    | 1.483 | NS   |
| 11 years old                                | 151 | 4.245   | 0.10206    |       |      |
| 12 years old                                | 135 | 3.9704  | 0.12702    |       |      |

|   |     |         |         |       |    |  |
|---|-----|---------|---------|-------|----|--|
| I like spending time with my dad.         |     |         |         |       |    |  |
| 10 years old                              | 129 | 4.4884  | 0.0915  |       |    |  |
| 11 years old                              | 150 | 4.36    | 0.10113 | 2.165 | NS |  |
| 12 years old                              | 135 | 4.1778  | 0.11655 |       |    |  |
| My dad cares a lot about me.              |     |         |         |       |    |  |
| 10 years old                              | 128 | 4.4141  | 0.10318 |       |    |  |
| 11 years old                              | 151 | 4.4967  | 0.09438 | 2.12  | NS |  |
| 12 years old                              | 135 | 4.2     | 0.12025 |       |    |  |
| I do not argue with my dad.               |     |         |         |       |    |  |
| 10 years old                              | 129 | 3.4496  | 0.15288 |       |    |  |
| 11 years old                              | 151 | 3.4967  | 0.13678 | 0.034 | NS |  |
| 12 years old                              | 135 | 3.4963  | 0.14297 |       |    |  |
| I talk with my dad about personal things. |     |         |         |       |    |  |
| 10 years old                              | 129 | 3.4419  | 0.14966 |       |    |  |
| 11 years old                              | 151 | 3.6954  | 0.13155 | 2.32  | NS |  |
| 12 years old                              | 135 | 3.2741  | 0.14586 |       |    |  |
| Connectedness to Mother (M range: 5-25)   |     |         |         |       |    |  |
| 10 years old                              | 129 | 21.4109 | 0.32455 |       |    |  |
| 11 years old                              | 153 | 21.8824 | 0.26229 | 0.647 | NS |  |
| 12 years old                              | 137 | 21.5912 | 0.31332 |       |    |  |
| I like spending time with my mom.         |     |         |         |       |    |  |
| 10 years old                              | 129 | 4.6744  | 0.06799 |       |    |  |
| 11 years old                              | 154 | 4.6753  | 0.07189 | 0.13  | NS |  |
| 12 years old                              | 137 | 4.6277  | 0.08417 |       |    |  |
| My mom and I are very close.              |     |         |         |       |    |  |
| 10 years old                              | 129 | 4.6512  | 0.07436 |       |    |  |
| 11 years old                              | 154 | 4.6883  | 0.06548 | 0.807 | NS |  |
| 12 years old                              | 137 | 4.562   | 0.07949 |       |    |  |
| My mom cares a lot about me.              |     |         |         |       |    |  |
| 10 years old                              | 129 | 4.7519  | 0.06229 |       |    |  |
| 11 years old                              | 154 | 4.7273  | 0.06911 | 0.284 | NS |  |
| 12 years old                              | 137 | 4.6788  | 0.07173 |       |    |  |
| I do not argue with my mom.               |     |         |         |       |    |  |
| 10 years old                              | 129 | 3.3411  | 0.14908 |       |    |  |
| 11 years old                              | 154 | 3.513   | 0.1264  | 1.378 | NS |  |
| 12 years old                              | 137 | 3.6642  | 0.12827 |       |    |  |
| I talk with my mom about personal things. |     |         |         |       |    |  |
| 10 years old                              | 129 | 3.9922  | 0.13321 |       |    |  |
| 11 years old                              | 153 | 4.268   | 0.10159 | 1.553 | NS |  |
| 12 years old                              | 137 | 4.0584  | 0.11938 |       |    |  |
| Connectedness to Friends (M range: 6-78)  |     |         |         |       |    |  |
| 10 years old                              | 129 | 24.5271 | 0.45618 |       |    |  |
| 11 years old                              | 154 | 25.0779 | 0.44151 | 0.369 | NS |  |
| 12 years old                              | 137 | 25.073  | 0.62031 |       |    |  |

|   |     |         |         |       |        |  |
|---|-----|---------|---------|-------|--------|--|
| Spending time with my friends is the best time of my day.           |     |         |         |       |        |  |
| 10 years old  | 130 | 4.2692  | 0.10576 |       |        |  |
| 11 years old  | 154 | 4.3117  | 0.1003  | 0.061 | NS     |  |
| 12 years old  | 138 | 4.2681  | 0.10262 |       |        |  |
| I have friends I'm really close to and trust completely.            |     |         |         |       |        |  |
| 10 years old  | 129 | 4.1783  | 0.10173 |       |        |  |
| 11 years old  | 154 | 4.3701  | 0.09303 | 1.197 | NS     |  |
| 12 years old  | 137 | 4.1825  | 0.11265 |       |        |  |
| Spending time with my friends is an important part of life.         |     |         |         |       |        |  |
| 10 years old  | 130 | 4.1769  | 0.11581 |       |        |  |
| 11 years old  | 154 | 4.2078  | 0.1041  | 0.053 | NS     |  |
| 12 years old  | 138 | 4.1594  | 0.1075  |       |        |  |
| My friends and I talk openly with each other about personal things. |     |         |         |       |        |  |
| 10 years old  | 130 | 3.1769  | 0.1463  |       |        |  |
| 11 years old  | 154 | 3.5065  | 0.13295 | 1.929 | NS     |  |
| 12 years old  | 138 | 3.5217  | 0.133   |       |        |  |
| I spend as much time as I can with my friends.                      |     |         |         |       |        |  |
| 10 years old  | 130 | 4.2692  | 0.10576 |       |        |  |
| 11 years old  | 154 | 4.2857  | 0.1008  | 0.601 | NS     |  |
| 12 years old  | 138 | 4.1377  | 0.10748 |       |        |  |
| My friends and I spend a lot of time talking about things.          |     |         |         |       |        |  |
| 10 years old  | 130 | 4.4154  | 0.08653 |       |        |  |
| 11 years old  | 154 | 4.3961  | 0.10068 | 1.092 | NS     |  |
| 12 years old  | 138 | 4.8043  | 0.36245 |       |        |  |
| Connectedness to Teachers (M range: 5-25)                           |     |         |         |       |        |  |
| 10 years old  | 129 | 22      | 0.36651 |       |        |  |
| 11 years old  | 153 | 21.8497 | 0.33485 | 1.092 | NS     |  |
| 12 years old  | 136 | 21.2794 | 0.37598 |       |        |  |
| I care what my teachers think of me.                                |     |         |         |       |        |  |
| 10 years old  | 130 | 4.2692  | 0.11072 |       |        |  |
| 11 years old  | 154 | 3.9675  | 0.12375 | 3.256 | 0.040* |  |
| 12 years old  | 138 | 3.8116  | 0.13858 |       |        |  |
| I want my teachers to respect me.                                   |     |         |         |       |        |  |
| 10 years old  | 130 | 4.4615  | 0.09777 |       |        |  |
| 11 years old  | 153 | 4.6601  | 0.06888 | 1.598 | NS     |  |
| 12 years old  | 137 | 4.6131  | 0.07839 |       |        |  |
| I try to get along with my teachers.                                |     |         |         |       |        |  |
| 10 years old  | 130 | 4.3846  | 0.09972 |       |        |  |
| 11 years old  | 154 | 4.526   | 0.08095 | 0.755 | NS     |  |
| 12 years old  | 137 | 4.4088  | 0.08641 |       |        |  |
| I try to earn my teachers' trust.                                   |     |         |         |       |        |  |
| 10 years old  | 129 | 4.4651  | 0.09342 |       |        |  |
| 11 years old  | 154 | 4.4416  | 0.08932 | 0.022 | NS     |  |
| 12 years old  | 136 | 4.4632  | 0.08912 |       |        |  |

|  |     |         |         |       |        |
|--|-----|---------|---------|-------|--------|
| I like most of the teachers in my school.        |     |         |         |       |        |
| 10 years old                                     | 130 | 4.3615  | 0.10069 |       |        |
| 11 years old                                     | 154 | 4.2078  | 0.10121 | 3.545 | 0.030* |
| 12 years old                                     | 137 | 3.9562  | 0.11624 |       |        |
| Connectedness to School (M range: 6-30)          |     |         |         |       |        |
| 10 years old                                     | 129 | 26.7519 | 0.40528 |       |        |
| 11 years old                                     | 153 | 26.9608 | 0.33869 | 0.234 | NS     |
| 12 years old                                     | 135 | 26.6074 | 0.38678 |       |        |
| I work hard/put forth a lot of effort at school. |     |         |         |       |        |
| 10 years old                                     | 129 | 4.3566  | 0.10828 |       |        |
| 11 years old                                     | 154 | 4.6883  | 0.074   | 3.634 | 0.027* |
| 12 years old                                     | 138 | 4.4565  | 0.09091 |       |        |
| I enjoy being at school.                         |     |         |         |       |        |
| 10 years old                                     | 130 | 4.2231  | 0.1131  |       |        |
| 11 years old                                     | 153 | 3.9216  | 0.11602 | 2.074 | NS     |
| 12 years old                                     | 137 | 4.1606  | 0.10578 |       |        |
| I do well in school.                             |     |         |         |       |        |
| 10 years old                                     | 130 | 4.4462  | 0.0927  |       |        |
| 11 years old                                     | 154 | 4.4221  | 0.08681 | 0.025 | NS     |
| 12 years old                                     | 138 | 4.4203  | 0.08655 |       |        |
| Doing well in school is important to me.         |     |         |         |       |        |
| 10 years old                                     | 130 | 4.6     | 0.08571 |       |        |
| 11 years old                                     | 154 | 4.6299  | 0.07595 | 0.721 | NS     |
| 12 years old                                     | 138 | 4.4928  | 0.09496 |       |        |
| Getting good grades is important.                |     |         |         |       |        |
| 10 years old                                     | 130 | 4.6769  | 0.07815 |       |        |
| 11 years old                                     | 154 | 4.6818  | 0.07296 | 0.002 | NS     |
| 12 years old                                     | 136 | 4.6838  | 0.0682  |       |        |
| Not having problems at school is important.      |     |         |         |       |        |
| 10 years old                                     | 130 | 4.4385  | 0.09889 |       |        |
| 11 years old                                     | 154 | 4.5584  | 0.08932 | 0.957 | NS     |
| 12 years old                                     | 138 | 4.3768  | 0.10192 |       |        |
| School is not boring.                            |     |         |         |       |        |
| 10 years old                                     | 130 | 4.0308  | 0.1145  |       |        |
| 11 years old                                     | 154 | 3.8506  | 0.12005 | 0.837 | NS     |
| 12 years old                                     | 137 | 3.8321  | 0.11517 |       |        |
| I feel good when I am in school.                 |     |         |         |       |        |
| 10 years old                                     | 130 | 4.4923  | 0.08406 |       |        |
| 11 years old                                     | 154 | 4.1688  | 0.10617 | 3.845 | 0.022* |
| 12 years old                                     | 138 | 4.1377  | 0.09768 |       |        |
| I do not have problems at school.                |     |         |         |       |        |
| 10 years old                                     | 130 | 3.9385  | 0.12817 |       |        |
| 11 years old                                     | 153 | 4.111   | 0.1115  | 0.612 | NS     |
| 12 years old                                     | 137 | 3.9708  | 0.11946 |       |        |

|  |     |         |         |       |        |  |
|--|-----|---------|---------|-------|--------|--|
| I get good grades at school.                                   |     |         |         |       |        |  |
| 10 years old   | 129 | 4.4341  | 0.09521 |       |        |  |
| 11 years old   | 154 | 4.5455  | 0.07201 | 1.769 | NS     |  |
| 12 years old   | 138 | 4.3188  | 0.09482 |       |        |  |
| Connectedness to Community (M range: 6-30)                     |     |         |         |       |        |  |
| 10 years old   | 129 | 24.6357 | 0.50361 |       |        |  |
| 11 years old   | 154 | 24.5455 | 0.50109 | 0.04  | NS     |  |
| 12 years old   | 138 | 24.7391 | 0.46637 |       |        |  |
| I like hanging out around where I live.                        |     |         |         |       |        |  |
| 10 years old   | 130 | 4.3385  | 0.10786 |       |        |  |
| 11 years old   | 154 | 4.2403  | 0.11172 | 0.226 | NS     |  |
| 12 years old   | 138 | 4.3116  | 0.10275 |       |        |  |
| I like hanging out a lot with kids in my neighborhood.         |     |         |         |       |        |  |
| 10 years old   | 129 | 4.1085  | 0.11608 |       |        |  |
| 11 years old   | 154 | 4.2338  | 0.10617 | 0.362 | NS     |  |
| 12 years old   | 138 | 4.2101  | 0.10461 |       |        |  |
| I often spend time playing or doing things in my neighborhood. |     |         |         |       |        |  |
| 10 years old   | 130 | 4.2     | 0.11318 |       |        |  |
| 11 years old   | 154 | 4.0195  | 0.11451 | 1.029 | NS     |  |
| 12 years old   | 138 | 4.2174  | 0.10168 |       |        |  |
| I spend a lot of time with kids around where I live.           |     |         |         |       |        |  |
| 10 years old   | 130 | 3.9846  | 0.11557 |       |        |  |
| 11 years old   | 154 | 3.9675  | 0.11412 | 0.008 | NS     |  |
| 12 years old   | 138 | 3.9855  | 0.11077 |       |        |  |
| I get along well with all the children in my neighborhood.     |     |         |         |       |        |  |
| 10 years old   | 130 | 4.3308  | 0.10032 |       |        |  |
| 11 years old   | 154 | 4.2078  | 0.10246 | 0.412 | NS     |  |
| 12 years old   | 138 | 4.2391  | 0.09058 |       |        |  |
| My neighborhood is not boring.                                 |     |         |         |       |        |  |
| 10 years old   | 130 | 3.6462  | 0.14275 |       |        |  |
| 11 years old   | 154 | 3.8766  | 0.11774 | 0.796 | NS     |  |
| 12 years old   | 138 | 3.7754  | 0.1297  |       |        |  |
| Connectedness to Religion (M range: 2-15)                      |     |         |         |       |        |  |
| 10 years old   | 130 | 12.2538 | 0.27089 |       |        |  |
| 11 years old   | 154 | 12.0779 | 0.24245 | 3.759 | 0.024* |  |
| 12 years old   | 138 | 11.2681 | 0.29174 |       |        |  |
| Religion is very important for me.                             |     |         |         |       |        |  |
| 10 years old   | 130 | 4.3692  | 0.10077 |       |        |  |
| 11 years old   | 154 | 4.4221  | 0.9249  | 0.507 | NS     |  |
| 12 years old   | 138 | 4.2826  | 0.10787 |       |        |  |
| I attend religious services regularly.                         |     |         |         |       |        |  |
| 10 years old   | 130 | 3.8769  | 0.12308 |       |        |  |
| 11 years old   | 154 | 3.7468  | 0.11528 | 1.34  | NS     |  |
| 12 years old   | 138 | 3.5942  | 0.12023 |       |        |  |

|                 |     |        |         |       |        |
|-----------------|-----|--------|---------|-------|--------|
| I am religious. |     |        |         |       |        |
| 10 years old    | 130 | 4.0077 | 0.11479 |       |        |
| 11 years old    | 154 | 3.9091 | 0.11146 | 7.559 | 0.001* |
| 12 years old    | 138 | 3.3913 | 0.13028 |       | *      |

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Note: Range for the mean of all individual items is 1-5. The range for each of the connectedness scales is specified within the table.

\*  $p \leq 0.05$

\*\*  $p \leq 0.001$

NS=Not statistically significant



**Table 46. Self-reported connectedness overall and by types, by church attendance (N=426)**

|   | N   | Mean    | Std. Error | ANOVA |      |
|---|-----|---------|------------|-------|------|
|   |     |         |            | F     | Sig. |
| Connectedness Overall (M range: 7-31.75)    |     |         |            |       |      |
| Church attendance-Yes                       | 282 | 22.4282 | 0.18432    | 3.373 | NS   |
| Church attendance-No                        | 120 | 21.7958 | 0.30164    |       |      |
| Connectedness to Parents (M range: 6-30)    |     |         |            |       |      |
| Church attendance-Yes                       | 297 | 26.5051 | 0.22403    | 0.947 | NS   |
| Church attendance-No                        | 124 | 26.0887 | 0.38833    |       |      |
| It is important that my parents trust me.   |     |         |            |       |      |
| Church attendance-Yes                       | 298 | 4.7483  | 0.0441     | 0.309 | NS   |
| Church attendance-No                        | 124 | 4.7016  | 0.07594    |       |      |
| My parents and I get along well.            |     |         |            |       |      |
| Church attendance-Yes                       | 299 | 4.5853  | 0.05866    | 0.975 | NS   |
| Church attendance-No                        | 124 | 4.4758  | 0.03828    |       |      |
| I care a lot about my parents.              |     |         |            |       |      |
| Church attendance-Yes                       | 299 | 4.7592  | 0.04299    | 0.496 | NS   |
| Church attendance-No                        | 124 | 4.7016  | 0.07331    |       |      |
| My parents and I have fun together.         |     |         |            |       |      |
| Church attendance-Yes                       | 299 | 4.5251  | 0.05691    | 1.798 | NS   |
| Church attendance-No                        | 124 | 4.379   | 0.0989     |       |      |
| I do not argue with my parents.             |     |         |            |       |      |
| Church attendance-Yes                       | 299 | 3.2308  | 0.09411    | 0.384 | NS   |
| Church attendance-No                        | 124 | 3.3387  | 0.14704    |       |      |
| I enjoy having a good time with my parents. |     |         |            |       |      |
| Church attendance-Yes                       | 298 | 4.6174  | 0.05298    | 1.48  | NS   |
| Church attendance-No                        | 124 | 4.4919  | 0.09683    |       |      |
| Connectedness to Father (M range: 0-25)     |     |         |            |       |      |
| Church attendance-Yes                       | 292 | 19.9178 | 0.28788    | 0.813 | NS   |
| Church attendance-No                        | 122 | 19.4262 | 0.48636    |       |      |
| My dad and I are close.                     |     |         |            |       |      |
| Church attendance-Yes                       | 294 | 4.102   | 0.07983    | 0.02  | NS   |
| Church attendance-No                        | 122 | 4.123   | 0.12073    |       |      |
| I like spending time with my dad.           |     |         |            |       |      |
| Church attendance-Yes                       | 293 | 4.314   | 0.07277    | 0.528 | NS   |
| Church attendance-No                        | 122 | 4.4098  | 0.10589    |       |      |
| My dad cares a lot about me.                |     |         |            |       |      |
| Church attendance-Yes                       | 293 | 4.3891  | 0.07152    | 0.111 | NS   |
| Church attendance-No                        | 122 | 4.3443  | 0.118      |       |      |
| I do not argue with my dad.                 |     |         |            |       |      |
| Church attendance-Yes                       | 294 | 3.5     | 0.09694    | 0.13  | NS   |
| Church attendance-No                        | 122 | 3.4344  | 0.15831    |       |      |

|   |     |         |         |       |        |  |
|---|-----|---------|---------|-------|--------|--|
| I talk with my dad about personal things.                           |     |         |         |       |        |  |
| Church attendance-Yes   | 294 | 3.6361  | 0.09504 | 8.521 | 0.004* |  |
| Church attendance-No  | 122 | 3.1148  | 0.15625 |       |        |  |
| Connectedness to Mother (M range: 5-25)                             |     |         |         |       |        |  |
| Church attendance-Yes   | 296 | 21.6858 | 0.20343 | 0.103 | NS     |  |
| Church attendance-No  | 124 | 21.5645 | 0.32191 |       |        |  |
| I like spending time with my mom.                                   |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 4.67    | 0.05044 | 0.12  | NS     |  |
| Church attendance-No  | 124 | 4.6371  | 0.08363 |       |        |  |
| My mom and I are very close.  |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 4.6498  | 0.04906 | 0.238 | NS     |  |
| Church attendance-No  | 124 | 4.6048  | 0.08083 |       |        |  |
| My mom cares a lot about me.  |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 4.7306  | 0.04351 | 0.185 | NS     |  |
| Church attendance-No  | 124 | 4.6935  | 0.08351 |       |        |  |
| I do not argue with my mom.   |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 3.4848  | 0.09225 | 0.318 | NS     |  |
| Church attendance-No  | 124 | 3.5806  | 0.14261 |       |        |  |
| I talk with my mom about personal things.                           |     |         |         |       |        |  |
| Church attendance-Yes   | 296 | 4.1453  | 0.08028 | 0.426 | NS     |  |
| Church attendance-No  | 124 | 4.0484  | 0.12589 |       |        |  |
| Connectedness to Friends (M range: 6-78)                            |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 24.7576 | 0.32547 | 0.725 | NS     |  |
| Church attendance-No  | 124 | 25.3065 | 0.62261 |       |        |  |
| Spending time with my friends is the best time of my day.           |     |         |         |       |        |  |
| Church attendance-Yes   | 299 | 4.2809  | 0.0695  | 0.018 | NS     |  |
| Church attendance-No  | 124 | 4.2984  | 0.11277 |       |        |  |
| I have friends I'm really close to and trust completely.            |     |         |         |       |        |  |
| Church attendance-Yes   | 297 | 4.2828  | 0.06881 | 0.663 | NS     |  |
| Church attendance-No  | 124 | 4.1774  | 0.11397 |       |        |  |
| Spending time with my friends is an important part of life.         |     |         |         |       |        |  |
| Church attendance-Yes   | 299 | 4.1237  | 0.10224 | 2.27  | NS     |  |
| Church attendance-No  | 124 | 4.3306  | 0.10224 |       |        |  |
| My friends and I talk openly with each other about personal things. |     |         |         |       |        |  |
| Church attendance-Yes   | 299 | 3.4983  | 0.09325 | 2.757 | NS     |  |
| Church attendance-No  | 124 | 3.2097  | 0.14943 |       |        |  |
| I spend as much time as I can with my friends.                      |     |         |         |       |        |  |
| Church attendance-Yes   | 299 | 4.1839  | 0.07528 | 1.67  | NS     |  |
| Church attendance-No  | 124 | 4.3548  | 0.09594 |       |        |  |
| My friends and I spend a lot of time talking about things.          |     |         |         |       |        |  |
| Church attendance-Yes   | 299 | 4.3712  | 0.06698 | 4.144 | 0.042* |  |
| Church attendance-No  | 124 | 4.9355  | 0.3996  |       |        |  |
| Connectedness to Teachers (M range: 5-25)                           |     |         |         |       |        |  |

|  |     |         |          |       |        |
|--|-----|---------|----------|-------|--------|
| Church attendance-Yes                            | 296 | 21.8986 | 0.24358  | 1.888 | NS     |
| Church attendance-No                             | 123 | 21.2764 | 0.38727  |       |        |
| I care what my teachers think of me.             |     |         |          |       |        |
| Church attendance-Yes                            | 299 | 4.0769  | 0.08443  | 1.935 | NS     |
| Church attendance-No                             | 124 | 3.8548  | 0.1415   |       |        |
| I want my teachers to respect me.                |     |         |          |       |        |
| Church attendance-Yes                            | 297 | 4.6128  | 0.05295  | 0.884 | NS     |
| Church attendance-No                             | 124 | 4.5161  | 0.09614  |       |        |
| I try to get along with my teachers.             |     |         |          |       |        |
| Church attendance-Yes                            | 298 | 4.443   | 0.06139  | 0.006 | NS     |
| Church attendance-No                             | 124 | 4.4516  | 0.09186  |       |        |
| I try to earn my teachers' trust.                |     |         |          |       |        |
| Church attendance-Yes                            | 297 | 4.4613  | 0.06235  | 0.015 | NS     |
| Church attendance-No                             | 123 | 4.4472  | 0.09534  |       |        |
| I like most of the teachers in my school.        |     |         |          |       |        |
| Church attendance-Yes                            | 298 | 4.245   | 0.07108  | 3.298 | NS     |
| Church attendance-No                             | 124 | 4       | 0.12065  |       |        |
| Connectedness to School (M range: 6-30)          |     |         |          |       |        |
| Church attendance-Yes                            | 295 | 26.922  | 0.025845 | 0.974 | NS     |
| Church attendance-No                             | 123 | 26.4553 | 0.39018  |       |        |
| I work hard/put forth a lot of effort at school. |     |         |          |       |        |
| Church attendance-Yes                            | 298 | 4.5336  | 0.05977  | 0.412 | NS     |
| Church attendance-No                             | 124 | 4.4597  | 0.10582  |       |        |
| I enjoy being at school.                         |     |         |          |       |        |
| Church attendance-Yes                            | 298 | 4.1208  | 0.07736  | 0.536 | NS     |
| Church attendance-No                             | 123 | 4.0163  | 0.11941  |       |        |
| I do well in school.                             |     |         |          |       |        |
| Church attendance-Yes                            | 299 | 4.4415  | 0.06046  | 0.116 | NS     |
| Church attendance-No                             | 124 | 4.4032  | 0.09507  |       |        |
| Doing well in school is important to me.         |     |         |          |       |        |
| Church attendance-Yes                            | 299 | 4.5786  | 0.0602   | 0.003 | NS     |
| Church attendance-No                             | 124 | 4.5726  | 0.08428  |       |        |
| Getting good grades is important.                |     |         |          |       |        |
| Church attendance-Yes                            | 297 | 4.6801  | 0.07185  | 0.003 | NS     |
| Church attendance-No                             | 124 | 4.6855  | 0.07185  |       |        |
| Not having problems at school is important.      |     |         |          |       |        |
| Church attendance-Yes                            | 299 | 4.5151  | 0.06202  | 2.092 | NS     |
| Church attendance-No                             | 124 | 4.3387  | 0.11615  |       |        |
| School is not boring.                            |     |         |          |       |        |
| Church attendance-Yes                            | 298 | 3.9966  | 0.07687  | 4.672 | 0.031* |
| Church attendance-No                             | 124 | 3.6774  | 0.13527  |       |        |
| I feel good when I am in school.                 |     |         |          |       |        |
| Church attendance-Yes                            | 299 | 4.3411  | 0.06437  | 4.965 | 0.026* |

|  |     |         |         |         |       |
|--|-----|---------|---------|---------|-------|
| Church attendance-No   | 124 | 4.0645  | 0.06756 |         |       |
| I do not have problems at school.                              |     |         |         |         |       |
| Church attendance-Yes  | 298 | 4.0268  | 0.08135 | 0.081   | NS    |
| Church attendance-No   | 123 | 3.9837  | 0.12855 |         |       |
| I get good grades at school.                                   |     |         |         |         |       |
| Church attendance-Yes  | 298 | 4.4732  | 0.05959 | 1.158   | NS    |
| Church attendance-No   | 124 | 4.3548  | 0.09246 |         |       |
| Connectedness to Community (M range: 6-30)                     |     |         |         |         |       |
| Church attendance-Yes  | 298 | 24.7651 | 0.32561 | 0.403   | NS    |
| Church attendance-No   | 124 | 24.371  | 0.56116 |         |       |
| I like hanging out around where I live.                        |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.2575  | 0.07485 | 0.9     | NS    |
| Church attendance-No   | 124 | 4.3871  | 0.11144 |         |       |
| I like hanging out a lot with kids in my neighborhood.         |     |         |         |         |       |
| Church attendance-Yes  | 298 | 4.2349  | 0.07237 | 1.26    | NS    |
| Church attendance-No   | 124 | 4.0806  | 0.12312 |         |       |
| I often spend time playing or doing things in my neighborhood. |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.1773  | 0.07306 | 0.746   | NS    |
| Church attendance-No   | 124 | 4.0565  | 0.12716 |         |       |
| I spend a lot of time with kids around where I live.           |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.0468  | 0.07576 | 2.443   | NS    |
| Church attendance-No   | 124 | 3.8226  | 0.12754 |         |       |
| I get along well with all the children in my neighborhood.     |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.3311  | 0.06481 | 4.079   | 0.044 |
| Church attendance-No   | 124 | 4.0806  | 0.11255 |         | *     |
| My neighborhood is not boring.                                 |     |         |         |         |       |
| Church attendance-Yes  | 299 | 3.7057  | 0.08902 | 2.116   | NS    |
| Church attendance-No   | 124 | 3.9435  | 0.13564 |         |       |
| Connectedness to Religion (M range: 2-15)                      |     |         |         |         |       |
| Church attendance-Yes  | 299 | 12.6756 | 0.15401 | 75.333  | 0.000 |
| Church attendance-No   | 124 | 9.9435  | 0.31803 |         | **    |
| Religion is very important for me.                             |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.495   | 0.05924 | 13.254  | 0.000 |
| Church attendance-No   | 124 | 4.0403  | 0.13126 |         | **    |
| I attend religious services regularly.                         |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.1538  | 0.0659  | 109.358 | 0.000 |
| Church attendance-No   | 124 | 2.7419  | 0.13687 |         | **    |
| I am religious.  |     |         |         |         |       |
| Church attendance-Yes  | 299 | 4.0268  | 0.07534 | 34.526  | 0.000 |
| Church attendance-No   | 124 | 3.1613  | 0.13902 |         | **    |

Note: Range for the mean of all individual items is 1-5. The range for each of the connectedness scales is specified within the table.

