



Walden University  
**ScholarWorks**

---

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies  
Collection

---

2016

# Prolonged Exposure to non-school related media use and violence among urban youth

Cindy Davis  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Public Health Education and Promotion Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Health Sciences

This is to certify that the doctoral dissertation by

Cindy Davis

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Peter Anderson, Committee Chairperson, Public Health Faculty  
Dr. Laura Forbes, Committee Member, Public Health Faculty  
Dr. Rodney Bowden, University Reviewer, Public Health Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2016

Abstract

Prolonged Exposure to Non-School Related Media Use and Violence Among Urban

Youth

by

Cindy Davis

MSW, Aurora University, 1989

BSW, University of Illinois at Chicago, 1988

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health Epidemiology

Walden University

May 2016

## Abstract

Youth violence is a pervasive and ongoing public health concern. Based on the paradigm of resilience, the purpose of this quantitative study was to test the relationship between prolonged (3 or more hours) of non-school related media use and youth violence. Secondary data from the Centers for Disease Control and Prevention (CDC) were utilized for this study. Logistic and multiple regression models were used to test whether exposure to prolonged non-school related media (video games and TV) use was associated with violent behavior, and whether there was a relationship between prolonged exposure to non-school related media use and electronic bullying among urban youth (N = 1228). Prolonged exposure to both types of non-school related media use was associated with violent behavior (carrying a weapon, physical fighting, perpetrating physical bullying), and playing video and computer games 3 or more hours per day was positively associated with electronic bullying. However, 3 or more hours of TV viewing per day was not associated with electronic bullying. Policy makers, constituents, and parents may benefit from a greater understanding of media exposure and urban youth violence. The knowledge gained from this study may promote positive social change within family systems by increasing parental awareness of what youth do in their unstructured free time and how this impacts subsequent behaviors. Public health professionals, community organizations, and social service agencies in urban communities could incorporate the results to create a culture that supports youth leadership programs that focus on limited use of non-school related media and on violence prevention.

Prolonged Exposure to Non-School Related Media Use and Violence Among Urban  
Youth

by

Cindy Davis

MSW, Aurora University, 1989

BSW, University of Illinois at Chicago, 1988

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health Epidemiology

Walden University

May 2016

## Dedication

This completed dissertation is dedicated to every adolescent growing up in urban Chicago who has been exposed to violence and has now been awarded the opportunity to use the GOD-given plan of salvation toward resilience. Franklin D. Roosevelt said, “When you get to the end of your rope, tie a knot and hang on.”

I hold special gratitude for my husband, Steven, and our supportive and accommodating children, Staci, Christopher, and Sofia, who were forgiving of my early mornings and late nights. It’s all a mom could ask for. For the prayers, encouragement, support, and kind words of my “faith-in-Christ” family, along with the well wishes of my friends, colleagues, supervisors, and classmates, I remain grateful. Having this support catapulted me through a journey that otherwise seemed impossible. Nelson Mandela said, “It always seems impossible until it’s done.” To GOD be all of the glory, it’s done!

## Acknowledgments

I am indebted to the GOD of my salvation, who “ordered my steps” and allowed me the opportunity to commence and complete such an arduous undertaking. I acknowledge Him first and foremost and above all.

This dissertation would not be complete without the resilience model of Herrman et al. (2011) and the permission for its use received from the *Canadian Journal of Psychiatry*. I want to acknowledge and thank my committee members who were generous with their expertise, encouragement, judicious feedback, and devoted time. Faculty members who helped to guide me through the process of scholarly writing and produce a finished product include Walden University faculty Dr. Mary Lescoe-Long (initial chair), Dr. Peter Anderson (chair), Dr. Laura Forbes (committee member), Dr. Rodney Bowden (URR), and Rush University’s Dr. Louis Fogg (methods/statistical analyst).

I remain eternally grateful to all others who assisted me and my family while on this journey in whatever capacity it might have been. Although it is impossible to mention each of you by name, please know all that you have done to help me make it to the successful completion of this dissertation is greatly appreciated.

## Table of Contents

List of Tables .....	v
List of Figures .....	vii
Chapter 1: Introduction to the Study .....	1
Introduction .....	1
Background of the Study .....	7
Problem Statement .....	9
Purpose of the Study .....	12
Research Questions and Hypotheses .....	13
Conceptual Framework .....	14
Nature of the Study .....	17
Operational Definitions .....	18
Assumptions .....	20
Scope and Delimitations .....	20
Limitations .....	21
Significance .....	23
Social Change Implications .....	23
Summary .....	24
Chapter 2: Literature Review .....	26
Introduction .....	26
Youth Violence .....	29
Urban Violence – Chicago .....	32



Literature Search Strategy.....	27
Conceptual Framework: The Resilience Paradigm.....	37
Herrman et al. Model .....	37
Key Resilience Literature .....	39
Early Seminal Researchers of Resilience .....	39
Emmy Werner .....	40
Norman Garmezy.....	41
Michael Rutter .....	43
Key Variables and Concepts Related to Risk and Protective Factors .....	47
Risk Factors For Youth Violence .....	47
Protective Factors Against Youth Violence.....	53
Key Variables and Concepts Related to Exposure to Non-School Related	
Media Use .....	61
The Influence of Media.....	61
Implications of Past Research.....	70
Summary and Conclusions .....	72
Chapter 3: Methodology of the Study.....	76
Introduction.....	76
Research Design and Rationale .....	76
Methodology .....	78
Population .....	78
Sampling and Sampling Procedures .....	80

Archival Data .....	82
Instrumentation and Operationalization of Constructs .....	84
Instrumentation .....	84
Operationalization.....	86
Data Analysis Plan .....	89
Confounding variables .....	90
Research Questions and Hypotheses .....	91
Statistical Methods.....	91
Threats to Validity .....	93
Ethical Procedures .....	93
CHAPTER 4: Results .....	97
Introduction.....	97
Data Collection .....	98
Results .....	99
Summary .....	118
CHAPTER 5: Discussion and Implications .....	120
Introduction.....	120
Interpretation of the Findings.....	121
Limitations of the Study.....	123
Recommendations.....	124
Implications.....	125
Conclusion .....	127

References.....	130
Appendix A: Letter of Consent.....	147
Appendix B: Centers for Disease Control and Prevention – Data Request Form.....	148
Appendix C: Middle School - Youth Risk Behavioral Surveillance Survey – 2013.....	149

## List of Tables

Table 1. Early Seminal Researchers, study of importance and the resulting definitions of resilience.....	46
Table 2. Demographic Characteristics of The Student Participants.....	97
Table 3. Violence Related Experiences Reported by Chicago Middle School Students.....	99
Table 4. Non-School Related Media Use Reported by Chicago Middle School Students.....	100
Table 5. Logistic Regression for Association Between Prolonged Exposure to Non-School Related Media (Television) and Violence.....	104
Table 6. Logistic Regression for Association Between Prolonged Exposure to Non-School Related Media (Video/Computer Games) and Violence.....	104
Table 7. Logistic Regression Model: Bullying (Perpetrator) Prolonged Exposure to Non-School Related Media and Violence Related Variables.....	106
Table 8. Logistic Regression Model: Harassed Due To Being GLTB, Prolonged Exposure to Non-School Related Media and Violence Related Variables.....	108
Table 9. Logistic Regression Model: Effects of Age, Sex, Watching TV/Playing Video Games on Likelihood of Bullying Others.....	109

Table 10. Logistic Regression Analysis for Association Between Watching Television Three or More Hours Per Day and Having Been Electronically Bullied.....	111
Table 11. Logistic Regression Analysis for Association Between Playing Three or More Hours of Video Games Per Day and Having Been Electronically Bullied.....	112
Table 12. Frequencies and Covariates.....	113
Table 13. Regression Model for Having Adult Support and Grades of As and Bs.....	114

## List of Figures

Figure 1.1. Healthy People 2010/Healthy People 2020.....	2
Figure 1.2 Conceptual model for this investigation.....	17
Figure 2.1. National Trends in Homicide Rates, 1994-2010 (CDC, 2013)..	29
Figure 2.2. Trends in Homicide Rates, *Illinois (CDC, 2013)....	30
Figure 2.3. Violent Crime Per 100,000 people (City of Chicago, 2010, p. 8).....	31
Figure 2.4. Juvenile arrest trends, City of Chicago, 2003-2008. ....	32
Figure 2.5. Factors that enhance or reduce homeostasis or resilience (Source: Herrman et al., 2011, p. 261). ....	34
Figure 3. YRBS participation map at District level – Middle School. ....	78

## Chapter 1: Introduction to the Study

The current proliferation and increasing impact that violence has placed on society warranted that it be deemed a severe and pervasive public health problem. Violence was confirmed as a public health problem when the first U.S. Surgeon General's Report entitled "Youth Violence: A Report of the Surgeon General" was issued by Dr. David Satcher (Surgeon General, 2001). The viewpoint that youth violence should be deemed a public health issue emerged after a decade long increase in violence (Gorski, 2013; Office of the Surgeon General, 2001). Between 1983 and 1993, youth violence in its lethality warranted action toward effective and strategic reduction and preventative programs (Surgeon General, 2001). Dr. Satcher confirmed violence as a public health problem, specifically among U.S. youth due to the prevalence of maladaptive behavior. This maladaptive behavior was highlighted in 1999 when 104,000 people under the age of 18 were arrested, with 1400 of the arrests due to homicides (Surgeon General, 2001). The magnitude of adolescents entangled in violent behavior was alarmingly high, creating the need for a call to action (Surgeon General, 2001). The issue of interpersonal violence as a public health problem was reaffirmed by U.S. Surgeon General Dr. Regina Benjamin over a decade later (Surgeon General, 2013). Dr. Benjamin revisited the prevalence of youth violence and the need for prevention as a part of the overall goals for the nation. The National Prevention Strategy included the goal of strengthening effective policies to prevent violence (Surgeon General, 2013). Healthy People 2020 addressed a reduction in youth violence in its Injury and Violence Prevention Section as a part of the

national health objectives, thus confirming it as paramount among public health concerns across the nation (Healthy People 2020, 2014).

My study addressed the national objectives set forth in Healthy People 2020 in contrast to the objectives previously noted in Healthy People 2010, by exploring what is perhaps not known about urban youth and their exposure to prolonged non-school related media use. Healthy People 2020 extrapolated from the National Survey of Children's Exposure to Violence (NatSCEV) when setting forth objectives for violence prevention. An assessment of the incidence and prevalence of children's exposure to violence is captured in NatSCEV. The objectives set forth by Healthy People 2010 remained consistent a decade later in Healthy People 2020 with the added objective that addressed bullying (See Figure 1):

<p><b>Healthy People 2010 Injury and Violence Prevention Objectives</b></p> <p><b>15-38:</b> Reduce physical fighting among adolescents</p> <p><b>15-39:</b> Reduce weapon carrying by adolescents on school property</p> <p><b>Healthy People 2020 Injury and Violence Prevention Objectives</b></p> <p><b>IVP-34:</b> Reduce physical fighting among adolescents</p> <p><b>IVP-35:</b> Reduce bullying among adolescents</p> <p><b>IVP-36:</b> Reduce weapon carrying by adolescents on school property</p>
---

*Figure 1.1.* Healthy People 2010/Healthy People 2020 – Injury and Violence Prevention Objectives



A reduction in violent youth behaviors would aid in the reduction of interpersonal injury and related medical visits. The reduction in both reported youth injury and violent behaviors would improve the physical and emotional health of the surrounding community (Surgeon General, 2013). The consistent occurrence of violent behaviors in the United States warrants study of the phenomenon. Research into violence prevention strategies remains a viable line of inquiry as this social problem impinges on the health and well-being of all persons (Slutkin, 2011; Surgeon General, 2013).

The study advanced the knowledge about urban youth interpersonal violence while exploring the impact that prolonged exposure to non-school related media use has on one's propensity to participate in violent acts. Interpersonal violence involves the deliberate use of power or force, which can be either physical or threatened towards another individual or group (Hall et al., 2012a). Youth interpersonal violence in an urban setting has a high probability of injuries, death, or mental trauma (Hall et al., 2012a).

In the professional literature, there has been a long-standing debate as to whether prolonged exposure to non-school related media use has an impact on youth violence. The association between non-school related media exposure and violent behaviors has been discussed among scholars representing diverse disciplines (Anderson et al., 2012; CDC, 2008; Department of Health and Human Services [DHHS], 2013; Ferguson, 2011) including public health, sociology, psychology, criminal justice, and secondary education (Anderson et al., 2012; CDC, 2014; DHHS, 2013; Surgeon General, 2001; Ybarra et al., 2008). Recently, the U.S. Department of Health and Human Services revised guidelines that defined "prolonged media use" or "screen time" to include the use of television,

computers, or video games for more than 2 hours when used outside of the educational setting (CDC, 2008; DHHS, 2013; Herrick, Fakhouri, Carlson, & Fulton, 2014). Herrick et al. (2014) also cited that prolonged media use has been historically linked to youth obesity, high cholesterol, and high blood pressure. In this study I made a considerable effort to connect what is known about non-school related media use, violence, and mediating factors among urban youth, thus addressing a gap in the professional literature.

Some urban youth are exposed to high levels of non-school related media use and subsequently engage in violent behaviors (Gentile, Coyne, & Walsh, 2011). In contrast, other urban youth are exposed to the same amount of non-school related media and choose not to engage in maladaptive behaviors, exhibiting a form of interpersonal resilience (Ferguson, 2010). Resilience for some urban youth has been attributed to the coverage that protective factors afford to some youth who reside in violence-filled community environments and who are highly exposed to violent media portrayal (Prot & Gentile, 2014).

Recently, youth violence has been identified as a national epidemic (Surgeon General, 2013) and brings with it physical, emotional, social, and economic disadvantages (Centers for Disease Control and Prevention [CDC], 2013). The disadvantages are many, and their impact is far reaching. Hall et al. (2012a) supported the notion that families and neighborhoods where potentially violent youth reside are in some ways negatively affected. However, other disadvantages include, but are not limited to, mental, physical, and social impairments experienced by those who perpetrate but also by those who are victimized (Hall et al., 2012a). Recognition of young people who carry

guns to school with the intent of inflicting harm on peers and who cope with anger by doing bodily harm to others heightens the need for violence prevention (Heller, Pollack, Ander, & Ludwig, 2013). In 2011, the CDC showed a 5.4% prevalence rate of teens who carried weapons to school, noting that the CDC classified weapons as guns, knives, and clubs (CDC, 2013). This was a decrease from the 2009 rate of 5.6%; the prevalence declined even further in 2013 to 5.2% (CDC, 2015). In this study I tested the relationship between prolonged exposure to non-school related media use and violence among urban youth.

Historically, youth violence has been reported at a higher rate among urban minorities (Hall et al., 2012a). The minority population includes those who self-identify as Blacks or African Americans and Hispanics or Latinos (CDC, 2013). It should be noted that *minority* refers to distinct groups (racial, ethnic, gender, religion) of individuals who experience lesser opportunities for education compared to others within the same society (Schaefer, 2013; University of Dayton Law School, 2007). I examined prolonged exposure to non-school related media use among young people in urban environments. I attempted to promote programs that address risks and promote resilience among youth in urban areas. Chicago, the focal point of this study, saw a violent crime rate of 1,002 per 100,000 persons, which surpassed other large urban cities including New York at 582 and Los Angeles at 559 (City of Chicago, 2011). This further incited the need for continued study toward prevention and social change. Youth violence in Chicago is an epidemic and is a threat to the health of the public (City of Chicago, 2011). In 2009, more than half of violent crime arrests were for youths under the age of 25, with

17 being under the age of 18 (CDC, 2013); in 2010, over 1,000 school aged children were shot, of which 216 were fatal (City of Chicago, 2011). As a result of interpersonal violence among Chicago's youth, viable information regarding factors of perpetration or victimization might help with strategic planning toward prevention.

Although there are many risks factors and elements of exposure to violence, the primary focus of this investigation was to test the correlation between urban youth who have engaged in prolonged non-school related media use (television, video games, computer games, and social media) and youth violence. Although the segue to youth violence has been addressed in terms of its risks, previous researchers have not determined whether protective factors are a direct buffer against youth violence (Hall et al., 2012a). For urban youth exposed to prolonged non-school related media use, protective factors might buffer against the risks (Hall et al., 2012a; Williams, Aiyer, Durkee, & Tolan, 2013). Resilience may be attributed to those protective factors (Williams et al., 2013). Protective factors may positively contribute to the decrease of urban youth violence even in the face of other risk factors, such as prolonged non-school related media use, which was the primary focus of this study.

The literature addressing the contribution that media may have on subsequent violent behavior among urban youth has been based on risk factor assessment. It has not been grounded in the consideration that the potential for protective factors may serve as an asset to offset the impact of prolonged exposure to non-school related media use. Neither have the inconsistencies in the literature been explained to date (Hall et al., 2012a). Consistent with the CDC's appeal that protective factors be considered (Hall et

al., 2012a), the distinction between risk factors and protective factors is addressed in Chapter 2. This was done in an effort to yield a closer look at the impact of prolonged exposure to non-school related media use among urban youth on youth violence, an examination that has not been done to date.

In this chapter, I present the contextual risk factors that are attributed to youth violence, why those factors should be further discussed, and how protective factors could offset those risks. I include the background, problem statement, purpose of the study, research questions and hypotheses, conceptual framework, nature of the study, operational definitions, assumptions, scope and delimitations, significance, and social change implications.

### **Background of the Study**

The current literature regarding youth violence has directed attention to a myriad of risk factors; however, no extensive attention has been given to the role of protective factors in violence prevention (CDC, 2011a). Protective factors are believed to be instrumental in lending to a resilient outcome for urban youth in the face of exposure to violence through a stable environment (CDC, 2011a; Peeters, 2012). I tested for prolonged exposure to non-school related media use and youth violence, as debate persists among scholars on whether the effect of this type of exposure is deleterious among urban youth. Gentile et al. (2011) argued that violence and prolonged media exposure are related, while Ferguson (2010) asserted that they were not. The discrepancies in the literature regarding prolonged media exposure and violence are

largely due to the belief that the methodology of some of the research does not support a relationship between the two (Ferguson et al., 2009b).

This study addressed the following variables: risk factors (low socioeconomic status, lack of family stability, a lack of community efficacy, poor peer relationships, and personal victimization), protective factors (good problem solving skills, emotional self-control, positive self-concept, sense of personal responsibility, easygoing disposition, empathy, and family and social networks including faith based organizations, schools, and youth programs) and prolonged exposure to non-school related media use (television, video games, computer games, and social media) among urban youth. The pervasiveness of youth violence in urban areas appears to be associated with numerous risk factors including low socioeconomic status, lack of family stability, a lack of community efficacy, poor peer relationships, and personal victimization (Datner, 2004; DuRant Cadenhead, Pendergrast, Slavens, & Linder, 1994; WHO, 2011). Johnson, Finigan, Bradshaw, Haynie, and Cheng (2012) pointed out that all adolescents who reside in urban environments are at-risk and do not necessarily engage in violent behavior. The wealth of knowledge on risk factors and youth violence supports the need for sustainable programs for primary prevention (Heller et al., 2013). Although some researchers highlight deleterious consequences of prolonged exposure to non-school related media use, including rebellion, aggression, and violent behavior (Ferguson, San Miguel, & Hartley, 2009a), others support the claim that exposure to non-school related media use may serve as a means of education (Wilson, 2008; Ferguson, 2009b; Ferguson, 2010). Ferguson (2010) asserted that some video games were effective in the development of appropriate

social behavior. The current gaps in the literature regarding the proposed relationship between non-school related media use and youth violence require continued research. The consideration of protective factors as buffers has not garnered significant attention (Hall et al., 2012a).

### **Problem Statement**

The literature shows that homicide is the leading cause of death among U.S. young people ages 10-24 (CDC, 2013), and approximately 700,000 youths aged 10-24 sustained nonfatal injuries from bullying, robbery, or assaults in 2011 (CDC, 2013). There are notable differences in these rates in urban versus rural environments. According to the Illinois Violent Death Reporting System (IVDRS, 2011) for 2005-2008, the city of Chicago saw 284 or 366 total school-age homicide victims versus 58 in rural suburban Cook County. Among these victims, 21.3% were Black and 2.1 % were White in the city of Chicago, versus 10.0% Black and 0.7% White in rural suburban Cook County. Youth violence does not discriminate by geographic location and is pervasive across the United States; however, urban centers such as Detroit and Chicago are focal points of youth violence (Heller et al., 2013; National Forum, 2012). Detroit, Michigan was deemed one of the most violent cities in the U. S. in 2010. Michigan has the highest rates of homicide for those ages 15-24 at 3.9 per 100,000 (Michigan Youth Violence Prevention Center [MYVPC], 2010). The MYVPC (2010) posited that at 15 times the rate among Whites and six times the rate among Hispanics, Blacks in Michigan have the highest homicide rate at 29.9% per 100,000. Although the city of Chicago has set a goal to decrease violent crime by 50% by 2020 (National Forum, 2012), violent deaths among

school-age children remains high. This is especially true for school-age children and adolescents who are African American, as statistics show this group to be victims of homicide more than any other ethnic and racial group in urban Chicago, at 17.0% per 100,000 (IVDRS, 2011). The CDC asserted that youth violence is a preventable public health issue (CDC, 2008; Hall et al., 2012a). Prevention requires an in-depth understanding of factors that drive the problem, coupled with an equally clear understanding of those factors (Williams et al., 2013). Understanding the factors that mitigate youth violence assist with primary prevention efforts which can effectively counter the risk by emphasizing protective supports and healthy environments (Williams et al., 2013).

A majority of the research into youth violence has focused solely on the risk factors for youth violence; little consideration has been given to protective factors (Hall et al., 2012a). To address this oversight, the CDC recently sponsored an expert panel on protective factors for youth violence prevention as a means of defining and identifying protective factors against youth violence (Hall et al., 2012a). This expert panel was dedicated to uncovering and examining protective factors that contribute independently to a reduced risk for violence rather than reflectively showing protective factors to be the antithesis of a well-documented risk factor (Hall et al., 2012a). The CDC expert panel also launched several large-scale investigations into the contribution of unique protective factors to the multiple indicators of youth violence. The concern remains that these larger examinations of protective factors may not comprehensively cover each risk as a whole, but should be addressed based on the individual risk at hand (Hall, Simon, Lee, & Mercy,



2012b). Concern about the potential for vicarious violence to spur real life violence among our nation's youth is one such singular risk factor (Ferguson, 2010). The literature on whether prolonged exposure to non-school related media use is a factor of youth violence and aggressive behavior remains conflicting.

Ybarra et al. (2008) demonstrated the association between exposure to non-school related media use coupled with other risk factors as significantly and positively linked with violent behavior. Similarly, Krahe et al. (2011) highlighted exposure to non-school related media use as contributory to youth desensitization and aggressive behavior. In a study of 820 youth, Boxer et al. (2008) found that exposure to non-school related media use was associated with aggression and violence. The three studies cited above are in direct contrast with another body of literature that indicates the impact of exposure to non-school related media use can be offset by exposure to any media set forth to educate others, known as educational and prosocial media, which is media that promotes empathy, helping others, and the effort to minimize aggression (Wilson, 2008; Ferguson, 2010). Some investigators have asserted that exposure to non-school related media use (video games) actually helped develop positive physical and social skills (Ferguson, 2010). Ferguson and Kilburn (2009b) conducted a meta-analysis of studies related to exposure to non-school related media use and found that media exposure was not associated with violent behavior. Ferguson et al. (2009b) concluded that the studies of violence in the media and its affects did not have much support for the view that higher aggression is a result of exposure. Because the contrasting views of exposure to non-school related media use and its effect on youth violence remains a concern among the

disciplines (Ferguson, 2011), I addressed this concern within this study, potentially providing new insight to this ongoing debate and filling a gap in the current literature. If prolonged exposure to non-school related media has any influence on youth violence among urban youth, it is incumbent upon parents, teachers, policymakers, and social service agencies to take notice, redefine youth programs as necessary, and set forth an agenda that aligns with primary prevention.

### **Purpose of the Study**

The purpose of this quantitative study was to test the relationships of risk and protective factors among urban youth exposed to prolonged non-school related media use and its impact on youth violence. Exposure to non-school related media has been suggested as a possible risk factor for youth violence; however, research findings on the relationship have been inconsistent (Boxer et al., 2008; Ybarra et al., 2008). I sought to test for an association between the variables. Protective personal traits such as good problem-solving skills, emotional self-control, positive self-concept, sense of personal responsibility, an easygoing disposition, empathy, (Marano, 2012) and family and social networks including faith-based organizations, schools, and youth programs were modifying variables because these may have an influence on the relationship between urban at-risk youth and youth violence (Baron & Kenny, 1986). The risk factors of low socioeconomic status, lack of family stability, lack of community efficacy, poor peer relationships, and personal victimization were mediating variables because these factors may help to explain the relationship between urban youth and youth violence, given that these risks are notable in the literature as contributors to youth violence (Baron et al.,

1986). The study may contribute to the paradigm shift occurring in youth violence research, promoting the value of strengthening youth resilience to violent exposures by emphasizing the countervailing influence of protective influences in the midst of recalcitrant urban blight and the accompanying social risk factors known to fuel violent behavior. The paradigm of resilience sheds light on the ability of an individual to adapt after adversity (Child Family Community Australia [CFCA], 2013; Datner, 2004; Herrman, Diaz-Granados, Berger, Jackson, & Yuen, 2011; Phaneuf, 2007; Rouse, Longo, & Trickett, 1999; Rutter, 2012;). The literature review further shows how resilience is assessed and why it is significant in acknowledging some individuals who succumb to violence when at risk while others do not.

Understanding whether protective factors mitigate the risk of prolonged exposure to non-school related media use may inform interventions designed to curb the effect of this seemingly omnipresent social influence in urban youth. Because youth violence is menacing and threatening to the general health of the public (CDC, 2008), I sought to test the value of risk and protective factors and the effects that may impact urban youth, especially in the face of previous exposure to violence in non-school related media (Ferguson, 2009b; Ferguson, 2010). The modifying and mediating variables, along with the resilience paradigm, are addressed in detail in Chapter 2.

### **Research Questions and Hypotheses**

Based on the conceptual framework, this study was conducted to answer the following research questions (RQs):

RQ1: Is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth?

H<sub>a</sub>1: Prolonged exposure to non-school related media use is associated with violent behavior in the study's sample of urban youth.

H<sub>0</sub>1: Prolonged exposure to non-school related media use is not associated with violent behavior in the study's sample of urban youth.

RQ2: Is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth?

H<sub>a</sub>2: Prolonged exposure to non-school related media use is associated with violent behavior through electronic bullying in the study's sample of urban youth.

H<sub>0</sub>0: Prolonged exposure to non-school related media use is not associated with violent behavior through electronic bullying in the study's sample of urban youth.

### **Conceptual Framework**

The paradigm of resilience served as the framework for this study. The term *resilience*, as it is most frequently applied in studies of youth violence (Gartland, Bond, Olsson, Buzwell, Sawyer, 2011), is the capacity for young people to avoid violent behavior. Most researchers attributed resiliency to the countervailing influence of protective, social, and environmental factors that buffer the negative influence of risk factors. Variables that have received support in the literature as risk factors for youth violence include chronic exposure to poverty, exposure to family violence, harsh unsupportive parenting, unstable home life, negative peer influence, and lack of neighborhood cohesiveness, each of which will be further described in the review of the

literature (CDC, 2011b). Protective factors are defined by the CDC (2011b) as factors that are independently protective against engaging in violent behavior, not simply the absence or antithesis of known risk factors. Social acceptance by peers, social recognition of a valued skill or skill set, and a supporting mentoring adult have received support in the literature as social resources protective for at-risk youth (Folke, 2007; Gartland et al., 2011). A youth who participates in family activities, school-based programs that promote healthy thoughts and behavior, and youth programs that have been designed to deter youth from perpetuating violence are examples of protective factors (Hardaway et al., 2012; Lewis et al., 2013; Stoddard et al., 2013).

Resilience, however, is also attributable to personal characteristics that convey a measure of hardiness in the face of stressful circumstances (Donnellan, Conger, McAdams, & Neppi, 2009; Gartland et al., 2011). Personal traits that have been associated with resilience include good problem-solving skills, emotional self-control, positive self-concept, sense of personal responsibility, an easygoing disposition, and empathy (Marano, 2012). Resilience as a function of personal characteristics suggests that violent behavior in the face of risk factors is potentially moderated by personal traits. This assertion is supported not only by research into resiliency traits, which are extensively discussed in the review of the literature, but also research into risk factors for violent behavior, which indicates a predisposition toward risk taking and callousness as personal traits that function as risk factors for youth violence (Donnellan et al., 2009; Gartland et al., 2011). Understanding the independent and interactive contribution of each of these two sets of factors could better explain the moderating effect of protective factors

by teasing out the effects of nature, hereditary characteristics youth are born with, and nurture, that which is influential once we are born (Miller & Jones, 2013).

Exposure to non-school related media use is one risk factor researchers have associated with violent behavior in youth (Krahé et al., 2010; Surgeon General, 2001; Ybarra et al., 2008). Other researchers have found a significant association between exposure to non-school related media use and subsequent violent behavior, but only within the presence of multiple risk factors (Boxer et al., 2009; Surgeon General, 2001; Ybarra et al., 2008). It is not exposure to non-school related media use alone that spurs subsequent violent behavior, but when coupled with other risk factors (e.g., low socioeconomic status, lack of family stability, or poor peer relationships), some researchers argue that the exposure to non-school related media use may heighten the potential for subsequent violence (Boxer et al., 2009; Surgeon General, 2001; Ybarra et al., 2008). This discrepancy contributes to the uncertainty surrounding the link between exposure to non-school related media use and violent behavior and suggests that one or more additional risk factors may be mediating the relationship (Ferguson et al., 2008; Ferguson, 2010). Multiple researchers have shown that the presence of multiple risk variables attenuates the relationship between exposure to non-school related media use and violent behavior (CDC, 2011b; Hall et al., 2012a; Ybarra et al., 2008). Kraemer, Stice, Kazdin, Offord, and Kupfer (2001) demonstrated that risk factors have historically worked in concert, especially when the heritable, ecological, societal, and biotic impacts were considered. Kraemer et al. (2001) further noted that it is unlikely that cause can be attributed to one risk factor alone, but rather is a function of the presence of multiple risk

factors. In this study, I investigated the potential for other risk factors to mediate the relationship between exposure to non-school related media use and violent behavior. The conceptual model for this investigation is presented in Figure 1.2.

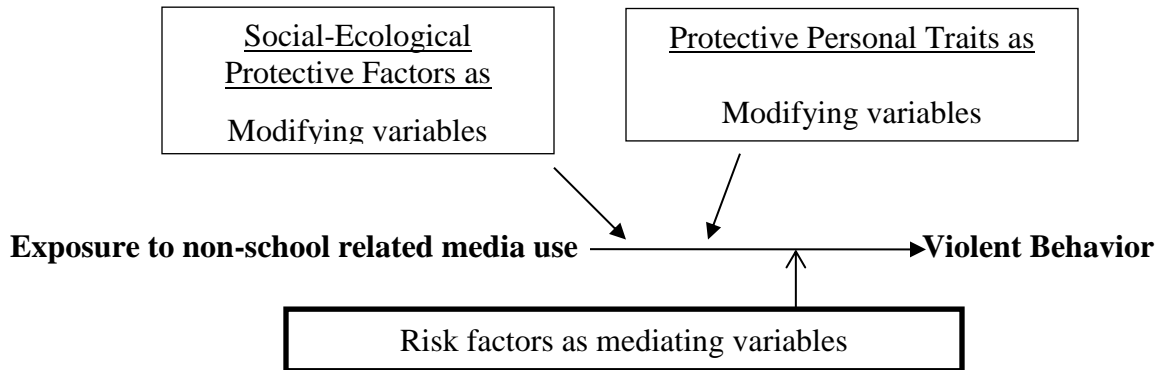


Figure 1.2. *Conceptual Model For This Investigation*

### Nature of the Study

This quantitative study included secondary data from the Youth Risk Behavioral Surveillance Survey YRBSS Questionnaire from the Centers of Disease Control and Prevention dated 2013 (CDC, 2015). I conducted a quantitative analysis of youth in the Chicagoland region and the prevalence of youth violence. Permission for use of specific data from the Chicago region was granted by CDC personnel (Appendix B). A quantitative approach was best suited this study because a quantitative study is deemed permissible when analyzing information from one point in time or when a short period of time is available for both the participants and the investigator (University of Southern California [USC], 2014). A quantitative study allows the researcher to examine a relationship among the variables (USC, 2014). I ensured the reliability and the validity by using the YRBSS questionnaire that received approval from a CDC Institutional Review Board. To ensure that the questionnaire is a viable tool, the CDC has consistently tested

the questionnaire since 1988. Questions specifically related to violence have remained in rotation and have been implemented since 1997. The tool has endured field testing, lab testing, and two test-retest studies for reliability. Critical observation of the student responses has been maintained in an effort to strengthen reliability and validity of the instrument. I analyzed the data using Statistical Package for the Social Sciences (SPSS) for both descriptive and multivariate analysis. I originally anticipated using stepwise regression models to examine the relationship between prolonged exposure to non-school related media use, on the outcome variable of violent behavior; however, I chose a logistical regression model instead.

### **Operational Definitions**

Due to the varying definitions of youth violence, prolonged exposure to non-school related media use, electronic bullying (aggression), resilience, urban youth (including those at-risk), social media, screen time, risk factors, and protective factors, the operational definitions for each key term is included as it relates to this study in alignment with the conceptual framework.

*Electronic bullying (aggression):* “Any type of harassment or bullying (teasing, telling lies, making fun of someone, making rude or mean comments, spreading rumors, or making threatening or aggressive comments) that occurs through email, a chat room, instant messaging, a website (including blogs), or text messaging” (David-Ferdon & Hertz, 2009, p. 3).

*Urban youth:* Those who live and attend school within the city limits. Those at-risk are the inner-city youth who live in urban, underprivileged neighborhoods, with



adverse childhood experiences (ACE) placing them at considerable risk of greater social disadvantage (Herrman et al., 2011; Swahn & Bossarte, 2009).

*Protective factors:* The course of actions taken or tools used that lend to a satisfactory outcome regardless of ill-factored incidents of stress, which would knowingly yield a greater possibility for the evolution of maladaptive behavior (Herrman et al., 2011).

*Resilience:* A construct composed of myriad factors that yield the presence of healthy adaptation following considerable exposure to stress or pushback that would otherwise threaten the well-being of a person (Herrman et al., 2011); it is the manifestation of aptitude in both positive and adverse surroundings (Masten & Coatsworth, 1998). With the foundation given, resilience is the potential to refrain from violent behavior, given exposure to non-school related media use within a context of risk variables and protective variables.

*Risk factors:* The dynamics that increase the vulnerability to victimization and perpetration among some youth, or specified factors that heighten the likelihood that youth will engage in violence (CDC, 2011a).

*Social media:* YouTube, Facebook, or any other social site with networking tools on the Internet.

*Screen time:* Activities that are completed in front of a screen. This includes time spent engaged on the computer (or other mobile devices), in front of a television, playing video games, or surfing the internet (DHHS, 2013; National Institutes of Health [NIH], 2013). No screen time is recommended for children under the age of 2, while for children

over the age of 2, 1-2 hours of screen time per day is recommended (DHHS, 2013; NIH, 2013).

*Prolonged exposure to non-school related media use:* Watching television, playing video games or computer games, or using the computer for something that is not school related including YouTube Facebook, or other social media sites, 3 or more hours per day (CDC, 2015). As defined by the YRBSS instrument for survey, non-school related media also includes Xbox, Playstation, iPod, iPad, other tablet, and smartphone/android device (CDC, 2015).

*Youth violence:* Intentional infliction of pain or physical harm or exerting control over someone that could result in him or her being hurt (CDC, 2011c).

### **Assumptions**

My intention is this quantitative study was to generalize about the behaviors of urban youth on the basis of exposure to prolonged non-school related media use. Because of the numerous studies on youth violence and its influences, the following statements are assumed to be true: (a) the questionnaire results used from the completed 2013 version of the CDC YRBSS are objective, reliable, and valid, (b) all middle school participants who provided information in the initial data did so honestly, and (c) the statistical procedure used for analysis was appropriate for the data measured.

### **Scope and Delimitations**

I tested the relationship between prolonged exposure to non-school related media use and resiliency, protective factors, and violence among urban male and female youth ages 11-14 years who live in Chicago. The study could possibly be generalized to other

inner-city youth who are at-risk. This study addressed the vulnerability of urban youth, thus adding to the body of literature that gives primary focus to prevention. Urban youth may be re-positioned to receiving prevention programs with heightened sensitivity to the specific needs of this vulnerable population. . Primary prevention of potential violence through said media outlets will remain the focus. The use of the conceptual framework of resilience provided this study with the support for a belief system that change is possible, even in the face of risk. This study is focused on the vulnerability of inner-city youth within the boundary of the City of Chicago. There remains some degree of generalization that cannot extend to youth who live outside of the city limits, which this study did not cover.

### **Limitations**

While the use of secondary data from the CDC can be valuable for providing worthwhile information, there are some limitations to this study. As a result of using the CDC YRBSS, limitations included (a) inability to verify the truthfulness of self-reported answers, (b) inability to control the consistency in which local parental permission was obtained, (c) the data obtained at the state level was not readily available for all participating states, (d) only the specified leading causes of morbidity and mortality were assessed via this questionnaire, and 5) although the YRBSS, from the CDC is ongoing and generally administered in the school setting, the findings were restricted specifically to those adolescents who attend school. Although the city of Chicago students participated in the 2013 administration of the YRBSS 2013, this secondary data was not stratified based on differences of vulnerability among urban youth and the neighborhoods

in which they reside. The ability to generalize across the city is limited by confounders such as age of exposure to social media or prolonged use, neighborhood risks, family structure, age at time of personal victimization, and type of school attended. Despite the limitations of the CDC data, they were significant to this study and provided information related to youth violence and exposure to non-school related media use among urban youth. This study was limited to television, video games, computer games, and computer use not related to school work, as outlined herein. Last, deciding which statistical format would be best for analyzing the data obtained via secondary sources in alignment with the research questions and hypotheses was a limitation (Doolan & Froelicher, 2009). This limitation, however, was resolved by committing to obtaining the knowledge of additional statistical sources outside of SPSS offered by the public health program, as deemed necessary (Salkind & Rasmussen, 2007). It is not possible to attribute prolonged exposure to non-school related media as the cause of subsequent violent behavior. Therefore, thus, cross-sectional correlational design was limited in assuming the relationship between cause and effect (Crosby, DiClemente & Salzar, 2006). Furthermore, establishing the direction in which the variables are situated or related is not possible when using the cross-sectional design (Crosby et al., 2006). Although information gathered over a long period of time (longitudinal) might be more suitable for indicating the relationship between the variables, the cross-sectional design, though limited, remained justifiable. For this study I relied on secondary data that were readily available from the Centers for Disease Control and Prevention (2015). Effort was made to

overcome limitations by pursuing available data from the most recent YRBSS questionnaire with intent to reflect incorporation of the research questions for this study.

### **Significance**

Violence among urban youth has increased in the City of Chicago over the past decade (City of Chicago, 2011). Because this study targeted urban youth from the city, the results obtained could help provide existing youth service organizations who service this population with insight in changing overall risk behaviors. The focus was primarily among Chicago youth 11-14 years old because this population is particularly vulnerable to the effects of exposure to non-school related media use (Kirsh, 2003). The Chicago-based Project on Human Development in Chicago Neighborhoods (PHDCN) is described in Chapter 2 as a significant source, confirming the vulnerability of urban youth. The PHDCN examined the exposure of inner city Chicago youth to youth violence risk factors and assessed the effectiveness of protective factors in mitigating youth violence in Chicago neighborhoods, but did not specifically examine the role of risk factors and protective factors as they relate to exposure to non-school related media use (Jain, Buka, Subramanian, & Molnar, 2012). Risk factors and protective factors may be consistent themes among urban youth who display violent behavior. These themes, when analyzed could assist with the identification of ways to incorporate preventive measures within youth service organizations.

### **Social Change Implications**

Positive social change could be extended to parents and policymakers who are unclear about the risk posed by prolonged exposure to non-school related media and its

potentially harmful effects on youth. Study findings could be instrumental in helping researchers clarify the parental action within the family context to curb the effects of non-school related media exposure. Further, findings could be used by investigators to suggest social support policies that can be used to mitigate the influence of potential violence in non-school related media use without resorting to a censorship debate that has little potential for a timely political resolution. These findings could also be used by strategists to give attention to the role of resiliency in the recovery and revitalization for those affected. I have provided evidence that could contribute to the ongoing fight against youth violence in the city of Chicago and could also serve as a platform on which to build health and safety policies for youth service organizations and the individual families and communities who will benefit from them.

### **Summary**

The aim of this study was to test the relationships between exposure to non-school related media use and violence in urban youth. The relationship between violence in urban youth and its impact on society has been well documented (Williams et al., 2013). With an abundance of literature focusing on risks and causes of vulnerability, the dearth of research on measures to protect and buffer vulnerable youth necessitate this investigation. The result of this study may assist with continued efforts for violence prevention among youth in urban environments. Because the study is focused on youth ages 11-14 years, violence prevention programs that seek to reduce the social and ecological risk factors and increase the protective factors could effect positive social change resulting in safer neighborhoods.

Chapter 2 presents an extensive review of the literature aligned with the conceptual framework on which this study is based.