\*  $p \leq 0.05$  \*\*  $p \leq 0.001$  NS=Not statistically significant

**Table 47. Pearson correlation analyses (N=424)**

|                    | Connectedness to... |              |             |             |             |             |             |             |             |       | Bullying    |             |      | Religiosity |    |   | Par. Rel. |
|--------------------|---------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------------|-------------|------|-------------|----|---|-----------|
|                    | O                   | P            | F           | M           | FR          | T           | S           | C           | R           | V     | B           | BV          | BS   | PB          | PR | O |           |
| Conne-<br>ctedness | O                   | 1.00         |             |             |             |             |             |             |             |       |             |             |      |             |    |   |           |
|                    | P                   | 0.745<br>**  | 1.00        |             |             |             |             |             |             |       |             |             |      |             |    |   |           |
|                    | F                   | 0.673<br>**  | 0.606<br>** | 1.00        |             |             |             |             |             |       |             |             |      |             |    |   |           |
|                    | M                   | 0.720<br>**  | 0.608<br>** | 0.430<br>** | 1.00        |             |             |             |             |       |             |             |      |             |    |   |           |
|                    | FR                  | 0.677<br>**  | 0.401<br>** | 0.308<br>** | 0.415<br>** | 1.00        |             |             |             |       |             |             |      |             |    |   |           |
|                    | T                   | 0.732<br>**  | 0.424<br>** | 0.384<br>** | 0.472<br>** | 0.430<br>** | 1.00        |             |             |       |             |             |      |             |    |   |           |
|                    | S                   | 0.753<br>**  | 0.544<br>** | 0.410<br>** | 0.491<br>** | 0.397<br>** | 0.623<br>** | 1.00        |             |       |             |             |      |             |    |   |           |
|                    | C                   | 0.724<br>**  | 0.403<br>** | 0.346<br>** | 0.424<br>** | 0.424<br>** | 0.446<br>** | 0.472<br>** | 1.00        |       |             |             |      |             |    |   |           |
|                    | R                   | 0.559<br>**  | 0.308<br>** | 0.348<br>** | 0.259<br>** | 0.242<br>** | 0.341<br>** | 0.382<br>** | 0.437<br>** | 1.00  |             |             |      |             |    |   |           |
|                    | V                   | 0.114 *      | 0.074       | 0.058       | 0.136<br>** | 0.076       | 0.137<br>** | 0.102<br>*  | 0.037       | 0.063 | 1.00        |             |      |             |    |   |           |
| Bullying           | B                   | -0.046       | -           | -           | -           | -           | -           | 0.122<br>*  | 0.036       | 0.049 | 0.124<br>*  | 1.00        |      |             |    |   |           |
|                    | BV                  | -0.184<br>** | -           | -           | -           | -           | -           | 0.183<br>** | 0.078       | 0.019 | 0.233<br>** | 0.107<br>*  | 1.00 |             |    |   |           |
|                    | BS                  | -0.039       | -           | -           | -           | -           | -           | 0.021       | 0.019       | -     | 0.752<br>** | 0.340<br>** | NC   | 1.00        |    |   |           |

|                  |    |             |             |             |             |             |             |             |             |             |            |                  |       |            |             |             |            |      |
|------------------|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------------|-------|------------|-------------|-------------|------------|------|
|                  | PB | 0.315<br>** | 0.191<br>** | 0.220<br>** | 0.121       | 0.095       | 0.203<br>** | 0.216<br>** | 0.222<br>** | 0.711<br>** | 0.143<br>* | -<br>0.029       | 0.048 | -<br>0.132 | 1.00        |             |            |      |
| Religio-<br>sity | PR | 0.569<br>** | 0.321<br>** | 0.309<br>** | 0.310<br>** | 0.399<br>** | 0.443<br>** | 0.515<br>** | 0.409<br>** | 0.856<br>** | -<br>0.109 | -<br>0.238<br>** | 0.100 | 0.233<br>* | 0.559<br>** | 1.00        |            |      |
|                  | O  | 0.534<br>** | 0.327<br>** | 0.366<br>** | 0.259<br>** | 0.338<br>** | 0.446<br>** | 0.480<br>** | 0.329<br>** | 0.872<br>** | 0.009      | -<br>0.202<br>*  | 0.041 | 0.130      | 0.856<br>** | 0.908<br>** | 1.00       |      |
| Par. Rel.        |    | 0.150 *     | 0.172<br>** | 0.061       | 0.151<br>** | 0.062       | 0.161<br>** | 0.180<br>** | 0.102       | 0.060       | 0.041      | -<br>0.025       | 0.030 | -<br>0.017 | 0.138       | 0.092       | -<br>0.014 | 1.00 |

NOTE: O=Overall, P= Parents, F= Father, M=Mother, FR=Friends, T= Teachers, S=School, C=Community, R= Religion, V= Victim, B=Bully, BV= Bully-Victim, BS=Bystander, PB= Public, PR=Private, Par. Rel.=Parental Religiosity

NC=Not computed, at least one of the variables is constant.

\* $p \leq 0.05$

\*\* $p \leq 0.001$

**Table 48. Sequential multiple linear regression analyses to assess variance in bullying victimization (N=424)**

| Step                   | Variables Included            | Adjusted R <sup>2</sup> | Std. Error | Change Statistics        |             |               |
|------------------------|-------------------------------|-------------------------|------------|--------------------------|-------------|---------------|
|                        |                               |                         |            | Change in R <sup>2</sup> | Change in F | Sig. F Change |
| 1: Individual Level    | Age                           | -0.013                  | 0.41       | 0.023                    | 0.635       | NS            |
|                        | Gender                        |                         |            |                          |             |               |
|                        | Location                      |                         |            |                          |             |               |
|                        | Private Religiosity           |                         |            |                          |             |               |
|                        | Connectedness to Mother       |                         |            |                          |             |               |
| 2: Interpersonal Level | Connectedness to Father       | -0.047                  | 0.42       | 0.044                    | 0.579       | NS            |
|                        | Connectedness to Teachers     |                         |            |                          |             |               |
|                        | Connectedness to Friends      |                         |            |                          |             |               |
|                        | Antisocial Friends            |                         |            |                          |             |               |
|                        | Dissappoint Parents           |                         |            |                          |             |               |
| 3: School Level        | Dissappoint Teachers          | -0.065                  | 0.42       | 0.004                    | 0.182       | NS            |
|                        | Dissappoint Church Leaders    |                         |            |                          |             |               |
| 4: Community Level     | Connectedness to School       | -0.053                  | 0.42       | 0.029                    | 1.508       | NS            |
|                        | Talk about bullying at School |                         |            |                          |             |               |
|                        | Connectedness to Community    |                         |            |                          |             |               |
| 5: Culture Level       | Talk about bullying at BGC    | -0.073                  | 0.42       | 0.012                    | 0.422       | NS            |
|                        | Connectedness to Religion     |                         |            |                          |             |               |
|                        | Public Religiosity            |                         |            |                          |             |               |
|                        | Talk about bullying at church |                         |            |                          |             |               |

**Table 49. Sequential multiple linear regression analyses to assess variance in bullying victimization among church-attending participants (N=424)**

| Step                   | Variables Included  | Adjusted R <sup>2</sup> | Std. Error | Change Statistics        |             |               |
|------------------------|---|-------------------------|------------|--------------------------|-------------|---------------|
|                        |   |                         |            | Change in R <sup>2</sup> | Change in F | Sig. F Change |
| 1: Individual Level    | Age<br>Gender<br>Location<br>Private Religiosity<br>Connectedness to Mother<br>Connectedness to Father<br>Connectedness to Teachers | -0.015                  | 0.41       | 0.046                    | 0.760       | NS            |
| 2: Interpersonal Level | Connectedness to Friends<br>Antisocial Friends<br>Dissappoint Parents<br>Dissappoint Teachers<br>Dissappoint Church Leaders         | -0.021                  | 0.41       | 0.116                    | 0.951       | NS            |
| 3: School Level        | Connectedness to School<br>Talk about bullying at School  | 0.012                   | 0.40       | 0.057                    | 1.930       | NS            |
| 4: Community Level     | Connectedness to Community<br>Talk about bullying at BGC<br>Connectedness to Religion   | -0.001                  | 0.41       | 0.019                    | 0.648       | NS            |
| 5: Culture Level       | Public Religiosity<br>Talk about bullying at church   | 0.000                   | 0.41       | 0.045                    | 1.015       | NS            |



**Table 50. Sequential multiple linear regression analyses to assess variance in bullying victimization among non-church attending participants (N=424)**

| Step                   | Variables Included  | Adjusted R <sup>2</sup> | Std. Error | Change Statistics        |             |               |
|------------------------|---|-------------------------|------------|--------------------------|-------------|---------------|
|                        |   |                         |            | Change in R <sup>2</sup> | Change in F | Sig. F Change |
| 1: Individual Level    | Age<br>Gender<br>Location<br>Private Religiosity<br>Connectedness to Mother<br>Connectedness to Father<br>Connectedness to Teachers | 0.016                   | 0.41       | 0.109                    | 1.168       | NS            |
| 2: Interpersonal Level | Connectedness to Friends<br>Antisocial Friends<br>Dissappoint Parents<br>Dissappoint Teachers<br>Dissappoint Church Leaders         | 0.022                   | 0.41       | 0.192                    | 1.032       | NS            |
| 3: School Level        | Connectedness to School<br>Talk about bullying at School  | 0.116                   | 0.39       | 0.109                    | 2.595       | NS            |
| 4: Community Level     | Connectedness to Community<br>Talk about bullying at BGC  | 0.095                   | 0.39       | 0.029                    | 0.669       | NS            |
| 5: Culture Level       | Connectedness to Religion<br>Public Religiosity<br>Talk about bullying at church  | 0.056                   | 0.40       | 0.044                    | 0.647       | NS            |

**Table 51. Sequential multiple linear regression analyses to assess variance in bullying perpetration (N=424)**

| Step                   | Variables Included            | Adjusted R <sup>2</sup> | Std. Error | Change Statistics        |             |               | Coefficients <sup>1</sup> |            |        |         |
|------------------------|-------------------------------|-------------------------|------------|--------------------------|-------------|---------------|---------------------------|------------|--------|---------|
|                        |                               |                         |            | Change in R <sup>2</sup> | Change in F | Sig. F Change | B                         | Std. Error | Beta   | p-value |
| 1: Individual Level    | Age                           | -0.017                  | 0.23       | 0.019                    | 0.525       | NS            | 0.022                     | 0.027      | 0.076  | NS      |
|                        | Gender                        |                         |            |                          |             |               | 0.016                     | 0.044      | 0.035  | NS      |
|                        | Location                      |                         |            |                          |             |               | -0.015                    | 0.043      | -0.033 | NS      |
|                        | Private Religiosity           |                         |            |                          |             |               | -0.051                    | 0.026      | -0.235 | 0.054*  |
|                        | Connectedness to Mother       |                         |            |                          |             |               | -0.010                    | 0.008      | -0.163 | NS      |
| 2: Interpersonal Level | Connectedness to Father       | -0.038                  | 0.23       | 0.055                    | 0.738       | NS            | 0.006                     | 0.004      | 0.146  | NS      |
|                        | Connectedness to Teachers     |                         |            |                          |             |               | 0.007                     | 0.007      | 0.136  | NS      |
|                        | Connectedness to Friends      |                         |            |                          |             |               | 0.003                     | 0.005      | 0.065  | NS      |
|                        | Antisocial Friends            |                         |            |                          |             |               | -0.050                    | 0.057      | -0.080 | NS      |
|                        | Dissappoint Parents           |                         |            |                          |             |               | 0.035                     | 0.036      | 0.117  | NS      |
|                        | Dissappoint Teachers          |                         |            |                          |             |               | 0.013                     | 0.030      | 0.044  | NS      |
| 3: School Level        | Dissappoint Church Leaders    | -0.011                  | 0.23       | 0.042                    | 2.315       | NS            | -0.012                    | 0.028      | -0.046 | NS      |
|                        | Connectedness to School       |                         |            |                          |             |               | -0.008                    | 0.006      | -0.177 | NS      |
| 4: Community Level     | Talk about bullying at School | 0.037                   | 0.22       | 0.059                    | 3.394       | 0.038*        | 0.063                     | 0.055      | 0.106  | NS      |
|                        | Connectedness to Community    |                         |            |                          |             |               | -0.001                    | 0.004      | -0.023 | NS      |
| 5: Culture Level       | Talk about bullying at BGC    | 0.198                   | 0.20       | 0.160                    | 7.359       | 0.000**       | -0.096                    | 0.039      | -0.239 | 0.015*  |
|                        | Connectedness to Religion     |                         |            |                          |             |               | -0.012                    | 0.007      | -0.180 | NS      |
|                        | Public Religiosity            |                         |            |                          |             |               | 0.067                     | 0.024      | 0.318  | 0.006*  |
|                        | Talk about bullying at church |                         |            |                          |             |               | 0.008                     | 0.002      | 0.339  | 0.000** |

\*p≤0.05

\*\*p≤0.001

<sup>1</sup>Coefficients shown only for variables of the final regression model (step 5).

**Table 52. Sequential multiple linear regression analyses to assess variance in bullying perpetration among church attending preadolescents (N=424)**

| Step                   | Variables Included            | Adj. R <sup>2</sup> | Std. Error | Change Statistics        |             |               | Coefficients <sup>1</sup> |            |        |         |
|------------------------|-------------------------------|---------------------|------------|--------------------------|-------------|---------------|---------------------------|------------|--------|---------|
|                        |                               |                     |            | Change in R <sup>2</sup> | Change in F | Sig. F Change | B                         | Std. Error | Beta   | p-value |
| 1: Individual Level    | Age                           | -0.005              | 0.21       | 0.055                    | 0.920       | NS            | -0.044                    | 0.034      | -0.169 | NS      |
|                        | Gender                        |                     |            |                          |             |               | -0.032                    | 0.052      | -0.076 | NS      |
|                        | Location                      |                     |            |                          |             |               | -0.043                    | 0.052      | -0.104 | NS      |
|                        | Private Religiosity           |                     |            |                          |             |               | -0.038                    | 0.034      | -0.204 | NS      |
|                        | Connectedness to Mother       |                     |            |                          |             |               | 0.013                     | 0.009      | 0.228  | NS      |
| 2: Interpersonal Level | Connectedness to Father       | -0.079              | 0.21       | 0.059                    | 0.456       | NS            | 0.001                     | 0.007      | 0.026  | NS      |
|                        | Connectedness to Teachers     |                     |            |                          |             |               | 0.009                     | 0.009      | 0.190  | NS      |
|                        | Connectedness to Friends      |                     |            |                          |             |               | -0.001                    | 0.007      | -0.015 | NS      |
|                        | Antisocial Friends            |                     |            |                          |             |               | 0.031                     | 0.089      | 0.046  | NS      |
|                        | Dissappoint Parents           |                     |            |                          |             |               | -0.035                    | 0.048      | -0.126 | NS      |
|                        | Dissappoint Teachers          |                     |            |                          |             |               | 0.004                     | 0.038      | 0.016  | NS      |
| 3: School Level        | Dissappoint Church Leaders    | -0.084              | 0.22       | 0.029                    | 0.881       | NS            | 0.029                     | 0.045      | 0.104  | NS      |
|                        | Connectedness to School       |                     |            |                          |             |               | -0.009                    | 0.009      | -0.229 | NS      |
| 4: Community Level     | Talk about bullying at School | 0.022               | 0.20       | 0.113                    | 3.862       | 0.027*        | 0.003                     | 0.068      | 0.005  | NS      |
|                        | Connectedness to Community    |                     |            |                          |             |               | -0.006                    | 0.005      | -0.194 | NS      |
|                        | Talk about bullying at BGC    |                     |            |                          |             |               | -0.095                    | 0.055      | -0.230 | NS      |
| 5: Culture Level       | Connectedness to Religion     | 0.227               | 0.18       | 0.191                    | 5.521       | 0.002*        | -0.004                    | 0.011      | -0.051 | NS      |
|                        | Public Religiosity            |                     |            |                          |             |               | 0.032                     | 0.029      | 0.173  | NS      |
|                        | Talk about bullying at church |                     |            |                          |             |               | 0.008                     | 0.002      | 0.489  | 0.000*  |

\*p≤0.001

<sup>1</sup>Coefficients shown only for variables of the final regression model (step 5).

**Table 53. Sequential multiple linear regression analyses to assess variance in bullying perpetration among non-church attending participants (N=424)**

| Step                   | Variables Included            | Adj. R <sup>2</sup> | Std. Error | Change Statistics        |             |               | Coefficients <sup>1</sup> |            |        |         |
|------------------------|-------------------------------|---------------------|------------|--------------------------|-------------|---------------|---------------------------|------------|--------|---------|
|                        |                               |                     |            | Change in R <sup>2</sup> | Change in F | Sig. F Change | B                         | Std. Error | Beta   | p-value |
| 1: Individual Level    | Age                           | 0.050               | 0.25       | 0.138                    | 1.563       | NS            | 0.090                     | 0.038      | 0.287  | 0.028*  |
|                        | Gender                        |                     |            |                          |             |               | 0.113                     | 0.066      | 0.222  | NS      |
|                        | Location                      |                     |            |                          |             |               | 0.152                     | 0.093      | 0.281  | NS      |
|                        | Private Religiosity           |                     |            |                          |             |               | 0.026                     | 0.041      | 0.094  | NS      |
|                        | Connectedness to Mother       |                     |            |                          |             |               | -0.043                    | 0.012      | -0.604 | 0.001** |
|                        | Connectedness to Father       |                     |            |                          |             |               | 0.004                     | 0.006      | 0.115  | NS      |
| 2: Interpersonal Level | Connectedness to Teachers     | 0.255               | 0.22       | 0.325                    | 2.342       | 0.043*        | 0.014                     | 0.009      | 0.247  | NS      |
|                        | Connectedness to Friends      |                     |            |                          |             |               | -0.011                    | 0.009      | -0.224 | NS      |
|                        | Antisocial Friends            |                     |            |                          |             |               | -0.210                    | 0.073      | -0.348 | 0.008*  |
|                        | Dissappoint Parents           |                     |            |                          |             |               | 0.047                     | 0.056      | 0.138  | NS      |
|                        | Dissappoint Teachers          |                     |            |                          |             |               | 0.035                     | 0.053      | 0.106  | NS      |
|                        | Dissappoint Church Leaders    |                     |            |                          |             |               | 0.027                     | 0.037      | 0.108  | NS      |
| 3: School Level        | Connectedness to School       | 0.248               | 0.22       | 0.030                    | 0.849       | NS            | -0.016                    | 0.011      | -0.290 | NS      |
|                        | Talk about bullying at School |                     |            |                          |             |               | 0.059                     | 0.087      | 0.086  | NS      |
| 4: Community Level     | Connectedness to Community    | 0.325               | 0.21       | 0.084                    | 2.674       | NS            | 0.020                     | 0.009      | 0.448  | 0.039*  |
|                        | Talk about bullying at BGC    |                     |            |                          |             |               | -0.148                    | 0.050      | -0.375 | 0.007*  |
|                        | Connectedness to Religion     |                     |            |                          |             |               | -0.013                    | 0.009      | -0.185 | NS      |
| 5: Culture Level       | Public Religiosity            | 0.605               | 0.16       | 0.203                    | 7.367       | 0.001*        | 0.166                     | 0.036      | 0.621  | 0.000** |
|                        | Talk about bullying at church |                     |            |                          |             |               | -0.007                    | 0.045      | -0.026 | NS      |

\*p≤0.05

\*\*p≤0.001

<sup>1</sup>Coefficients shown only for variables of the final regression model (step 5).