## Chapter 2: Literature Review

Youth violence is a pervasive burden on the general health of the public (CDC, 2014; WHO, 2014). This quantitative study addressed the relationship between prolonged exposure to non-school related media use, resiliency, protective factors, and violence in urban youth. In this chapter I review the major themes from the youth violence literature that are relevant to exposure to non-school related media and youth violence.

Historically, exposure to non-school related media use was deemed a contributor to youth violence, especially among 7<sup>th</sup> to 12<sup>th</sup> graders (Center for Sport Policy [CSPC], 1999). Tortolero et al. (2014) claimed that the time youth ages 11-14 years spend daily engaging in video games continues to increase in the United States. The CSPC (1999) has been unrelenting in naming violence in the media (including video games) as a major cause of youth violence, further citing violent television, video games, and computer games as primary sources of media. The CSPC highlighted the growing concern among many Americans regarding the increase in violence among youth; however, the call for national reform has not been enacted with vigor due to a lack of consensus among researchers and policymakers. The CSPC report was completed in 1999, and over the past 15 years, the certainty of whether exposure to non-school related media use serves as a conduit to youth violence remains debatable.

One important discussion among scholars, researchers, health care professionals, and policymakers includes exposure to non-school related media use as a risk factor and its sequelae on the adolescent psyche (Tortolero et al., 2014). Much of the research on youth violence solidly delineates the risks (McDaniel, 2011); however, some scholars



have argued that very little information is strongly delineated that pertain to factors that protect (CDC, 2011b; McDaniel, 2011). Although the CDC and the WHO suggest that violence among preadolescent youth has often been the focus for researchers when seeking an association to exposure to non-school related media use, not all researchers agree. Tortolero et al. (2014) reached a different conclusion in their cross-sectional study among 5,147 fifth graders. While some scholars have focused on violence and aggression, Tortolero et al. (2014) acknowledged that aggression as a possible outcome of exposure to non-school related media use is probable. Further, Tortolero et al. (2014) cited depression among fifth graders as the outcome of daily violent video game access, rather than subsequent aggression.

The following section of this chapter delineates how the literature which supports the key concepts and variables for this study were obtained. The literature search strategy further identifies how articles for this study were obtained and which focus terms were searched. The literature search strategy also identifies databases and libraries that were accessed to obtain viable literature for this study.

### **Literature Search Strategy**

The literature review of articles used for this study were obtained via Google Scholar, EBSCOhost, CINAHL, Elsevier Science, Refworks, PubMed, and from Rush University Medical Center Library, University of Illinois at Chicago (Health Sciences) Library and Walden University Library. The search focused on the search terms: *youth violence, urban violence, community violence, media, and media violence*; paired with

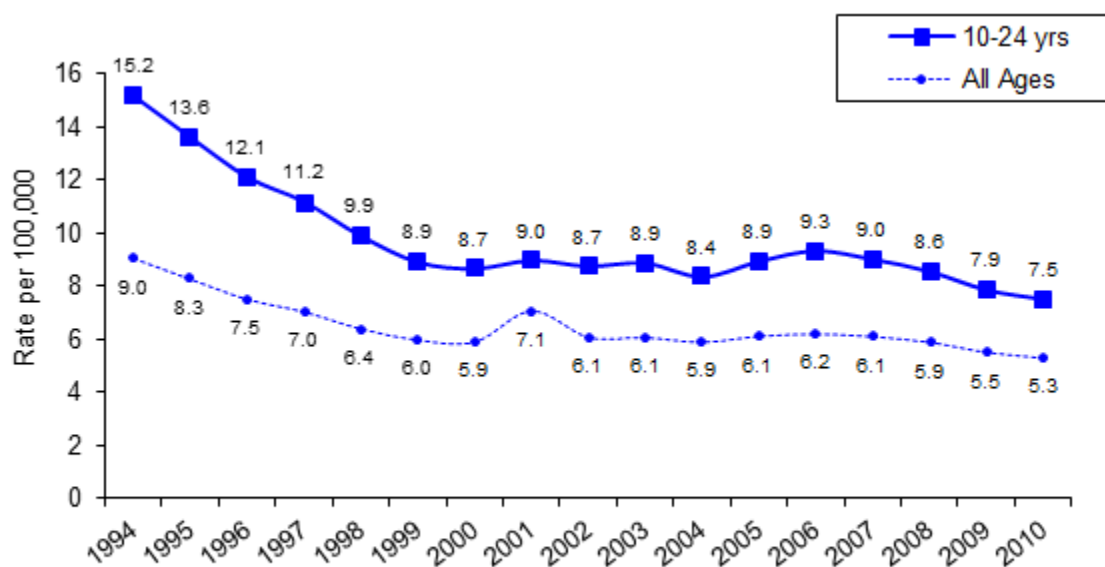
the variables: *risk factors*, *protective factors*, and *resilience*. Several books from the Chicago Public Library were referenced which yielded information regarding the City of Chicago trends in youth violence. Peer reviewed articles were preferred, however, there was some information obtained from professional organizations, including the American Academy of Pediatrics and American Psychiatric Association. Articles were selected based on their significance to exposure to generalized media use and youth violence, with specific attention to urban, inner-city youth. A host of articles and books were accessed, retrieved and reviewed. A comprehensive search for available literature yielded very few arguments that definitively made exposure to non-school related media use a causal reason for subsequent aggressive behavior. Neither were any articles located that differentiated between youth with protective factors in place who were exposed to violence versus those exposed to violence without protective factors in place.

The literature review that follows provides an overview of youth violence, urban violence: Chicago, the conceptual framework of resilience, as foundational for this study, starting with seminal pioneers of resilience, secondly, the key variables for the study are amassed (with reasons why these variables and concepts are relevant to this study), and third the implications of past research are addressed, along with a summary, where key arguments will be highlighted. Within this literature review, the existing research is discussed according to the strengths and flaws of methodological choices employed by the author. This chapter concludes with an overview of how the study may add insight in addressing the identified gaps. The following section is a preview of the literature that establishes youth violence as a problem.

## **Youth Violence**

From 1980 to 2011, rates of violence reported in the United States wavered (Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2014). The OJJDP records show an increase in crime across the nation in the mid-2000s, but a decline overall in 2011, which was the lowest it had been since 1980 (OJJDP, 2014). The violent crime index (VCI), which includes murder, nonnegligent manslaughter, forcible rape, robbery, and aggravated assault, indicated 202 arrests in 2011; this included young people between the ages of 10 and 17 years (OJJDP, 2014). Youth violence is a problem not only in the United States but globally (WHO, 2014). Globally, 41% of homicides occur among young people ages 10-29 years (WHO, 2014). The CDC along with WHO reported that homicide is the third leading cause of death among young people aged 10-24 in the United States and worldwide (CDC, 2013; WHO, 2014) with approximately 13 homicides per day (CDC, 2014). The CDC approximated that 700,000 youths aged 10-24 sustained nonfatal injuries from bullying, robbery, or assaults in 2011, all as a result of violence (CDC, 2013). Youth violence does not discriminate by geographic location and is pervasive across the United States; however, urban centers such as Detroit, Chicago (City of Chicago, 2010; Heller et al., 2013; National Forum, 2012), Los Angeles, New York City, Philadelphia, and Houston (City of Chicago, 2010) are focal points of youth violence. The CDC asserted that youth violence is a preventable public health issue (CDC, 2008; Hall et al., 2012a). However, prevention requires an in-depth understanding of factors that drive the problem, coupled with an equally clear understanding of factors that mitigate youth violence (Williams et al., 2013).

The rate of youth violence (homicides) across the United States between 1994 and 2010 was 15.2 per 100,000 (CDC, 2013). In the state of Illinois, the homicide rate for that same period was 25.7, which was 10.5% higher than the nation's average homicide rate. Although by 2010, according to the CDC (2013) the rate for the nation was down to 7.5 among young people aged 10-24, the state of Illinois trended down as well yet remained higher than the nation at 11.0 per 100,000, a 3.5% difference. Figure 2.1 and Figure 2.2 show the trends in the homicide rates for the United States and the state of Illinois.



\* Rates for All Ages are age-adjusted to the standard 2000 population; rates for the 10-24 yrs age group is age-specific.

Figure 2.1. National Trends in Homicide Rates, 1994-2010 (CDC, 2013)

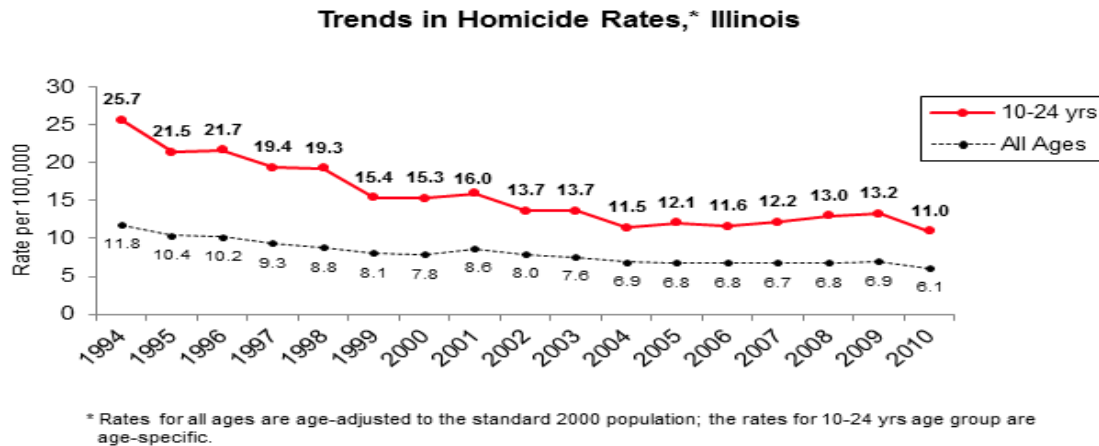


Figure 2.2. Trends in Homicide Rates, \*Illinois (CDC, 2013)

The impact of youth violence specific to urban areas is further delineated in the next section. The rate of urban violence (homicides) among young people ages 10-24 years across the state of Illinois by race/ethnicity and sex indicates that there is a disproportionate number of Black, non-Hispanic males leading the trend. The astounding rate is 83.7 % per 100,000, making it imperative to seek protective environments, in which youth in urban environments can thrive. One urban area of youth violence is the city of Chicago, where 91% of those who have succumbed to victimization of gun violence were male (Chicago Community Trust [CCT], n.d.). The CCT (n.d.) posited that violence has an impact on youth in Chicago, thus, inciting the need to further explore urban violence in its own realm.

Figure 2.3 presents an outline of the city of Chicago, which is color coded to highlight the areas of the city where violence among youth is estimated to be higher

(Askins, 2010).

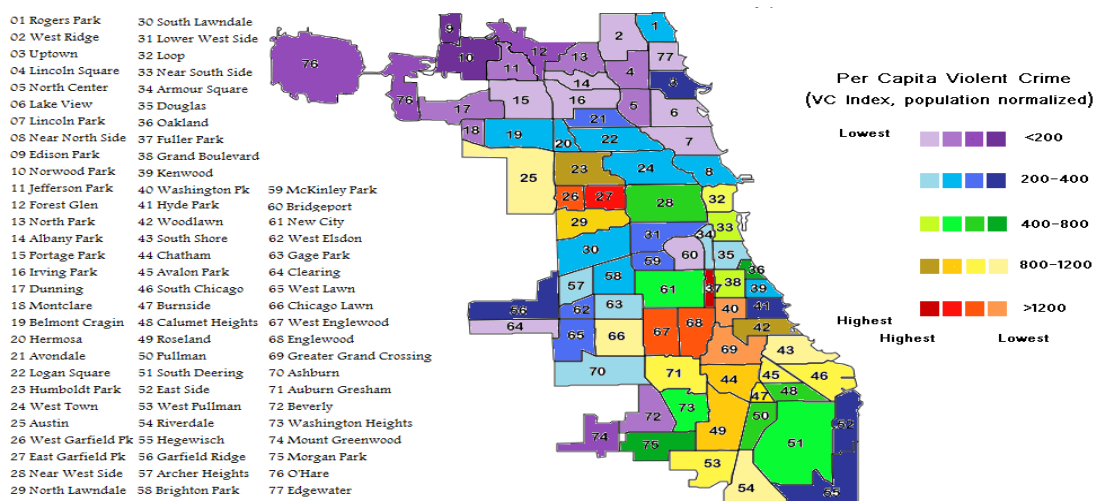
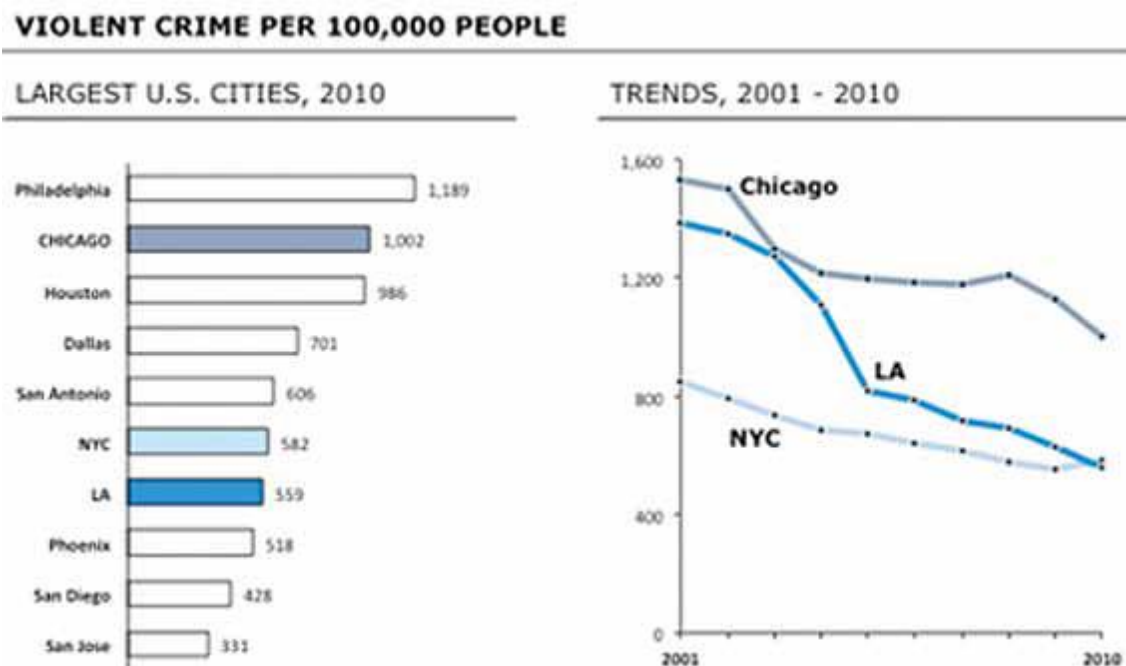


Figure 2.3. City of Chicago-Per Capita Violent Crime

### Urban Violence: Chicago

In November, 2014, one week in Chicago yielded 10 homicides, all by gunshot, and included at least four young men aged 21-23 (Swartz, 2014). Although this study focuses on middle school students, the CDC considers young people to be those up to the age of 24 (CDC, 2012a). The city of Chicago has a population of 2,695,598, of which 1,272,592 are male and 1,362,760 are female (U.S. Census, 2014a). The city is reported as having 150,000 gang members, which is more than any city in the United States (City of Chicago, 2010). Although the city of Chicago's national forum, in 2010, indicated a decrease in city crime, the rate of violence remains overwhelming with almost half of those killed ranging in age from 10 to 25 (City of Chicago, 2010). In 2009, of the violent crime arrests, 65% were of people 25 years or younger; 2010 yielded 1,109 young people shot, of which 216 were fatal. In 2011, the city of Chicago saw two to three times more

murders per capita than peer cities such as Los Angeles and New York (City of Chicago, 2010). Figure 2.4 presents clear documentation of violent crimes per 100,000 people for the largest U. S. cities in 2010, noting the city of Chicago, second only to Philadelphia.



*Figure 2.4.* Violent Crime Per 100,000 People (City of Chicago, 2010, p. 8)

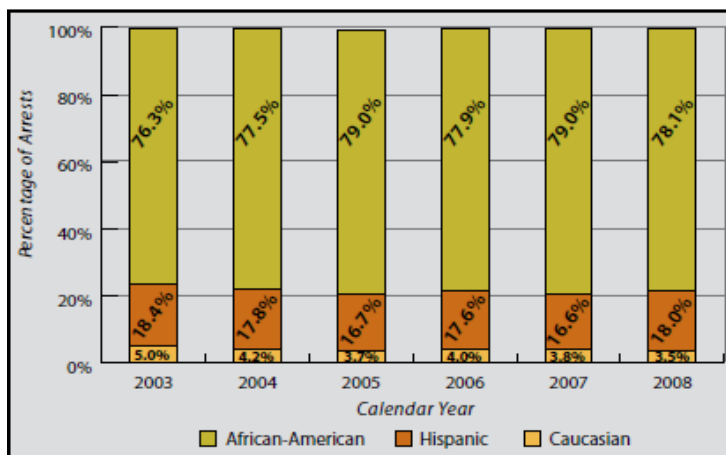
For the young people who reside in the urban area of Chicago, violence seems to be ubiquitous. Urban youth are defined as those who reside in and attend school in the city, and at-risk urban youth are considered those who are from the inner-city who live in urban, underprivileged neighborhoods who have faced adverse childhood experiences (ACE), placing them at considerable risk of greater social disadvantage (Herrman et al., 2011; Swahn et al., 2009). This social disadvantage is disproportionately seen in African American youth who reside in impoverished neighborhoods with limited resources (City of Chicago, 2010). Impoverished neighborhoods with limited resources, and low-income

areas are deemed risk factors for adolescents who reside in urban areas (CDC, 2009), thus making adolescence a time of increased vulnerability (Smit, 2009; Stoddard et al., 2013).

Because violence hits the highest point during the adolescent years (Stoddard et al., 2013) those in urban areas are plagued with being at the brunt of violence (Jain & Cohen, 2013). Chicago, one particular urban area, is plagued with being at the brunt of violence due to some of the following risk factors: poverty, a lack of jobs (chronic unemployment), community disorganization, youth with unstructured free time, a lack of affordable housing and a lack of places to purchase groceries (food deserts), subpar neighborhood schools, and minimal economic growth (University of Chicago, 2012; Moore, 2013). The importance of directing attention to urban youth as a vulnerable population due to the myriad risk factors has been stressed in the literature (Jain et al., 2013; Smit et al., 2009). The need to build sustainable programs, specific to urban youth, which ward off and prevent violent behavior at best is further magnified, as not addressing those factors can lead to potential arrests delineated by race and ethnicity, as seen in Figure 2.5 (City of Chicago, 2009).



**FIGURE 4:**  
**PERCENTAGE OF ARRESTS**  
**BY RACE/ETHNICITY, 2003 TO 2008**



*Figure 2.5.* Juvenile Arrest Trends, City of Chicago, 2003-2008

While the argument is made that youth who grow up in urban areas are considered a more vulnerable population due to myriad risk factors, which are later expounded upon in this chapter; and while some of those risk factors lend to violent behavior, some scholars note that behavior is siphoned and influenced by the media (Ybarra et al., 2008; Hall et al., 2012b). Exposure to non-school related media use is considered a risk factor when coupled with other risk factors including low socio-economic status and poor family support (Hall et al., 2012b; Krahe et al., 2011; Ybarra et al., 2008). Boxer et al., (2008) found exposure to non-school related media use to be one of the risk factors of concern among a group of 820 youth, 390 of whom were juvenile delinquents. The scores were obtained through “cross-informant modeling” (p. 417) of data obtained directly from the youths, their parents, and their instructors in school. Since most of those involved in the study were from “typical” community populations (p. 418) coupled with those from high-risk backgrounds, the significance of exposure to non-school related

media as a potential risk factor should be further addressed (CDC, 2008; Hall et al., 2012b). The city of Chicago houses approximately 23.1% young people under the age of 18 (United States Census Bureau, 2014a), signifying the need to address the risk factors that lend to violent behavior, including prolonged exposure to non-school related media and to also address protective factors that may buffer against violent behavior. Protective and risk factors have been studied by myriad scholars and any conclusion justifying a causal relationship between exposure to non-school related media use, urban youth and subsequent maladaptive behavior remains elusive (Ferguson & Kilburn, 2009). Jain et al., (2012) examined 1,166 at risk urban youth from Chicago in a multi-wave study. The authors posited that protective factors serve an important role in lessening the impact of children and youth who have been exposed to violence. Protective factors are further explored in the body of this literature review.

The literature is expansive regarding risk factors for violence among urban youth; however, sparse information has been available for shedding as much light on factors which protect when youth are exposed to non-school related media. Historically, scholars have presented research that embarked upon salient variables, specifically addressing the risks of exposure to non-school related media use coupled with the notable risk factors of youth who reside in the inner city (Hall et al., 2012b; Jain et al., 2012), thus, the urban areas where violence is more significant deserve to be addressed and given the opportunity to distinguish those risks that place urban youth in a vulnerable position and heightens the need for attention to factors that will, in turn, protect and buffer, if not

prevent a perpetual cycle of violence within generations to come. The following section presents the conceptual framework literature for this study.