**Table 54. Self-reported religiosity, by location**

| Description   | Total<br>(N=426) |      | Location                         |      |                         |      | X <sup>2</sup> , df, p-value |
|---|------------------|------|----------------------------------|------|-------------------------|------|------------------------------|
|   |                  |      | San Juan<br>Metropolitan<br>Area |      | Other<br>Municipalities |      |                              |
|   | N                | %    | N                                | %    | N                       | %    |                              |
| <b>Religious behaviors, beliefs and practices</b>               |                  |      |                                  |      |                         |      |                              |
| <b>Likes to participate in religious activities</b>             |                  |      |                                  |      |                         |      |                              |
| No  | 108              | 25.4 | 51                               | 27.3 | 57                      | 23.8 | 3.867, 5,<br>NS              |
| A little  | 3                | 0.7  | 19                               | 10.2 | 33                      | 13.8 |                              |
| More or less  | 52               | 12.2 | 24                               | 12.8 | 39                      | 16.3 |                              |
| Pretty much   | 63               | 14.8 | 38                               | 20.3 | 40                      | 16.7 |                              |
| A lot   | 78               | 18.3 | 53                               | 28.3 | 69                      | 28.9 |                              |
| No response   | 122              | 28.6 | 2                                | 1.1  | 1                       | 0.4  |                              |
| <b>Cares about church</b>                                       |                  |      |                                  |      |                         |      |                              |
| Not at all  | 51               | 12   | 19                               | 10.2 | 32                      | 13.4 | 5.649, 5,<br>NS              |
| A little  | 18               | 4.2  | 10                               | 5.3  | 8                       | 3.3  |                              |
| More or less  | 40               | 9.4  | 13                               | 7    | 27                      | 11.3 |                              |
| Pretty much   | 96               | 22.5 | 47                               | 25.1 | 49                      | 20.5 |                              |
| A lot   | 218              | 51.2 | 96                               | 51.3 | 122                     | 51   |                              |
| No response   | 3                | 0.7  | 2                                | 1.1  | 1                       | 0.4  |                              |
| <b>Obedying God and commandments is important for me.</b>       |                  |      |                                  |      |                         |      |                              |
| Very much disagree  | 16               | 3.8  | 13                               | 7    | 3                       | 1.3  | 12.118,<br>6, NS             |
| Disagree  | 12               | 2.8  | 4                                | 2.1  | 8                       | 3.3  |                              |
| More or less  | 19               | 4.5  | 10                               | 5.3  | 9                       | 3.8  |                              |
| Agree   | 29               | 6.8  | 11                               | 5.9  | 18                      | 7.5  |                              |
| Very much agree   | 345              | 81   | 148                              | 79.1 | 197                     | 82.4 |                              |
| No response   | 4                | 0.9  | 1                                | 0.5  | 3                       | 1.3  |                              |
| Do not understand what this means                               | 1                | 0.2  | 0                                | 0    | 1                       | 0.4  |                              |
| <b>When I have problems, I seek help in church or religion.</b> |                  |      |                                  |      |                         |      |                              |
| Very much disagree  | 56               | 13.1 | 29                               | 15.5 | 27                      | 11.3 | 9.352, 6,<br>NS              |
| Disagree  | 23               | 5.4  | 12                               | 6.4  | 11                      | 4.6  |                              |
| More or less  | 76               | 17.8 | 30                               | 16   | 46                      | 19.2 |                              |
| Agree   | 54               | 12.7 | 18                               | 9.6  | 36                      | 15.1 |                              |
| Very much agree   | 209              | 49.1 | 97                               | 51.9 | 112                     | 46.9 |                              |
| No response   | 4                | 0.9  | 1                                | 0.5  | 3                       | 1.3  |                              |
| Do not understand what this means                               | 4                | 0.9  | 0                                | 0    | 4                       | 1.7  |                              |
| <b>Church attendance during the past 12 months</b>              |                  |      |                                  |      |                         |      |                              |
| Never   | 110              | 25.8 | 50                               | 26.7 | 60                      | 25.1 | 3.953, 5,<br>NS              |
| Only during holidays or important celebrations                  | 50               | 11.7 | 23                               | 12.3 | 27                      | 11.3 |                              |
| Once a month  | 47               | 11   | 16                               | 8.6  | 31                      | 13   |                              |

|   |     |      |    |      |     |      |                 |
|---|-----|------|----|------|-----|------|-----------------|
| Not every week,<br>but more than once<br>per month      | 68  | 16   | 34 | 18.2 | 34  | 14.2 |                 |
| Almost every<br>week                                    | 148 | 34.7 | 62 | 33.2 | 86  | 36   |                 |
| No response   | 3   | 0.7  | 2  | 1.1  | 1   | 0.4  |                 |
| Participation in church activities during the past year |     |      |    |      |     |      |                 |
| Never   | 165 | 39   | 76 | 40.5 | 89  | 37.4 |                 |
| Only during<br>holidays or<br>important<br>celebrations | 46  | 10.8 | 19 | 10.2 | 27  | 11.3 |                 |
| Once a month  | 64  | 15.1 | 32 | 17.1 | 32  | 13.4 | 5.351, 5,<br>NS |
| Not every week,<br>but more than once<br>per month      | 46  | 10.8 | 20 | 10.7 | 26  | 10.9 |                 |
| Almost every<br>week                                    | 100 | 23.5 | 39 | 20.9 | 61  | 25.6 |                 |
| No response   | 4   | 0.9  | 1  | 0.5  | 3   | 1.3  |                 |
| Reason for attending church or religious activities     |     |      |    |      |     |      |                 |
| I do not go to<br>church                                | 95  | 22.3 | 39 | 20.9 | 56  | 23.4 |                 |
| I want to go  | 154 | 36.2 | 70 | 37.4 | 84  | 35.1 |                 |
| Parents/guardians<br>say I have to go                   | 86  | 20.2 | 35 | 18.7 | 51  | 23.1 | 3.733, 6,<br>NS |
| Friends want me to<br>go                                | 39  | 9.2  | 18 | 9.6  | 21  | 8.8  |                 |
| I do not know why<br>I go                               | 17  | 4    | 6  | 3.2  | 11  | 4.6  |                 |
| Other reason  | 31  | 7.3  | 16 | 8.6  | 15  | 6.3  |                 |
| No response   | 4   | 0.9  | 3  | 1.6  | 1   | 0.4  |                 |
| Frequency of prayer                                     |     |      |    |      |     |      |                 |
| Never   | 92  | 21.6 | 41 | 21.9 | 51  | 21.4 |                 |
| Sometimes   | 63  | 14.8 | 34 | 18.2 | 29  | 12.2 |                 |
| At least once a<br>month                                | 41  | 9.6  | 14 | 7.5  | 27  | 11.3 | 5.260, 5,<br>NS |
| At least once a<br>week                                 | 56  | 13.2 | 27 | 14.4 | 29  | 12.2 |                 |
| Every day   | 170 | 40   | 70 | 37.4 | 100 | 42   |                 |
| No response   | 3   | 0.7  | 1  | 0.5  | 2   | 0.8  |                 |
| Frequency of reading sacred book (e.g., Bible)          |     |      |    |      |     |      |                 |
| Never   | 161 | 37.9 | 74 | 39.6 | 87  | 36.6 |                 |
| Only during<br>holidays or<br>important<br>celebrations | 51  | 12   | 25 | 13.4 | 26  | 10.9 | 2.731, 5,<br>NS |
| Once per month  | 54  | 12.7 | 20 | 10.7 | 34  | 14.3 |                 |
| Not every week,<br>but more than once<br>per month      | 45  | 10.6 | 17 | 9.1  | 28  | 11.8 |                 |

|  |     |      |    |      |     |      |              |
|--|-----|------|----|------|-----|------|--------------|
| Almost every week  | 111 | 26.1 | 50 | 26.7 | 61  | 25.6 |              |
| No response  | 3   | 0.7  | 1  | 0.5  | 2   | 0.8  |              |
| Frequency of listening to religious programming on radio             |     |      |    |      |     |      |              |
| Never  | 196 | 46   | 94 | 50.3 | 102 | 42.7 |              |
| Only during holidays or important celebrations                       | 53  | 12.5 | 22 | 11.8 | 31  | 13   |              |
| Once per month   | 45  | 10.6 | 20 | 10.7 | 25  | 10.5 | 3.994, 5, NS |
| Not every week, but more than once per month                         | 34  | 8    | 12 | 6.4  | 22  | 9.2  |              |
| Almost every week  | 94  | 22.1 | 38 | 20.3 | 56  | 23.5 |              |
| No response  | 3   | 0.7  | 1  | 0.5  | 2   | 0.8  |              |
| Frequency of watching religious programming on tv                    |     |      |    |      |     |      |              |
| Never  | 191 | 44.9 | 78 | 41.7 | 113 | 47.4 |              |
| Only during holidays or important celebrations                       | 64  | 15.1 | 30 | 16   | 34  | 14.3 |              |
| Once per month   | 58  | 13.6 | 25 | 13.4 | 33  | 13.9 | 4.794, 4, NS |
| Not every week, but more than once per month                         | 40  | 9.4  | 23 | 12.3 | 17  | 7.1  |              |
| Almost every week  | 69  | 16.2 | 30 | 16   | 39  | 16.4 |              |
| No response  | 3   | 0.7  | 1  | 0.5  | 2   | 0.8  |              |
| Engaged in at least one type of religious activity in the past year. |     |      |    |      |     |      |              |
| Yes  | 109 | 34.1 | 52 | 35.4 | 58  | 33.3 | 0.147, 1, NS |
| No   | 211 | 65.9 | 95 | 64.6 | 116 | 66.7 |              |
| Religious activities reported  |     |      |    |      |     |      |              |
| Attendance to mass or sermon   | 78  | 18.4 | 25 | 13.4 | 53  | 22.3 | 5.754, 3, NS |
| Sunday school or Bible school  | 116 | 27.3 | 43 | 23   | 73  | 30.7 | 3.327, 2, NS |
| Catechism  | 53  | 12.5 | 24 | 12.8 | 29  | 12.2 | 0.175, 2, NS |
| First Communion  | 44  | 10.4 | 17 | 9.1  | 27  | 11.3 | 0.729, 2, NS |
| Arts ministry (dance, worship, music, mime, acting)                  | 69  | 16.2 | 28 | 15   | 41  | 17.2 | 0.549, 2, NS |
| Baptism as a child/baby  | 85  | 20   | 36 | 19.3 | 49  | 20.7 | 0.286, 2, NS |
| Baptism as an older child/adult                                      | 22  | 5.2  | 9  | 4.8  | 13  | 5.5  | 0.234, 2, NS |
| Communion  | 45  | 10.6 | 16 | 8.6  | 29  | 12.2 | 1.624, 2, NS |

|  |     |      |    |      |    |      |                     |
|--|-----|------|----|------|----|------|---------------------|
| Rosary   | 38  | 9    | 16 | 8.6  | 22 | 9.3  | 0.215, 2,<br>NS     |
| Youth group  | 56  | 13.2 | 15 | 8.1  | 41 | 17.2 | 7.858, 2,<br>NS     |
| Church sports' team  | 35  | 8.3  | 10 | 5.3  | 25 | 10.5 | 3.915, 2,<br>NS     |
| Weekend retreats or camps                                    | 42  | 9.9  | 12 | 6.4  | 30 | 12.6 | 4.690, 2,<br>NS     |
| Summer camps   | 73  | 17.2 | 30 | 16   | 43 | 18.1 | 0.458, 2,<br>NS     |
| Prayer services  | 46  | 10.8 | 14 | 7.5  | 32 | 13.4 | 4.038, 2,<br>NS     |
| Tutoring   | 24  | 5.7  | 8  | 4.3  | 16 | 6.8  | 1.357, 2,<br>NS     |
| Church concerts or plays                                     | 35  | 8.2  | 9  | 4.8  | 26 | 10.9 | 5.362, 2,<br>NS     |
| Family days  | 49  | 11.5 | 12 | 6.4  | 37 | 15.5 | 8.770, 2,<br>0.012* |
| Missions' trips  | 31  | 7.3  | 12 | 6.4  | 19 | 8    | 0.531, 2,<br>NS     |
| Other  | 17  | 4    | 4  | 2.1  | 13 | 5.5  | 3.174, 2,<br>NS     |
| Parental Religiosity: Importance of religion to your parents |     |      |    |      |    |      |                     |
| Not important  | 67  | 15.8 | 31 | 16.6 | 36 | 15.1 |                     |
| Little importance  | 32  | 7.5  | 12 | 6.4  | 20 | 8.4  |                     |
| Quite important  | 64  | 15.1 | 28 | 15   | 36 | 15.1 |                     |
| Very important   | 133 | 31.3 | 48 | 25.7 | 85 | 35.7 |                     |
| More important for mom than dad                              | 48  | 11.3 | 27 | 14.4 | 21 | 8.8  | 10.457,<br>6, NS    |
| More important for dad than mom                              | 76  | 17.9 | 40 | 21.4 | 36 | 15.1 |                     |
| No response  | 5   | 1.2  | 1  | 0.5  | 4  | 1.7  |                     |

N/A: Not applicable

\*p≤0.05

\*\* p≤0.001



**Table 55. Self-reported religiosity, by gender**

| Description  | Total   |      | Gender |      |      |      | X <sup>2</sup> , df, p-value |
|--|---------|------|--------|------|------|------|------------------------------|
|  | (N=426) |      | Female |      | Male |      |                              |
|  | N       | %    | N      | %    | N    | %    |                              |
| <b>Religious behaviors, beliefs and practices</b>        |         |      |        |      |      |      |                              |
| Likes to participate in religious activities             |         |      |        |      |      |      |                              |
| No   | 108     | 25.4 | 37     | 17.8 | 71   | 32.6 | 15.950,<br>5, 0.007*         |
| A little   | 3       | 0.7  | 33     | 15.9 | 19   | 8.7  |                              |
| More or less   | 52      | 12.2 | 36     | 17.3 | 27   | 12.4 |                              |
| Pretty much  | 63      | 14.8 | 40     | 19.2 | 38   | 17.4 |                              |
| A lot  | 78      | 18.3 | 60     | 28.8 | 62   | 28.4 |                              |
| No response  | 122     | 28.6 | 2      | 1    | 1    | 0.5  |                              |
| Cares about church                                       |         |      |        |      |      |      |                              |
| Not at all   | 51      | 12   | 16     | 7.7  | 35   | 16.1 | 20.485,<br>5,<br>0.001**     |
| A little   | 18      | 4.2  | 5      | 2.4  | 13   | 6    |                              |
| More or less   | 40      | 9.4  | 22     | 10.6 | 18   | 8.3  |                              |
| Pretty much  | 96      | 22.5 | 62     | 29.8 | 34   | 15.6 |                              |
| A lot  | 218     | 51.2 | 101    | 48.6 | 117  | 53.7 |                              |
| No response  | 3       | 0.7  | 2      | 1    | 1    | 0.5  |                              |
| Obeying God and commandments is important for me.        |         |      |        |      |      |      |                              |
| Very much disagree                                       | 16      | 3.8  | 4      | 1.9  | 12   | 5.5  | 9.513, 6,<br>NS              |
| Disagree   | 12      | 2.8  | 3      | 1.4  | 9    | 4.1  |                              |
| More or less   | 19      | 4.5  | 8      | 3.8  | 11   | 5    |                              |
| Agree  | 29      | 6.8  | 15     | 7.2  | 14   | 6.4  |                              |
| Very much agree  | 345     | 81   | 177    | 85.1 | 168  | 77.1 |                              |
| No response  | 4       | 0.9  | 1      | 0.5  | 3    | 1.4  |                              |
| Do not understand what this means                        | 1       | 0.2  | 0      | 0    | 1    | 0.5  |                              |
| When I have problems, I seek help in church or religion. |         |      |        |      |      |      |                              |
| Very much disagree                                       | 56      | 13.1 | 30     | 14.4 | 26   | 11.9 | 2.383, 6,<br>NS              |
| Disagree   | 23      | 5.4  | 11     | 5.3  | 12   | 5.5  |                              |
| More or less   | 76      | 17.8 | 40     | 19.2 | 36   | 16.5 |                              |
| Agree  | 54      | 12.7 | 27     | 13   | 27   | 12.4 |                              |
| Very much agree  | 209     | 49.1 | 97     | 46.6 | 112  | 51.4 |                              |
| No response  | 4       | 0.9  | 1      | 0.5  | 3    | 1.4  |                              |
| Do not understand what this means                        | 4       | 0.9  | 2      | 1    | 2    | 0.9  |                              |
| Church attendance during the past 12 months              |         |      |        |      |      |      |                              |
| Never  | 110     | 25.8 | 46     | 22.1 | 64   | 29.4 | 14.660,<br>5, 0.012*         |
| Only during holidays or important celebrations           | 50      | 11.7 | 24     | 11.5 | 26   | 11.9 |                              |
| Once a month   | 47      | 11   | 14     | 6.7  | 33   | 15.1 |                              |
| Not every week, but more than once per month             | 68      | 16   | 40     | 19.2 | 28   | 12.8 |                              |
| Almost every week  | 148     | 34.7 | 82     | 39.4 | 66   | 30.3 |                              |
| No response  | 3       | 0.7  | 2      | 1    | 1    | 0.5  |                              |
| Participation in church activities during the past year  |         |      |        |      |      |      |                              |

|  |     |      |     |      |     |      |           |
|--|-----|------|-----|------|-----|------|-----------|
| Never  | 165 | 39   | 79  | 38.1 | 86  | 39.4 |           |
| Only during holidays or important celebrations           | 46  | 10.8 | 23  | 11.1 | 23  | 10.6 |           |
| Once a month   | 64  | 15.1 | 28  | 13.5 | 36  | 16.5 | 2.264, 5, |
| Not every week, but more than once per month             | 46  | 10.8 | 24  | 11.6 | 22  | 10.1 | NS        |
| Almost every week  | 100 | 23.5 | 52  | 25.1 | 48  | 22   |           |
| No response  | 4   | 0.9  | 1   | 0.5  | 3   | 1.4  |           |
| Reason for attending church or religious activities      |     |      |     |      |     |      |           |
| I do not go to church                                    | 95  | 22.3 | 38  | 18.3 | 57  | 26.1 |           |
| I want to go   | 154 | 36.2 | 91  | 43.8 | 63  | 28.9 |           |
| Parents/guardians say I have to go                       | 86  | 20.2 | 43  | 20.7 | 43  | 19.7 | 18.350,   |
| Friends want me to go                                    | 39  | 9.2  | 12  | 5.8  | 27  | 12.4 | 6, 0.005* |
| I do not know why I go                                   | 17  | 4    | 5   | 2.4  | 12  | 5.5  |           |
| Other reason   | 31  | 7.3  | 16  | 7.7  | 15  | 6.9  |           |
| No response  | 4   | 0.9  | 3   | 1.4  | 1   | 0.5  |           |
| Frequency of prayer                                      |     |      |     |      |     |      |           |
| Never  | 92  | 21.6 | 32  | 15.5 | 60  | 27.5 |           |
| Sometimes  | 63  | 14.8 | 30  | 14.5 | 33  | 15.1 |           |
| At least once a month                                    | 41  | 9.6  | 14  | 6.8  | 27  | 12.4 | 18.427,   |
| At least once a week                                     | 56  | 13.2 | 30  | 14.5 | 26  | 11.9 | 5, 0.002* |
| Every day  | 170 | 40   | 100 | 48.3 | 70  | 32.1 |           |
| No response  | 3   | 0.7  | 1   | 0.5  | 2   | 0.9  |           |
| Frequency of reading sacred book (e.g., Bible)           |     |      |     |      |     |      |           |
| Never  | 161 | 37.9 | 74  | 35.7 | 87  | 39.9 |           |
| Only during holidays or important celebrations           | 51  | 12   | 27  | 13   | 24  | 11   |           |
| Once per month   | 54  | 12.7 | 22  | 10.6 | 32  | 14.7 | 3.881, 5, |
| Not every week, but more than once per month             | 45  | 10.6 | 23  | 11.1 | 22  | 10.1 | NS        |
| Almost every week  | 111 | 26.1 | 60  | 29   | 51  | 23.4 |           |
| No response  | 3   | 0.7  | 1   | 0.5  | 2   | 0.9  |           |
| Frequency of listening to religious programming on radio |     |      |     |      |     |      |           |
| Never  | 196 | 46   | 93  | 47.7 | 103 | 47.2 |           |
| Only during holidays or important celebrations           | 53  | 12.5 | 32  | 15.5 | 21  | 9.6  |           |
| Once per month   | 45  | 10.6 | 18  | 8.7  | 27  | 12.4 | 6.986, 5, |
| Not every week, but more than once per month             | 34  | 8    | 14  | 6.8  | 20  | 9.2  | NS        |
| Almost every week  | 94  | 22.1 | 49  | 23.7 | 45  | 20.6 |           |
| No response  | 3   | 0.7  | 1   | 0.5  | 2   | 0.9  |           |
| Frequency of watching religious programming on tv        |     |      |     |      |     |      |           |
| Never  | 191 | 44.9 | 95  | 45.9 | 96  | 44   |           |
| Only during holidays or important celebrations           | 64  | 15.1 | 35  | 16.9 | 29  | 13.3 |           |
| Once per month   | 58  | 13.6 | 26  | 12.6 | 32  | 14.7 | 5.987, 5, |
| Not every week, but more than once per month             | 40  | 9.4  | 14  | 6.8  | 26  | 11.9 | NS        |
| Almost every week  | 69  | 16.2 | 36  | 17.4 | 33  | 15.1 |           |

|  |     |      |     |      |     |      |                    |
|--|-----|------|-----|------|-----|------|--------------------|
| No response  | 3   | 0.7  | 1   | 0.5  | 2   | 0.9  |                    |
| Engaged in at least one type of religious activity in the past year. |     |      |     |      |     |      |                    |
| Yes  | 109 | 34.1 | 52  | 33.8 | 58  | 34.7 | 0.033, 1,          |
| No   | 211 | 65.9 | 102 | 66.2 | 109 | 65.3 | NS                 |
| Religious activities reported  |     |      |     |      |     |      |                    |
| Attendance to mass or sermon   | 78  | 18.4 | 43  | 20.8 | 35  | 16.1 | 1.812, 2, NS       |
| Sunday school or Bible school  | 116 | 27.3 | 66  | 31.9 | 50  | 22.9 | 4.468, 2, NS       |
| Catechism  | 53  | 12.5 | 29  | 14   | 24  | 11   | 1.131, 2, NS       |
| First Communion  | 44  | 10.4 | 25  | 12.1 | 19  | 8.7  | 1.545, 2, NS       |
| Arts ministry (dance, worship, music, mime, acting)                  | 69  | 16.2 | 46  | 22.2 | 23  | 10.6 | 10.808, 2, 0.004*  |
| Baptism as a child/baby  | 85  | 20   | 39  | 18.9 | 46  | 21.1 | 0.618, 2, NS       |
| Baptism as an older child/adult                                      | 22  | 5.2  | 9   | 4.3  | 13  | 6    | 0.866, 2, NS       |
| Communion  | 45  | 10.6 | 29  | 14   | 16  | 7.3  | 5.211, 2, NS       |
| Rosary   | 38  | 9    | 21  | 10.1 | 17  | 7.6  | 0.960, 2, NS       |
| Youth group  | 56  | 13.2 | 41  | 19.8 | 15  | 6.9  | 15.534, 2, 0.000** |
| Church sports' team  | 35  | 8.3  | 23  | 11.2 | 12  | 5.5  | 4.709, 2, NS       |
| Weekend retreats or camps  | 42  | 9.9  | 28  | 13.5 | 14  | 6.4  | 6.235, 2, 0.044*   |
| Summer camps   | 73  | 17.2 | 41  | 19.8 | 32  | 14.7 | 2.194, 2, NS       |
| Prayer services  | 46  | 10.8 | 31  | 15   | 15  | 6.9  | 7.417, 2, 0.025*   |
| Tutoring   | 24  | 5.7  | 17  | 8.2  | 7   | 3.2  | 5.176, 2, NS       |
| Church concerts or plays   | 35  | 8.2  | 23  | 11.1 | 12  | 5.5  | 4.648, 2, NS       |
| Family days  | 49  | 11.5 | 35  | 16.9 | 14  | 6.4  | 11.633, 2, 0.003*  |
| Missions' trips  | 31  | 7.3  | 20  | 9.7  | 11  | 5    | 3.587, 2, NS       |
| Other  | 17  | 4    | 8   | 3.9  | 9   | 4.1  | 0.308, 2, NS       |
| Parental Religiosity: Importance of religion to your parents         |     |      |     |      |     |      |                    |
| Not important  | 67  | 15.8 | 22  | 10.6 | 45  | 20.6 |                    |
| Little importance  | 32  | 7.5  | 15  | 7.2  | 17  | 7.8  | 18.988,            |
| Quite important  | 64  | 15.1 | 39  | 18.8 | 25  | 11.5 | 6, NS              |
| Very important   | 133 | 31.3 | 76  | 36.7 | 57  | 26.1 |                    |

|                                 |    |      |    |      |    |     |
|---------------------------------|----|------|----|------|----|-----|
| More important for mom than dad | 48 | 11.3 | 24 | 11.6 | 24 | 11  |
| More important for dad than mom | 76 | 17.9 | 28 | 13.5 | 48 | 22  |
| No response                     | 5  | 1.2  | 3  | 1.4  | 2  | 0.9 |

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N/A: Not applicable

\* $p \leq 0.05$

\*\*  $p \leq 0.001$

**Table 56. Self-reported religiosity, by age**

| Description  | Total<br>(N=426) |      | Age    |      |        |      |        |      | X <sup>2</sup> , df,<br>p-<br>value |
|--|------------------|------|--------|------|--------|------|--------|------|-------------------------------------|
|  |                  |      | 10 y/o |      | 11 y/o |      | 12 y/o |      |                                     |
|  | N                | %    | N      | %    | N      | %    | N      | %    |                                     |
| <b>Religious behaviors, beliefs and practices</b>        |                  |      |        |      |        |      |        |      |                                     |
| Likes to participate in religious activities             |                  |      |        |      |        |      |        |      |                                     |
| No   | 108              | 25.4 | 34     | 25.8 | 35     | 22.7 | 38     | 27.3 | 10.851<br>, 10,<br>NS               |
| A little   | 3                | 0.7  | 14     | 10.6 | 17     | 11   | 21     | 15.1 |                                     |
| More or less   | 52               | 12.2 | 14     | 10.6 | 24     | 15.6 | 25     | 18   |                                     |
| Pretty much  | 63               | 14.8 | 28     | 21.2 | 28     | 18.2 | 22     | 15.8 |                                     |
| A lot  | 78               | 18.3 | 41     | 31.1 | 50     | 32.5 | 31     | 22.3 |                                     |
| No response  | 122              | 28.6 | 1      | 0.8  | 0      | 0    | 2      | 1.4  |                                     |
| Cares about church                                       |                  |      |        |      |        |      |        |      |                                     |
| Not at all   | 51               | 12   | 15     | 11.4 | 20     | 13   | 16     | 11.5 | 9.346,<br>10, NS                    |
| A little   | 18               | 4.2  | 5      | 3.8  | 3      | 1.9  | 10     | 7.2  |                                     |
| More or less   | 40               | 9.4  | 13     | 9.8  | 12     | 7.8  | 15     | 10.8 |                                     |
| Pretty much  | 96               | 22.5 | 27     | 20.5 | 36     | 20.5 | 32     | 23   |                                     |
| A lot  | 218              | 51.2 | 71     | 53.8 | 83     | 53.9 | 64     | 46   |                                     |
| No response  | 3                | 0.7  | 1      | 0.8  | 0      | 0    | 2      | 1.4  |                                     |
| Obeying God and commandments is important for me.        |                  |      |        |      |        |      |        |      |                                     |
| Very much disagree                                       | 16               | 3.8  | 6      | 4.5  | 3      | 1.9  | 7      | 5    | 7.473,<br>12, NS                    |
| Disagree   | 12               | 2.8  | 3      | 2.3  | 4      | 2.6  | 5      | 3.6  |                                     |
| More or less   | 19               | 4.5  | 6      | 4.5  | 6      | 3.9  | 7      | 5    |                                     |
| Agree  | 29               | 6.8  | 9      | 6.8  | 12     | 7.8  | 8      | 5.8  |                                     |
| Very much agree  | 345              | 81   | 106    | 80.3 | 128    | 83.1 | 110    | 78.1 |                                     |
| No response  | 4                | 0.9  | 2      | 1.5  | 0      | 0    | 2      | 1.4  |                                     |
| Do not understand  |                  |      |        |      |        |      |        |      |                                     |
| 1  | 0.2              | 0    | 0      | 1    | 0.6    | 0    | 0      | 0    |                                     |
| When I have problems, I seek help in church or religion. |                  |      |        |      |        |      |        |      |                                     |
| Very much disagree                                       | 56               | 13.1 | 20     | 15.2 | 16     | 10.4 | 20     | 14.4 | 27.598<br>, 12,<br>0.006*           |
| Disagree   | 23               | 5.4  | 4      | 3    | 12     | 7.8  | 7      | 5    |                                     |
| More or less   | 76               | 17.8 | 16     | 12.1 | 29     | 18.8 | 31     | 22.3 |                                     |
| Agree  | 54               | 12.7 | 14     | 10.6 | 13     | 8.4  | 27     | 19.4 |                                     |
| Very much agree  | 209              | 49.1 | 76     | 57.6 | 82     | 53.2 | 50     | 36   |                                     |
| No response  | 4                | 0.9  | 2      | 1.5  | 0      | 0    | 2      | 1.4  |                                     |
| Do not understand  |                  |      |        |      |        |      |        |      |                                     |
| 4  | 0.9              | 0    | 0      | 2    | 1.3    | 2    | 1.4    |      |                                     |
| Church attendance during the past 12 months              |                  |      |        |      |        |      |        |      |                                     |
| Never  | 110              | 25.8 | 40     | 30.3 | 36     | 23.4 | 34     | 24.5 | 15.429<br>, 10,<br>NS               |
| Only during holidays or important celebrations           | 50               | 11.7 | 14     | 10.6 | 16     | 10.4 | 20     | 14.4 |                                     |
| Once a month   | 47               | 11   | 15     | 11.4 | 20     | 13   | 12     | 8.6  |                                     |

|   |     |      |    |      |    |      |     |      |          |
|---|-----|------|----|------|----|------|-----|------|----------|
| Not every week, but more than once per month            | 68  | 16   | 18 | 13.6 | 18 | 11.7 | 31  | 22.3 |          |
| Almost every week                                       | 148 | 34.7 | 44 | 33.3 | 64 | 41.6 | 40  | 28.8 |          |
| No response   | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 2   | 1.4  |          |
| Participation in church activities during the past year |     |      |    |      |    |      |     |      |          |
| Never   | 165 | 39   | 48 | 29.5 | 61 | 39.9 | 56  | 40.2 |          |
| Only during holidays or important celebrations          | 46  | 10.8 | 13 | 9.8  | 18 | 11.8 | 15  | 10.8 |          |
| Once a month  | 64  | 15.1 | 24 | 18.2 | 20 | 13.1 | 19  | 13.7 | 15.562   |
| Not every week, but more than once per month            | 46  | 10.8 | 9  | 6.8  | 14 | 9.2  | 23  | 16.5 | , 12, NS |
| Almost every week                                       | 100 | 23.5 | 36 | 27.3 | 40 | 26.1 | 24  | 17.3 |          |
| No response   | 4   | 0.9  | 2  | 1.5  | 0  | 0    | 2   | 1.4  |          |
| Reason for attending church or religious activities     |     |      |    |      |    |      |     |      |          |
| I do not go to church                                   | 95  | 22.3 | 28 | 21.2 | 34 | 22.1 | 33  | 23.7 |          |
| I want to go  | 154 | 36.2 | 49 | 37.1 | 59 | 38.8 | 46  | 33.1 |          |
| Parents/guardians say I have to go                      | 86  | 20.2 | 27 | 20.5 | 33 | 21.4 | 26  | 18.7 | 8.058,   |
| Friends want me to go                                   | 39  | 9.2  | 15 | 11.4 | 13 | 8.4  | 11  | 7.9  | 12, NS   |
| I do not know why I go                                  | 17  | 4    | 5  | 3.8  | 5  | 3.2  | 7   | 5    |          |
| Other reason  | 31  | 7.3  | 7  | 5.3  | 10 | 6.5  | 13  | 9.4  |          |
| No response   | 4   | 0.9  | 1  | 0.8  | 0  | 0    | 3   | 2.2  |          |
| Frequency of prayer                                     |     |      |    |      |    |      |     |      |          |
| Never   | 92  | 21.6 | 33 | 25   | 30 | 19.6 | 28  | 20.1 |          |
| Sometimes   | 63  | 14.8 | 19 | 14.4 | 26 | 17   | 18  | 12.9 |          |
| At least once a month                                   | 41  | 9.6  | 12 | 9.1  | 14 | 9.2  | 15  | 10.8 | 9.992,   |
| At least once a week                                    | 56  | 13.2 | 10 | 7.6  | 22 | 14.4 | 24  | 13.2 | 10, NS   |
| Every day   | 170 | 40   | 57 | 43.2 | 61 | 39.9 | 170 | 40.1 |          |
| No response   | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 3   | 1.4  |          |
| Frequency of reading sacred book (e.g., Bible)          |     |      |    |      |    |      |     |      |          |
| Never   | 161 | 37.9 | 45 | 34.1 | 61 | 39.9 | 55  | 39.6 | 10.250   |
| Only during holidays or important                       | 51  | 12   | 16 | 12.1 | 18 | 11.8 | 17  | 12.2 | , 10, NS |

|  |     |      |    |      |    |      |    |      |        |       |
|--|-----|------|----|------|----|------|----|------|--------|-------|
| celebrations   |     |      |    |      |    |      |    |      |        |       |
| Once per month   | 54  | 12.7 | 15 | 11.4 | 20 | 13.1 | 19 | 13.7 |        |       |
| Not every week, but more than once per month                         | 45  | 10.6 | 11 | 8.3  | 15 | 9.8  | 19 | 13.7 |        |       |
| Almost every week  | 111 | 26.1 | 44 | 33.3 | 39 | 25.5 | 27 | 19.4 |        |       |
| No response  | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 2  | 1.4  |        |       |
| Frequency of listening to religious programming on radio             |     |      |    |      |    |      |    |      |        |       |
| Never  | 196 | 46   | 65 | 49.2 | 69 | 45   | 62 | 44.6 |        |       |
| Only during holidays or important celebrations                       | 53  | 12.5 | 20 | 15.2 | 17 | 11.1 | 16 | 11.5 |        |       |
| Once per month   | 45  | 10.6 | 12 | 9.1  | 17 | 11.1 | 16 | 11.5 | 11.596 |       |
| Not every week, but more than once per month                         | 34  | 8    | 4  | 3    | 15 | 9.8  | 14 | 10.1 | , 10,  | NS    |
| Almost every week  | 94  | 22.1 | 30 | 22.7 | 35 | 22.9 | 29 | 20.9 |        |       |
| No response  | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 2  | 1.4  |        |       |
| Frequency of watching religious programming on tv                    |     |      |    |      |    |      |    |      |        |       |
| Never  | 191 | 44.9 | 61 | 46.2 | 64 | 41.9 | 66 | 47.5 |        |       |
| Only during holidays or important celebrations                       | 64  | 15.1 | 21 | 15.9 | 21 | 13.7 | 22 | 15.8 |        |       |
| Once per month   | 58  | 13.6 | 19 | 14.4 | 22 | 14.4 | 16 | 11.5 | 7.951, |       |
| Not every week, but more than once per month                         | 40  | 9.4  | 10 | 7.6  | 16 | 10.5 | 14 | 10.1 | 12, NS |       |
| Almost every week  | 69  | 16.2 | 20 | 15.2 | 30 | 19.6 | 19 | 13.7 |        |       |
| No response  | 3   | 0.7  | 1  | 0.8  | 0  | 0    | 2  | 1.4  |        |       |
| Engaged in at least one type of religious activity in the past year. |     |      |    |      |    |      |    |      |        |       |
| Yes  | 109 | 34.1 | 33 | 35.1 | 34 | 30.1 | 42 | 37.2 | 1.325, |       |
| No   | 211 | 65.9 | 61 | 64.9 | 79 | 69.9 | 71 | 62.8 | 2, NS  |       |
| Religious activities reported  |     |      |    |      |    |      |    |      |        |       |
| Attendance to mass or sermon   | 78  | 18.4 | 26 | 19.7 | 27 | 17.6 | 25 | 18   | 2.390, | 4, NS |
| Sunday school or   | 116 | 27.3 | 32 | 24.2 | 42 | 27.5 | 42 | 30.2 | 3.451, |       |

|  |     |      |    |      |    |      |    |      |                  |
|--|-----|------|----|------|----|------|----|------|------------------|
| Bible school   |     |      |    |      |    |      |    |      | 4, NS            |
| Catechism  | 53  | 12.5 | 18 | 13.6 | 17 | 11.1 | 18 | 12.9 | 2.654,<br>4, NS  |
| First Communion  | 44  | 10.4 | 15 | 11.4 | 11 | 7.2  | 18 | 12.9 | 5.094,<br>4, NS  |
| Arts ministry  | 69  | 16.2 | 23 | 17.4 | 26 | 17   | 20 | 14.4 | 2.643,<br>4, NS  |
| Baptism as child   | 85  | 20   | 27 | 20.6 | 26 | 17   | 32 | 23   | 3.997,<br>4, NS  |
| Baptism as an older child/adult                              | 22  | 5.2  | 7  | 5.3  | 9  | 5.9  | 6  | 4.3  | 2.488,<br>4, NS  |
| Communion  | 45  | 10.6 | 17 | 12.9 | 14 | 9.2  | 14 | 10.1 | 3.285,<br>4, NS  |
| Rosary   | 38  | 9    | 10 | 7.6  | 13 | 8.5  | 15 | 10.8 | 3.093,<br>4, NS  |
| Youth group  | 56  | 13.2 | 14 | 10.7 | 18 | 11.8 | 24 | 17.3 | 5.278,<br>4, NS  |
| Church sports' team  | 35  | 8.3  | 8  | 6.1  | 10 | 6.5  | 17 | 12.3 | 6.740,<br>4, NS  |
| Weekend retreats or camps                                    | 42  | 9.9  | 10 | 7.6  | 14 | 9.2  | 18 | 12.9 | 4.585,<br>4, NS  |
| Summer camps   | 73  | 17.2 | 24 | 18.2 | 25 | 16.3 | 23 | 16.5 | 4.363,<br>4, NS  |
| Prayer services  | 46  | 10.8 | 17 | 12.9 | 15 | 9.8  | 14 | 10.1 | 2.988,<br>4, NS  |
| Tutoring   | 24  | 5.7  | 7  | 5.3  | 10 | 6.5  | 7  | 5.1  | 2.478,<br>4, NS  |
| Church concerts or plays                                     | 35  | 8.2  | 10 | 7.6  | 13 | 8.5  | 12 | 8.6  | 2.275,<br>4, NS  |
| Family days  | 49  | 11.5 | 13 | 9.8  | 19 | 12.4 | 17 | 12.2 | 2.697,<br>4, NS  |
| Missions' trips  | 31  | 7.3  | 12 | 9.1  | 10 | 6.5  | 9  | 6.5  | 3.053,<br>4, NS  |
| Other  | 17  | 4    | 4  | 3    | 7  | 4.6  | 6  | 4.3  | 2.636,<br>4, NS  |
| Parental Religiosity: Importance of religion to your parents |     |      |    |      |    |      |    |      |                  |
| Not important  | 67  | 15.8 | 20 | 15.2 | 27 | 17.6 | 20 | 14.4 |                  |
| Little importance  | 32  | 7.5  | 9  | 6.8  | 12 | 7.8  | 11 | 7.9  |                  |
| Quite important  | 64  | 15.1 | 20 | 15.2 | 20 | 13.1 | 24 | 17.3 |                  |
| Very important   | 133 | 31.3 | 38 | 28.8 | 51 | 33.3 | 43 | 30.9 |                  |
| More important for mom than dad                              | 48  | 11.3 | 15 | 11.4 | 16 | 10.5 | 17 | 12.2 | 9.786,<br>12, NS |
| More important for dad than mom                              | 76  | 17.9 | 29 | 22   | 27 | 17.6 | 20 | 14.4 |                  |
| No response  | 5   | 1.2  | 1  | 0.8  | 0  | 0    | 4  | 2.9  |                  |

N/A: Not applicable

\* $p \leq 0.05$

\*\*  $p \leq 0.001$



**Table 57. Self-reported religiosity, by church attendance**

| Description  | Total (N=426) |      | Church Attendance |      |    |      | X <sup>2</sup> , df, p-value |
|--|---------------|------|-------------------|------|----|------|------------------------------|
|  |               |      | Yes               |      | No |      |                              |
|  | N             | %    | N                 | %    | N  | %    |                              |
| Religious behaviors, beliefs and practices               |               |      |                   |      |    |      |                              |
| Likes to participate in religious activities             |               |      |                   |      |    |      |                              |
| No   | 108           | 25.4 | 61                | 20.3 | 47 | 37.6 | 36.216, 5<br>0.000**         |
| A little   | 3             | 0.7  | 29                | 9.6  | 23 | 18.4 |                              |
| More or less   | 52            | 12.2 | 40                | 13.3 | 23 | 18.4 |                              |
| Pretty much  | 63            | 14.8 | 67                | 23.3 | 11 | 8.8  |                              |
| A lot  | 78            | 18.3 | 102               | 33.9 | 20 | 16   |                              |
| No response  | 122           | 28.6 | 2                 | 0.7  | 1  | 0.8  |                              |
| Cares about church                                       |               |      |                   |      |    |      |                              |
| Not at all   | 51            | 12   | 25                | 8.3  | 26 | 20.8 | 23.868, 5,<br>0.000**        |
| A little   | 18            | 4.2  | 12                | 4    | 6  | 4.8  |                              |
| More or less   | 40            | 9.4  | 21                | 7    | 19 | 15.2 |                              |
| Pretty much  | 96            | 22.5 | 72                | 23.9 | 24 | 19.2 |                              |
| A lot  | 218           | 51.2 | 169               | 56.1 | 49 | 39.2 |                              |
| No response  | 3             | 0.7  | 2                 | 0.7  | 1  | 0.8  |                              |
| Obeying God and commandments is important for me.        |               |      |                   |      |    |      |                              |
| Very much disagree                                       | 12            | 2.8  | 9                 | 3    | 7  | 5.6  | 3.269, 6,<br>NS              |
| Disagree   | 19            | 4.5  | 7                 | 2.3  | 5  | 4    |                              |
| More or less   | 29            | 6.8  | 13                | 4.3  | 6  | 4.8  |                              |
| Agree  | 345           | 81   | 20                | 6.6  | 9  | 7.2  |                              |
| Very much agree  | 4             | 0.9  | 248               | 82.4 | 97 | 77.6 |                              |
| No response  | 1             | 0.2  | 3                 | 1    | 1  | 0.8  |                              |
| Do not understand  | 16            | 3.8  | 1                 | 0.3  | 0  | 0    |                              |
| When I have problems, I seek help in church or religion. |               |      |                   |      |    |      |                              |
| Very much disagree                                       | 56            | 13.1 | 28                | 9.3  | 28 | 22.4 | 21.452, 6,<br>0.002*         |
| Disagree   | 23            | 5.4  | 16                | 5.3  | 7  | 5.6  |                              |
| More or less   | 76            | 17.8 | 47                | 15.6 | 29 | 23.2 |                              |
| Agree  | 54            | 12.7 | 39                | 13   | 15 | 12   |                              |
| Very much agree  | 209           | 49.1 | 165               | 54.8 | 44 | 35.2 |                              |
| No response  | 4             | 0.9  | 3                 | 1    | 1  | 0.2  |                              |
| Do not understand  | 4             | 0.9  | 3                 | 1    | 1  | 0.8  |                              |
| Church attendance during the past 12 months              |               |      |                   |      |    |      |                              |
| Never  | 110           | 25.8 | 57                | 18.9 | 53 | 42.4 | 47.643, 5,<br>0.000**        |
| Only during holidays or important celebrations           | 50            | 11.7 | 29                | 9.6  | 21 | 16.8 |                              |
| Once a month   | 47            | 11   | 30                | 10   | 17 | 13.6 |                              |
| Not every week, but more than once per month             | 68            | 16   | 52                | 17.3 | 16 | 12.8 |                              |

|   |     |      |     |      |    |      |                    |
|---|-----|------|-----|------|----|------|--------------------|
| Almost every week                                       | 148 | 34.7 | 131 | 43.5 | 17 | 13.6 |                    |
| No response   | 3   | 0.7  | 2   | 0.7  | 1  | 0.8  |                    |
| Participation in church activities during the past year |     |      |     |      |    |      |                    |
| Never   | 165 | 39   | 89  | 29.4 | 76 | 61.2 |                    |
| Only during holidays or important celebrations          | 46  | 10.8 | 36  | 12   | 10 | 8.1  |                    |
| Once a month  | 64  | 15.1 | 49  | 16.3 | 15 | 12.1 | 41.669, 4, 0.000** |
| Not every week, but more than once per month            | 46  | 10.8 | 35  | 11.6 | 11 | 8.9  |                    |
| Almost every week                                       | 100 | 23.5 | 89  | 29.6 | 11 | 8.9  |                    |
| No response   | 4   | 0.9  | 3   | 1    | 1  | 0.8  |                    |
| Reason for attending church or religious activities     |     |      |     |      |    |      |                    |
| I do not go to church                                   | 95  | 22.3 | 41  | 13.6 | 54 | 43.2 |                    |
| I want to go  | 154 | 36.2 | 120 | 39.9 | 34 | 27.2 |                    |
| Parents/guardians say I have to go                      | 86  | 20.2 | 69  | 22.9 | 17 | 13.6 | 46.824, 6, 0.000** |
| Friends want me to go                                   | 39  | 9.2  | 30  | 10   | 9  | 7.2  |                    |
| I do not know why I go                                  | 17  | 4    | 13  | 4.3  | 4  | 3.2  |                    |
| Other reason  | 31  | 7.3  | 26  | 8.6  | 5  | 4    |                    |
| No response   | 4   | 0.9  | 2   | 0.7  | 2  | 1.6  |                    |
| Frequency of prayer                                     |     |      |     |      |    |      |                    |
| Never   | 92  | 21.6 | 55  | 18.3 | 37 | 29.8 |                    |
| Sometimes   | 63  | 14.8 | 44  | 14.6 | 19 | 15.3 |                    |
| At least once a month                                   | 41  | 9.6  | 31  | 10.3 | 10 | 8.1  | 14.774, 5, 0.011*  |
| At least once a week                                    | 56  | 13.2 | 34  | 11.3 | 22 | 17.7 |                    |
| Every day   | 170 | 40   | 135 | 44.9 | 35 | 28.2 |                    |
| No response   | 3   | 0.7  | 2   | 0.7  | 1  | 0.8  |                    |
| Frequency of reading sacred book (e.g., Bible)          |     |      |     |      |    |      |                    |
| Never   | 161 | 37.9 | 96  | 31.9 | 65 | 52.4 |                    |
| Only during holidays or important celebrations          | 51  | 12   | 36  | 12   | 15 | 12.1 |                    |
| Once per month  | 54  | 12.7 | 35  | 11.6 | 19 | 15.3 | 26.528, 5, 0.000** |
| Not every week, but more than once per month            | 45  | 10.6 | 35  | 11.6 | 10 | 8.1  |                    |
| Almost every week                                       | 111 | 26.1 | 97  | 32.2 | 14 | 11.3 |                    |
| No response   | 3   | 0.7  | 2   | 0.7  | 1  | 0.8  |                    |

|  |     |      |     |      |    |      |                    |
|--|-----|------|-----|------|----|------|--------------------|
| Frequency of listening to religious programming on radio             |     |      |     |      |    |      |                    |
| Never  | 196 | 46   | 123 | 40.7 | 73 | 58.9 |                    |
| Only during holidays or important celebrations                       | 53  | 12.5 | 37  | 12.3 | 16 | 12.9 |                    |
| Once per month   | 45  | 10.6 | 30  | 10   | 15 | 12.1 | 26.871, 5, 0.000** |
| Not every week, but more than once per month                         | 34  | 8    | 23  | 7.6  | 11 | 8.9  |                    |
| Almost every week  | 94  | 22.1 | 86  | 28.6 | 8  | 6.5  |                    |
| No response  | 3   | 0.7  | 2   | 0.7  | 1  | 0.8  |                    |
| Frequency of watching religious programming on tv                    |     |      |     |      |    |      |                    |
| Never  | 191 | 44.9 | 120 | 39.8 | 71 | 57.3 |                    |
| Only during holidays or important celebrations                       | 64  | 15.1 | 43  | 14.3 | 21 | 16.9 |                    |
| Once per month   | 58  | 13.6 | 42  | 14   | 16 | 12.9 | 21.970, 5, 0.001** |
| Not every week, but more than once per month                         | 40  | 9.4  | 38  | 12.6 | 2  | 1.6  |                    |
| Almost every week  | 69  | 16.2 | 56  | 18.6 | 13 | 10.5 |                    |
| No response  | 3   | 0.7  | 2   | 0.7  | 1  | 0.8  |                    |
| Engaged in at least one type of religious activity in the past year. |     |      |     |      |    |      |                    |
| Yes  | 109 | 34.1 | 84  | 40.2 | 26 | 23.2 | 9.331, 1, 0.001**  |
| No   | 211 | 65.9 | 125 | 59.8 | 86 | 76.8 |                    |
| Religious activities reported  |     |      |     |      |    |      |                    |
| Attendance to mass or sermon   | 78  | 18.4 | 58  | 19.3 | 20 | 16.1 | 0.594, 2, NS       |
| Sunday school or Bible school  | 116 | 27.3 | 96  | 31.9 | 20 | 16.1 | 10.999, 2, 0.004*  |
| Catechism  | 53  | 12.5 | 41  | 13.6 | 12 | 9.7  | 1.267, 2, NS       |
| First Communion  | 44  | 10.4 | 38  | 12.6 | 6  | 4.8  | 5.744, 2, NS       |
| Arts ministry (dance, worship, music, mime, acting)                  | 69  | 16.2 | 60  | 19.9 | 9  | 7.3  | 10.377, 2, 0.006*  |
| Baptism as a child/baby  | 85  | 20   | 67  | 22.3 | 18 | 14.5 | 3.351, 2, NS       |
| Baptism as an older child/adult                                      | 22  | 5.2  | 18  | 6    | 4  | 3.2  | 1.376, 2, NS       |
| Communion  | 45  | 10.6 | 38  | 12.6 | 7  | 5.6  | 4.528, 2, NS       |
| Rosary   | 38  | 9    | 32  | 10.7 | 6  | 4.8  | 3.663, 2, NS       |

|  |     |      |     |      |    |      |                      |
|--|-----|------|-----|------|----|------|----------------------|
| Youth group  | 56  | 13.2 | 46  | 15.3 | 10 | 8.1  | 3.907, 2,<br>NS      |
| Church sports' team  | 35  | 8.3  | 26  | 8.6  | 9  | 7.3  | 0.225, 2,<br>NS      |
| Weekend retreats or<br>camps                                 | 42  | 9.9  | 37  | 12.3 | 5  | 4    | 6.736, 2,<br>0.034*  |
| Summer camps   | 73  | 17.2 | 59  | 19.6 | 14 | 11.3 | 4.270, 2,<br>NS      |
| Prayer services  | 46  | 10.8 | 40  | 13.3 | 6  | 4.8  | 6.504, 2,<br>0.039*  |
| Tutoring   | 24  | 5.7  | 20  | 6.6  | 4  | 3.3  | 1.901, 2,<br>NS      |
| Church concerts or<br>plays                                  | 35  | 8.2  | 31  | 10.3 | 4  | 3.2  | 5.824, 2,<br>0.054*  |
| Family days  | 49  | 11.5 | 40  | 13.3 | 9  | 7.3  | 3.143, 2,<br>NS      |
| Missions' trips  | 31  | 7.3  | 25  | 8.3  | 6  | 4.8  | 1.578, 2,<br>NS      |
| Other  | 17  | 4    | 12  | 4    | 5  | 4    | 0.026, 2,<br>NS      |
| Parental Religiosity: Importance of religion to your parents |     |      |     |      |    |      |                      |
| Not important  | 67  | 15.8 | 38  | 12.6 | 29 | 23.4 |                      |
| Little importance  | 32  | 7.5  | 19  | 6.3  | 13 | 10.5 |                      |
| Quite important  | 64  | 15.1 | 39  | 13   | 25 | 20.2 |                      |
| Very important   | 133 | 31.3 | 100 | 33.2 | 33 | 26.6 |                      |
| More important for<br>mom than dad                           | 48  | 11.3 | 39  | 13   | 9  | 7.3  | 19.719, 6,<br>0.003* |
| More important for<br>dad than mom                           | 76  | 17.9 | 62  | 20.6 | 14 | 11.3 |                      |
| No response  | 5   | 1.2  | 4   | 1.3  | 1  | 0.8  |                      |