### **Conceptual Framework: The Resilience Paradigm**

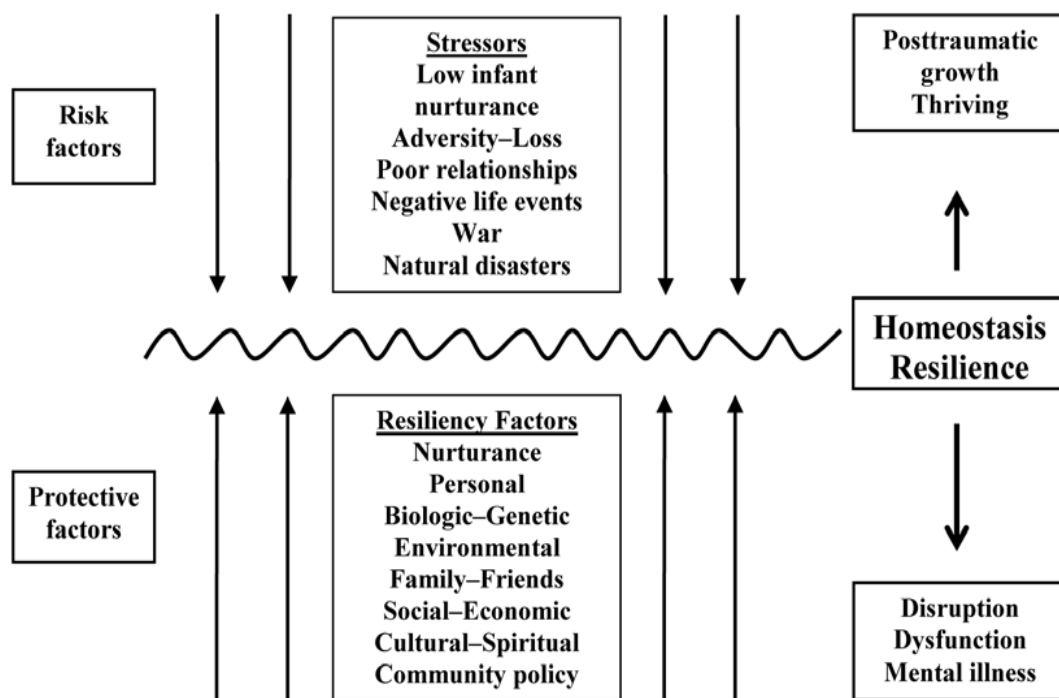
#### **Herrman et al. Model**

I examined the effect of exposure to prolonged non-school related media use on urban youth, using the lens of resilience. Resilience is an evolving concept for which the literature does not currently offer a single agreed upon definition, but which the majority of researchers characterize as a positive adjustment to dangerous or difficult life circumstances such that the individual is able to triumph and prosper (CFCA, 2013; Herrman et al., 2011; Masten, 2001; Phaneuf, 2007; Rouse, Longo & Trickett, 1999; Rutter, 2012). The specific characteristics associated with resiliency are also currently open to debate, with some investigators focusing primarily on the personality traits shared by resilient individuals, or ego-resilience (Masten, 2001); while other investigators emphasize protective factors in the environment that appear to buffer individuals from the impact of trauma or hardships (Herrman et al., 2011; Rouse et al., 1999; Rutter, 2012). This classic nature versus nurture divide is challenged by still other researchers who conceive of, and investigate resilience as a dynamic interplay among genetic characteristics, family influences, friends, social, economic, and cultural factors, as well as community qualities and resources (CFCA, 2013; Garmezy, 1991; Rouse et al., 1999; Rutter, 2012). Many investigators have focused on resilience in childhood or adolescence, portraying the phenomenon as a static achievement that allows troubled youths to develop into highly functional adults (Masten, 2001). Still other investigators

have examined resilience over the lifespan, and view it as a series of adjustments to life's challenges (Herrman et al., 2011; Werner, 1993). In one stream of research investigators have interpreted resilience as the antithesis of risk factors (Garmezy, 1991; Masten, 2001). More recently, researchers have turned their attention to the role of protective factors in resilient outcomes (Afifi & MacMillan, 2011; Jones, 2012).

Herrman et al. (2011) have developed an integrated and dynamic model of resilience to guide both clinical and public health practice. This model, based on an extensive review of the resilience literature, clarifies the breadth and depth of the concept as it is currently understood. The model is well suited to my investigation as it conceives of the spectrum of resilience factors as counterpoints to a corresponding spectrum of risk factors for personal dysfunction, social dysfunction, and mental illness. The model further conceives of resiliency factors as protective, with the potential to enhance continued personal growth and high level functioning in the wake of both acute and chronic stressors. This conceptualization is consistent with the CDC's current emphasis on understanding the role of protective factors in reducing the risk for youth violence (CDC, 2008). Further, the model's comprehensive nature is consistent with my research intent of examining a broad range of protective factors relative to my target population. For these reasons, the Herrman et al. framework was adopted for this investigation. The goal of this research was to further test the relationship between exposure to non-school related media use and subsequent violent behavior among, urban youth using the model of Herrman et al., (2011) as a reference. This model was employed for the locus of study, as it stems from the resilience paradigm. It supports and models the

interconnectedness of the variables in question, thus, giving rise to assisting with showing how some at-risk youth are more vulnerable to engaging in violence as a coping mechanism and others are not. The model is presented in Figure 2.6 below.



*Figure 2.6.* Factors That Enhance Or Reduce Homeostasis Or Resilience (Source: Herrman et al., 2011, p. 261 – See Appendix A)

Operationalizing the Herrman et al. model requires an appreciation for both the resilience factors and the risk factors that are most applicable to understanding youth violence. A review of the essential resilience literature follows.

### **Key Resilience Literature**

#### **Early Seminal Researchers of Resilience**

Resilience research has been evolving over the past six decades. And although resilience has been studied among scholar practitioners for the past 60 years, resilience

remains without a concrete, agreed upon definition among many multi-disciplinary practitioners (Herrman et al., 2011). The following three salient investigators are pioneers in resilience research.

### **Emmy Werner**

Emmy Werner is credited with establishing resilience as a legitimate area of investigation. Her Kauai Longitudinal Study challenged the widely held belief that adverse childhood circumstances inevitably led to a troubled adulthood (Werner, 1993; Thomas, 2011). Werner and her colleagues studied a cohort of multi-ethnic children born on Kauai in 1955 to assess the impact of adverse family circumstances, parental mental illness, and chronic poverty on childhood development. Out of a cohort of 698 children, half were born into poverty and a third of the study cohort deemed at high risk due to multiple adverse risk factors (Werner, 1993). Werner's team assessed the grouping at ages 1, 2, 10, 18, 32, and 40, initially to document the strength of the relationship between unfavorable circumstances and impaired growth and development (Aldwin, Cunningham & Taylor, 2010; Thomas, 2011; Werner, 1993). The surprising results of this investigation were that, contrary to the researchers expectation, the majority of challenged children proceeded to develop normally and ultimately became functional adults (Aldwin et al., 2010; Werner, 1993). Werner and her team were able to determine that the challenged children that followed a normal developmental trajectory had been assessed as having a relaxed disposition that was engaging to their care givers. Over the course of their childhood, these children demonstrated intelligence, a clear sense of autonomy, good communication and problem solving skills, and a well-developed sense

of personal control. Further to this, Werner teased out the contribution of social factors, noting that these resilient children also had at least one positive adult caregiver and exposure to positive community resources, including membership in socially recognized and approved activities and organizations. The legacy of this investigation was not only the then ground-breaking conclusion that adversity does not necessarily condemn a child to a life of dysfunction, but that both personal traits and social factors contributed to resilient outcomes. Werner's research set the stage for further investigations into resilience-related factors which would include both the ego-resilience school of resilience and the social and environmental nurture paradigm (Garmezy, 1991; Masten, 2001; Thomas, 2011; Werner, 1993).

### **Norman Garmezy**

Given his 1974 study of the heritability of schizophrenia, Norman Garmezy is ascribed as a seminal pioneer in the study of resilience. With his investigation of the offspring of schizophrenic women, he determined that a subgroup of his study population functioned highly despite their exposure to a schizophrenic parent (CFCA, 2013; Garmezy, 1974; Rutter, 2012). Garmezy concluded that it was the presence of protective factors that supported the strength he saw exhibited in this group of children (CFCA, 2013; Garmezy, 1974; Masten, 2001; Rutter, 2012). With the launch of this early research, Garmezy declared that children who are resilient are those who, regardless of their genetic predisposition, are able to adequately adapt to life's disadvantages and complexities (CFCA, 2013; Garmezy, 1974; Rutter, 2012).

Norman Garmezy completed multiple studies which added further evidence of support of the factors uncovered by Emmy Werner. He developed a robust list of the individual attributes, the relationship attributes, and the external supports that contribute to childhood resilience. He also examined different forms of resilience, including resilience in the face of high risk and bouncing back from trauma, both of which are applicable to this study.

Garmezy's 1991 study of children born into poverty was distinct in that he determined that adult support, educational support, faith based organizations within the community and other protective factors, were associated with greater personal aptitude, a greater learning capacity, and ongoing adaptability. These positive outcomes were further linked with a greater potential for the children to pursue successful lives (Garmezy, 1991). Garmezy additionally provided insight into dysfunction and resilience as a function of circumstances beyond the racial divide by focusing on the nation's poor, ghetto-dwelling children (Garmezy, 1991, p. 416). Through his research, Garmezy outlined the realities of racial disparities, citing that two of three poor children in the U.S. were Caucasian, while 50% of all Black children were living in poverty, and two of five Hispanic children suffered the same fate. All of the children shared the common set of circumstances: living in a female headed, underprivileged household (Garmezy, 1991). In this 5 year investigation, Garmezy noted that risk factors for urban ghetto youth began at birth as a lack of maternal access to prenatal care and adequate nutrition, which led to low birth weight babies at risk for health and behavioral problems throughout childhood and beyond. Ghetto mothers were frequently unemployed single parents unable to



adequately support their offspring. Children in these circumstances were also at higher risk for becoming victims of child abuse than children from nurturing backgrounds (Garmezy, 1991). This study incited the need to explore transgenerational demise (the potential or expected demise occurring across multiple generations as a result of poverty) yet noting that although downfall was the expected outcome, it was not the ultimate result (Garmezy, 1991). After studying three generations, Garmezy found that 50% of the high risk ghetto children did not repeat the cycle of dysfunction in adulthood, to which they were exposed to as children (Garmezy, 1991), thus, questioning the widely held perception of a transgenerational cycle of poverty (Garmezy, 1991). Garmezy was able to conclude that protective factors: a change in the stressor that may have resulted from one's personality, unity among families in poverty, a present and caring adult, and other support derived from within church or community were related to improved developmental outcomes for children raised in poverty (Garmezy, 1991).

### **Michael Rutter**

Similar to the 1955 Werner study, Rutter et al., engaged in an epidemiologic investigation. This time the target population was inner-city school aged children, between the ages of 10-11, living in London (Garmezy, 1991). Rutter regarded Norman Garmezy as “one of the most important pioneers in the conceptualization and study of resilience...” (Rutter, 2012, p. 335) for his study of schizophrenic women and their offspring. Rutter consequently developed an investigation of his own emphasizing the gene-environment interaction (Rutter, 2012). Rutter et al., examined the influence of the school environment on student achievement or delinquency by comparing the

developmental path of students from high attainment schools and low attainment schools (Garnezy, 1991). The children underwent a series of assessments during their last year of primary school and were then reassessed at the ages of 14-16. Rutter and his team found that the schools in the disadvantaged regions showed discernible differences in the rates of criminal behavior (delinquency), manners, student attendance and scholastics (Garnezy, 1991). One discernible difference was that the rate of criminal behavior in one school was three times that of another school (Garnezy, 1991, p. 426). Contrary to expectations, the investigation also showed that regardless of school settings, those in disadvantaged areas and those with high attainment, mirrored similar characteristics that showed that students who were high achievers were less likely to engage in criminal conduct, skip school and do well scholastically regardless of the school they attended (Garnezy, 1991). The most notable differences were identified at the time of leaving the school as opposed to when studies at the disadvantaged schools began (Garnezy, 1991). Because the study allowed for continued assessment for one year following school completion, the investigators were able to document better adult outcomes even among those students from pitiable familial circumstances, giving acknowledgment to having protective factors in place (Garnezy, 1991). Rutter and his team attributed those findings to academic support, fostering high self-esteem; promotion of social and scholastic success regardless of the school setting (Garnezy, 1991, p. 425); the conclusion being, school, as an agent for adjustment to stressors that children potentially face, may be a viable factor of protection. Rutter (2012) has since identified nine distinct approaches to resilience research: gene-environment interactions, low risk vs. high risk individuals, the

role of risk and or protective factors, biologic investigations, extrapolations from animal models, “turning point effects” i.e. matrimony or military service for those from low socioeconomic status, as noted during the Great Depression (p. 342), qualitative investigations to determine the “meaning of experiences” (p. 342), scientific influence i.e. ability of change within the brain attributed to outside influences, and notation of outcome for those who have faced adversity with successful rebound. In identifying this typology, Rutter highlighted resilience’s conceptual breadth and as emphasized by the aforementioned seminal pioneers, the need to acknowledge, and be sensitive to the contributions of the environment (Masten, 2001; Rutter, 1999, p. 124).

In detailing each pioneer in the study of resilience, the common theme is resilience as it relates to children at risk. These seminal researchers viewed resilience as a dynamic concept capable of accounting for developmental success in the face of stressors, adversity, or poor life circumstances (Garmezy, 1991; Herrman et al., 2011; Masten, 2001; Phaneuf, 2007; Rutter, 2012). The focus of this study was centered on the effect of exposure to non-school related media use on at-risk youth. Resilience is conceived as a conceptual buffer mitigating against the reflexive subsequent violence. By understanding the resilience factors that are notably protective in this circumstance, my study could provide new and better detailed evidence either supporting or not supporting the role of exposure to non-school related media use in the violent behavior of urban youth. Table 1 summarizes the findings and the contributions of the early seminal researchers.

*Table 1. Early Seminal Researchers, Study Of Importance And The Resulting Definitions of Resilience*

<b>Seminal Researcher</b>	<b>Study of Importance</b>	<b>Risk Factors</b>	<b>Factors associated with Resilience</b>	<b>Resilience defined</b>
Werner, Emmy	Kauai Longitudinal Study of 1955 provided the first evidence that adversity need not lead to dysfunctional outcomes.	Perinatal stress; Poverty; Parental psychopathology; Disruption of family unit (Werner, 1993, p. 503)	Self-help skills; Positive self-concept; Autonomy; Supportive adults (Thomas, 2011; Werner, 1993, p. 503;)	Successful coping “with ... biological and psychosocial risk factors” (Thomas, 2011; Werner, 1993, p. 503;).
Garnezy, Norman	1974 study of the heritability of schizophrenia; investigated the offspring of schizophrenic women, noting high functioning despite exposure	Genetic liability; environmental risks; psychosocial disadvantage	Positive personality traits; nurturing family; external support	“...Adaptive patterns of social behavior and work achievement” (Rutter, 2012, p. 335); adequately adapting to life’s disadvantages regardless of the genetic predisposition ; (CFCA, 2013)
Rutter, Michael	1979 Study of inner-city children in London in relation to the impact of school influence on cognitive competence	Adverse family conditions; environmental disadvantages; deprivation	Academic support; fostering high self-esteem; promotion of social and scholastic success (Garnezy, 1991, p. 425)	“...relative resistance to psychosocial risk experiences” (Rutter, 1999, p. 119)

## **Key Variables and Concepts Related to Risk and Protective Factors**

### **Risk Factors For Youth Violence**

Any factor that elevates the possibility that a young person will engage in violent behavior is deemed a risk factor (CDC, 2012a). Conceptually, myriad variables are defined as risk factors. In reviewing the literature, a risk factor has not been defined as causal of violence among youth (CDC, 2011a), however, the vulnerability of a young person growing up in an urban environment and exposed to violence is often due to: low socio-economic status, lack of family stability, lack of community efficacy, and/or poor peer relations (APA, 2013b; CCT, n.d.; CDC, 2012a; Hall et al., 2012b; Herrmann et al., 2011; McDaniel, 2011; WHO, 2002; Ybarra et al., 2008), and personal victimization (WHO, 2002; Herrman et al., 2011; CDC, 2012a; APA, 2013b; CCT, n.d.). The following review of the literature pertains to each aforementioned risk factor that reportedly serves as a segway to youth violence. The first of those variables to be expounded upon is low socio-economic status.

***Low Socio-Economic Status.*** Households with low socio-economic status are not unique to urban Chicago, but prevalent across the nation. In the city of Chicago, 76% of Chicago Public School students received free lunch in 2011, while another 6% received reduced lunches (Ahmed-Ullah, 2014). The United States (U. S.) Census Bureau reported approximately 15.4% persons in the United States living below poverty level from 2009-2013; the city of Chicago had a somewhat higher rate of persons living below poverty at 22.6% (U.S. Census Bureau, 2014c). Research from Hardaway, McLoyd and Wood (2012), CDC (2012a) and WHO (2014) confirmed that children who are reared in

environments with chronic exposure to poverty, low socio-economic status, deprived conditions, and little parental support are in a predisposition for exposure to or participation in violent activity. After a study with 391 low income, urban youth between the ages of 13-17, Hardaway et al., (2012) posited that low socio-economic status is in some way connected to a distinct set of risk factors for children, especially those who are of ethnic minority.

There are approximately 10.3% persons under the age of 18 living below poverty level (U.S. Census Bureau, 2014c); and 86% of children, who in 2012, attended Chicago Public Schools, who came from families that were of low socio-economic status (City of Chicago, n.d.). This is almost double the number of students from low income families across the state of Illinois, which is only 48% (Chicago Public Schools (n.d.), thus, making it a significant variable to address in violence prevention. Children who grow up in low income urban areas are not destined to succumb to violence (City of Chicago, n.d.; Allison, Edmonds, Wilson, Pope & Farrell, 2011). According to the researchers there are protective factors i.e. participation in extracurricular activities and good relationships between children and their parents that may suitably buffer the risks of being reared in a low income family (Allison et al., 2011; Hardaway et al., 2012). These protective factors are discussed later within this literature review. This study has highlighted low socio-economic status (SES), as it is in some way linked to the risk factors for urban youth. The unification of those risk factors and the consequences thereof are shown in this study for the sake of addressing them at-large with intended recommendations for those who work with young people and their families.

***Lack of Family Stability.*** Parents who are harsh, unsupportive, and provide little emotional nurturance to a growing child, place that child at risk for youth violence. The CDC describes those aforementioned variables as family risk factors (CDC, 2011a). Growing up in a single parent family and poor relationships between a parent and a child are deemed risk factors for aggressive and violent behavior (CDC, 2011a; Ybarra et al., 2008). From 2009-2013, the city of Chicago maintained approximately 111,847 youth under the age of 18 in a single parent household (U. S. Census Bureau, 2014b). According to the longitudinal study by Henneberger, Durkee, Truong, Atkins and Tolan (2012) of the 364 inner city adolescent male participants from the Chicago Youth Development Study, 62% of the 10-15 year old boys lived in single parent households and the majority were low income; all were considered at risk. To further substantiate the nature of risk due to a lack of family stability, Kassis, Artz, Scambor, Scambor, and Moldenhauer (2012) completed a cross-sectional study on family violence and resilience. Of this random sample of 5,149 middle school students in 4 Eastern European countries, resilience was strongly linked to personal and relational characteristics, while exposure to family abuse, harsh parenting styles and witnessing physical spousal abuse were deemed connected to a direct experience with violence (Kassis et al., 2012). After the three-stage analysis using logistic regression procedures (separating by gender i.e. boys and girls) Kassis et al., (2012) found that the students were able to counter violence if they were able to talk to a parent or a friend, thus demonstrating the value of family stability in preventing youth violence.