N/A: Not applicable

\* $p \leq 0.05$

\*\*  $p \leq 0.001$

**Table 58. Logistic regression analyses on the odds of being a victim-only of bullying according to the participants' involvement in public or private religiosity (N=424)**

|          | Public Religiosity |       |        |      |       |           | Private Religiosity |       |        |      |       |           | Public * Private Religiosity |       |        |      |       |           |
|----------|--------------------|-------|--------|------|-------|-----------|---------------------|-------|--------|------|-------|-----------|------------------------------|-------|--------|------|-------|-----------|
|          | B                  | s.e.  | d<br>f | sig. | OR    | CI<br>95% | B                   | s.e.  | d<br>f | sig. | OR    | CI<br>95% | B                            | s.e.  | d<br>f | sig. | OR    | CI<br>95% |
| Overall  | 0.091              | 0.368 | 1      | NS   | 1.095 | NS        | 0.111               | 0.387 | 1      | NS   | 1.117 | NS        | -0.121                       | 0.228 | 1      | NS   | 0.886 | NS        |
| Location |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| San      |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| Juan     |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| Metro    | -0.92              | 1.099 | 1      | NS   | 0.399 | NS        | 0.892               | 0.526 | 1      | NS   | 2.441 | NS        | -0.18                        | 0.522 | 1      | NS   | 0.835 | NS        |
| Area     |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| Other    |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| Mun.     | 0.153              | 0.413 | 1      | NS   | 1.165 | NS        | -1.256              | 0.78  | 1      | NS   | 0.285 | NS        | 0.343                        | 0.335 | 1      | NS   | 1.409 | NS        |
| Gender   |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| Female   | -0.317             | 0.622 | 1      | NS   | 0.728 | NS        | 0.007               | 0.501 | 1      | NS   | 1.007 | NS        | 0.141                        | 0.317 | 1      | NS   | 1.151 | NS        |
| Male     | 0.416              | 0.475 | 1      | NS   | 1.516 | NS        | 0.176               | 0.666 | 1      | NS   | 1.193 | NS        | -0.464                       | 0.415 | 1      | NS   | 0.629 | NS        |
| Age      |                    |       |        |      |       |           |                     |       |        |      |       |           |                              |       |        |      |       |           |
| 10 y/o   | 1.183              | 0.682 | 1      | NS   | 3.264 | NS        | -1.621              | 1.679 | 1      | NS   | 0.198 | NS        | -0.002                       | 0.857 | 1      | NS   | 0.998 | NS        |
| 11 y/o   | -1.059             | 0.848 | 1      | NS   | 0.347 | NS        | 0.096               | 0.621 | 1      | NS   | 1.101 | NS        | 0.311                        | 0.446 | 1      | NS   | 1.365 | NS        |
| 12 y/o   | -0.037             | 0.879 | 1      | NS   | 0.692 | NS        | 0.385               | 0.584 | 1      | NS   | 1.469 | NS        | -0.018                       | 0.403 | 1      | NS   | 0.982 | NS        |

**Table 59. Logistic regression analyses on the odds of being a bully-only of bullying according to the participants' involvement in public or private religiosity (N=424)**

|                | Public Religiosity |              |        |      |       |               | Private Religiosity |              |        |      |            |               | Public * Private Religiosity |              |        |      |              |               |
|----------------|--------------------|--------------|--------|------|-------|---------------|---------------------|--------------|--------|------|------------|---------------|------------------------------|--------------|--------|------|--------------|---------------|
|                | B                  | s.e.         | d<br>f | sig. | OR    | CI<br>95<br>% | B                   | s.e.         | d<br>f | sig. | OR         | CI<br>95<br>% | B                            | s.e.         | d<br>f | sig. | OR           | CI<br>95<br>% |
| Overall        | 0.466              | 0.515        | 1      | NS   | 1.561 | NS            | -0.404              | 0.806        | 1      | NS   | 0.668      | NS            | -0.117                       | 0.42         | 1      | NS   | 0.889        | NS            |
| Location       |                    |              |        |      |       |               |                     |              |        |      |            |               |                              |              |        |      |              |               |
| SJ             | 0.659              | 0.769        | 1      | NS   | 1.933 | NS            | 0.089               | 0.857        | 1      | NS   | 1.094      | NS            | -16.319                      | 2984.<br>936 | 1      | NS   | 0            | 0             |
| Metro          |                    |              |        |      |       |               |                     |              |        |      |            |               |                              |              |        |      |              |               |
| Other<br>Muni. | 0.41               | 0.659        | 1      | NS   | 1.507 | NS            | -0.491              | 1.175        | 1      | NS   | 0.612      | NS            | 0.047                        | 0.527        | 1      | NS   | 1.048        | NS            |
| Gender         |                    |              |        |      |       |               |                     |              |        |      |            |               |                              |              |        |      |              |               |
| Female         | 32.45              | 5550.<br>606 | 1      | NS   | NS    | NS            | 21.015              | 5703.<br>083 | 1      | NS   | NS         | NS            | -12.548                      | 2806.<br>357 | 1      | NS   | NS           | NS            |
| Male           | 0.047              | 0.596        | 1      | NS   | 1.049 | NS            | -0.006              | 0.806        | 1      | NS   | 0.994      | NS            | -0.104                       | 0.438        | 1      | NS   | 0.901        | NS            |
| Age            |                    |              |        |      |       |               |                     |              |        |      |            |               |                              |              |        |      |              |               |
| 10 y/o         | 2.273              | 2.067        | 1      | NS   | 9.705 | NS            | 2.571               | 3.455        | 1      | NS   | 13.07<br>7 | NS            | -1.819                       | 2.001        | 1      | NS   | 0.162        | NS            |
| 11 y/o         | -<br>16.22<br>4    | 7815.<br>591 | 1      | NS   | 0     | 0             | -<br>16.761         | 8347.<br>983 | 1      | NS   | 0          | 0             | 9.16                         | 4066.<br>637 | 1      | NS   | 9510.<br>804 | 0             |
| 12 y/o         | 0.44               | 0.758        | 1      | NS   | 1.552 | NS            | -0.624              | 0.974        | 1      | NS   | 0.536      | NS            | -0.074                       | 0.5          | 1      | NS   | 0.929        | NS            |

**Table 60. Logistic regression analyses on the odds of being a bully-victim of bullying according to the participants' involvement in public or private religiosity (N=424)**

|                | Public Religiosity |       |        |      |       |               | Private Religiosity |       |        |      |       |               | Public * Private Religiosity |       |        |      |       |               |
|----------------|--------------------|-------|--------|------|-------|---------------|---------------------|-------|--------|------|-------|---------------|------------------------------|-------|--------|------|-------|---------------|
|                | B                  | s.e.  | d<br>f | sig. | OR    | CI<br>95<br>% | B                   | s.e.  | d<br>f | sig. | OR    | CI<br>95<br>% | B                            | s.e.  | d<br>f | sig. | OR    | CI<br>95<br>% |
| Overall        | 0.037              | 0.394 | 1      | NS   | 1.038 | NS            | 0.245               | 0.392 | 1      | NS   | 1.278 | NS            | -0.036                       | 0.226 | 1      | NS   | 0.964 | NS            |
| Location       |                    |       |        |      |       |               |                     |       |        |      |       |               |                              |       |        |      |       |               |
| SJ<br>Metro    | 0.291              | 0.618 | 1      | NS   | 1.338 | NS            | 0.39                | 0.5   | 1      | NS   | 1.476 | NS            | -0.241                       | 0.341 | 1      | NS   | 0.786 | NS            |
| Other<br>Muni. | -0.09              | 0.516 | 1      | NS   | 0.914 | NS            | 0.042               | 0.64  | 1      | NS   | 1.043 | NS            | 0.123                        | 0.316 | 1      | NS   | 1.131 | NS            |
| Gender         |                    |       |        |      |       |               |                     |       |        |      |       |               |                              |       |        |      |       |               |
| Female         | -0.347             | 0.746 | 1      | NS   | 0.707 | NS            | -0.009              | 0.596 | 1      | NS   | 0.991 | NS            | 0.212                        | 0.366 | 1      | NS   | 1.237 | NS            |
| Male           | 0.213              | 0.48  | 1      | NS   | 1.238 | NS            | 0.646               | 0.571 | 1      | NS   | 1.908 | NS            | -0.239                       | 0.307 | 1      | NS   | 0.787 | NS            |
| Age            |                    |       |        |      |       |               |                     |       |        |      |       |               |                              |       |        |      |       |               |
| 10 y/o         | -2.366             | 1.217 | 1      | NS   | 0.094 | NS            | 0.713               | 1.377 | 1      | NS   | 2.041 | NS            | 0.763                        | 0.646 | 1      | NS   | 2.145 | NS            |
| 11 y/o         | 1.498              | 1.001 | 1      | NS   | 4.474 | NS            | 1.173               | 1.308 | 1      | NS   | 3.23  | NS            | -1.26                        | 0.917 | 1      | NS   | 0.284 | NS            |
| 12 y/o         | 1.258              | 0.84  | 1      | NS   | 3.518 | NS            | 0.972               | 0.717 | 1      | NS   | 2.643 | NS            | -0.591                       | 0.412 | 1      | NS   | 0.554 | NS            |

**Table 61. Logistic regression analyses on the odds of being a bystander-only of bullying according to the participants' involvement in public or private religiosity (N=424)**

|                | Public Religiosity |       |        |      |       |           | Private Religiosity |       |        |            |       |                 | Public * Private Religiosity |       |        |           |       |           |
|----------------|--------------------|-------|--------|------|-------|-----------|---------------------|-------|--------|------------|-------|-----------------|------------------------------|-------|--------|-----------|-------|-----------|
|                | B                  | s.e.  | d<br>f | sig. | OR    | CI<br>95% | B                   | s.e.  | d<br>f | sig.       | OR    | CI<br>95%       | B                            | s.e.  | d<br>f | sig.      | OR    | CI<br>95% |
| Overall        | -<br>0.328         | 0.339 | 1      | NS   | 0.72  | NS        | -0.152              | 0.36  | 1      | NS         | 0.859 | NS              | 0.272                        | 0.218 | 1      | NS        | 1.312 | NS        |
| Location       |                    |       |        |      |       |           |                     |       |        |            |       |                 |                              |       |        |           |       |           |
| SJ<br>Metro    | -<br>0.352         | 0.686 | 1      | NS   | 0.703 | NS        | -1.78               | 0.823 | 1      | 0.03<br>1* | 0.169 | 0.034-<br>0.847 | 1.402                        | 0.716 | 1      | 0.05<br>* | 4.062 | NS        |
| Other<br>Muni. | -<br>0.277         | 0.419 | 1      | NS   | 0.758 | NS        | 1.387               | 0.729 | 1      | NS         | 4.001 | NS              | -0.359                       | 0.323 | 1      | NS        | 0.699 | NS        |
| Gender         |                    |       |        |      |       |           |                     |       |        |            |       |                 |                              |       |        |           |       |           |
| Female         | -<br>0.059         | 0.56  | 1      | NS   | 0.943 | NS        | 0.012               | 0.508 | 1      | NS         | 1.012 | NS              | -0.058                       | 0.318 | 1      | NS        | 0.944 | NS        |
| Male           | -<br>0.533         | 0.459 | 1      | NS   | 0.587 | NS        | -0.71               | 0.626 | 1      | NS         | 0.491 | NS              | 0.735                        | 0.388 | 1      | NS        | 2.085 | NS        |
| Age            |                    |       |        |      |       |           |                     |       |        |            |       |                 |                              |       |        |           |       |           |
| 10 y/o         | -<br>1.184         | 0.921 | 1      | NS   | 0.306 | NS        | 0.753               | 1.773 | 1      | NS         | 2.124 | NS              | 0.295                        | 1.167 | 1      | NS        | 1.343 | NS        |
| 11 y/o         | 0.7                | 0.683 | 1      | NS   | 2.013 | NS        | 0.109               | 0.611 | 1      | NS         | 1.115 | NS              | -0.181                       | 0.408 | 1      | NS        | 0.835 | NS        |
| 12 y/o         | -0.33              | 0.644 | 1      | NS   | 0.719 | NS        | -0.396              | 0.527 | 1      | NS         | 0.673 | NS              | 0.347                        | 0.324 | 1      | NS        | 1.415 | NS        |



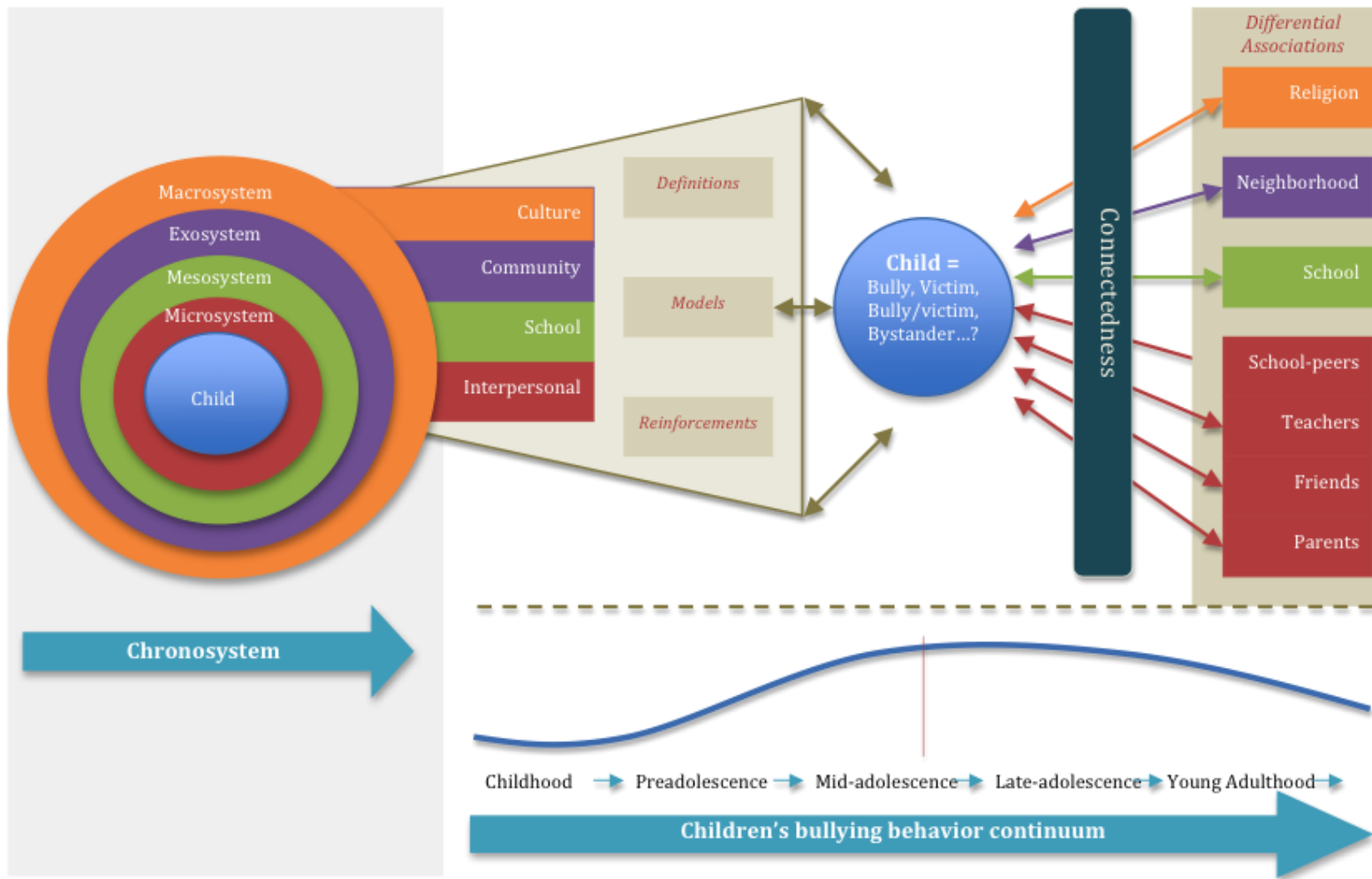
## Appendix B: Figures

| Puerto Rico <sup>1</sup>       |  |   |
|--------------------------------|--|---|
| <b>Geography</b>               | <b>Location</b>  | Caribbean Region; Smallest of the Greater Antilles, located east of the Dominican Republic  |
|                                | <b>Area</b>  | 13, 790 sq km (L x W: 100 mi x 35 mi)   |
| <b>Demographics</b>            | <b>Population</b>  | 3.7 million (US Census 2010)  |
|                                | <b>Population &lt; 18 years</b>  | 25% of total  |
|                                | <b>Sex ratio, population &lt; 18 years</b>                                       | 1.04 males/females  |
|                                | <b>Ethnicity</b>   | 98.8% Hispanic  |
|                                | <b>Religious beliefs</b>   | 85% Catholic, 15% Protestant  |
| <b>Economics</b>               | <b>Average annual wages</b>  | \$ 26,870   |
|                                | <b>Average Family Income</b>   | \$47,129  |
|                                | <b>Unemployment Rate</b>   | 16%   |
|                                | <b>Child Poverty Rate</b>  | 56%   |
|                                | <b>Children in families where no parent has year-round, full-time employment</b> | 51%   |
|                                | <b>GDP per capita</b>  | \$16,300 (2010 est.)  |
| <b>Education</b>               | <b>Fall enrollment at public schools</b>   | 503,635<br>(Pk-8 <sup>th</sup> : 355,11; 9 <sup>th</sup> -12 <sup>th</sup> : 148,520)   |
|                                | <b>≥ 25 year olds that have completed high school or higher degree</b>           | 66.4%   |
|                                | <b>16-18 year old school drop-outs</b>   | 84.1%   |
| <b>Politics and Government</b> | <b>Jurisdiction</b>  | 1898: Surrendered by Spain to the United States by the Treaty of Paris<br>1952: Gained greater local autonomy through Commonwealth status |
|                                | <b>Administrative Divisions</b>  | 78 municipalities   |

**Figure 1. About Puerto Rico**

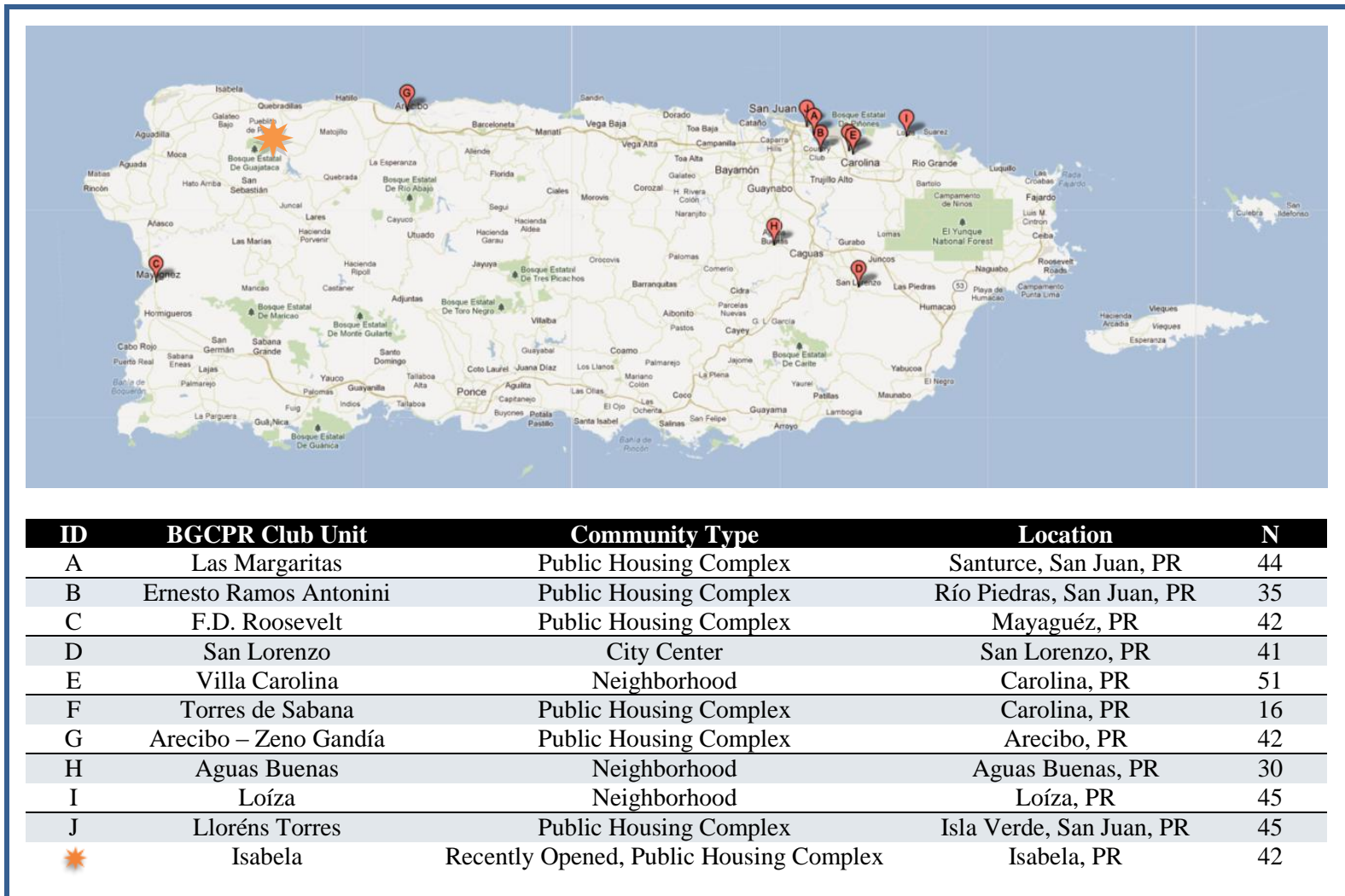
<sup>1</sup> Data for year 2010, unless otherwise noted.

Data sources: AECF, 2010a, 2010b; CIA, 2010; U.S. Census Bureau, 2010a, 2010b, 2011



**Figure 2. Socio-ecological approach to the role of social learning and connectedness on children's bullying behavior**

Note: Developed based on theoretical information provided by Akers, 1994; Bronfenbrenner, 1979; Karcher, 2004; and Swearer & Espelage, 2004.



**Figure 3. Boys & Girls Clubs of Puerto Rico: Unit locations**

## Appendix C: About Boys & Girls Clubs of America<sup>2</sup>



### **BOYS & GIRLS CLUBS OF AMERICA**

“In every community, boys and girls are left to find their own recreation and companionship in the streets. An increasing number of children are at home with no adult care or supervision. Young people need to know that someone cares about them. Boys & Girls Clubs offer that and more. Club programs and services promote and enhance the development of boys and girls by instilling a sense of competence, usefulness, belonging and influence. Boys & Girls Clubs are a safe place to learn and grow – all while having fun. It is the place where great futures are started each and every day.”

*Boys & Girls Clubs of America*

Founded in 1860 at Hartford, Connecticut, Boys & Girls Clubs currently operate in 3,954 locations (i.e., schools, public housing complexes and military installations) and serve 4.1 million children each year across the United States, including Puerto Rico. Sixty two percent of their served children are between the ages of 6 and 12 years.

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<sup>2</sup> Quotes and official data made public through the Boys & Girls Clubs of America can be found here: <http://www.bgca.org/whoweare/Pages/WhoWeAre.aspx>, and <http://www.bgca.org/whoweare/Pages/FactsFigures.aspx>.

## Appendix D: Letter of Support – Boys & Girls Clubs of Puerto Rico



February 6, 2012

### LETTER OF SUPPORT

**Project Title:** “The Role of Connectedness, Differential Associations, and Religious Factors on Bullying Participation among Puerto Rican Preadolescents”

**Researcher:** Melissa C. Mercado-Crespo, MSc MA  
Doctoral Candidate  
Department of Community and Family Health  
University of South Florida, College of Public Health

**Faculty Adviser:** Martha Coulter, DrPH MSW  
Director and Professor  
Harrell Center for the Study of Family violence  
Department of Community and Family Health  
University of South Florida, College of Public Health

**BGCPR Contact:** Joan Rivera-Carrión, MSW  
Area Manager  
Boys & Girls Club of Puerto Rico

Boys and Girls Club of Puerto Rico is in complete support of this project. As a partner, BGCPR will provide the necessary support to ensure the success of the project. This includes assistance in the recruitment of participants, and providing meeting space at each Club location for the data collection and research activities.

Sincerely,

A handwritten signature in black ink, appearing to read "José A. Campos", is written over a horizontal line.

José A. Campos  
President & CEO  
787-268-4504  
jcampos@bgcpr.org

## Appendix E: Letter for Project Location Liaisons (Spanish Version)

Buenas tardes [NAME],

Mi nombre es Melissa Mercado, y estoy a cargo de la investigación sobre el *bullying* que llevaremos a cabo en las distintas unidades de *Boys & Girls Club of Puerto Rico*. Este estudio es parte de mi investigación doctoral para el grado PhD en Salud Pública de la *University of South Florida*, y se titula “El rol de las conexiones y factores religiosos en la participación de *bullying* en preadolescentes puertorriqueños (IRB Pro00008983).”

El propósito de esta investigación es explorar el rol de las diferentes conexiones y asociaciones que los preadolescentes tienen con otras personas, lugares o entidades, y la religiosidad pública en su participación de *bullying* (acoso escolar). A estos fines realizaremos una encuesta con preadolescentes en Puerto Rico (10-12 años de edad) que sean miembros de *Boys & Girls Club of Puerto Rico*. Específicamente, necesitamos reclutar 50 participantes por Unidad – para un total de 600 participantes a nivel isla.

Como director(a) de la Unidad [REDACTED] de *Boys & Girls Club of Puerto Rico*, necesitamos su ayuda en lo siguiente:

- 1) Designar a un miembro de su Staff para que sirva como persona contacto y reclutador(a) de participantes para esta investigación. Puede ser el/la trabajador(a) social de su Unidad, usted mismo(a) u otro Staff de su preferencia.
- 2) Participar de una reunión de orientación – en persona o vía telefónica – sobre el proceso de reclutamiento de participantes y actividades a realizarse el día de la encuesta.
- 3) Colaborar en el reclutamiento de 50 participantes para este estudio. Los participantes deben ser:
  - a. Preadolescentes de 10-12 años de edad
  - b. Miembros regulares de su unidad de *Boys & Girls Club of Puerto Rico*
  - c. No haber sido diagnosticado(a) con problemas de aprendizaje o problemas en el desarrollo
  - d. Igual número de niños y niñas (si es posible)
  - e. No haber participado en las actividades de desarrollo del cuestionario durante el periodo de octubre 2011 a marzo 2012
- 4) Entregar la carta de información y hoja de autorización a los padres de los participantes potenciales (ver documentos adjuntos). Cada padre, madre o encargado(a) debe recibir una (1) carta de información y dos (2) hojas de autorización para padres. Los padres sólo deberán firmar y devolver una (1) de las hojas de autorización para padres el día del estudio.
- 5) Separar un salón para que los participantes puedan contestar la encuesta en cada día y hora acordada. Este salón debe:

- a. Ofrecer pocas distracciones; recomendamos que sea un lugar separado de las actividades normales del Club, tranquilo y con poco ruido.
  - b. Tener buena ventilación; que sea un lugar con una temperatura agradable.
  - c. Tener pupitres, o mesas y sillas para todos los participantes.
  - d. Ser apropiado para acomodar el número máximo de participantes y staff de investigación (máximo 30 preadolescentes, 2 investigadores y 1 staff).
  - e. Estar disponible para uso del personal de investigación y los participantes durante mínimo 2 horas el día de la encuesta (90 minutos para completar el cuestionario y 30 minutos para funciones administrativas del estudio).
- 6) Recordar a los participantes que todas las hojas de autorización de los padres deberán estar firmadas antes de que se lleve a cabo la encuesta. Los investigadores recogerán dichas hojas de autorización el día de la encuesta.
  - 7) Coordinar junto a los investigadores los días y las horas para realizar la encuesta en su unidad de *Boys & Girls Club de Puerto Rico*. Esta fecha debe ser durante el periodo del 27 de agosto al 12 de octubre de 2012, o según coordinado con la oficina central de *Boys & Girls Clubs de Puerto Rico*.

Agradeceré que me deje saber lo más pronto posible: a) quién será la persona contacto en su Unidad para esta investigación y b) el día y hora que prefiera para pautar una reunión inicial sobre el reclutamiento de participantes. Puede comunicarse conmigo al celular 787-368-6823 o vía correo electrónico [mmercad1@health.usf.edu](mailto:mmercad1@health.usf.edu).

Es para mi un honor poder colaborar con *Boys & Girls Club of Puerto Rico* a través de mi preparación doctoral y profesional. Muchas gracias por su apoyo en este proyecto. ¡Hasta pronto!

Saludos cordiales,

Melissa C. Mercado-Crespo, MSc MA  
Candidata/Estudiante Doctoral  
Departamento de Salud Familiar y Comunitaria  
*University of South Florida, College of Public Health*

Cc:

José A. Campos – Presidente y CPO, *Boys & Girls Club of Puerto Rico*  
Joan Rivera Carrión, MSW – Gerente de Area, *Boys & Girls Club of Puerto Rico*

## Appendix F: Letter for Project Location Liaisons (English Version)

Good afternoon [NAME],

My name is Melissa Mercado, and I'm in charge of the bullying research study that we will be conducting across the different *Boys & Girls Club of Puerto Rico* units. This study is part of my doctoral research for the PhD degree in Public Health at the University of South Florida, and it is titled "The Role of Connectedness and Religious Factors on Bullying Participation among Puerto Rican Preadolescents (IRB Pro00008983)."

The purpose of this study is to explore the role of the differential connections and associations that preadolescents have with other people, places or entities, and public religiosity on their bullying participation. To this purpose we will conduct a survey with Puerto Rico preadolescents (ages 10-12 years) who are members of *Boys & Girls Club of Puerto Rico*. Specifically, we need to recruit 50 participants per Unit/Club – for a total of 600 participants island-wide.

As the *Boys & Girls Club of Puerto Rico* [NAME OF CLUB/UNIT] Director, we need your help with the following:

- 1) Designate a Staff member to serve as the contact person and participants' recruiter for this research study. He/she may be the Social Worker at your Unit/Club, yourself or any other Staff member you prefer.
- 2) Participate in an orientation meeting – in person or by phone – to talk about the recruitment process and research activities to be conducted on the day of the survey.
- 3) Coordinate the recruitment of 50 participants for this study. Participants must be:
  - a. Preadolescents, ages 10-12 years
  - b. Regular members at your *Boys & Girls Club of Puerto Rico* Unit/Club
  - c. Have not been diagnosed with a learning or developmental disability
  - d. Equal number of boys and girls (if possible)
  - e. Not having participated in any of the questionnaire development activities during the October 2011 thru March 2012 period.
- 4) Distribute the information letter and parental authorization forms to parents of potential participants (see documents attached). Each parent or guardian must receive one (1) information letter and two (2) parental authorization forms. Parents must sign and return only one (1) of the parental authorization forms on the date of the study.
- 5) Reserve a room or classroom where participants may answer the questionnaire on the appointed survey days and times. This room must:
  - a. Offer limited distractions; we recommend it is separated from all normal Club activities, calm and with limited noise.



- b. Have good ventilation; it must have a comfortable temperature.
  - c. Have school-desks or tables and chairs for all participants.
  - d. Be appropriate to accommodate the maximum number of participants and research staff (maximum 30 preadolescents, 2 researchers and 1 staff).
  - e. Be available for use by the researchers and participants for at least 2 hours during the survey day (90 minutes to answer the questionnaire and 30 minutes for administrative research activities).
- 6) Remind participants that all parental authorization forms must be signed before the day of the survey. The researchers will collect the authorization forms on the day of the survey.
- 7) Coordinate with the researchers when (days and times) the survey will be held at their *Boys & Girls Club of Puerto Rico* Unit/Club. This date must be within the August 27 thru September 28, 2012 period, or as coordinated by the central administration offices of *Boys & Girls Clubs of Puerto Rico*.

I'll appreciate if you could advise sooner on: a) who will be the contact person within your Unit/Club for this research study, and b) the day and time preferred for us to have an initial meeting on the participants' recruitment process. You may contact me via cellphone 787-368-6823 or email [mmercad1@health.usf.edu](mailto:mmercad1@health.usf.edu).

It is an honor for me to be able to collaborate with *Boys & Girls Club of Puerto Rico* through my doctoral and professional training. Thank you very much for your support in this project. See you soon!

Best regards,

Melissa C. Mercado-Crespo, MSc MA  
Doctoral Candidate/Student  
Department of Community and Family Health  
*University of South Florida, College of Public Health*

Cc:

José A. Campos – President y CPO, *Boys & Girls Club of Puerto Rico*  
Joan Rivera-Carrión, MSW – Area Manager, *Boys & Girls Club of Puerto Rico*

## Appendix G: Letter for Parents (Spanish Version)



Estimado(a) padre, madre o encargado(a),

Mi nombre es Melissa Mercado. Soy estudiante doctoral en la escuela de salud pública de la *University of South Florida*.

Usted ha recibido esta carta porque su hijo(a) ha sido invitado(a) a participar en un estudio de investigación. El propósito de este estudio es explorar el rol de las diferentes conexiones y asociaciones que los preadolescentes tienen con otras personas, lugares o entidades, y la religiosidad pública en su participación de *bullying* (acoso escolar).

Este estudio contará con la participación de un máximo de 600 preadolescentes (10-12 años de edad) puertorriqueños, que sean miembros en una de las 11 unidades de *Boys & Girls Club of Puerto Rico* (aproximadamente 50 participantes por Club). Si usted lo autoriza, su hijo(a) será uno(a) de esos participantes, y tendrá la oportunidad de contestar un cuestionario escrito.

Los cuestionarios serán entregados y completados en un momento específico, y en uno de los salones de la unidad de *Boys & Girls Club of Puerto Rico* a la que su hijo(a) asiste regularmente. El/la directora(a) de su Club le indicará el día y la hora seleccionada para su Club – durante los meses de agosto a septiembre de 2012. Yo entregaré los cuestionarios a los participantes, y permaneceré en el salón junto a ellos mientras lo contestan individualmente. Los participantes tendrán 75 minutos para completar el cuestionario. Se ofrecerá una merienda liviana al final.

Estas entrevistas son parte de una investigación titulada “El rol de las conexiones y factores religiosos en la participación de *bullying* en preadolescentes puertorriqueños (IRB Pro00008983).” No esperamos que su hijo(a) enfrente algún riesgo mayor durante su participación en el estudio.

Si está de acuerdo con que su hijo(a) participe en esta investigación, por favor, complete el formulario de permiso para padres. Su autorización escrita es necesaria para que su hijo(a) pueda participar. También le pediremos a su hijo(a) que verbalmente nos diga si está o no dispuesto a participar en este estudio. Por favor, entregue el documento firmado a [CONTACT'S NAME] de *Boys & Girls Club of Puerto Rico* en o antes del [DATE].

Con mucho gusto contestaré cualquier pregunta que usted tenga sobre esta investigación. Por favor, siéntase en completa libertad de llamarme al 787-368-6823 o enviarme un correo electrónico a [mmercad1@health.usf.edu](mailto:mmercad1@health.usf.edu). Gracias.

Sinceramente,

Melissa C. Mercado-Crespo, MSc MA  
Estudiante/Candidata Doctoral  
Departamento de Salud Familiar y Comunitaria  
*University of South Florida (USF), College of Public Health*

## Appendix H: Letter for Parents (English Version)



Dear parent or guardian,

My name is Melissa Mercado. I'm a doctoral student at the University of South Florida, College of Public Health.

You are receiving this letter because your child has been invited to participate in a research study. The purpose of this study is to explore the role of the differential connections and associations that preadolescents have with other people, places or entities, and public religiosity on their bullying participation.

This study will include the participation of maximum of 600 Puerto Rican preadolescents (ages 10-12 years), who are members of one of the 11 *Boys & Girls Club of Puerto Rico* units (approximately 50 participants per Club). If you grant us authorization, your child will be one of those participants, and he/she will have the opportunity to answer a written questionnaire.

The questionnaires will be given and answered during a specific time, and at one of the classrooms/rooms at the *Boys & Girls Club of Puerto Rico* unit that your child regularly attends. The Club Director will let you know the selected date and time for your Club, during the months of August thru September 2012. I will hand out the questionnaires to each participant, and will stay with them inside the classroom while they individually answer it. The participants will have 75 minutes to complete the questionnaire. A light snack will be provided at the end.

All interviews are considered research, and part of the study titled "The Role of Connectedness and Religious Factors on Bullying Participation among Puerto Rican Preadolescents (IRB Pro00008983)". It is not intended that your child will be at risk during this study.

If you agree with your son/daughter being part of this research, please complete the parental permission form. Your written authorization is required. We will also ask your child to verbally assent to participate in this study. Please return the signed parental permission form to [NAME] at *Boys & Girls Club of Puerto Rico* by [DATE].

I will be happy to answer any questions you may have about this research. Please feel free to call me at 787-368-6823 or send me an email at [mmercad1@health.usf.edu](mailto:mmercad1@health.usf.edu). Thank you.

Sincerely,

Melissa C. Mercado-Crespo, MSc MA  
Doctoral Student/Candidate  
Department of Community & Family Health  
University of South Florida, College of Public Health

## Appendix I: Parental Authorization Form (Spanish Version)



### Permiso Parental para Participar de Investigaciones Sociales y de Comportamiento

**Información que los padres deben considerar antes de permitir que su hijo(a) participe en un estudio de investigación.**

**IRB Study # Pro00008983**

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Le presentamos la siguiente información para ayudarle a usted y a su hijo(a) decidir si el/ella quiere o no quiere participar en un estudio de investigación. Por favor, lea la información en este documento cuidadosamente. Le exhortamos a hacer preguntas al investigador, si tiene cualquier pregunta o no entiende esta información.

Le pedimos que permita a su hijo(a) participar en un estudio de investigación titulado: “El rol de las conexiones y factores religiosos en la participación de *bullying* en preadolescentes puertorriqueños.”

La persona encargada de este estudio de investigación es Melissa C. Mercado-Crespo. Esta persona es la Investigadora Principal del proyecto. Sin embargo, hay otras miembros del equipo de investigación que también pudiesen estar involucrados y actuar en nombre de la persona a cargo. Ella será guiada en esta investigación por la Dra. Martha L. Coulter.

Esta investigación se llevará a cabo en *Boys & Girls Club of Puerto Rico*.

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### **¿Por qué se está haciendo este estudio de investigación?**

El propósito de este estudio es explorar el rol de las diferentes conexiones y asociaciones que los preadolescentes tienen con otras personas, lugares o entidades, y la religiosidad pública en su participación de *bullying* (acoso escolar).

### **¿Por qué hemos invitado a su hijo(a) a participar?**

Su hijo(a) ha sido invitado(a) a participar en este estudio de investigación porque el/ella es un preadolescente (10-12 años de edad) miembro de uno de las unidades de *Boys & Girls Club of Puerto Rico*.

## **¿Debe su hijo(a) participar en este estudio?**

Este documento de consentimiento informado le explica de qué se trata este estudio de investigación. Usted puede decidir si quiere que su hijo(a) participe en el mismo. Este documento explica:

- Por qué se está haciendo este estudio.
- Que ocurrirá durante el estudio, y qué su hijo(a) deberá hacer durante el mismo.
- Le dirá si existe la posibilidad de que su hijo(a) sea beneficiado por participar en el estudio.
- Le dirá si existe el riesgo de que su hijo(a) enfrente algún tipo de problema a consecuencia de participar en el estudio.

Antes de tomar una decisión:

- Lea este documento.
- Permita que algún amigo o familiar también lea el documento.
- Hable sobre el estudio con la persona encargada, o la persona que le está explicando el mismo. Puede pedirle a alguna otra persona que lo acompañe mientras conversa sobre el estudio.
- Discuta el estudio y este documento con alguien de confianza.
- Investigue de qué se trata el estudio.
- Usted pudiera tener preguntas que no son contestadas con la información provista en este documento. No debe adivinar las respuestas. Si tiene preguntas, pregúntele a la persona encargada del estudio o algún miembro del equipo de investigación. Pídale que le explique el proyecto de forma tal que usted lo entienda.
- Tome su tiempo en pensar y tomar una decisión.

La decisión de permitir a su hijo(a) participar en este estudio es suya. Si decide permitirle participar, entonces deberá firmar este documento. Si no desea que su hijo(a) participe, no firme el documento.

## **¿Qué ocurrirá durante el estudio?**

Su hijo(a) deberá participar en este estudio 1 solo día, durante un periodo de 75 minutos (1 hora y 15 minutos). Su hijo(a) deberá contestar un cuestionario individual en uno de los salones de la unidad de *Boys & Girls Club of Puerto Rico* a la cual pertenece.

En investigaciones como ésta nos referimos a cada reunión que su hijo(a) tenga con la persona encargada de la investigación u otro(s) miembros del equipo de investigación como “visitas de estudio”. En este caso, su hijo(a) deberá asistir a una sola visita de investigación (para contestar un cuestionario individual en persona), la cual tomará 75 minutos, y se llevará a cabo en el *Boys & Girls Club* al que asiste su hijo(a).

Durante la visita le pediremos a su hijo(a) lo siguiente:

- Asistir al salón asignado, en el día y la hora indicada.
- Contestar las preguntas de un cuestionario. Nosotros le proveeremos el cuestionario y lápiz a utilizar.
- No se va a anotar el nombre de los participantes. Solamente la investigadora principal del estudio y el/la asistente de investigación tendrán acceso a los cuestionarios contestados. Guardaremos los cuestionarios contestados en un archivo bajo llave, en un lugar seguro.

### **¿Cuántas personas participarán en este estudio?**

Alrededor de 600 personas participarán en este estudio en la *University of South Florida* y *Boys & Girls Club of Puerto Rico*.

### **¿Cuáles son las opciones si decide no permitir que su hijo(a) participe en el estudio?**

No hay problema; está bien si decide no permitir a su hijo(a) participar en este estudio. Su hijo(a) también puede decidir no querer participar en el estudio. Su hijo(a) podrá continuar con sus actividades regulares en *Boys & Girls Club of Puerto Rico*.

### **¿Será su hijo(a) compensado por participar en este estudio?**

No se otorgará compensación económica a su hijo(a) por su participación en este estudio. Se ofrecerá una merienda liviana al concluir la visita de estudio.

### **¿Cuánto le costará permitir que su hijo(a) participe en este estudio?**

No le costará nada permitir a su hijo(a) participar en este estudio.

### **¿Cuáles son los beneficios que su hijo(a) pudiera recibir si le permite participar en este estudio?**

No sabemos si su hijo(a) recibirá algún beneficio por participar en este estudio. Al autorizar que su hijo(a) voluntariamente participe nos ayudará a entender mejor qué piensan los preadolescentes puertorriqueños sobre el rol de las conexiones con otros y la religiosidad en el *bullying* (acoso escolar). Lo que aprendamos podrá ayudar a su hijo(a) y otros en el futuro.

### **¿Cuáles son los riesgos que su hijo(a) pudiera enfrentar al participar del estudio?**

Las siguientes situaciones de riesgo pudieran ocurrir:

- Malestar psicológico al recordar incidentes de violencia (e.g., *bullying*) actuales o que ocurrieron en el pasado.

Si su hijo(a) enfrenta cualquiera de estos problemas, usted deberá informarlo a la persona a cargo de este estudio u otro miembro del equipo de investigación inmediatamente. Si estos problemas le preocupan, o si su hijo(a) enfrentase otro tipo de problema, puede llamar a la persona encargada del estudio al 787-368-6823, lunes a viernes de 9am a 5pm.

## **¿Será compensado por daños sufridos, relacionados a la participación en esta investigación?**

Si cree que su hijo(a) ha sufrido daño por algo que se hizo durante este estudio de investigación, deberá comunicarse inmediatamente con Melissa C. Mercado-Crespo al 787-368-6823 o Martha L. Coulter al 813-974-3623. La *University of South Florida* no sufragará gastos de cuidado o tratamiento que pudieran ser necesarios si su hijo sufre daños o se enferma mientras participa en este estudio. El costo de tales cuidados y tratamientos es su responsabilidad. Además, la *University of South Florida* no compensará por salario perdido si su hijo sufre daños durante el estudio. La *University of South Florida* es considerada una agencia del estado, y por lo tanto no puede ser demandada legalmente. Sin embargo, si se demuestra que alguno(s) de los investigadores en este estudio u otro empleado(a) de USF fue negligente en su trabajo de forma tal que provocase daño a su hijo, entonces sí es posible demandar. La cantidad de dinero que puede recuperar del Estado de la Florida es limitada.

### **Usted también puede llamar al *USF Self Insurance Program (SIP)* al 1-813-974-8008 si piensa que:**

- Su hijo(a) sufrió daños, por que participó en este estudio.
- Alguien en el estudio hizo algo mal, o no hizo algo que debía hacer, y causó daños a su hijo(a).
- El SIP debe investigar el asunto.

## **Privacidad y Confidencialidad**

Guardaremos todos los expedientes de su hijo(a) de forma privada y confidencial. Algunas personas tendrán que tener acceso a dichos documentos. Por ley, cualquier persona que tenga acceso a los expedientes de su hijo(a) deberá mantenerlos en total confidencialidad. Solamente las siguientes personas podrán ver los expedientes:

- El equipo de investigación, incluyendo el/la investigador(a) principal, su supervisor(a) y el/la asistente de investigación.
- Algunas personas en el gobierno y la universidad que deban saber más sobre el estudio. Por ejemplo, personas que supervisan este tipo de estudios pudieran mirar los expedientes. Esto se hace para asegurarnos de que estamos llevando a cabo la investigación de forma correcta. Ellos también se asegurarán de que estamos protegiendo los derechos y la seguridad de su hijo(a).
- Cualquier agencia federal, estatal o local que regule este tipo de investigación. Eso incluye la Oficina de Protección de Investigaciones Humanas (OHRP, por sus siglas en inglés) del Departamento de Salud y Servicios Humanos (DHHS, por sus siglas en inglés) de los Estados Unidos.
- La *USF Institutional Review Board (IRB)*, junta revisora institucional de proyectos de investigación humana realizados en USF) y sus empleados que tienen la responsabilidad de supervisar este estudio, empleados en la Oficina de Investigación e Innovación de USF, la División de Integridad y Conformidad en Investigación, y otras oficinas en USF que supervisan este tipo de investigaciones.

Es posible que publiquemos los hallazgos de este estudio. Al hacerlo no incluiremos el nombre de su hijo(a). No publicaremos nada que pudiera hacer que otras personas sepan quién es su hijo(a).

## **¿Qué sucederá si decide no permitir que su hijo(a) participe en el estudio?**

Usted debe permitir que su hijo(a) participe en el estudio solamente si ambos – usted y su hijo(a) – quieren hacerlo. Usted y su hijo(a) no deben sentirse presionados en participar en el estudio, para complacer a el/la investigador(a) o su equipo de trabajo.

### **Si decide no permitir que su hijo(a) participe en el estudio:**

- Su hijo(a) no estará en problemas, ni perderá ningún derecho que regularmente tiene.
- Su hijo(a) seguirá recibiendo los mismos servicios que él/ella regularmente recibe.

**Usted también puede decidir que su hijo(a) no participará en el estudio, aún cuando ya haya firmado este documento de consentimiento informado.** Nosotros le mantendremos informado(a) de cualquier cambio, que pueda afectar su decisión de permitir a su hijo(a) participar en el estudio. También puede decidir que su hijo(a) deje de participar en el estudio, por cualquier motivo y en cualquier momento. Si decide que no quiere que su hijo(a) continúe participando en el estudio, dígaselo al equipo de investigación lo más pronto posible.

- Si decide dejar de participar en el estudio, su hijo(a) podrá continuar recibiendo los mismos servicios que él/ella regularmente recibía.

Pudieran surgir circunstancias que nos obliguen a retirar a su hijo(a) del estudio, aún cuando usted quiera el él/ella permanezca en el mismo. Su hijo(a) pudiera ser retirado del estudio si nos percatamos de que no es seguro para su hijo(a) que participe, o si su hijo(a) no asiste a la reunión de estudio según acordado. Le dejaremos saber la razón por la cual retiramos la participación de su hijo(a), si éste fuera el caso.

### **Puede recibir respuestas a sus preguntas, preocupaciones o quejas**

Si tiene cualquier tipo de pregunta, preocupación o queja relacionada a este estudio, llame a Melissa C. Mercado-Crespo al 787-368-6823. Si tiene preguntas sobre los derechos de su hijo(a), o preguntas, quejas o preocupaciones generales como participante de un estudio de investigación puede comunicarse con el *USF Institutional Review Board* al 813-974-5638.



## **Consentimiento para Permitir a mi Hijo(a) Participar en este Estudio de Investigación**

Es su decisión. Usted decide si permitirá que su hijo(a) participe en este estudio de investigación. Si quiere que su hijo(a) participe en este estudio, por favor lea las declaraciones a continuación. Si son ciertas, firme el documento en el lugar indicado.

**Libremente doy mi consentimiento para que mi hijo(a) participe en este estudio de investigación.** Entiendo que al firmar este documento estoy diciendo que estoy de acuerdo con que mi hijo(a) participe en una investigación. He recibido una copia personal de este documento.

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Firma del padre/encargado de el/la niño(a)  
que participará en este estudio

---

Fecha

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Nombre en letra de molde del padre/encargado de el/la  
niño(a) que participará en este estudio

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Firma de la persona obteniendo el consentimiento

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Fecha

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Nombre de la persona obteniendo el consentimiento

## Appendix J: Parental Authorization Form (English Version)



### Parental Permission to Participate in Social & Behavioral Research

**Information for parents to consider before allowing your child to take part in this research study.**

**IRB Study # Pro00008983**

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The following information is being presented to help you and your child decide whether or not your child wishes to be a part of a research study. Please read this information carefully. If you have any questions or if you do not understand the information, we encourage you to ask the researcher.

We are asking you to allow your child to take part in a research study called: “The Role of Connectedness and Religious Factors on Bullying Participation among Puerto Rican Preadolescents”.

The person who is in charge of this research study is Melissa C. Mercado-Crespo. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. She is being guided in this research by Dr. Martha L. Coulter.

The research will be conducted at *Boys & Girls Club of Puerto Rico*.

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#### **Why is this research being done?**

The purpose of this study is to explore the role of the differential connections and associations that preadolescents have with other people, places or entities, and public religiosity on their bullying participation.

#### **Why is your child being asked to take part?**

Your child has been invited to participate in this research project because he/she is a preadolescent (ages 10-12 years) who is member of one of the *Boys & Girls Club* of Puerto Rico units.

#### **Should your child take part in this study?**

This informed consent form tells you about this research study. You can decide if you want your child to take part in it. This form explains:

- Why this study is being done.
- What will happen during this study and what your child will need to do.

- Whether there is any chance your child might experience potential benefits from being in the study.
- The risks of having problems because your child is in this study.

Before you decide:

- Read this form.
- Have a friend or family member read it.
- Talk about this study with the person in charge of the study or the person explaining the study. You can have someone with you when you talk about the study.
- Talk it over with someone you trust.
- Find out what the study is about.
- You may have questions this form does not answer. You do not have to guess at things you don't understand. If you have questions, ask the person in charge of the study or study staff as you go along. Ask them to explain things in a way you can understand.
- Take your time to think about it.

The decision to provide permission to allow your child to participate in the research study is up to you. If you choose to let your child be in the study, then you should sign this form. If you do not want your child to take part in this study, you should not sign the form.

### **What will happen during this study?**

Your child will be asked to spend about 1 day in this study, during a 75-minute period (1 hour and 15 minutes). Your son/daughter will be asked to answer an individual questionnaire at one of the classrooms/rooms at the *Boys & Girls Club of Puerto Rico* unit that he/she is member of.

A study visit is one your child will have with the person in charge of the study or study staff. In this case, your child will need to come for 1 study visit in all (to answer an individual, in-person questionnaire), which will take about 75 minutes, and will be held at his/her *Boys & Girls Club*.

During the visit, your child will be asked:

- Go to the assigned room/classroom, on the appointed day and time.
- Answer the questionnaire. We will provide the questionnaire and pencil he/she will use.
- We will not record the name of the participants. Only the principal investigator and the research assistant will have access to the answered questionnaires. We will store the answered questionnaires inside a locked cabinet, which is kept at a secure location.

### **How many other people will take part?**

About 600 people will take part in this study at the *University of South Florida*, and *Boys & Girls Club Puerto Rico*.