***Lack of Community Efficacy.*** Poverty, neighborhood depravity, and community

homelessness are all social conditions that may lend to the cycle of maladaptive behaviors (Aisenberg & Herrenkohl, 2008; Braveman, 2010; Ybarra et al., 2008). A myriad of scholars have studied and found that one of the key predictors of neighborhood level violent crime is a lack of “collective efficacy” (Braveman, 2010; City of Chicago, n.d., ; Allison et al., 2011; Ybarra et al., 2008; ). When a community lacks efficacy, that is, the ability to have confidence in knowing that those within the community are cooperatively working together and seeking what is best for all who live there it places the youth within that community at higher risk for the propensity to engage in violence (Allison et al., 2011; Braveman, 2010; City of Chicago, n.d.). This violence may be as a means of survival (LeBlanc, Self-Brown, Shepard, & Kelley, 2011) or as a reaction to being victimized, as noted in the LeBlanc et al., (2011) study in which 90 adolescent participants in 7<sup>th</sup> – 12<sup>th</sup> grade overwhelmingly (96%) reported exposure to violence, both physical and verbal. Hardaway et al., (2012) shared that for a lot of the families who reside in communities that are unsafe and riddled with violence, children are sheltered by being denied access to freely play in the community, thus, creating stress on the activities of daily living and the inability to build positive relationships with those around them (Stoddard et al., 2013). This, coupled with cognitive, emotional and behavioral effects on inner-city children can lend to subsequent violence if coping strategies are not implemented within the community (Jones, 2007; Medina, Margolin, Gordis, Osofsky, Osofsky & Miller, 2002). This was solidly demonstrated when Voisin, Bird, Hardestry and Shiu (2011) completed a study among African American youths from Chicago’s south side; a study in which Voisin et al., (2011) garnered a sample of 32 African



American high school students to assess coping skills amidst violence within the community. Voisin et al., (2011) found that exposure to violence was more prevalent among the adolescent males, who with school interventions could be able to better cope with violence in the community. Community cohesion and efficacy is deemed as a combatant to the atrocities of violence (Nowell & Boyd, 2010). Evidence also shows that community involvement via programs and joint approaches can provide the stamina that youth need to deal with the surrounding violence, thus, awarding the opportunity a neighborhood needs to prevent further moral decay (Aisenberg et al., 2008; Allison et al., 2011; Hardaway et al., 2012; Nowell et al., 2010). This study has emphasized the need for community efficacy because the community suffers when the community does not provide the necessary resources for its young people to thrive. The consequences affect the whole community when the depravation is not addressed, especially for those affected by the aforementioned risk factors.

***Poor Peer Relations.*** Herrman et al., (2011) posited that poor relationships and negative life events serve as stressors and subsequently serve as factors that reduce homeostasis or balance in life. It is during adolescence that influences from peers increase (Stoddard et al., 2013). Influences from peers are often constructive and helpful or unconstructive and detrimental, noting that an association with peers who are delinquent increases the possibility for engagement in violence or other maladaptive behavior (Stoddard et al., 2013). Henneberger et al., (2012) in their longitudinal study (over the course of 7 years and five waves), which focused on the relationship between peer violence and popularity and delinquency in adolescent boys, found that “peer

violence is positively related to boy's delinquency" (p. 1651). The Hennenberger et al., (2012) study was vital to this segment of the literature review, as its study sample is from communities within the inner city of Chicago, where delinquency is widespread and peer relationships may be vitally important.

*Personal Victimization.* Best exemplified through a focus group, authors Wade, Shea, Rubin and Wood (2014) focused on young adults who grew up in low-income, urban Philadelphia neighborhoods to ascertain common stressors. What Wade et al., (2014) discovered through nominal group technique, is that coupled with media and technology, the participants identified personal victimization as one of the 10 most common stressors. Gibson (2013) recognized the importance of teaching youth how to adequately find his or her way through the neighborhoods that are often disadvantaged via two waves of self-report data and logistic regression. Because personal victimization is one of the risk factors for youth violence in urban areas, avoiding exposure to non-school related media, which is known to be suggestive of further violent behavior, teaching youth how to circumvent personal victimization remains paramount (Gibson, 2013).

Urban youth have the same basic needs that young people anywhere have. The need for adequate food and housing, a safe environment, clothing, caring adults and a sense of belonging are universal in nature (Mello & Nader, 2013). Without basic needs, the predisposition of heightened vulnerability comes to the forefront of adolescent development. Heightened vulnerability gives rise to the possibility that the urban youth are open and vulnerable to taking cues for behavior and problem solving from delinquent

peers and from the media, both of which are substantially influential during the growing years (Anderson et al., 2012; Stoddard et al., 2013).

### **Protective Factors Against Youth Violence**

Family and social networks (Herrman et al., 2011; McDaniel, 2011; Jain et al., 2011; Jain et al., 2013; APA, 2013a; Stoddard et al., 2013; CCT, n.d.), schools (Henry et al., 2012; Hall et al., 2012b; Stoddard et al., 2013), protective personal traits (Herrman et al., 2011; McDaniel, 2011; Hall et al., 2012b; Jain et al., 2013) and youth programs (Herrman et al., 2011; Hardaway et al., 2012; Hall et al., 2012b) are four factors consistently described in the literature as buffers against violence among urban youth. Protective factors have not been entirely ignored; however, it is risk factors that have garnered much of the attention when studying violence among urban youth (CDC, 2011a; Hall et al., 2012a). Relevant literature regarding the CDC's call to further investigate protective factors with equal attention in prevention of violence is herein implemented. Family and social networks is the first protective factor for review.

*Family and social networks.* Hardaway et al., (2012) and Stoddard et al., (2013) asserted that a relationship with caregivers remains important throughout adolescence and this relationship can serve as a protective factor. Hardaway et al., (2012) went on to say that the parent and adolescent relationship assists with social and emotional adjustment including the difficulty of delinquency. The Hardaway et al., (2012) research was supported by cross-sectional and longitudinal studies that maintained various aspects of the parent/child relationship, including, "warmth, support, closeness, conflict, and communication" at its center (p. 114). This study further supports the significance of

having family and support networks in place for urban youth. Social support networks were recognized as an important protective factor when the constituents for the city of Chicago addressed its initiative for youth violence prevention (City of Chicago, n.d.). Opportunities for all youth should bear consideration among policy holders, however, a vested interest in those who are at risk requires specific designation, thus, the city of Chicago has expanded its opportunities for high-risk youth inclusive of mentoring programs, better training of agencies providing care to children and families, and programs that specifically address high risk youth involved with the justice system (City of Chicago, n.d.). Because the focus of this study has been centered on Chicago youth, this effort is symbolic of the recognition that high-risk, urban youth require carefully tailored programs that address the unique needs with which they present (City of Chicago, 2010). And, that, building relationships and partnerships with family, social networks (including faith-based organizations), schools and youth organizations can serve as an asset to protection from the consequences of violence exposure (City of Chicago, 2010). A shared vision among youth and the ecological environment by which they are impacted may push the adolescent toward social change. This study tested the relationship between protective factors, exposure to non-school related media use, resilience and youth violence among urban youth, highlighting that marginalized youth require basic services and supports that allow stability in the face of everyday crises (Pittman, Tolman, Yohalem, & Ferber, 2011). It is the implementation of basic services that lend to resilience (Hardaway et al., 2012).

*Schools.* Also recognizing the need for school-based programs in urban areas to

deter youth from violence, the city of Chicago has implemented plans to ensure restructured programs (tutoring, truancy reduction, and alternative learning environments included) within the schools as a means of “reconnecting high-risk youth to school” (City of Chicago, n.d., p. 1). It is not enough to implement programs within schools and social networks for urban youth if they lack protective personal traits. Protective traits are not to be implemented in silos, but rather interfacing in nature, thus, providing the best firewall against violence among youth who live in the city. Lewis et al., (2013) argued that these personal protective traits can be obtained in school programs. Lewis et al., (2013) were able to evaluate the effects of school-based social and emotional learning in a health promotion program, at which time participants from 14 Chicago Public Schools over a period of six years engaged in the Positive Action Program, through which the students were able to learn how to maintain healthy thoughts and behavior. This is vitally important when myriad risk factors, including exposure to non-school related media is influential, especially in grades 3-8 as was the case in the Lewis et al., (2013) pool of participants. The following segment is a composite of protective personal traits that may also serve as protective factors in deterring against youth violence among urban youth.

***Protective Personal Traits.*** Scholars have recognized individual character traits that are deemed personal in nature and also serve as protective factors for young people who are exposed to violence. Donnellan et al., (2009) concluded that these “personal characteristics can facilitate resilience” (p. 1646). Personal characteristics were defined as the variations in which people think, feel and act individually from youth through adulthood (Donnellan et al., 2009). Good problem solving skills, emotional self-control,

positive self-concept, sense of personal responsibility, an easy going disposition, and empathy are among the various characteristics (Donnellan et al., 2009; Marano, 2012), especially helpful for coping when exposed to violent and influential media.

***Good Problem Solving Skills.*** Urban youth sometimes lack good problem solving skills due to environmental restraints (Stoddard et al., 2013). However, good problem solving skills, coupled with other personal protective traits are assistive in reducing risk factors and strengthening protective factors for the adolescent population (Mello et al., 2013). Good problem solving skills include the capability of planning ahead, thinking critically when faced with a dilemma and the ability to pursue resources for dissolving adverse situations (Mello et al., 2013; Pittman et al., 2011) This is an important aspect of this study because for those young people who have adults who are able to listen, guide and help set goals, the viability of coping when exposed to violence is enhanced (Pittman et al., 2011). As noted in the resilience literature, there are a large range of factors that protect, including the advantage of having at least one positive adult care giver in the life of an at-risk youth, notably contributing to social factors that aid in resilience and deter from adverse situations (Herrman et al., 2011; Werner, 1993).

***Emotional Self-control.*** Researchers have been relentless in trying to ascertain what young people, especially those from the inner city, need to assist them with coping when feeling threatened or victimized. Among these youth, one of the factors that incite the need to engage in violent behavior as a result of personal victimization is the lack of emotional self-control. Emotional self-control is an individual characteristic which, similar to anger management, allows youth to recognize the warning signs of becoming

physically angry, utilize internal self-talk, and implement calming strategies (Mello et al., 2013). Among the social factors that aid in resilience, for these young people, urban youth, is having a clear sense of autonomy (Werner, 1993). Emotional self-control is relative to this study because, for youth who have clarity in who he/she is and are able to independently maintain a calm temperament, influence for engaging in maladaptive behavior/violence is minimized (Mello et al., 2011).

***Positive Self-concept.*** Historically, Garbarino (1995) posited that young people who are successful in life hold the belief that they have the capability to continue success. Present day researchers continue to support positive self-concept as a protective factor against youth violence, as the ability to believe in oneself and ones capabilities is one of the keys to coping and resilience (Mello et al., 2013). Positive self-concept as a protective factor is important to this study because young people who are exposed to violence often lack the propensity to bounce back if appropriate supports are not in place. This study addresses those supports.

***Sense of Personal Responsibility.*** The autonomy exuded in youth who consistently make an effort to resolve the problems they face and overcome the challenges that are presented in life are seen as possessing one of the personal protective traits necessary to cope with exposure to violence (Pittman et al., 2011). When a young person maintains a sense of personal responsibility, the urge to fight violence with violence is minimized. Mello et al., (2013) evaluated the use of the violence prevention program through the Second Step Program, which prides itself in implementing a sense of personal responsibility in all participants from preschool through junior high. The

program was found to be successful based on the students' ability to independently implement conflict resolution without adult supervision (Mello et al., 2013). Having a sense of personal responsibility is relevant to this study, as young people who obtain and maintain a sense of personal responsibility, especially through programs that are supportive, are thereby able to show forth resilience (Mello, 2013). According to each resilience pioneer delineated in this study, Werner, Garmezy, and Rutter, a key deterrent to rising above adversity is the ability to learn from supportive programs (in this case, Second Step Program), in moving away from the defeat of a challenge and into the light of resiliency by enacting a clear sense of responsibility, showing that a personal protective trait, a sense of personal responsibility is a buffer between young people and the complexities of the environment (Garmezy, 1991, Rutter, 2012, Werner, 1993).

*An Easy Going Disposition.* The capability of responding to and coping with adverse situations with a temperament that is positive is duly noted as a coping mechanism and a protective factor (Mello et al., 2013; Pittman et al., 2011). Researchers have posited that at-risk youth, when exposed to violence are better able to use resources from within to respond in a way that does not adversely affect themselves or others when they possess an easy going disposition (Mello et al., 2013).

*Empathy.* The ability to comprehend or adopt the ability to relate to the feelings and thoughts of others is known as empathy (Pittman et al., 2011). This study maintained a component of protective factors that researchers posit as mitigating factors against youth violence. Empathy is one of those mitigating factors; because young people are often desensitized due to the deprived surroundings in which they live, the value of



having empathy (the ability to care about others) remains important (Mello et al., 2013). The ability to maintain a friendship and relationship with another human being, knowing how to put forth effort to help others and understanding how to relate to others are all characteristics of empathy (Pittman et al., 2011), which serves as a protective factor (Donnellan et al., 2009).

Because each of these protective personal traits are interdependent and sometimes overlap one another, Pittman et al. (2011) posit that adolescent development is a time of ongoing complexity and influential phases, thus, it is important that young people receive careful guidance in implementing and practicing the application of these traits into everyday life. Careful guidance of a caring adult, one who will emphasize the importance of maintaining a relaxed disposition, intelligence, a clear sense of autonomy, good communication, problem solving skills and personal control (Werner, 1993), all of which are deemed protective personal traits; all of which have been noted by the seminal pioneers of resilience and deemed helpful to the healthy development of urban youth, in contrast to the reflexive subsequent violence after exposure to violence (CFCA, 2013; Garnezy, 1974; Masten, 2001; Rutter, 2012). In this study, the relationship among urban youth and exposure to non-school related media use with subsequent violence are viewed as being impacted by risk factors previously discussed and each trait discussed here are relevant, as they are viewed as a means of protection from youth violence (Donnellan et al., 2009).

***Youth Programs.*** All young people need to be able to communicate with others and all young people need places where they can go for support (Pittman et al., 2011).

Named as one of the three overarching protective factors for urban youth, youth programs, even those that are school-based have been deemed helpful in deterring youth who have been exposed to violence from repeating what they have been exposed to (Lewis et al., 2013). The University of Chicago Crime Lab (2012) implemented one of the largest randomized clinical trials with participants from an urban population. On the precedent that youth violence is one of Chicago's most pressing issues, the collaborative effort enrolled approximately 2,500 disadvantaged adolescent males from 18 of Chicago's schools within low income neighborhoods, to in-school, after school or control group (University of Chicago, 2012). The results were surprisingly positive for those who were able to actively participate, with a noticeable increase of social and cognitive skills and better school participation; there was also a 44% decline in violent crime by those who were able to enroll and participate (University of Chicago, 2012). Because of prior researchers who have identified the importance of social-cognitive functioning, education and minimal violence among the adolescent population (Marano, 2012), this project was deemed a success and further exemplifies the need for youth programs as a protective factor for urban youth in deterring violent behavior even in high impact urban areas. The research supports the heightened need for protective personal traits among youth (CFCA, 2013; Garmezy, 1974; Masten, 2001; Rutter, 2012). Youth programs are highlighted as important, as the youth programs house staff who impart those protective personal traits: (i.e. social skill building, communication skills, and problem-solving skills) to young people who need it the most (Pittman et al., 2011). These protective personal traits have been explored within this review of the literature.

For susceptible youth, the absence of making a connection to an external resource has been shown to have adverse results (Mello et al., 2013). Here is what we know, researchers have shown the importance of family, social networks, schools, youth programs and personal protective traits during the time of adolescence, noting that this connection may also be a protective factor (Hardaway et al., 2012; Stoddard et al., 2012). Without a connection to positive resource, the adolescent is vulnerable to the dictates of the environment (Mello et al., 2013; Pittman et al., 2011). What we yet need to learn or come to know is what catalyst heightens the propensity towards violence? We have looked at risk factors. We have looked at protective factors; however the specificity needed in the research is: to what end does exposure to non-school related media use impact urban youth, especially for those who lack family and social support and come from poverty and are without protective personal traits, as delineated in this review of the literature.

### **Key Variables and Concepts Related to Exposure to Non-School Related Media Use**

#### **The Influence of Media**

The definition for ‘influence’, according to the Oxford Dictionary of English is “the capacity to have an effect on the character, development, or behavior of someone or something” (Oxford Dictionary of English, 2009, Kindle Edition). Exposure to non-school related media includes the usage of television, video games, motion picture, computer, social media, music, animation, magazines, books, educational and pro-social media (APA, 2014; Beresin, 2014; CDC, 2015). This study was limited to the use of television, video games, computer games, and social media. Social media is an

expression form among urban youth which continues to serve as a gateway to violence exposure (David-Ferdon & Hertz, 2009; Ybarra et al., 2008). Adolescent youth spend a substantial amount of time engaged in the media (Anderson et al., 2012). Exposure to non-school related media has not been deemed as direct causation to violence in at-risk youth (Ferguson, 2009b), however, this same exposure among youth remains a societal and public health concern among politicians, parental groups, and policy makers, especially due to a lack of physical inactivity due to time spent sedentary with non-school related media (CDC, 2014; Ybarra et al., 2008). Although the consensus among parenting groups and the American Academy of Pediatrics (2001) is that some media maybe harmful to the adolescent population (Ybarra et al., 2008), other scholars such as Anderson et al., (2012) and Ferguson et al., (2009b) have posited helpful effects of some video games. While scholars like Anderson et al., (2012) provide a perspective, showing that video games may have helpful effects such as “pain management, coordination and spatial cognition, pro-social behavior, education and exercise” (pp. 57-59); they also shared harmful effects of video games, which include: addiction, short attention span, poor academic performance and an elevated level of aggression. That, being said, indicates that the relationship between myriad variables, such as non-school related media exposure, risk and protective factors, coupled with the resilience paradigm, and the impact on youth violence remains disputed (Ferguson, 2009b). Because many studies have been completed and different results have been reached regarding the effects of exposure to said media among young people, further study remains necessary (Wilson,

2008; Ferguson, 2009a; Ferguson, 2010; Ferguson, 2011; Gentile et al., 2011; Peeters, 2012; Williams et al., 2013; Prot et al., 2014).

Exposure to non-school related media use might influence children in urban areas, affecting growth and development into law abiding citizens, but rather influencing their growth and development into desensitized violent adults, especially if the media contains violent matter. The research questions remain: Is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth? And, is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth? According to Anderson et al., (2012) exposure to media (video games and computer games) stands independent as a risk factor, however, there are no scholars who study aggression who have unequivocally posited that this exposure alone is the source of maladaptive behavior.

To ascertain a relationship between youth violence and prolonged exposure to non-school related media use, the YRBSS has been conducted to assess for that health behavior that places young urban youth at risk for violent behavior. Among several studies that have been completed over the past decade, Anderson et al., (2003) shared a report they completed after summarizing their observation of the available literature concluding: 1) a uniform definition of violence vs. aggression is needed, 2) violence is rarely a result of a single variable and that exposure to video games and computer games as media is one such variable, 3) it becomes necessary to acknowledge the developmental perspective when formulating thoughts about the impact of media and adolescent

behavior and 4) methodology used in any research pertaining to a relationship between youth violence and exposure to media, especially those with violent content, should be carefully reviewed before reaching a conclusion. In 2005, Browne and Hamilton-Giachritsis completed a study referencing the influence of violent media (television, video and computer games) on children and adolescents, at which time they concluded that violence in the media is a factor in child and adolescent development. This was based on a meta-analysis of available literature, yet still noting the continued debate about methodological issues as referenced earlier by Anderson et al., (2003). In the Browne et al., (2005) meta-analysis study, the first example yielded results from a longitudinal study over a period of 17 years in which a community sample of 707 individuals were assessed and resulted in “high exposure to television has been assumed to be likely to lead to high exposure to television violence” (p. 703); thus, concluding that copious television viewing during adolescence resulted in “probable” exposure to violence, thus increasing the possibility for negative and aggressive behavior. This conclusion was determined after controlling for other risk factors (Browne et al., 2005). The second example in the Browne et al., (2005) meta-analysis was that of 557 children, also in a longitudinal study over the course of 15 years, which showed through structural equation modeling; that children exposed to violence in the media (television, video and computer games) were likely to engage in aggressive behavior in early adulthood; this study also controlled for other risk factors. In both cases, exposure to non-school related media use was predictive of aggressive behavior, carefully noting that an association between non-school related media use and violent behavior is not synonymous to a causal relationship.

While non-school related media use remains as a risk factor for youth violence, the research remains unclear on causality of subsequent bellicosity. Ferguson (2010) noted that some of the research has made it clear that there is a link between playing violent video games and aggression, while other researchers do not render the same conclusion. The American Academy of Pediatrics [AAP] (2001) asserts that exposure to media violence (via television, video and computer games) is responsible for numerous problems in the health and well-being of children and youth, including anxiety, inability to sleep, desensitization, sadness and maladaptive behavior. At the initial start of this writing, the AAP information had not been updated since 2001 and provided no coverage for the role that protective factors may serve in the wake of prolonged exposure to non-school related media use. The link between potential media violence from prolonged television viewing, video or computer games and aggression is considered weak at best. Some studies state that the linkage between the two is clear; however, a comprehensive search for available literature fully supporting this conclusion yielded very few arguments that made youth exposure to prolonged non-school related media use a cause for behavior thereafter.