## **What other choices do you have if you decide not to let your child to take part?**

If you decide not to let your child take part in this study, that is okay. Instead of being in this research study your child can choose not to participate. Your child will be able to continue with his/her usual activities at *Boys & Girls Club of Puerto Rico*.

## **Will your child be compensated for taking part in this study?**

No economic compensation will be provided to your child if he/she participates in this study.

## **What will it cost you to let your child take part in this study?**

It will not cost you anything to let your child take part in the study. A light snack will be provided upon completion of the study visit.

## **What are the potential benefits to your child if you let him / her take part in this study?**

We do not know if your child will gain any benefits by taking part in this study. By authorizing your child to voluntarily participate, you are helping us better understand what Puerto Rican preadolescents think about the role of being connected to others and religiosity on bullying. What we learn may help your child and others in the future.

## **What are the risks if your child takes part in this study?**

The following risks may occur:

- Psychological discomfort from remembering a past or current violence (e.g., bullying) incident.

If your child has any of these problems, tell the person in charge of this study or study staff at your child's next visit. If these problems bother or worry you, or if your child has other problems, call the person in charge of this study at 787-368-6823 Monday thru Friday from 9am to 5pm.

## **Will I be compensated for research related injuries?**

If you believe your child has been harmed because of something that is done during the study, you should call Melissa C. Mercado-Crespo at 787-368-6823, or Martha L. Coulter at 813-974-3623 immediately. The University of South Florida will not pay for the cost of any care or treatment that might be necessary because your child gets hurt or sick while taking part in this study. The cost of such care or treatment will be your responsibility. In addition, the University of South Florida will not pay for any wages you may lose if your child is harmed by this study. The University of South Florida is

considered a state agency and therefore cannot usually be sued. However, if it can be shown that your child's researcher, or other USF employee, is negligent in doing his or her job in a way that harms your child during the study, you may be able to sue. The money that you might recover from the State of Florida is limited in amount.

**You can also call the USF Self Insurance Programs (SIP) at 1-813-974-8008 if you think:**

- Your child was harmed because he/she took part in this study.
- Someone from the study did something wrong that caused your child harm, or did not do something they should have done.
- Ask the SIP to look into what happened.

## **Privacy and Confidentiality**

We will keep your child's study records private and confidential. Certain people may need to see your child's study records. By law, anyone who looks at your child's records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, her supervisor, and the research assistant.
- Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.
- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your child's name. We will not publish anything that would let people know who your child is.

## **What happens if you decide not to let your child take part in this study?**

You should only let your child take part in this study if both of you want to. You and your child should not feel that there is any pressure to take part in the study to please the study investigator or the research staff.

**If you decide not to let your child take part:**

- Your child will not be in trouble or lose any rights he/she would normally have.
- You child will still get the same services he/she would normally have.

**You can decide after signing this informed consent form that you no longer want your child to take part in this study.** We will keep you informed of any new developments, which might affect your willingness to allow your child to continue to participate in the study. However, you can decide you want your child to stop taking part in the study for any reason at any time. If you decide you want your child to stop taking part in the study, tell the study staff as soon as you can.

- If you decide to stop, your child can continue receiving the services he/she would usually have.

Even if you want your child to stay in the study, there may be reasons we will need to withdraw him/her from the study. Your child may be taken out of this study if we find out it is not safe for your child to stay in the study, or if your child is not coming for the study visits when scheduled. We will let you know the reason for withdrawing your child's participation in this study.

**You can get the answers to your questions, concerns, or complaints.**

If you have any questions, concerns or complaints about this study, call Melissa C. Mercado-Crespo at 787-368-6823. If you have questions about your child's rights, general questions, complaints, or issues as a person taking part in this study, call the USF IRB at (813) 974-5638.

## Consent for My Child to Participate in this Research Study

It is up to you to decide whether you want your child to take part in this study. If you want your child to take part, please read the statements below and sign the form if the statements are true.

**I freely give my consent to let my child take part in this study.** I understand that by signing this form I am agreeing to let my child take part in research. I have received a copy of this form to take with me.

---

Signature of Parent of Child Taking Part in Study

---

Date

---

Printed Name of Parent of Child Taking Part in Study

---

Signature of Person Obtaining Consent

---

Date

---

Printed Name of Person Obtaining Consent

## Appendix K: Verbal Child Assent Script (Spanish Version)

*Hola. Mi nombre es Melissa Mercado, y soy una estudiante universitaria, una estudiante doctoral. Estoy aprendiendo para llegar a ser una doctora, pero no el tipo de doctor que trabaja en oficinas médicas, clínicas u hospitales. Espero llegar a ser una doctora en salud pública, y trabajar en estudios de investigación.*

*Primero que todo, déjenme explicarles por qué estoy aquí. Estoy aquí para aprender de ustedes. Quiero saber qué piensan los preadolescentes de Puerto Rico – como ustedes – sobre el bullying (acoso escolar) y el estar conectado a otros. Para eso, les pediré que por favor contesten este cuestionario.*

*No hay respuestas correctas o incorrectas. Sus respuestas son muy importantes, ya que nos ayudarán a aprender más sobre este tema y cómo podemos ayudar a los preadolescentes en Puerto Rico.*

**\*\* NOTA: Hacer referencia a las instrucciones en la pizarra, cartulina o “flip-chart” \*\***

*Esto es lo que haremos durante la próxima hora y 15 minutos (75 minutos):*

- 1) Cada uno de ustedes me dirá si quiere participar y llenar este cuestionario. La participación es voluntaria; si no quieres participar, está bien. Solo dímelo y podrás regresar a tus actividades normales en el Club.*
- 2) Les voy a entregar un cuestionario y un lápiz a cada participante.*
- 3) Para todas las preguntas, selecciona la respuesta que piensas es correcta, o la que mejor describe lo que piensas o cómo se sientes.*
- 4) Por favor, no escribas tu nombre en el cuestionario.*
- 5) Si tienes alguna pregunta, levanta tu mano.*
- 6) No se permite hablar mientras contestas el cuestionario.*
- 7) Cuando termines, entrega el cuestionario al staff.*

*¿Entienden qué es lo que vamos a hacer? ¿Tienen alguna pregunta?*

*Ahora iré uno por uno para saber si quieren participar y contestar este cuestionario.*

**\*\* NOTA: Preguntar a cada participante lo siguiente – “¿Quieres participar?”. El/la asistente de investigación escoltará fuera del salón a cualquier preadolescente que no quiera participar en esta investigación. \*\***



## Appendix L: Verbal Child Assent Script (English Version)

*Hi. My name is Melissa Mercado, and I am a university student – a doctoral student. I’m learning to become a doctor – but not the kind of doctor you visit at a medical office, clinic or hospital. I’ll be a doctor in public health, and work in research studies.*

*First of all, let me explain to you why I’m here. I am here because I want to learn from you. I want to know what preadolescents in Puerto Rico – like yourself – think about bullying and being connected to others. For that, I will ask you to please answer a questionnaire.*

*There are no right or wrong answers. Your answers are very important, since they will help us learn more about this topic and how we can help Puerto Rico’s preadolescents.*

**\*\* NOTE:** Refer to the instructions on the Blackboard, poster-board or flip-chart. **\*\***

*This is what we will do during the next hour and fifteen minutes (75 minutes):*

- 1) Each one of you will tell me if you want to participate and answer this questionnaire. Participation is voluntary; if you do not want to participate, that’s okay. Just tell me and you will be able to return to your normal Club activities.*
- 2) I will give each participant a questionnaire and a pencil.*
- 3) For all questions, please select the answer you think is correct, or the one that best describes what you think or how you feel.*
- 4) Please, do not write your name on the questionnaire.*
- 5) If you have any questions, raise your hand.*
- 6) Talking is not allowed while answering this questionnaire.*
- 7) When you finish, give the questionnaire to the staff.*

*Do you understand what we will do? Do you have any questions?*

*I’ll know go one by one to know if you’d like to participate and answer this questionnaire.*

**\*\* NOTE:** Ask each participant the following – “*Do you want to participate?*”. The research assistant will escort any preadolescent who do not wish to participate out of the room. **\*\***

## Appendix M: Authorization to Use OBVQ

### **FW: Q-materials free**

Dan Olweus [Olweus@uni.no]

**Sent:** Friday, March 25, 2011 1:33 PM

**To:** Mercado-Crespo, Melissa

**Attachments:** QE06GenVersion1206CodeForm~1.pdf (638 KB) ; QE06GenVersion1206XX.pdf (91 KB) ; qe02Instrucbx.doc (45 KB) ; 1MonaArt1x03xony2mb.pdf (2 MB) ; 1qe02BriefPsyInfoX.doc (23 KB)

Dan Olweus

Research Professor of Psychology

Uni Health, University of Bergen

Pb 7800

N-5020 Bergen

NORWAY

Tel. +(47) 55 58 23 27 or +(47) 55 29 36 12 or (cell phone) +47 934 19 380

Email: Olweus@psyhp.uib.no

---

**From:** Dan Olweus

**Sent:** Sunday, February 13, 2011 4:50 PM

**To:** Dan Olweus

**Subject:** FW: Q-materials free

Hello-

Please find attached the Questionnaire materials and an article that you may find useful. Good luck with your work! (Please note that, due to copyright regulations, you are not allowed to include a copy of the Questionnaire in a thesis/ dissertation or any other unpublished or (to be) published materials. However, selected text portions from the Questionnaire that I have already published, for example, in the attached paper can be included/published without restrictions. For additional information, you may contact Sue Thomas - [srthomas@hazelden.org](mailto:srthomas@hazelden.org)).

Kind regards

Dan Olweus

Research Professor of Psychology

The HEMILCenter, UiB  
PB 7807  
NO-5020 Bergen  
NORWAY

Address for visit:  
Christies gate 13  
Bergen

Tel. +(47) 55 58 23 27 or +(47) 55 29 36 12 or + 934 19 380  
Email: [Olweus@psyhp.uib.no](mailto:Olweus@psyhp.uib.no)

## Appendix N: Confirmation of Translations' Accuracy

Department of Spanish and Portuguese  
Box 571039  
Georgetown University  
Washington DC, 20057-1039

August 22, 2011

Institutional Review Board  
University of South Florida

To Whom It May Concern:

This letter is to confirm the accurate translation from English to Spanish of the documents entitled "Parental Permission to Participate in Social & Behavioral Research" and "Verbal Child Assent."

I conducted a backtranslation of these documents, which will be utilized as part of the research titled "Development of a Survey to Measure Connectedness, Religiosity, and Children's Bullying among Preadolescents in Puerto Rico: Phase 2 – Puerto Rico (IRB# Pro00005603)". As a native speaker of English and being professionally trained in Spanish linguistic, I judge these documents' Spanish translation to be accurate.

If you have any questions, please feel free to contact me at

Sincerely,



Anne Calderón

**Appendix O: Survey Instrument (Spanish Version)****El rol de las conexiones y factores religiosos en la participación de *bullying* en preadolescentes de Puerto Rico****\*\*\* Instrucciones \*\*\***

Aquí encontrarás unas preguntas sobre tu vida durante los pasados 3 meses.

Hay varias respuestas al lado de cada pregunta. Contesta cada pregunta colocando una **X** en la línea que se encuentra al lado de la respuesta que mejor describe cómo te sientes.

Solamente puedes marcar una respuesta por pregunta.

Si luego de seleccionar una respuesta deseas cambiarla, puedes hacerlo. Asegúrate de borrar completamente la respuesta incorrecta. Luego, coloca una **X** en la respuesta correcta.

Por favor, no escribas tu nombre en este cuestionario. Nadie sabrá lo que tú contestaste a las preguntas.

Es bien importante que contestes con la verdad. Marca la respuestas que creas es cierta.

No se permite hablar mientras contestas el cuestionario.

Si tienes preguntas, levanta la mano.

La mayoría de las preguntas tienen que ver con tu vida durante los pasados 3 meses. Al contestar las preguntas, piensa solamente en cómo ha sido tu vida durante los pasados 3 meses... no tan sólo cómo es ahora mismo.

Presta atención a la maestra. Ella te dará más instrucciones.

¡Gracias por participar!





\*\*\* SEGUNDA PARTE: *Bullying* \*\*\*

Aquí hay varias preguntas relacionadas al *bullying*. Primero vamos a definir o explicar qué significa la palabra *bullying*.

Decimos que un niño o una niña es víctima de *bullying* (acoso) cuando otro niño/a o un grupo de niños/as:

- Lo/la insultan, le hablan malo o le dicen cosas hirientes
- Se burlan de él/ella
- Lo/la ridiculizan, o le dicen sobrenombres o apodosos crueles
- Lo/la ignoran completamente o excluyen del grupo de amistades, o lo dejan fuera a propósito
- Lo/la patean, golpean, empujan, amenazan o encierran en un salón
- Dicen mentiras o rumores falsos sobre él/ella
- Le envían notas crueles
- Tratan que los otros estudiantes lo desprecien, echen a un lado o no lo quieran
- Lo/la maltratan
- Lo/la provocan o molestan de forma cruel
- Otras cosas parecidas que le hieren

Este tipo de situaciones ocurren **frecuentemente o más de una vez**. Es difícil para un/a niño/a defenderse del *bullying*.

**No es *bullying*** cuando:

- Los/as niños/as se molestan o provocan unos a otros jugando, en sentido de broma, o vacilando.
- Dos niños/as que son más o menos igual de fuertes, populares o poderosos discuten o pelean.

15. ¿Entendiste esta definición? \_\_\_\_\_ Sí \_\_\_\_\_ No

16. ¿Antes de hoy, habías escuchado hablar del *bullying*? \_\_\_\_\_ Sí \_\_\_\_\_ No

En los pasados 12 meses, ¿te han hablado directamente sobre el *bullying*...

17. ... en la escuela? \_\_\_\_\_ Sí \_\_\_\_\_ No \_\_\_\_\_ No sé

18. ... en tu *Boys & Girls Club*? \_\_\_\_\_ Sí \_\_\_\_\_ No \_\_\_\_\_ No sé

19. ... en tu iglesia? \_\_\_\_\_ Sí \_\_\_\_\_ No \_\_\_\_\_ No sé



20. ¿Cuántas veces has sido víctima o te han hecho *bullying* durante los pasados 3 meses?
- \_\_\_\_\_ No me ha pasado en estos meses
- \_\_\_\_\_ Solo ha ocurrido 1 o 2 veces
- \_\_\_\_\_ 2 o 3 veces por mes
- \_\_\_\_\_ Una vez por semana
- \_\_\_\_\_ Varias veces cada semana

**¿Haz sido víctima de alguno de los siguientes tipos de *bullying* durante LOS PASADOS 3 MESES? Por favor, contesta todas las preguntas.**

\*\*\* Questions 21-42 have been omitted from this document due to the instruments' copyright restrictions. \*\*\*



**\*\*\* TERCERA PARTE: *Bullying* contra otros \*\*\***

43. ¿Cuántas veces has participado en el *bullying* de otro/a(s) niño/a(s) durante los pasados 3 meses?
- \_\_\_\_\_ No ha ocurrido en estos meses  
\_\_\_\_\_ Solo ha ocurrido 1 o 2 veces  
\_\_\_\_\_ 2 o 3 veces por mes  
\_\_\_\_\_ Una vez por semana  
\_\_\_\_\_ Varias veces cada semana

**¿Haz participado de alguna manera en *bullying* contra otro/a(s) niño/a(s) durante LOS PASADOS 3 MESES? Por favor, contesta todas las preguntas.**

\*\*\* Questions 44-63 have been omitted from this document due to the instruments' copyright restrictions. \*\*\*



\*\*\* CUARTA PARTE: *Estar conectado a otros* \*\*\***Instrucciones:**

Lee cada oración y marca con un círculo el número de tu respuesta. Indica hasta qué punto estas de acuerdo con ella. Si no entiendes una oración, levanta la mano. Si aún no entiendes, circula el signo de pregunta “¿?”.

|  | Para nada | Tal vez no | Más o menos | Tal vez sí | Absolutamente cierta | ¿?<br>No entiendo la pregunta |
|--|-----------|------------|-------------|------------|----------------------|-------------------------------|
| <b><u>Papá y Mamá</u></b>                                  |           |            |             |            |                      |                               |
| 64. Es importante que papi y mami confíen en mí.           | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 65. Mis padres y yo nos llevamos bien.                     | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 66. Mis padres me importan mucho.                          | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 67. Mis padres y yo nos divertimos juntos.                 | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 68. No discuto con mis padres.                             | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 69. Disfruto pasando un buen tiempo con mi papá y mi mamá. | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| <b><u>Papá (o Padrastro)</u></b>                           |           |            |             |            |                      |                               |
| 70. Mi papá y yo somos muy unidos.                         | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 71. Me gusta pasar tiempo con mi papá.                     | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 72. Mi papá se preocupa mucho por mí.                      | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 73. No discuto con mi papá.                                | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 74. Hablo con mi papá sobre temas personales.              | 1         | 2          | 3           | 4          | 5                    | ¿?                            |

|                                  | Para nada  | Tal vez no | Más o menos | Tal vez sí | Absolutamente cierta | ¿? No entiendo la pregunta |    |
|----------------------------------|--|------------|-------------|------------|----------------------|----------------------------|----|
| <b><u>Mamá (o Madrastra)</u></b> |  |            |             |            |                      |                            |    |
| 75.                              | Disfruto compartiendo tiempo con mi mamá.                              | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 76.                              | Mi mamá y yo somos muy unidas(os).                                     | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 77.                              | Mi mamá se preocupa mucho por mi.                                      | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 78.                              | No discuto con mi mamá.  | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 79.                              | Hablo con mi mamá sobre temas personales.                              | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| <b><u>Amigos(as)</u></b>         |  |            |             |            |                      |                            |    |
| 80.                              | La mejor parte de mi día es pasar tiempo con mis amigos(as).           | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 81.                              | Tengo amigos(as) muy cercanos en los que confío mucho.                 | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 82.                              | Pasar tiempo con mis amigos(a) es una parte importante de mi vida.     | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 83.                              | Mis amigos(as) y yo hablamos abiertamente sobre temas personales.      | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 84.                              | Paso tanto tiempo como puedo con mis amigos(as).                       | 1          | 2           | 3          | 4                    | 5                          | ¿? |
| 85.                              | Mis amigos(as) y yo pasamos mucho tiempo hablando de diferentes cosas. | 1          | 2           | 3          | 4                    | 5                          | ¿? |

|   | Para nada | Tal vez no | Más o menos | Tal vez sí | Absolutamente cierta | ¿?<br>No entiendo la pregunta |
|---|-----------|------------|-------------|------------|----------------------|-------------------------------|
| <b><u>Maestros(as)</u></b>                                    |           |            |             |            |                      |                               |
| 86. Me importa lo que mis maestros(as) piensen de mí.         | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 87. Yo quiero que mis maestros(as) me respeten.               | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 88. Trato de llevarme bien con mis maestros(as).              | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 89. Me esfuerzo por ganarme la confianza de mis maestros(as). | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 90. Me gustan la mayoría de mis maestros(as) en la escuela.   | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| <b><u>Escuela</u></b>   |           |            |             |            |                      |                               |
| 91. Me esfuerzo mucho en la escuela.                          | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 92. Me gusta estar en la escuela.                             | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 93. Me va bien en la escuela.                                 | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 94. Estar bien en la escuela es importante.                   | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 95. Sacar buenas notas es importante.                         | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 96. No tener problemas en la escuela es importante.           | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 97. No me aburro en la escuela.                               | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 98. Me siento bien cuando estoy en la escuela.                | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 99. No tengo problemas en la escuela.                         | 1         | 2          | 3           | 4          | 5                    | ¿?                            |
| 100. Saco buenas notas en la escuela.                         | 1         | 2          | 3           | 4          | 5                    | ¿?                            |

|   | Para nada | Tal vez no | Más o menos | Tal vez sí | Absolutamente cierta | ¿? No entiendo la pregunta |
|---|-----------|------------|-------------|------------|----------------------|----------------------------|
| <b><u>Comunidad</u></b>   |           |            |             |            |                      |                            |
| 101. Me gusta pasear por el lugar donde vivo (por ejemplo mi vecindario). | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 102. Me gusta pasar mucho tiempo con los(as) niños(as) de mi vecindario.  | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 103. Muchas veces paso tiempo jugando o haciendo cosas en mi vecindario.  | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 104. Paso mucho tiempo con los(as) niños(as) de mi vecindario.            | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 105. Me llevo bien con todos(as) los(as) niños(as) de mi vecindario.      | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 106. Mi vecindario no es aburrido.  | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| <b><u>Religión</u></b>  |           |            |             |            |                      |                            |
| 107. Mi religión es muy importante para mí.                               | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 108. Yo voy a la iglesia frecuentemente.                                  | 1         | 2          | 3           | 4          | 5                    | ¿?                         |
| 109. Soy una persona religiosa.   | 1         | 2          | 3           | 4          | 5                    | ¿?                         |



**\*\*\* QUINTA PARTE: Religiosidad \*\*\***

**Instrucciones:** Por favor, contesta todas las preguntas con la verdad. Marca tus respuestas con una "X" encima de la línea o en el encasillado.

110. ¿Cuánta satisfacción te da participar en actividades de la iglesia? \_\_\_\_\_ Ninguna  
 \_\_\_\_\_ Poca  
 \_\_\_\_\_ Más o menos  
 \_\_\_\_\_ Bastante  
 \_\_\_\_\_ Mucha

111. ¿Cuánto te importa la iglesia? \_\_\_\_\_ Nada  
 \_\_\_\_\_ Poco  
 \_\_\_\_\_ Más o menos  
 \_\_\_\_\_ Bastante  
 \_\_\_\_\_ Mucho

|  | Muy en desacuerdo | En desacuerdo | Más o menos | De acuerdo | Muy de acuerdo | ¿? No entiendo |
|--|-------------------|---------------|-------------|------------|----------------|----------------|
| 112. Hacer lo que Dios dice o seguir los mandamientos es importante para mí. | 1                 | 2             | 3           | 4          | 5              | ¿?             |
| 113. Cuando tengo problemas, busco ayuda en la iglesia o la religión.        | 1                 | 2             | 3           | 4          | 5              | ¿?             |

114. En los pasados 12 meses, ¿cuántas veces fuiste a la iglesia? \_\_\_\_\_ Nunca  
 \_\_\_\_\_ Solo en días feriados o celebraciones importantes  
 \_\_\_\_\_ 1 vez al mes  
 \_\_\_\_\_ No todas las semanas, pero más de 1 vez al mes  
 \_\_\_\_\_ Casi todas las semanas

115. La mayoría de las veces, ¿porqué vas a la iglesia o actividades religiosas?

- No voy a la iglesia  
 Yo quiero ir  
 Mis padres o encargados dicen que tengo que ir  
 Mis amigos(as) quieren que vaya  
 No sé por qué voy  
 Otra razón: \_\_\_\_\_

116. En el pasado año, ¿con cuánta frecuencia participaste en actividades en la iglesia (por ejemplo: escuela Bíblica, pantomimas, el coro)?

- Nunca  
 Solo en días feriados o celebraciones importantes  
 1 vez al mes  
 No todas las semanas, pero más de 1 vez al mes  
 Casi todas las semanas

117. Las iglesias tienen diferentes tipos de actividades, servicios y programas. ¿En cuáles has participado durante los pasados 12 meses?

- Ninguna  
 Misa o predicación  
 Escuela bíblica  
 Catecismo  
 Primera comunión  
 Grupo o ministerio de artes (ej. Danza, adoración, música, pantomima, drama)  
 Bautismo cuando era bebé  
 Bautismo cuando era mayor  
 Santa cena o comunión  
 Rosarios  
 Grupo de jóvenes  
 Equipo deportivo  
 Retiros o campamentos de fin de semana  
 Campamentos de verano  
 Servicios de oración  
 Tutorías  
 Conciertos, obras de teatro  
 Pasadías familiares  
 Viajes misioneros  
 Otro: \_\_\_\_\_



118. ¿Cuántas veces tu oras, rezas, hablas o le pides a Dios?
- \_\_\_\_\_ Nunca  
 \_\_\_\_\_ A veces, pero menos de 1 vez al mes  
 \_\_\_\_\_ Por lo menos 1 vez al mes  
 \_\_\_\_\_ Por lo menos 1 vez a la semana  
 \_\_\_\_\_ Todos los días
- 
119. En los pasados 12 meses, ¿cuántas veces leíste el libro sagrado de tu religión (por ejemplo: La Biblia, las Escrituras)?
- \_\_\_\_\_ Nunca  
 \_\_\_\_\_ Solo en días feriados o celebraciones importantes  
 \_\_\_\_\_ 1 vez al mes  
 \_\_\_\_\_ No todas las semanas, pero más de 1 vez al mes  
 \_\_\_\_\_ Casi todas las semanas
- 
120. En los pasados 12 meses, ¿cuántas veces escuchaste programas religiosos en la radio?
- \_\_\_\_\_ Nunca  
 \_\_\_\_\_ Solo en días feriados o celebraciones importantes  
 \_\_\_\_\_ 1 vez al mes  
 \_\_\_\_\_ No todas las semanas, pero más de 1 vez al mes  
 \_\_\_\_\_ Casi todas las semanas
- 
121. En los pasados 12 meses, ¿cuántas veces viste programas religiosos en la televisión?
- \_\_\_\_\_ Nunca  
 \_\_\_\_\_ Solo en días feriados o celebraciones importantes  
 \_\_\_\_\_ 1 vez al mes  
 \_\_\_\_\_ No todas las semanas, pero más de 1 vez al mes  
 \_\_\_\_\_ Casi todas las semanas
- 
122. ¿Cuán importante es la iglesia o la religión para tus padres?
- \_\_\_\_\_ No importante  
 \_\_\_\_\_ De poca importancia  
 \_\_\_\_\_ Bastante importante  
 \_\_\_\_\_ Muy importante  
 \_\_\_\_\_ Es más importante para mi mamá que para mi papá  
 \_\_\_\_\_ Es más importante para mi papá que para mi mamá

**Verifica que contestaste todas las preguntas. ¡Gracias!**



.....  
Fuentes:

***Olweus Bully/Victim Questionnaire*** (Derechos reservados: Dan Olweus 1996-2006)

Traducción al Español por Melissa C. Mercado-Crespo, MSc MA (septiembre 2011)

Traducción al Español revisada por Sonalí Irizarri-Mena, MA (septiembre 2011)

Primera revisión por participantes potenciales (Tampa, FL; octubre 2011)

Segunda revisión por participantes potenciales (San Juan, PR; noviembre 2011)

Tercera revisión-prueba estadística piloto (San Juan, PR; marzo 2012)

***Hemingway Measure of Adolescent Connectedness (Karcher, 2005-2011)***

Versión original en Español provista por M.L. Karcher (online)

Adaptación para puertorriqueños por Melissa C. Mercado-Crespo (sept. 2011)

Primera revisión por participantes potenciales (Tampa, FL; octubre 2011)

Segunda revisión por participantes potenciales (San Juan, PR; noviembre 2011)

Tercera revisión-prueba estadística piloto (San Juan, PR; marzo 2012)

***Various religiosity measures***

Adapted from: Abbotts et al., 2004; Burkett, 1993; Cretacci, 2003; Ellison, Boardman, Williams & Jackson, 2001; Evans, Cullen, Dunaway, Burton & Velmer, 1995; and Nonnemaker et al., 2003

Traducción al Español por Melissa C. Mercado-Crespo, MSc MA (septiembre 2011)

Primera revisión por participantes potenciales (Tampa, FL; octubre 2011)

Segunda revisión por participantes potenciales (San Juan, PR; noviembre 2011)

Tercera revisión-prueba estadística piloto (San Juan, PR; marzo 2012)

**Appendix P: Survey Instrument (English Version)****The Role of Connectedness and Religious Factors on Bullying Participation among Preadolescents in Puerto Rico****\*\*\* Instructions \*\*\***

Here you will find some questions about your life during the past 3 months.