The age of adolescence is an industrious time. The social learning theory introduced by Bandura in (1972) has been a focal point of interest for those studying violent behavior. Ever since Bandura's graphic demonstration of vicariously learned violence toward the Bobo doll, public health professionals and psychologists have been concerned about the potential for vicarious violence to spur real life violence among our nation's youth (Ferguson, 2010). And now with the display of violence made evident via

media, exposure to such is under question about its impact among youth who are vulnerable. The literature on whether this exposure to media is a direct causal factor of youth violence and aggressive behavior among at-risk youth, presents conflicting evidence. While there are many risk factors that impact these vulnerable youth, exposure to violence in the media (television, video games, and computer (social media) is one such notable singular risk factor, of which its facets as listed are further explored within this chapter.

More recent research has shown that because of the tech-saavy nature of today's society, young people are vulnerable for exposure to violence through electronic (social) media (Herrick, Fakhouri, Carlson & Fulton, 2014; O'Keeffe & Clarke-Pearson, 2011). Over 10 years ago, Anderson et al., (2003) completed a study which shed light on the influence of media violence on youth. The modes of media included in the Anderson et al., (2003) study encompassed television, film, video games, and music. And now, twelve years later, while research remains vast in most or all aspects of youth violence, the area that has yet to receive magnification is that of the tremendous role of protective factors for youth directly exposed to violence (ETV) via television, video and computer games and computer (social media). Protective factors for youth with prolonged exposure to media may be helpful in the effort toward building resilience (Jain et al., 2012). The following conduits of media were identified by the Center for Sport Policy and Conduct during a 1999 Senatorial report: television, video games, computer games, computer/internet, and music; some of the same media outlets as studied by Anderson et al in 2003. Again in 2008, Ybarra et al., in a cross-sectional study which showed the



relationship between internet and exposure to non-school related media use, also identified the same conduits as primary sources for the delivery of violent media available to adolescents (Tortolero et al., 2014) including urban youth.

**Television.** As one group of scholars contended, “Television violence may be realistic but not necessarily interactive” (Ybarra et al., 2008, p. 934). Access to readily available television has been offered since the 1930s according to Ferguson (2013) with Westerns, which portrayed violence via shootings, stabbings or fist fights becoming popular. Because children view at least four hours of television every day (American Academy of Child and Adolescent Psychiatry [AACAP], 2011), scholars, over the past five decades or so, have studied whether exposure to violent behavior on television increases the odds of aggressive behavior thereafter (Anderson et al., 2003; Browne et al., 2005). The longitudinal study (1977-1992) completed by Huesmann et al. (2003) included the participation of 557 1<sup>st</sup> and 3<sup>rd</sup> graders from public schools in Oak Park, IL (a suburb of Chicago) and 2 parochial schools in the city of Chicago. The participants were interviewed in the classroom on at least two occasions, the parents also had an interview and school records were accessed to ascertain academic ability. Coupled with other risk factors (low SES, poor family relations, poor peer relations) Huesmann et al., (2003) concluded that exposure to non-school related media use in childhood lasts into adolescence and young adulthood, thereby increasing the possibility of aggressive behavior for both boys and girls. It should be noted that the AACAP (2011) caveat all research, past and present, by proclaiming that although television violence is certainly not the “cause” of maladaptive behavior among adolescents, it is clearly a significant

factor.

**Video games.** Video games remain at the crux of decades of debates over what is useful and what is detrimental to at-risk urban youth (Ferguson, 2011) and there are significant scholarly efforts to demonstrate both sides of the argument. In the recent study by Ferguson (2010) in which he analyzed other studies based on methodological and theoretical problems, he contended that although the public remains concerned about youth exposure to non-school related media use, the concerns are “exaggerated” (p. 68). Ferguson (2010) further asserted that lawmakers and other concerned parties have engaged in “moral panic”, thus, minimizing the findings that video games, violent in nature are not considered as a strong predictor of youth violence. In contrast, Swing and Anderson (2008) asserted that there is a causal connection between the actual playing of violent video games and aggressive behavior thereafter. Swing et al., (2008) made the assertion that habitual playing of violent video games gave way to later aggression, even after controlling for gender and previous maladaptive behavior in each sample. Because of the recent mass shootings in Colorado and Connecticut, the question of media effects remains a public health concern (Strasburger and Donnerstein, 2014). Strasburger et al. (2014) concluded that 1) it is difficult to convince the general public of scientific findings regarding violent video game exposure and 2) confusion emerges regarding “risk” and “cause”, but that through further longitudinal and cross-sectional studies the perception of the public can be altered which opens ongoing collaboration about continued prevention efforts.

**Computer/Internet.** Young people around the age of 13, who experience

exposure to non-school related media via video and computer games or via the internet, especially in the presence of other risk factors are vulnerable to subsequent violent behavior (Ybarra et al., 2008). The CDC in joint collaboration with the U.S. Department of Health and Human Services posited that the quick advancement of technology in myriad forms has greatly impacted the ways in which we function and behave as a society (David-Ferdon et al., 2009; O’Keeffe et al., 2011). However, those hi-tech advances are not without potential risk (David-Ferdon et al., 2009; Ybarra et al., 2008). Growing up with Media was a national online survey in which Ybarra et al., (2008) examined 1588 youth, ages 10-15, in a cross-sectional study who were privy to internet use over the 6 months prior to the survey and demonstrated that exposure to non-school related media use shown in music, games, television and the internet, coupled with other risk factors were “significantly associated” with violent behavior; this was based on self-reported violent behavior (shooting or stabbing someone, aggravated assault, robbery and sexual assault) (p. 929). Caution should be used when studies rely upon self-reported data due to a concern for research bias and reliability of the information obtained (Creswell, 1994). Ybarra et al., (2008) were careful to suggest that the helpful facet of technology also be explored, as not all technology is riddled with the volatility of debates regarding exposure to non-school related media use exposure (Ferguson, 2009). Social media, according to O’Keeffe et al., (2011) is actually a means of broadening the opportunity for young people to connect socially, improve technology skills, and better communicate with one another, thus, indicating that not all computer time is detrimental. However, without proper adult supervision and the ability to self-monitor behavior,

extensive alone time and peer pressure might heighten the risk of exposure to exposure to non-school related media use via the computer (O’Keeffe et al., 2011).

Each mode of media: television, video games, computer games, and computer (internet/social media) delineated herein maintains the potential to influence the adolescent mind, behavior and actions. For vulnerable youth, the lyrics to a song may guide actions; television may become a parent; video games may become the voice of reason and the computer may be the decision maker (APA, 2014; Beresin, 2014; David-Ferdon et al., 2009; Ybarra et al., 2008). When violence is in the media, the outcome for youth is sometimes unhealthy as has been learned via this literature review. This study adds to the research by testing the relationship among protective factors, exposure to prolonged non-school related media use, resilience and youth violence, while considering the moderating variables of socioeconomic background and ethnicity. The lack of data which is specific to media consumption and subsequent violence among at-risk, adolescent, urban youth indicates the continued need for specific identification of what should be addressed, who it should be addressed to and how addressing those needs may impact the youth at the crux of this ongoing discussion. In this study I identify those needs and made recommendations for future research.

### **Implications of Previous Research**

As recent as January 2013, the president of the United States requested that the Centers for Disease Control and Prevention commence research on video game violence, thus, implicating that exposure to such games may be a conduit for violent behavior. Though this gesture on the part of the president may imply the idea that video game

violence is one of the culprits to youth violent activity and that the safety of the public remains a concern; however, to focus on violence in video games alone would lend a skewed view of the role of media overall. The literature does not account for youth violence in the context of exposure to a single form of media but rather, en masse, including computer games, social media, and television, as are addressed in this study. To limit the research to one view of media would be a disservice to the population the nation is seeking to protect, our youth. Despite the limitations in past research and the challenge of moving from a risk model approach to a preventive and protective approach, as noted in the model adapted from Herrman et al., (2011) this study maintained a focus on urban youth, the risk and protective factors for youth violence and the sustainable tools necessary to build resilience so that the cycle of violence is no longer perpetuated.

The model of Herrman et al., (2011) was adapted for this quantitative study. The model provided factors that enhance or reduce homeostasis or resilience (Herrman et al., 2011, p. 261). Within the model, Herrman et al., (2011) demonstrated that when risk factors are decreased, there is “post-traumatic growth and thriving” (p.261). However, when the protective factors are diminished, there is “dysfunction and mental illness” (Herrman et al., 2011, p. 261).

Past research has been very specific about violence in the media and its existence, as well as its negative effect on the adolescent mind; however, past research has also indicated the helpful aspect of media and its educational component. Although McDaniels (2011) concluded that young people who have good social skills and a supportive family possess two of the consistently mentioned protective factors against

youth violence, it was still suggested that more research is needed to understand these same protective factors when dealing with young people from urban areas. This is in sync with Henry et al., (2012), who concluded that ethnic differences should be taken into consideration when seeking factors of protection for implementation into effective preventive programs, as is the goal of this study at hand, being to inform, assist, and support constituents who share the desire to build resilience in the at-risk adolescent and strengthen the tools that are protective in nature so that violence is not the option even after exposure to myriad risks.

### **Summary and Conclusions**

To date, there are no known studies conducted in urban Chicago about prolonged exposure to non-school related media use in connection with protective factors, risk factors and the possibility for resilience in mitigating pervasive violence among urban youth. However, several studies have been published that have demonstrated a relationship between exposure to non-school related media use and subsequent aggression in adolescents. Also, there are no known studies within this literature review that cite research past or present that has directly surveyed urban youth regarding prolonged exposure to non-school related media use, subsequent violent behavior and resilience. There are three points that have materialized as a result of this literature review. First, the causes of youth violence are vast and multi-leveled (Davis, 2012). The research of Krug et al., (2002) confirmed that there are many reasons (personal and environmental) people occupy themselves in violence. A second point that emerged from the literature is that the attitude that many urban youth have toward prolonged media use

may stem from desensitization within the home and in the community. For youth who spend time with peers who are delinquent, it raises the bar of the opportunity for participation in violent activity as a victim or a participant (Krug et al., 2002), as the external influence of one's peers may impact decision-making capacity in the developing adolescent. The final point is throughout the literature, the mind-set regarding prolonged media use and urban youth has not been consistent across disciplines, thus, further igniting the need to continue to pursue the means by which urban youth are exposed to non-school related media, whether it lends to aggressive behavior and whether protective factors are assistive in reducing the effects of said exposure, in light of other risk factors.

This review of the literature has addressed the idea that exposure to some media (pro-social and educational) is healthy, while other researchers found prolonged use of media with non-school related material to be deleterious to urban youth. Researchers have focused on risk factors to youth violence and how those factors perpetuate continued violence, especially among youth who hail from the inner city, some of whom are without supports, without resources, and without good decision-making capacity (Voisin et al., 2011). The impact that growing up in a deprived environment can have on young people has been the focus of myriad researchers. However, past research in the area of youth violence, specifically as a result of exposure to non-school related media use, has not been addressed for this disadvantaged population. Very few studies have concentrated on urban youth who have made poor decisions as a result of what they have seen or heard through television programs, music; computer based social media, or video/computer games (Ferguson, 2009; Gentile et al., 2011; Williams et al., 2013).

Adolescence is a time of learning through modeling and the literature has shown a strong argument for minimizing exposure to non-school related media use among urban youth. Thus, the intention of this study was to specifically bring light to the relationship among protective factors, exposure to non-school related media use, resilience and youth violence. In so doing, the information herein could provide a solid infrastructure for parents, policy makers, youth service agencies and stakeholders on which decisions can be made. In this chapter, I have used supportive literature to detail that not all media is violent or harmful. While the literature has also shown that exposure to some forms of media can result in outcomes that are harmful when young people are excessively and repetitively exposed, there are also some youth who rise above the influence of what the media dictates and subsequently show resilience in not perpetuating a cycle of violence. A review of the literature allowed me to draw upon the expertise of resilience pioneers like Emmy Werner, Norman Garmezy and Michael Rutter, whose research is supportive of the realization that not all exposure to adverse situations perpetuates continued adversity throughout the lifespan. The questions remain of whether this resilience is due to protective factors and whether exposure to non-school related media use is one of the conduits to aggressive and violent behavior in this study population? The literature did show that exposure to some non-school related media use is overall considered a contributor to youth violence but not the explicit cause thereof, thus, this study may shed light on modifying variables that contribute to the protection of at-risk youth (Hardaway et al., 2012). The next chapter will specify the research design and indicate the existing relationship with the research questions, while, at the same time, providing an



explanation for why this research design was chosen. Chapter 3 will present the methodology for this overall study, including sample population, instrumentation, data collection and data analysis, and detailed rationale for its use.

### Chapter 3: Methodology of the Study

Effort has been made to address the relationship between prolonged exposure to non-school related media use, resiliency, protective factors, and violence in urban youth through a quantitative research design. In analyzing data and information from the CDC Youth Risk Behavior Surveillance System (YRBSS), I sought to test for an association between risk and protective factors among urban youth who have been exposed to prolonged non-school related media use. I also sought to test the value of risk and protective factors and the effects that may impact urban youth, especially in the face of previous exposure to non-school related media use (Ferguson, 2009, 2010). This chapter provides a brief overview of how and why the YRBSS was established, along with an outline of the specific methodological procedures including the research design and rationale, population, sampling and sampling procedures, plan for data analysis, and threats to validity.

#### **Research Design and Rationale**

This quantitative study and analysis of data allowed me to examine the dependent variable, youth violence. Prolonged non-school related media use and resiliency were examined as the independent variables. This study included an assessment of risk factors as mediating variables and an assessment of protective personal traits and social-ecological protective factors as modifying variables.

Using a quantitative approach was appropriate, for the analysis of secondary data via surveys (Creswell, 2008; USC, 2014) among the middle school participants of the 2013 YRBSS. A quantitative cross-sectional design is ideal when determining a

relationship between two variables (Creswell, 2008). Creswell (2008) indicated the use of questionnaires for collecting data as appropriate in cross-sectional designs, as it allows for capturing data that is descriptive, shows trends, and captures the attitude of the participant. One example of the effort to advance knowledge in public health is noted in the published study of Brook et al. (2014) who, through a quantitative study, examined Colombian adolescents. Brook et al. (2014) used a standard self-report survey obtaining surveillance of these adolescents from January, 1995, through December, 1996, to gather information related to the early risk factors for violence. Brooks et al. (2014) found cultural factors in U.S. adolescents pertaining to victimization as a result of violence and its effect on behavior. Brener et al., (2013) posited that the maintenance of data from surveillance remains an essential aspect for appropriate formation and assessments of programs intended to enhance the well-being of the general population, thus making a quantitative cross-sectional approach, with the use of a self-report survey, ideal for this study. The YRBSS is one such surveillance system that has been implemented by CDC to assess vital health risk behaviors via a self-administered questionnaire with the intent of informing public health care workers and policymakers about the pervasiveness of health-related risk factors among young people and also to promote healthy prevention programs with the information obtained (Brener et al., 2013). The goal of YRBSS is to advise public health workers and educators at the national and local level.

**Youth Risk Behavioral Surveillance Survey.** Established in 1991, the YRBSS, a national school-based survey, has been used to survey high school youth and locally, at the state level, to survey middle school youth across the United States regarding

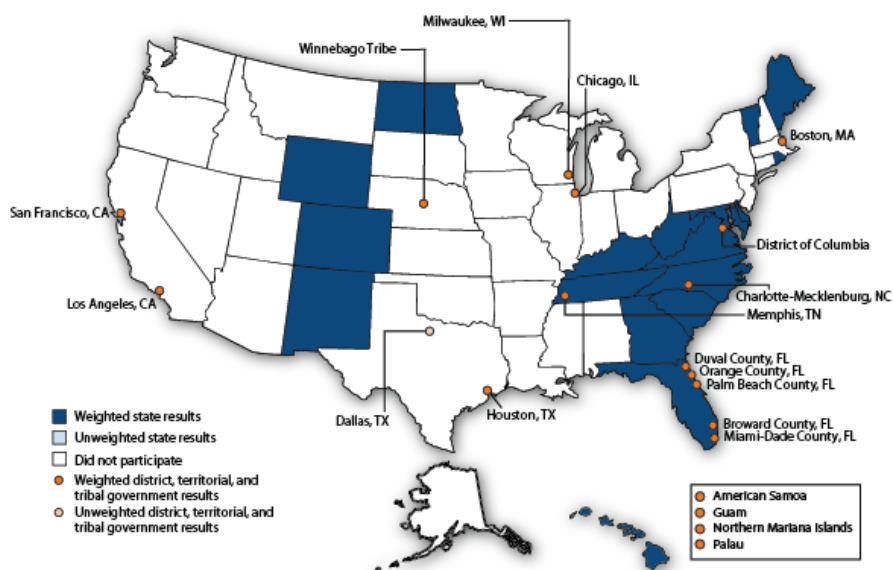
avoidable conduct that lends to the primary reasons for morbidity and mortality among adolescents and grown-ups. Data gathered from the YRBSS has consistently shown the relevance of information from surveillance systems and its importance for organizing and assessing programs that enhance the health and well-being of the public (Brener et al., 2013). The 2013 YRBSS was used to collect data regarding the main risk factors that lead to inadvertent hurt and aggression, promiscuity that can result in pregnancy and sexually transmitted infections (STIs), substance abuse and alcohol, smoking, unhealthy eating, and sedentary behavior (Brener et al., 2013). This information was collected at a national level and also from participating U.S. states, participating territories, participating urban schools districts, and some of the tribal territories. No resource constraints were directly associated with using the YRBSS. The CDC gave me permission to use and modify the questionnaire as needed. However, this study did not require a modification of the YRBSS instrument.

## **Methodology**

### **Population**

Participants for YRBSS 2013 were chosen from the state, territory, urban school district, or tribal government elected to participate (Brener et al., 2013). The YRBSS 2013 included a representative sample of students from high school Grades 9-12. However, there was also a survey available, independent of the high school participants, which allowed middle school students Grades 6-8 to participate, but only for the states, territories, urban school districts, and tribes elected to take part (Brener et al., 2013). The 2013 YRBSS included the participation of over 13,000 high school students and

participating middle school students by site discretion. The 2013 YRBSS middle school (age group focus for this study) included 18 states, 14 cities, four territories, and one tribal government, all of whom received weighted (response rate of at least 60%) data for their middle school YRBSS (CDC, 2014). Currently, the city of Chicago boasts the third largest school district in the nation with 420 public elementary schools, two contract schools, and 58 charter schools (Chicago Public Schools [CPS], 2015). The student enrollment for Grades 1-8 is approximately 232, 825 students with 86.02% who are at an economic disadvantage. The city of Chicago school district participated in the 2013 Middle School YRBSS. For the 2013 YRBSS, Chicago Public Schools included 32 middle schools with 1228 participants (CPS, 2015). The participation map for YRBSS 2013, which includes Chicago, is as follows:



*Figure 3.* YRBSS Participation Map At District level – Middle School. CDC (2013). Reprinted with permission.

## **Sampling and Sampling Procedures**

To obtain information specifically related to health risk behaviors of high school and middle school students is the primary goal of the YRBSS. Since 1991, at the establishment of the YRBSS, the CDC established a biennial schedule for administration of the YRBSS questionnaire, deeming that changes are generally gradual in nature, thus, a biennial schedule would in turn, be sufficient enough to capture those changes (Brener et al., 2014).

The YRBSS allowed each participating state, territory, tribal government, or urban school district to use a cluster sample design in two stages, yielding a representative sample of high school students in Grades 9-12. Although the national YRBSS also included a cluster sample design, it was completed in three stages in an effort to get a sample that was nationally represented (Brener et al., 2014). The following is a brief description of the method used for sampling by the YRBSS for state, territorial, tribal, and large urban school districts:

Sampling Stage 1 – Selection of schools with probability based on size of student enrollment

Sampling Stage 2 – Intact classes were chosen randomly for participation, thus, making all students in the intact class eligible for participation

The following is a brief description of the method used for three-stage sampling by the YRBSS at the national level:

Sampling Stage 1 – PSUs, which are primary sampling units were selected,

however, they had to be large enough to create sub PSUs. This stage included sorting the school by size and stratifying based on the MSA, which is the metropolitan statistical area.

Sampling Stage 2 – Schools were chosen from the PSUs. Both private and public schools were given the opportunity for participation and were separated based on enrollment. One fourth PSU were chosen for school sampling smaller in size and three large schools were chosen.

Sampling Stage 3 – The random selection of up to 2 classes each for grades 9-12 were selected for participation. Note: Two classes were specifically chosen for participation if the school manifested greater enrollment of recognized minorities.

The administration of the YRBSS for middle school is not standard. Although each site has a site coordinator, some schools conduct their own YRBSS, such as in Texas. Some conduct the survey in conjunction with other surveys, such as in Los Angeles and Philadelphia, who conjointly conduct the YRBSS with the Communities Putting Prevention to Work (CPPW). The Cherokee Nation conjointly administers the Youth Tobacco Survey (YTS) with the YRBSS in an effort to minimize school resources. In the city of Chicago, the survey was completed with the assistance of a survey contractor from Chicago Public Schools. The middle school survey was designed to be completed during one class session. The middle school survey used is a modification of the national YRBSS questionnaire.

This biennial collection of data was conducted via a pen-and-paper, self-administered questionnaire designed to capture information specific to the six significant risk health behaviors common among U.S. youths. Students were not obligated to participate at the state or national level. Inclusion criteria were high school and middle school students; however, students who did not choose to participate were not substituted, thus maintaining the reliability of the sample design and alleviating any bias that may result. Estimates within  $\pm 5\%$  at a 95% confidence level were expected given the design of the national YRBSS (Brener et al., 2014).

### **Archival Data**

The data retrieved for the nucleus of this study were obtained from the YRBSS 2013. The information was obtained from self-administered survey questionnaires among middle school students within the Chicago Public School district, one of the participating regions funded by the CDC. In the past, participants from education and health agencies in the 50 states, along with seven territorial educational agencies and 31 local educational agencies, were deemed eligible to administer the YRBSS in 2013. As noted in the sampling, once classes were selected, students were recruited for voluntary participation with an emphasis placed on anonymity and confidentiality for those who elected to take part.

Demographic information collected from the participants included five questions addressing age, gender, current grade, race, and ethnicity. Each participating site or region held the option of how consent to parents would be provided. Approximately 90% of participating sites used passive consent, in which parents responded only if they did



not want the child to participate, and 10% of the participating sites used active consent, in which participating students needed to return a signed consent form for participation from a parent or guardian (Brener et al., 2014).

The YRBSS has been consistently designed to extrapolate data that encompasses health behaviors of each participating high school or middle school student, including questions that measure the following:

- 1) Behaviors that contribute to unintentional injuries and violence
- 2) Sexual behaviors that contribute to HIV infections, other STDs, and unintended pregnancy
- 3) Tobacco use
- 4) Alcohol and other drug use
- 5) Unhealthy dietary behaviors and
- 6) Physical inactivity (Brener et al., 2013, p. 4)

The 2013 version of the YRBSS questionnaire included changes resulting from the enlisted input of professionals at both federal and local levels. The changes for 2013 questionnaire included inquiry regarding height, weight, asthma, and sleep, which on previous surveys had not been included. Because the survey was administered in the educational setting, the goal of administering staff was to expedite completion by making the questionnaire scannable by computer, using paper and pencil and completed with one class period. This has been done biennially within every odd year since 1991. Upon completion of the questionnaire, each student questionnaire was placed in a sealed

envelope and placed in a box to be delivered to the CDC for analysis. Students who were absent from school on the date of survey administration were offered the opportunity to participate, provided anonymity was maintained and privacy was not compromised. Follow up procedures to participation in the YRBSS 2013 included public use data, however, no school name or student participant names were released at any time. Because the CDC produces results for each participating site, each site is given the opportunity to review results via electronic format. This is done after the raw datasets have been edited and classified after accounting for omitted information, logical inconsistencies, and more remote responses.

Data retrieval followed the completion of a Data Request Form (See Appendix B) at the CDC website (<http://www.cdc.gov/healthyyouth/yrbs/requestdata.htm>). There is open access without the need to create a password or set up an individual account. YRBSS data are available for SPSS programs; and were saved to a new USB key. For viewing online, Youth Online Interactive Data Tables were launched by CDC. This portal gave access to each data set for customization and for analyzing at will. Results for 1991-2013 are currently available within the youth online portal and may be accessed by site and health topic of interest.

### **Instrumentation and Operationalization of Constructs**

#### **Instrumentation**

CDC data from the YRBSS, 2013 were examined for this study using quantitative data analysis to assess adolescent health risk behaviors. The standard questionnaire for the 2013 YRBSS included a total of 86 questions, and was developed after collaboration

among myriad scholars, survey research specialist and scientific experts including staff from the Department of Education, National Institute of Health, along with representatives from the local (state) health programs in schools. PCSample from the CDC and Westat materialized in 1989 and since then, has undergone field testing, laboratory testing, and two tests – retest studies for reliability (1992, 2000) and the scrutiny of student responses in an effort to build upon reliability and validity of the instrument. This resulted in expounding on the way questions were worded and clarification of options available for response among the student population. Two of the most recent studies that used data from the YRBSS for similar populations include: Lowry, Robin, Kann and Galuska (2014) and DeRavello, Everett Jones, Tulloch, Taylor and Doshi (2014). Lowry et al., (2014) sought to find the association of body mass index with sexual risk taking among U. S. high school students using YRBSS data from 2005-2011. DeRavello et al., (2014) sought to find the relationship between substance abuse and sexual risk behaviors, among American Indian and Alaska Native high school students. Both populations, though not equal, are comparable to the proposed population for the research intended in this study. By using data from YRBSS, both Lowry et al., (2014) and DeRavello et al., (2014) used YRBSS with the intended purpose to advance public health. The questionnaire is in public domain (<http://www.cdc.gov/yrbss>) and does not require consent prior to its use. The YRBSS questionnaire is appropriate to this study as it includes a broad base of health related constructs that directly address health-related behavior and habits among the adolescent population for middle school students. The questions have been tested consistently from 1988-2008 through ongoing reviews for

appropriateness, noting that the survey questions capture nearly all health habits that have contributed to the foundational causes of injuries and death among the adolescent and young adult population. Through this study, I measured behavior related to violence among adolescent students using the YRBSS. Questions on the YRBSS specifically related to violence were composed with reference to violence-related behaviors and school-related violent behaviors (CDC, 2014) with the rationale that the questions remain significant to maintain, as the prevalence of violence remains since implementing the questions for the duration of 1997-2013. Measuring this significant behavior on the questionnaire is based on information from the Web-based Injury Statistics Query and Reporting System (WISQARS). Questions related to physical fights, also a form of violence, in school and on school grounds remain viable on the questionnaire, as physical fighting can be seen as a sign of future behavior. This is based on the information from Sosin, Koepsell, and Mercy (1995) who studied fighting as a marker for multiple problem behaviors in adolescents; and also the work of Borowsky and Ireland (2004) who studied the predictors of future fight-related injuries among the adolescent. Chapter 4 further shows the clarity of the myriad variables analyzed from the CDC, 2013 YRBSS questionnaire.

### **Operationalization**

February through May of each odd numbered year, the administration of the national school-based YRBSS is completed. Separate from the national survey, select sites choose to participate in the middle school survey, which is a modified version of the national questionnaire. For 2011, there were 16 states participating in the middle school

YRBSS along with three territories one tribe and 14 urban schools. The modified middle school questionnaire was created with language specific to this adolescent population (Brener et al., 2014)

**Violent Behavior.** Violent behavior is a dependent variable and five items included on the middle school YRBSS measuring violence-related behavior were included, with a rationale for use based on the prevalence of said behavior from previous YRBSS data as well as research by several scholars (Borowsky et al., (2004); Sosin et al., (1995). Three of those questions are specifically related to violent behavior as follows:

Question #10: Have you ever carried a weapon, such as a gun, knife, or club?

With the following coding for response: A. Yes, B. No

Question #11: Have you ever been in a physical fight?

With the following coding for response: A. Yes, B. No

Question #12: Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?

With the following coding for response: A. Yes, B. No

The last two questions for violent-related behavior reference bullying (with the specification that, bullying entailed behavior among students who make fun of, intimidate, maliciously talk about others, strike, push, or harm other students tauntingly and consistently [CDC, 2015]) and is significant in measuring predictors of future behavior (Borowsky et al., 2014). Those questions included:

Question #13: Have you ever been bullied on school property?

With the following coding for response: A. Yes, B. No

Question #14: Have you ever been electronically bullied? (Including via e-mail, chat rooms, instant messaging, websites, or texting)

With the following coding for response: A. Yes, B. No

**Prolonged Exposure To Non-School Related Media.** The rationale for including questions regarding prolonged exposure to non-school related media stems from concern for inactivity and sedentary behavior among adolescents, thus, listed under physical activity on the questionnaire. The National Institutes for Health (2013) shared guidelines as follows for appropriate screen time: 1) Under the age of 2, there should be no screen time, and 2) Over the age of 2, screen time should be limited to 1-2 hours per day (DHHS, 2013; Kaneshiro et al., 2013). There are two questions specifically related to measuring this independent variable. Those two questions include:

Question #43: On an average school day, how many hours do you watch TV?

With the following coding for response: A. *I do not watch TV on an average school day*; B. *Less than 1 hour per day*; C. *1 hour per day*; D. *2 hours per day*; E. *3 hours per day*; F. *4 hours per day*; and G. *5 or more hours per day*

Question #44: On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)

With the following coding for response: A. *I do not play video or computer games or use a computer for something that is not school work*; B. *Less than 1 hour per*

*day; C. 1 hour per day; D. 2 hours per day; E. 3 hours per day; F. 4 hours per day; and G. 5 or more hours per day*

The local YRBSS completion for the city of Chicago yielded a total of 1228 completed questionnaires for middle school participation. For the purpose of this study, only the local data was used.

### **Data Analysis Plan**

From the Research Triangle Institute, SUDAAN Release 10 was used as the processing system for the quantitative data analysis of YRBSS 2013, along with SAS, Version 9.2, 2008. Microsoft Visual Studio 2008, Visual Basic is the software used for the statistical analysis of correlated data. Justification of this software and its use by the CDC entails the ability reserved by the researcher to be able to provide analyses for questionnaires that have been altered with deleted or additional questions and sorted according to participating sites that have deviated from the standard questionnaire. The Visual Basic software allowed for analyses that include those differences. The data cleaning and editing process was completed via Survey Data Management Systems (SDMS), which was established in 1999 specifically to process the data collected via the YRBSS and also to render subsequent reports. The YRBSS data analysis for 2013 was completed using logistic regression. Logistic regression is considered one of the most effective ways to ascertain whether or not a change that has occurred is statistically significant or not, especially among myriad prevalence estimates (Brener et al., 2013). The use of multiple statistical tests is deemed appropriate when seeking to ensure validity

of the data received from each participating site. CDC and Westat utilized the transfer and tracking functions to make sure that all of the incoming data was logged in and properly accounted for. Using myriad programs ensured that missing data, inconsistent data, questionnaires that have been modified, and sensitivity to noted differences were accounted for. Data are available in SPSS format and was used for the data analysis in this study.

### **Confounding Variables**

Delineating and taking into account the confounding variables is done so in an effort to support the idea that the independent variable has an implied relationship with the dependent variable. This is outlined within the first 5 questions on the 2013 YRBSS questionnaire (See Appendix C) as follows:

1. How old are you? Including responses in range from 10 – 16 years of age
2. What is your sex? Including responses: Female and Male
3. In what grade are you? Including responses: 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, Ungraded or other grade
4. Are you Hispanic of Latino? Including responses: Yes or No
5. What is your race? Including the option to select more than one of the responses: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander or White

In asking and collecting this information, it was noted that these variables could possibly have an influence on the results of data collected for analyses.



Data generated from the 2013 YRBSS 50 question questionnaire (See Appendix C) was transmitted for use and analyses using the Statistical Package for the Social Sciences (IBM – SPSS), specifically answering the following:

### **Research Questions and Hypotheses**

Based on the conceptual framework, this study hoped to answer the following research questions:

RQ1: Is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth?

H<sub>a</sub>1: Prolonged exposure to non-school related media use is associated with violent behavior in the study's sample of urban youth.

H<sub>0</sub>2: Prolonged exposure to non-school related media use is not associated with violent behavior in the study's sample of urban youth.

RQ2: Is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth?

H<sub>a</sub>1: Prolonged exposure to non-school related media use is associated with violent behavior through electronic bullying in the study's sample of urban youth

H<sub>0</sub>2: Prolonged exposure to non-school related media use is not associated with violent behavior through electronic bullying in the study's sample of youth.

### **Statistical Methods**

**Descriptive Statistics.** I used descriptive statistics to show which variables are included, who the participants are, and outline the sociodemographic characteristics and other pertinent information that describes the data i.e. means and standard deviation

(Crosby et al., 2006) for each variable posed in this study. Group characterization was also described and included i.e. participants age and grade.

To determine pairwise variances between subpopulations, t-tests were used for the analyses of the 2013 YRBSS collected data. The results will be considered statistically of value (or significant) if the t-test, p value is  $<0.05$  for main effects and for interactions. It should be noted that when seeking to distinguish smaller differences between two prevalence estimates, rather than examining confidence intervals (CI), t-tests are used (Brener et al., 2013; Kann et al., 2014).

**Multivariate Analysis.** Multivariate analyses were carried out as a means of measuring the relationship between prolonged exposure to non-school related media, the independent variable and youth violence, the dependent variable. Taking into consideration that the moderating variable, protective factors and the mediating variable, risk factors may influence the relationship between the independent and the dependent variables, multivariate analysis remained necessary. It allowed for the analysis of data, given that there was more than one variable. Stepwise regression model was the intended analysis, as it would allow me to build a model of the variables by adding one at a time or removing one variable at a time based on the t-statistic (logistic regression models were used instead. See chapter 4 for details). The intended margin of error was 5% with a confidence interval of 95%. This multivariate analysis allowed for an overview of the available data.

### **Threats to Validity**

The YRBSS is a biennial survey administered to high school and middle school students in the school setting via questionnaire. When using a questionnaire, the data outcome could be rendered biased should the researcher find that students under or over reported the requested information (Crosby et al., 2006). The specified data might also be influenced by environmental factors or student limitations in comprehension.

Instrumentation could pose a threat to the internal validity of the study. The YRBSS questionnaire is an instrument that has undergone rigorous test and retest measures for reliability. Although subject to participant bias due to self-reported behavior, threats to validity were minimized through methodological studies that resulted in the implementation of protocols specifically related to editing of data received.

Brener et al., (2013) indicated that no study has been conducted that would specifically address the overall validity of self-reported health behaviors that are a part of the YRBSS questionnaire, however, caution has been encouraged, that future scholars and administrators of the YRBSS take notice of varying measures that would be deemed as compromising to the validity of the self-reported behavior. Thus, the YRBSS questionnaire is revised prior to its use for each biennial administration and new students are added as per the sampling protocol. This was done in an effort to minimize any environmental or cognitive threats to the validity thereof.

### **Ethical Procedures**

The CDC maintains seven Institutional Review Boards (IRBs), each with approximately 1 – 3 members who are not CDC affiliates. The YRBSS obtained approval

from CDC IRB at inception, origination and implementation. Upon proposal submission, approval from the Walden University IRB, to use this secondary data, was obtained (Walden University IRB #10-06-15-0262697).

Public use of data available on line at Centers for Disease Control and Prevention does not identify any student participant by name, does not provide personal information on students as individuals, does not provide school or region and protects the demographic information by not making it available in public domain. The students who volunteered for participation in the YRBSS did not undergo any physical test or examination. The administration of the questionnaire was completed in approximately one class period after passive or active parental permission was obtained by the school administration and CDC representative. Survey material was distributed and collected in such a way that the participants were reminded that no personal information was requested and should not be provided. The students were made aware that the questionnaire should be returned in a sealed envelope without any personal identifying markers.

The national YRBSS data files that are in public domain do not have any specific identifying markers related to the state or regional participants from which it was retrieved. It has been noted by Brener et al., (2013) and Kann et al., (2014) that the processing of data retrieved was a joint effort of the CDC and the technical staff contracted to maintain the integrity of the information being processed. The data has been maintained in confidence. There was no unnecessary handling of data by outside personnel within the school setting. Each participant was allotted a booklet for responses

which were computer scanned and assessed thereby. The system was designed to shield any participant from being identified by name, state, region, school or other demographic information; anonymous and voluntary completion of the questionnaire was paramount.

### **Summary**

The research design employed for this study was: quantitative. The study used the survey results from the CDCs YRBSS 2013 questionnaire to aid in examining the relationship between exposure to prolonged non-school related media use, resiliency, protective factors and violence in urban youth. Discussion regarding data collection measures and results of the data analysis are forthcoming in Chapter 4.

In completing a study for the correlation of urban youth exposure to prolonged non-school related media use and subsequent violence, I used a quantitative research design and data retrieved from the 2013 CDC YRBSS questionnaire. In using the YRBSS questionnaire, I was allowed the opportunity to assess the relationship between adolescent health behavior and subsequent actions with protective and risk factors as modifying variables. Variables of non-school related media included: television, video games, computer games and computer/internet (social media). The CDC YRBSS data from the 2013 questionnaire was the most current. It was a one time, school based survey among high school and middle school youth across the nation within participating states and regions. To report the demographics of the participants for this study, descriptive statistics were used. To analyze the data retrieved seeking a relationship between exposures to prolonged non-school related media use, urban youth and youth violence, a step wise regression model was supposed to be used (see Chapter 4 for actual logistic

regression model used). Chapter 4 shows the different variables that were analyzed and also shows the descriptive data (mean, frequencies, standard deviation). The hypotheses were evaluated along with a summary of the design used for inquiring about the aforementioned relationship between youth violence and urban youth who have had prolonged exposure to non-school related media use.

## Chapter 4: Results

The purpose of this study was to test the relationships between prolonged exposure to non-school related media and youth violence among urban youth in the city of Chicago. Using secondary data from Centers for Disease Control and Prevention, Youth Risk Behavioral Surveillance Survey (YRBSS) 2013, I examined the dependent variables of youth violence and electronic bullying and the independent variable of prolonged exposure to non-school related media (3 or more hours watching television and/or playing video/computer games on an average school day). The following research questions and hypotheses were used to guide the study:

RQ1: Is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth? The null hypothesis was that prolonged exposure to non-school related media is not associated with violent behavior in the study's sample of urban youth. The alternative hypothesis was prolonged exposure to non-school related media use is associated with violent behavior in the study's sample of urban youth.

RQ2: Is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth? The null hypothesis was that prolonged exposure to non-school related media use is not associated with violent behavior through electronic bullying in the study's sample of urban youth. The alternate hypothesis was that prolonged exposure to non-school related media use is associated with violent behavior through electronic bullying in the study's sample of urban youth.

This chapter provides results from the data analysis and answers to each research question. This chapter also includes the data collection method used for this study, demographics of the participants, tables and figures that support the narrative of the data, and ancillary analysis. This chapter concludes with a summary of the major findings resulting from this inquiry.

### **Data Collection**

This study included data collected from the CDC through the YRBSS (Appendix C). The data was not restricted and was available for download and analysis in the following formats: SAS Input, SAS format, and SPSS syntax. Self-reported data from the 2013 YRBSS were used for analyses. Although the data is open domain, specific data for the Chicago region required a special request for data form that was completed and submitted to the CDC liaison. The data specific to the Chicago middle school region was received via e-mail and downloaded to the designated jump drive.

The survey was completed under the direction of Chicago Public Schools (CPS) Office of Student Health and Wellness in the spring of 2013. As noted in Chapter 3, Chicago has the third largest school district in the nation, and approximately 86% of students are from low-income homes (City of Chicago, 2010; City of Chicago, 2011). As a representative sample of the population of interest, the 2013 YRBSS in Chicago included 32 middle schools from the CPS network of 420 public elementary schools. This participation generated 1,228 completed and usable middle school student surveys, gathered via nonprobability sampling. The students ranged in age from 10 to 15 years, and all students within the participating schools were invited to participate.



The middle school population of students from the metropolis of Chicago were the focus of this study. The city of Chicago allows for the completion of the YRBSS in collaboration with the CDC on a biannual basis. The target population included Chicago middle school students in 6<sup>th</sup> to 8<sup>th</sup> grade. The YRBSS was administered after parental permission was received. The students were then allowed to voluntarily participate and have their responses remain anonymous. The following topics were addressed in the survey: demographics (age, gender, race, ethnicity, weight, and height) and grade. The risk assessment included questions pertaining to unintentional injuries and violence, tobacco use, alcohol and other drug use, sexual behaviors, dietary behaviors, and physical activity.

### **Results**

The demographics of this student population ( $N = 1,228$ ) included 32.8% of students who were 13 years of age, the largest age group of all participants. There was a small gender difference of participants, with 674 females and 622 males. Black or African American middle school students made up the majority of participants, with 559 (36.5%) participants. Second were Multiple Hispanic (26.7%) and Hispanic/Latino (21.7%) with a total of 520 participants, as summarized in Table 2. The following characteristics were removed and not factored into the analysis: student participants 10 years old or younger, 16 year olds, missing scores, and ungraded students. The 14 and 15 year old students were combined and analyzed as one group. All information was used with permission from the CDC.