There are several answer options by each question. Answer each question by placing an X on the line by the answer that best describes how you feel.

You may only select one answer per question.

If after selecting an answer you want to change it, you may do so. Make sure that you completely erase the incorrect answer. Then, place an X on the correct answer.

Please, do not write your name on this questionnaire. Nobody will know what you answered to these questions.

It is very important that you answer with the truth. Select the answers that you think are true.

Talking is not allowed while answering the questionnaire.

If you have any questions, raise your hand.

Most of the questions have to do with your life during the past 3 months. When you answer, think about how your life has been during the past 3 months... not just how it is right now.

Pay attention of the teacher. She will give you more instructions.

Thank you for participating!





**\*\*\* PART 2: *Bullying* \*\*\***

Here you will find several questions related to *bullying*. First, let us define or explain what the word *bullying* means.

We say that a child is a *bullying* (harrasment) victim when another child or group of children:

- Insult, use foul language or say hurtful things against him/her
- Make fun of him/her
- Ridiculize him/her, or call him mean or cruel names
- Completely ignore or exclude him/her from the group of friends, or leave him/her out of things on purpose
- Kick, hit, push, threaten or lock him/her in a room
- Say lies or spread false rumors about him/her
- Send him/her mean notes
- Try to make other students reject him/her, or put him/her aside and dislike him/her
- Mistreat him/her
- Provoke or bother in a cruel manner
- Other hurtful things like that

This type of situations occur **frequently or more than once**. It is difficult for a child to defend him or herself from *bullying*.

**It is not bullying when:**

- Children tease or provoke each other playing, goofing around or in a playful manner.
- Two children that have about the same strength, popularity or power argue or fight.

15. Did you understand this definition?  Yes  No

16. Have you heard anyone talk about *bullying* before today?  Yes  No

During the past 12 months, have they talked to you directly about *bullying*...

17. ... at school?  Yes  No  Don't Know

18. ... at your *Boys & Girls Club*?  Yes  No  Don't Know

19. ... at your church?  Yes  No  Don't Know

20. How often have you been a victim of *bullying* during the past couple of months?
- \_\_\_\_\_ Hasn't happened these past months
  - \_\_\_\_\_ Only once or twice
  - \_\_\_\_\_ 2 or 3 times per month
  - \_\_\_\_\_ Once per week
  - \_\_\_\_\_ Several times per week

**Have you been a victim of any of these types of *bullying* during THE PAST 3 MONTHS? Please, answer all questions.**

\*\*\* Questions 21-42 have been omitted from this document due to the instruments' copyright restrictions. \*\*\*



**\*\*\* PART 3: *Bullying* against others \*\*\***

43. How often have you taken part in *bullying* other children during the past 3 months?
- \_\_\_\_\_ Hasn't happened these past months
  - \_\_\_\_\_ Only once or twice
  - \_\_\_\_\_ 2 or 3 times per month
  - \_\_\_\_\_ Once per week
  - \_\_\_\_\_ Several times per week

**Have you participated in *bullying* another student(s) in any way during THE PAST 3 MONTHS? Please, answer all the questions.**

\*\*\* Questions 44-63 have been omitted from this document due to the instruments' copyright restrictions. \*\*\*





**\*\*\* PART 4: Connectedness to others \*\*\***

**Instruccions:** Read each sentence, and mark with a circle the number of your answer. Tell us how much you agree with it. If you do not understand a sentence, raise your hand. If you still do not understand, circle the question mark “?”.

|  | Not at<br>all | Maybe<br>no | More<br>or less | Maybe<br>yes | Absolutely<br>true | ? Don't<br>understand<br>the question |
|--|---------------|-------------|-----------------|--------------|--------------------|---------------------------------------|
| <b><u>Parents (Dad &amp; Mom)</u></b>                              |               |             |                 |              |                    |                                       |
| <b>60.</b> It is important that my parents (mom and dad) trust me. | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>61.</b> My parents and I get along well.                        | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>62.</b> I care a lot about my parents.                          | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>63.</b> My parents and I have fun together.                     | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>64.</b> I do not argue with my parents.                         | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>65.</b> I enjoy having a good time with my parents.             | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b><u>Father (or Stepfather)</u></b>                               |               |             |                 |              |                    |                                       |
| <b>66.</b> My dad and I are close.                                 | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>67.</b> I like spending time with my dad.                       | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>68.</b> My dad cares a lot about me.                            | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>69.</b> I do not argue with my dad.                             | 1             | 2           | 3               | 4            | 5                  | ?                                     |
| <b>70.</b> I talk with my dad about personal things.               | 1             | 2           | 3               | 4            | 5                  | ?                                     |

|   | Not at<br>all | Maybe<br>no | More<br>or less | Maybe<br>yes | Absolutely<br>true | <b>? Don't<br/>understand<br/>the<br/>question</b> |
|---|---------------|-------------|-----------------|--------------|--------------------|--|
| <b><u>Mother (or<br/>Stepmother)</u></b>                                |               |             |                 |              |                    |  |
| 71. I like spending time with my mom.                                   | 1             | 2           | 3               | 4            | 5                  | ?  |
| 72. My mom and I are very close.  | 1             | 2           | 3               | 4            | 5                  | ?  |
| 73. My mom cares a lot about me.  | 1             | 2           | 3               | 4            | 5                  | ?  |
| 74. I do not argue with my mom.   | 1             | 2           | 3               | 4            | 5                  | ?  |
| 75. I talk with my mom about personal things.                           | 1             | 2           | 3               | 4            | 5                  | ?  |
| <b><u>Friends</u></b>   |               |             |                 |              |                    |  |
| 76. Spending time with my friends is the best time of my day.           | 1             | 2           | 3               | 4            | 5                  | ?  |
| 77. I have friends I'm really close to and trust completely.            | 1             | 2           | 3               | 4            | 5                  | ?  |
| 78. Spending time with my friends is an important part of life.         | 1             | 2           | 3               | 4            | 5                  | ?  |
| 79. My friends and I talk openly with each other about personal things. | 1             | 2           | 3               | 4            | 5                  | ?  |
| 80. I spend as much time as I can with my friends.                      | 1             | 2           | 3               | 4            | 5                  | ?  |
| 81. My friends and I spend a lot of time talking about things.          | 1             | 2           | 3               | 4            | 5                  | ?  |

|  | Not at<br>all | Maybe<br>no | More<br>or less | Maybe<br>yes | Absolutely<br>true | <b>?</b> Don't<br>understand<br>the<br>question |
|--|---------------|-------------|-----------------|--------------|--------------------|---|
| <b><u>Teacher(s)</u></b>                             |               |             |                 |              |                    |   |
| 82. I care what my teachers think of me.             | 1             | 2           | 3               | 4            | 5                  | ?   |
| 83. I want my teachers to respect me.                | 1             | 2           | 3               | 4            | 5                  | ?   |
| 84. I try to get along with my teachers.             | 1             | 2           | 3               | 4            | 5                  | ?   |
| 85. I try to earn my teachers' trust.                | 1             | 2           | 3               | 4            | 5                  | ?   |
| 86. I like most of the teachers in my school.        | 1             | 2           | 3               | 4            | 5                  | ?   |
| <b><u>School</u></b>                                 |               |             |                 |              |                    |   |
| 87. I work hard/put forth a lot of effort at school. | 1             | 2           | 3               | 4            | 5                  | ?   |
| 88. I enjoy being at school.                         | 1             | 2           | 3               | 4            | 5                  | ?   |
| 89. I do well in school.                             | 1             | 2           | 3               | 4            | 5                  | ?   |
| 90. Doing well in school is important to me.         | 1             | 2           | 3               | 4            | 5                  | ?   |
| 91. Getting good grades is important.                | 1             | 2           | 3               | 4            | 5                  | ?   |
| 92. Not having problems at school is important.      | 1             | 2           | 3               | 4            | 5                  | ?   |
| 93. School is not boring.                            | 1             | 2           | 3               | 4            | 5                  | ?   |
| 94. I feel good when I am in school.                 | 1             | 2           | 3               | 4            | 5                  | ?   |
| 95. I do not have problems at school                 | 1             | 2           | 3               | 4            | 5                  | ?   |
| 96. I get good grades at school.                     | 1             | 2           | 3               | 4            | 5                  | ?   |

|  | Not at all | Maybe no | More or less | Maybe yes | Absolutely true | ? Don't understand the question |
|--|------------|----------|--------------|-----------|-----------------|---------------------------------|
| <b><u>Community</u></b>  |            |          |              |           |                 |                                 |
| 97. I like hanging out around where I live (for example, my neighborhood). | 1          | 2        | 3            | 4         | 5               | ?                               |
| 102. I like hanging out a lot with kids in my neighborhood.                | 1          | 2        | 3            | 4         | 5               | ?                               |
| 103. I often spend time playing or doing things in my neighborhood.        | 1          | 2        | 3            | 4         | 5               | ?                               |
| 104. I spend a lot of time with kids around where I live.                  | 1          | 2        | 3            | 4         | 5               | ?                               |
| 105. I get along well with all the children in my neighborhood.            | 1          | 2        | 3            | 4         | 5               | ?                               |
| 106. My neighborhood is not boring.  | 1          | 2        | 3            | 4         | 5               | ?                               |
| <b><u>Religion</u></b>   |            |          |              |           |                 |                                 |
| 107. Religion is very important for me.                                    | 1          | 2        | 3            | 4         | 5               | ?                               |
| 108. I attend religious services regularly.                                | 1          | 2        | 3            | 4         | 5               | ?                               |
| 109. I am a religious person.  | 1          | 2        | 3            | 4         | 5               | ?                               |



**\*\*\* PART 5: Religiosity \*\*\***

**Instruccions:** Please answer all questions truthfully. Mark your answers with an “X” on top of the blank line or box.

110. How much satisfactions would you say you get from going to church?  None  
 A little  
 More or less  
 Quite some  
 A lot

111. How important is church to you?  Not at all  
 A little  
 More or less  
 Quite some  
 A lot

|  | Greatly disagree | Disagree | More or less | Agree | Greatly agree |  | I do not understand |
|--|------------------|----------|--------------|-------|---------------|--|---------------------|
| 112. Following what God says or his commandments is important to me. | 1                | 2        | 3            | 4     | 5             |  | ?                   |
| 113. When I have problems, I seek help in the church or religion.    | 1                | 2        | 3            | 4     | 5             |  | ?                   |

114. Durng the past 12 months, how many times did you go to church services?  Never  
 Only on holidays or important celebrations  
 Once a month  
 Not every week, but more than once a month  
 Almost every week

115. Most of the time, why do you go to church or religious activities?
- I do not go to church  
 I want to go  
 My parents or guardians say I have to go  
 My friends want me to go  
 I do not know why I go to church  
 Other reason: \_\_\_\_\_
- 

116. During the past year, how frequently did you participate in church activities (for example: Bible school, plays, the choir)?
- Never  
 Only on holidays or important celebrations  
 Once a month  
 Not every week, but more than once a month  
 Almost every week
- 

117. Churches offer different types of activities, services and programs. In which have you participated during the past 12 months?
- None  
 Mass or sermon  
 Bible School  
 Catechism  
 First Communion  
 Arts group or ministry (ex. Worship, music, acting)  
 Baptism as a baby  
 Baptism when I was older  
 Communion  
 Rosaries  
 Youth group  
 Sports team  
 Retreats or weekend camps  
 Summer camps  
 Prayer meetings  
 Tutoring  
 Concerts, drama performances  
 Family outings or field trips  
 Missions' trips or pilgrimages  
 Other: \_\_\_\_\_

118. How often do you pray, supplicate or talk to God?
- \_\_\_\_\_ Never  
\_\_\_\_\_ Sometimes, but less than once a month  
\_\_\_\_\_ At least once a month  
\_\_\_\_\_ At least once a week  
\_\_\_\_\_ Every day
- 

119. During the past 12 months, how many times did you read the sacred book of your religion (for example, the Bible or Scriptures)?
- \_\_\_\_\_ Never  
\_\_\_\_\_ Only on holidays or important celebrations  
\_\_\_\_\_ Once a month  
\_\_\_\_\_ Not every week, but more than once a month  
\_\_\_\_\_ Almost every week
- 

120. During the past 12 months, how many times did you listen to religious programming on the radio?
- \_\_\_\_\_ Never  
\_\_\_\_\_ Only on holidays or important celebrations  
\_\_\_\_\_ Once a month  
\_\_\_\_\_ Not every week, but more than once a month  
\_\_\_\_\_ Almost every week
- 

121. During the past 12 months, how many times did you watch religious programming on TV?
- \_\_\_\_\_ Never  
\_\_\_\_\_ Only on holidays or important celebrations  
\_\_\_\_\_ Once a month  
\_\_\_\_\_ Not every week, but more than once a month  
\_\_\_\_\_ Almost every week
-

122. How important is church or religion to your parents?
- \_\_\_\_\_ Not important at all  
 \_\_\_\_\_ Of little importance  
 \_\_\_\_\_ Quite important  
 \_\_\_\_\_ Very important  
 \_\_\_\_\_ It is more important to my mother than to my father  
 \_\_\_\_\_ It is more important to my father than to my mother
- 

**Verify that you answered all questions. Thank you!**



.....

Sources:

***Olweus Bully/Victim Questionnaire***

Rights Reserved: Dan Olweus 1996-2006

Spanish translation by Melissa C. Mercado-Crespo, MSc MA (September 2011)

Spanish translation revised by Sonalí Irizarri-Mena, MA (September 2011)

First review by potential participants (Tampa, FL; October 2011)

Second review by potential participants (San Juan, PR; November 2011)

***Hemingway Measure of Adolescent Connectedness (Karcher, 2005-2011)***

Original Spanish version provided by M.L. Karcher (online)

Adapted for Puerto Ricans by Melissa C. Mercado-Crespo (September 2011)

First review by potential participants (Tampa, FL; October 2011)

Second review by potential participants (San Juan, PR; November 2011)

***Various religiosity measures***

Adapted from: Abbotts et al., 2004; Burkett, 1993; Cretacci, 2003; Ellison, Boardman, Williams & Jackson, 2001; Evans, Cullen, Dunaway, Burton & Velmer, 1995; and Nonnemaker et al., 2003

Spanish translation by Melissa C. Mercado-Crespo, MSc MA (September 2011)

First review by potential participants (Tampa, FL; October 2011)

Second review by potential participants (San Juan, PR; November 2011)



## Appendix Q: Instructions for Participants (Spanish Version)

NOTA: Estas instrucciones serán escritas en la pizarra, en una cartulina o un “flip-chart” para que los participantes puedan leerlas antes de entregarles el cuestionario.

- 1) Contesta: ¿Quieres participar en esta investigación y contestar este cuestionario? Recuerda que la participación es voluntaria; si no quieres participar, está bien.
- 2) Para todas las preguntas, selecciona la respuesta que piensas es correcta, o la que mejor describe lo que piensas o cómo se sientes.
- 3) Por favor, no escribas tu nombre en el cuestionario.
- 4) Si tienes alguna pregunta, levanta tu mano.
- 5) No se permite hablar mientras contestas el cuestionario.
- 6) Cuando termines, entrega el cuestionario al staff.

## Appendix R: Instructions for Participants (English Version)

**NOTE:** These instructions will be written on the blackboard, a poster-board or a flip-chart, so that participants can read them before receiving the questionnaire.

- 1) Answer: Do you want to participate in this research study and answer the questionnaire? Remember that participation is voluntary; if you do not want to participate, that's okay.
- 2) For all questions, please select the answer you think is correct, or the one that best describes what you think or how you feel.
- 3) Please, do not write your name on the questionnaire.
- 4) If you have any questions, raise your hand.
- 5) Talking is not allowed while answering this questionnaire.
- 6) When you finish, give the questionnaire to the staff.

## Appendix S: Concept Definitions for Participants (Spanish Version)

### **BULLYING**

Decimos que un/a niño/a es víctima de *bullying* (acoso) cuando otro/a niño/a o un grupo de niños/as:

- Lo/la insultan, le hablan malo o le dicen cosas hirientes
- Se burlan de él/ella
- Lo/la ridiculizan, o le dicen sobrenombres o apodos crueles
- Lo/la ignoran completamente o excluyen del grupo de amistades, o lo dejan fuera a propósito
- Lo/la patean, golpean, empujan, amenazan o encierran en un salón
- Dicen mentiras o rumores falsos sobre él/ella
- Le envían notas crueles
- Tratan que los otros estudiantes lo desprecien, echen a un lado o no lo quieran
- Lo/la maltratan
- Lo/la provocan o molestan de forma cruel
- Otras cosas parecidas que le hieren

Este tipo de situaciones ocurren **frecuentemente o más de una vez**. Es difícil para un/a niño/a defenderse del *bullying*.

**No es *bullying*** cuando:

- Los/as niños/as se molestan o provocan unos a otros jugando, en sentido de broma, o vacilando.
- Dos niños/as que son más o menos igual de fuertes, populares o poderosos discuten o pelean.

### **ESTAR CONECTADO A OTROS**

“El sentido de estar conectado a otros refleja nuestra disposición a cuidar e involucrarnos con otras personas.” Podemos estar conectados a personas, lugares, cosas o grupos. En este cuestionario hablaremos de estar conectado a personas y lugares:

- Personas: Padre, madre y/o encargado; Amigos(as); Maestros(as) de la escuela
- Lugares: Escuela; Comunidad o vecindario; Iglesia; Boys & Girls Club

### **RELIGIOSIDAD O SER RELIGIOSO**

Existen muchas religiones diferentes. Una persona religiosa puede ser: Católica, cristiana evangélica, musulmana, judía o de otra religión. **En este cuestionario no hablaremos de una religión específica.** No estamos preguntando a qué religión perteneces.

Se dice que una persona es religiosa cuando él o ella:

- Cree en las enseñanzas de una religión específica
- Tiene fe
- Participa en actividades de su grupo religioso o iglesia frecuentemente.
  - Por ejemplo: Servicios o cultos; Escuela bíblica o clases de catecismo.
- Participa en tradiciones de su religión o grupo religioso.
  - Por ejemplo: Orar, rezar o meditar; Leer libro sagrado (e.g., Biblia); Ayunar; Tomar la comunión o santa cena; Ofrendar o diezmar.

## Appendix T: Concept Definitions for Participants (English Version)

### BULLYING

We say a child is being bullied when another child or several other children:

- say mean and hurtful things
- make fun of him or her
- call him or her mean and hurtful names
- completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- hit, kick, push, shove around, threaten him or her, or lock him/her in a room
- tell lies or spread false rumors about him or her
- send mean notes to him or her
- try to make other students dislike him or her
- provoke or tease him or her in a mean and hurtful way
- do other hurtful things like that

These things may **take place frequently or more than once**. It is difficult for the child to defend himself or herself from bullying.

We don't call it bullying when:

- children tease or provoke each other in a friendly and playful way.
- two children of about the same strength, power or popularity-status argue or fight among themselves.

### BEING CONNECTED TO OTHERS

“Connectedness reflects the disposition to care for and become involved with others.”

We can be connected to people, places, things or groups. In this questionnaire we will talk about being connected to people and places:

- People: Father, mother and/or guardians; Friends; School-teachers
- Places: School; Community or neighborhood; Church; Boys & Girls Club

### RELIGIOSITY OR BEING RELIGIOUS

There are many different religions. A religious person may be: Catholic, Evangelical-Christian, Muslim, Jewish or from another religion.

**In this questionnaire we will not talk about a specific religion.** We are not asking you what religion you belong to.

It is said that a person is religious when he or she:

- Believes in the teachings from a specific religion
- Has faith
- Frequently participates in activities with his or her religious group or church.
  - For example: Religious services or meetings; Bible school or catechism classes
- Participates in his or her religion's or religious group's traditions.
  - For example: Praying or meditating; Reading the sacred book (e.g., Bible); Fasting; Taking communion; Giving offerings or tithing

## Appendix U: IRB Approval Letter



DIVISION OF RESEARCH INTEGRITY AND COMPLIANCE  
Institutional Review Boards, FWA No. 00001669  
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799  
(813) 974-5638 • FAX (813) 974-5618

July 26, 2012

Melissa Mercado Crespo, MSc, MA  
Community and Family Health  
The Harrell Center for the Study of Family Violence  
13201 Bruce B. Downs Blvd, MDC 56  
Tampa, FL 33612

RE: **Expedited Approval for Initial Review**  
IRB#: Pro00008983  
Title: **The Role of Connectedness and Religious Factors on Bullying Participation among Preadolescents in Puerto Rico**

Dear Ms. Crespo:

On 7/26/2012 the Institutional Review Board (IRB) reviewed and **APPROVED** the above referenced protocol. Please note that your approval for this study will expire on 7/26/2013.

Approved Items:

**Protocol Document:**

[MC%20MercadoCrespo-Proposal-Post Defense-FINAL June 25 2012-IRB-rev 7-19-12b.docx](#)

**Consent Documents:**

[Pro00008983-Parental Authorization Form-English-July 19 2012b.pdf.pdf](#)

[Pro00008983-Parental Authorization Form-Spanish-July 19 2012b.pdf.pdf](#)

A waiver of documentation of assent has been approved.

**Please use only the official, IRB- stamped consent documents found under the "Attachment Tab" in the recruitment of participants.** Please note that these documents are only valid during the approval period indicated on the stamped document.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

A handwritten signature in cursive script that reads "John A. Schinka, Ph.D.".

John A. Schinka, Ph.D., Chairperson  
USF Institutional Review Board

## **About the Author**

Melissa C. Mercado-Crespo has served in the non-profit, public and private sectors as an epidemiologist researcher and communications specialist. This dissertation research study marks her completion of all requirements for the PhD degree in Public Health at the University of South Florida (USF), where she specialized in youth violence research and prevention - with special emphasis on children's bullying. She is also conducted research on the role of religious factors in children's resilience against violence.

Ms. Mercado-Crespo served as a Graduate Research Associate at the Harrell Center for the Prevention of Family Violence, and an Undergraduate Instructor for the Foundations of Maternal and Child Health (MCH) course - both within the USF College of Public Health. She has also served as Adjunct Faculty at the Health, Wellness and Sports Technologies Department at Hillsborough Community College. She was recently invited to join the Centers for Disease Control and Prevention's Epidemic Intelligence.

Ms. Mercado-Crespo held multiple national-scope roles at the National Council of La Raza (NCLR). Within its Institute for Hispanic Health, and the Office of Research, Advocacy and Legislation, she assisted in the development, management, and evaluation/reporting of health promotion and disease prevention projects targeting Latino communities in the United States. She also collaborated on a range of research initiatives related to children's issues - such as the KIDS COUNT Puerto Rico project -, cancer, cholesterol, and other areas.

She has presented and been recognized for her research work in local, national and international forums, such as the American Public Health Association (APHA), the National Hispanic Medical Association (NHMA), and the World Congress on Child & Adolescent Rights. She is a nominated member of Phi Kappa Phi, Eta Sigma Gamma, and Golden Key International Honour Society, and a member, presenter and contributor to APHA's MCH Section, Family Violence Prevention Forum, and Latino Caucus.

She is a past 2010-11 CDC/USF MCH Leadership Trainee, a 2009-10 APHA MCH Section Student Fellow, and collaborator at the USF/CDC Florida Prevention Research Center. Ms. Mercado-Crespo has served as a manuscript reviewer for multiple national and international journals, and as a grants/scholarship reviewer for the Office of Latino Affairs at the Washington DC Governor's Office and the Hispanic Congressional Caucus.

Born in San Juan, Puerto Rico, she also has a Bachelor's Degree in Biological Sciences and a Master of Sciences' Degree in Epidemiology from the University of Puerto Rico; and a Master of Arts' Degree in Communications/Public Relations from the University of the Sacred Heart in San Juan, Puerto Rico.