Table 2

*Demographic Characteristics of The Student Participants*

Characteristic	Unweighted Frequency (N)	Weighted Percentage (%)
<b>Sex</b>		
Female	674	52.0
Male	622	48
<b>Grade</b>		
6 <sup>th</sup>	400	30.8
7 <sup>th</sup>	415	32.0
8 <sup>th</sup>	480	37
<b>Age</b>		
11 years old	278	21.4
12 years old	361	27.7
13 years old	458	35.2
14 and 15 years old	202	15.6
<b>Race/Ethnicity</b>		
Black or African American	559	36.5
Multiple - Hispanic	290	26.7
Hispanic/Latino	230	21.7

In Chapter 3, I presented the study plan to test the relationship among the following variables: prolonged exposure to non-school related media use, risk factors, protective factors, resilience and youth violence. In an effort to align with that plan, I maintained the following variables at the point of data analysis: prolonged exposure to non-school related media used (TV or video and computer games, three or more hours

per day) as the independent variable and youth violence (bullying, having been bullied physically [in RQ1] or electronically [in RQ2], carrying a weapon, physical fighting, with and without the need to see a doctor or a nurse) as the dependent variables. The covariates included having at least one adult support (protective factor), peer influence (risk factor), and ability to maintain good grades (resilience), all of which were analyzed with logistic regression models using SPSS and were documented in the ancillary analysis. A stepwise regression model was originally planned and initiated; however, logistic regression was a better fit, as it allowed for analyzing the secondary data set in which there was more than one independent variable for which an outcome was sought.

Linear regression model in SPSS was used to test for multicollinearity among the independent variables. The variance inflation factor (VIF) and tolerance values were acceptable for both independent variables at 1.00. There was no need to eliminate either independent variable (3 or more hours of television or 3 or more hours of computer/video games on an average school day).

Frequencies and valid percentages were obtained from descriptive statistics crosstabs in SPSS for the dependent variables (violence related experiences) categorized under unintentional injuries and violence. In the YRBSS, Question 10 asked “Have you ever carried a weapon, such as a gun, knife, or club?” Question 11 asked “Have you ever been in a physical fight?” Question 12 asked “Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?” Question 13 asked “Have you ever been bullied on school property?” Question 14 asked “Have you ever been electronically bullied?” Of all the variables, having been in a physical fight was the

most frequent, 723 (56.7%). Being in a physical fight and needing to be seen by a doctor or a nurse was the least frequent occurrence, 63 (4.9%) reported by the students. See Table 3 for a summary of frequencies and valid percentages for violence-related experiences reported by Chicago middle school students.

Table 3

*Violence Related Experiences Reported by Chicago Middle School Students*

Dependent Variable	Frequency	Valid percent (%)
Carried a weapon	256	19.9
In a physical fight	723	56.7
In a physical fight and needed to see a doctor or nurse	63	4.9
Has been bullied (victim)	460	35.7
Electronically bullied	190	14.7

The frequencies and valid percentages were obtained from descriptive statistics crosstabs in SPSS for the independent variables (non-school related media use) which were categorized under physical activity. The YRBSS asked students the following questions regarding prolonged exposure to media (3 or more hours on an average school day). Question 45 asked “On an average school day, how many hours do you watch TV?” Question 46 asked “On an average school day, how many hours do you play video or computer games or use a computer for something that is not school related?” Among these two independent variables, there was not a large margin of difference in frequency

with watching television outnumbering playing video or computer games by a mere 2%.

See Table 4 for frequencies and valid percentages of non-school related media use reported by Chicago middle school students.

Table 4

*Non-School Related Media Use Reported by Chicago Middle School Students*

Independent Variable	Frequency	Valid percent (%)
Watched television three or more hours per day on an average school day	613	48.6
Played video or computer games three or more hours per day on an average school day	590	46.5

In reviewing this population, the data showed that in 2013, 613 (46.2%) students reported watching 3 or more hours of television on an average school day. Black females, in all grades, were more likely to watch 3 or more hours per day of television than Black males. I conducted a chi-square test for associations between gender and watching TV 3 or more hours per day. All expected cell frequencies were greater than five. There was no statistically significant association between gender for all races and grades and TV,  $X^2(1) = .473, p = .492$ . In 2013, 590 (45.3%) students reported playing video or computer games or used a computer for something that was not school work 3 or more hours per day on an average school day. I conducted a chi-square test for association between gender and playing video or computer games 3 or more hours per day. All expected

frequencies were greater than five. There was no statistically significant association between gender for all races and grades and playing video games,  $X^2(1) = .001, p = .982$ .

### **Research Question 1**

Is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth?

The frequency of each dependent variable was measured according to whether the student watched 3 or more hours of television per day on an average school day, along with the odds of greater risk shown in the odds ratio (OR). For students who reported watching television 3 or more hours per day on an average school day, 23.3% also reported carrying a weapon (OR = 1.486); 62.3% reported being in a physical fight (OR = 1.561), 5.3% reported being hurt in a physical fight and needed to see a doctor or a nurse (OR = 1.130), and 34.8% reported being bullied (OR = .897). Second, the frequency of each dependent variable was measured according to whether the student played computer or video games 3 or more hours per day on an average school day. Of the students who reported playing three or more hours of computer/video games on an average school day, 24.3% also reported carrying a weapon (OR = 1.690), 64.1% also reported being in a physical fight (OR = 1.805), 6.7% reported being hurt in a fight and needed to see a doctor or a nurse (OR = 1.931), and 37.4% also reported having been bullied (OR = 1.117). Prolonged exposure to non-school related media was measured by analyzing the two independent variables (watching television or playing video/computer games for three or more hours per day on an average school day). And violence in this study was measured by analyzing the dependent variables as set forth in the 2013 YRBSS (carrying

a weapon, physical fighting, physical fighting and needing to see a doctor or a nurse, being bullied, and electronic bullying). Together these variables were analyzed for association through the use of a multiple regression model which was used, first to predict carrying a weapon. The variables of prolonged TV and video/computer games statistically significantly predicted carrying a weapon,  $F(1, 1236) = 14.167$ , ( $p = .000$ ),  $\text{adj. } R^2 = .011$ . Video hours added statistically significantly to the prediction,  $p < .05$ . The logistic regression model singling out TV resulted in Nagelkerke  $R^2 = 0.16$  and OR = 1.561. This same model, singling out video/computer games resulted in Nagelkerke  $R^2 = .017$ , OR 1.690 and  $p = .000$ .

A logistic regression was used to ascertain the association between watching TV and playing video/computer games three or more hours per average school day, and the likelihood that students have been in a physical fight. The logistic regression model was statistically significant  $X^2(2) = 32.647$ ,  $p < .005$ . The model explained 3.5% (Nagelkerke  $R^2$ ) of the variance in being in a physical fight and correctly classified 69.5% of cases. Sensitivity was 72.8%, specificity was 40.2%. Positive predictive value was 46.89% and negative predictive value was 38.66%. Of the two predictive variables, both were statistically significant (TV, Nagelkerke  $R^2 = 0.16$ , OR = 1.561,  $p = .005$  and video/computer games, Nagelkerke  $R^2 = .028$ , OR = 1.805,  $p = .000$ ).

Multiple regression was performed to ascertain the association between watching TV and playing video/computer games three or more hours per average school day, and the likelihood that students have been in a physical fight which required treatment from a doctor or nurse. The analysis showed that watching television did not statistically

significantly predict being in a physical fight with injuries, Nagelkerke  $R^2 = .001$ , OR = 1.130,  $p = .640$ . The analysis further showed that playing video/computer games did not statistically significantly predict being in a physical fight and needing treatment from a doctor or nurse,  $F(1, 1231) = 5.524$ , Nagelkerke  $R^2 = 0.15$ , OR = 1.931, ( $p = .019$ ).

Logistic regression was performed to ascertain association between watching TV and playing video/computer games three or more hours per average school day, and the likelihood that students have been bullied. The analysis showed that there was no significant connection between television and being bullied, OR = .897, Nagelkerke  $R^2 = .001$ , ( $p = .360$ ); neither was there statistical significance between playing video/computer games and being bullied, OR = 1.117, Nagelkerke  $R^2 = .001$ ,  $p = .347$ .

The logistic regression analysis showed that television viewing and playing video/computer games had a significant association with youth violence among urban middle school students in Chicago. The null hypothesis that prolonged exposure to non-school related media use is not associated with violent behavior in the study's sample of urban youth, is rejected, specifically for the dependent variables of carrying a weapon (TV,  $p = .039$ ; video,  $p = .002$ ), and being in a physical fight (TV,  $p = .005$ ; video,  $p = .000$ ). Table 5 provides a summary of the logistic regression model for association between prolonged exposure to non-school related media (television) and violence. Table 6 provides a summary of the logistic regression model for association between prolonged exposure to non-school related media (video/computer games) and violence.



Table 5

*Logistic Regression for Association Between Prolonged Exposure to Non-School Related Media (Television) and Violence*

Variable	B	Sig.	Exp(B)	95% CI	
				LL	UL
Carrying a weapon	-.304	.039	.738	[.552, .985]	
Physical fight	.335	.005	1.398	[1.107, 1.767]	
Physical fight with the need to see a doctor or a nurse	-.017	.950	.983	[.582, 1.662]	
Have been bullied (victim)	-.122	.317	.885	[.698, 1.124]	

Exp(B) = Odds ratio; CI = Confidence interval; LL = lower limit; UL = upper limit

Table 6

*Logistic Regression Model for Association Between Prolonged Exposure to Non-School Related Media (Video/Computer Games) and Violence*

Variable	B	Sig.	Exp(B)	95% CI	
				LL	UL
Carrying a weapon	-.467	.002	.627	[.469, .837]	
Physical fight	.507	.000	1.660	[1.313, 2.100]	
Physical fight with the need to see a doctor or a nurse	.622	.023	1.863	[1.089, 3.188]	
Have been bullied (victim)	.109	.372	1.115	[.878, 1.415]	

Exp(B) = Odds ratio; CI = Confidence interval; LL = lower limit; UL = upper limit

Once the full data set was available, two other variables were found and are included in the ancillary analysis as forms of violence: perpetration of bullying and being harassed due to being thought to be gay, lesbian, bisexual or transgender (GLBT). The frequencies and logistic regression analysis was as follows:

*Ever bullied someone else on school property.* Of the student participants 194 (14.8%) reported having bullied someone else on school property, compared to 1,101 (85.2%) who did not bully others. Multiple regression analysis showed that TV and video hours statistically significantly predicted bullying others (perpetrator),  $F(1, 1243) = 8.935, p = .003$ . The logistic regression model was performed to ascertain the association between being a bully (perpetrator) and prolonged exposure to non-school related media, along with whether there was an association between being a bully (perpetrator) and the other violence variables. For students who carried a weapon, were in a physical fight, had been bullied (victim) or had been electronically bullied, there was a statistically significant relationship with being a bully (perpetrator) as noted in Table 7.

Table 7

*Logistic Regression Model: Bullying (Perpetrator), Prolonged Exposure to Non-School Related Media and Violence Related Variables*

Variables	B	Sig.	Exp(B)	95% CI LL UL
Watched television three or more hours per day and bullying (perpetrator)	.359	.029	1.431	[.508, .965]
Playing video/computer games three or more hours per day and bullying (perpetrator)	400	0.15	1.492	[.490, .929]
Carried a weapon	1.045	.000	2.843	[2.035, 3.970]
Being in a physical fight	1.019	.000	2.772	[1.942, 3.955]
Being in a physical fight and needed to see a doctor or a nurse	.809	.006	2.245	[1.258, 4.007]
Have ever been bullied (victim)	1.009	.000	2.743	[2.006, 3.751]
Have been electronically bullied	1.208	.000	3.345	[2.344, 4.774]

Exp(B) = Odds ratio; LL = lower limit; UL = upper limit

One of the last violence related variables obtained when the full data set became available was: *Ever been harassed because someone thought you were gay, lesbian,*

*bisexual, or transgender (GLBT)*. Of the student participants 133 (9.7%) reported being harassed because someone thought they were GLBT, compared to 1154 (90.3%) who were not harassed. Multiple regression analysis showed that TV hours did not statistically significantly predict being harassed due to GLBT,  $F(1, 1235) = 6.314, (p = .012)$ . The logistic regression model was performed to ascertain the association between having been harassed due to being GLBT and prolonged exposure to non-school related media, along with whether there was an association between being harassed for being GLBT and the other violence variables. For students who had been bullied (victim) or had been electronically bullied, there was a statistically significant relationship with having been harassed due to being GLBT, as noted in Table 8.

Table 8

*Logistic Regression Model: Harassed Due to Being GLTB, Prolonged Exposure to Non-School Related Media and Violence Related Variables*

Variable	B	Sig.	Exp(B)	95% CI	
				LL	UL
Watched television three or more hours per day and being harassed for GLBT	-.464	.021	.629	[.423, .933]	
Playing video/computer games three or more hours per day and harassed for GLBT	.202	.321	1.223	[.821, 1.822]	
Carried a weapon	-.414	.066	.661	[.426, 1.027]	
Being in a physical fight	-.528	.020	.590	[.378, .919]	
Being in a physical fight and needed to see a doctor or a nurse	-.679	.046	.507	[.260, .987]	
Have ever been bullied (victim)	-.908	.000	.403	[.270, .603]	
Have been electronically bullied	-.660	.005	.517	[.325, .822]	

Exp(B) = Odds Ratio; LL = lower limit; UL = upper limit

A logistic regression was performed to ascertain the effects of age, sex, watching TV and playing video/computer games three or more hours per day on the likelihood of bullying others. The logistic regression model was statistically significant,  $X^2(4) = 27.402$ ,  $p < .005$ . The model explained 20% (Nagelkerke  $R^2$ ) of the variance in bullying and correctly classified 84.8% of cases. Of the four predictor variables only two added significantly to the model: three or more hours of watching television (OR = 1.431) and three or more hours of playing video/computer games (OR = 1.492) as displayed in Table 9.

Table 9

*Logistic Regression Model: Effects of Age, Sex, Watching TV/Playing Video Games on Likelihood of Bullying Others*

Variables in the Equation	B	S.E.	Wald	df	Sig.	Exp(B)	95% CI LL UL
Age	-.018	.080	.053	1	.818	.982	[.840, 1.148]
Sex	.059	.159	.135	1	.713	1.060	[.776, 1.1448]
TV	.359	.164	4.770	1	.029	1.431	[1.037, 1.974]
Video/Computer	.400	.165	5.860	1	0.15	1.492	[1.079, 2.063]

Exp(B) = Odds ratio; LL = lower limit; UL = upper limit

## **Research Question 2**

The second research question was: Is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth?

A chi-square test for association was conducted between being electronically bullied and watching three or more hours of TV on an average school day. All expected cell frequencies were greater than five. The frequency at which the participants reported having been electronically bullied and watching TV three or more hours per day resulted in 20.5% reporting being electronically bullied (OR = 2.285). There was not a statistically significant association,  $X^2(1) = 1.082$ ,  $p = .298$ . A chi-square test for association between being electronically bullied and playing video or computer games or using a computer for something that was not school work three or more hours per day on an average school day and being electronically bullied was also conducted. All expected cell frequencies were greater than five. There was a statistically significant association between being electronically bullied and playing video or computer games or non-school related computer use,  $X^2(1) = 26.337$ ,  $p = .000$ . The frequency at which the participants reported having been electronically bullied and playing video or computer games three or more hours on a school day resulted in 13.8% reporting having been electronically

bullied (OR = .847). The multiple regression analysis for having been electronically bullied (victim) showed that only playing video/computer games was statistically significant in predicting being electronically bullied,  $F(1, 1236) = 25.524$ , OR = .847, Nagelkerke  $R^2$  = .002,  $p$  value = .000. Watching television three or more hours on an average school day was significant in this analysis, OR = .847, Nagelkerke  $R^2$  = .002,  $p$  = .030.

The logistic regression analysis for association between video/computer games showed Nagelkerke  $R^2$  = .037, OR = 2.285,  $p$  value = .000; supporting a rejection of the null; having been electronically bullied ( $p$  = .000) also supports a rejection of the null, as summarized in Table 10, which reflects logistic regression model for association between prolonged exposure to media (television) and having been electronically bullied. Alternately, Table 11 reflects the logistic regression model for prolonged exposure to media (video/computer games). These results support that prolonged exposure to non-school related media use (watching television and playing video/computer games three or more hours per day on an average school day) is associated with being electronically bullied.

Table 10

*Logistic Regression Analysis for Association Between Watching Television Three or More Hours per day and Having been Electronically Bullied*

Variable	B	Sig.	Exp(B)	95% CI Lower and Upper
Watching television three				



or more hours per day	-.361	.030	.697	[.503 – .966]
--------------------------	-------	------	------	---------------

Exp(B) = Odds ratio

Table 11

*Logistic Regression Analysis for Association Between Playing Three or More Hours of Video/Computer Games per day and having been Electronic Bullying*

Variable	B	Sig.	Exp(B)	95% CI Lower and Upper
Playing video/computer games three or more hours per day	.897	.000	2.451	[1.756 – 3.421]

Exp(B) = Odds ratio

### **Ancillary Analysis**

This information was available in the data set and was important to include. I decided to test the relationship and here are the results:

When looking at associations of risk and protective factors among urban middle school students, the literature review referenced the volatility of peer influence and the

risks that adolescents take when among peers. One survey question relating to peer influence was:

*If one of your best friends offered you a cigarette, would you smoke?* In 2013, 931 (71.5%) reported that they would smoke if one of their best friends offered them a cigarette; while 349 (26.8%) said they would not.

Through this study, I noted that having the support of at least one adult can serve as a protective factor for the adolescent. There was one question on the YRBSS, 2013 which measured adult support. The question was: *Is there at least one teacher or other adult in this school that you can talk to if you have a problem?* In 2013, 831 (66.7%) reported that they have at least one teacher or other adult in the school they could talk to if they had a problem; while 415 (31.9%) said they did not.

The ability to do well following an adverse situation (exposure to violence) is defined in this study as, resilience. One YRBSS question was asked about student grades, noting that A's and B's was an important factor for students who had adult support. The following question was asked; *During the past 12 months, how would you describe your grades in school?* In 2013, 731 (57.5%) of students reported having mostly A's and B's in school, compared to 541 (41.6%) who did not have A's and B's. Table 12 is documentation for the frequencies of these covariates.

Table 12

*Frequencies for covariates*

Dependent Variable	Frequency	Valid percent (%)
--------------------	-----------	-------------------

---

Peer Influence	931	72.7
Adult Support	831	66.7
Maintain Good Grades	731	57.5

---

Of those students who reported having mostly A's and B's in school, 15.2% also reported having adult support. A logistic regression was performed to determine the effects of having adult support on the likelihood that students would achieve grades of A's and B's. The logistic regression model was statistically significant,  $X^2(9) = 46.340$ ,  $p < .005$ . The model explained 5% (Nagelkerke  $R^2$ ) of the variance in good grades, thus supporting the literature that having adult support may serve as a protective factor for these urban adolescents. The regression model analysis also supported the literature, showing that having adult support statistically significantly predicted grades of A's and B's in school:  $F(1, 1216) = 9.720$ ,  $p\text{-value} = .002$ . Table 13 provides a summary of the regression model for having adult support and receiving grades of A's and B's.

Table 13

*Regression Model for Having Adult Support and Grades Of As and Bs*

Variable	Sum of Squares	df	Mean Square	F	Sig.
Adult support with A's and B's <sup>a</sup>	2.352	1	2.352	9.720	.002 <sup>b</sup>

a. Dependent Variable: school grades

b. Predictors: (Constant), Adult support

## Summary

Two research questions were the nucleus of this study: First, is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth? And second, is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth?

The results of statistical analyses performed and descriptive statistics were all presented in this chapter. Using a quantitative approach, this study was designed to test the relationship between prolonged use of non-school related media and youth violence. The first research question for whether prolonged exposure to non-school related media use is associated with violent behavior in the study's sample of urban youth, the null hypothesis was rejected. The results of the data analysis showed that prolonged exposure to non-school related media use was associated with violent behavior (carrying a weapon, physical fighting, perpetrating bullying) in the study's sample of urban youth. For the second research question, of whether prolonged exposure to non-school related media use is associated with violent behavior through electronic bullying in the study's sample of urban youth, the analysis revealed that playing video and computer games three or more hours per day was positively associated with electronic bullying, however three or more hours of TV viewing per day was not associated with electronic bullying. The null hypothesis was rejected for video/computer and its association with electronic bullying and accepted for TV.

Chapter 5 is inclusive of a summation of this study, including its limitations. An interpretation of the findings, potential for social change, recommendations for future studies, and conclusions of this study are also included in the next chapter.

## Chapter 5: Discussion and Implications

The overarching goal of this study was to test the relationships between prolonged non-school related media use and youth violence among adolescent middle school students in urban Chicago. Two research questions were examined for this study. First, is prolonged exposure to non-school related media use associated with violent behavior in the study's sample of urban youth? Second, is prolonged exposure to non-school related media use associated with violent behavior through electronic bullying in the study's sample of urban youth? This study was conducted because youth violence in urban areas is a threat to the health of the public. Both risk and protective factors were tested in this study. Researchers who have studied youth violence have found that disadvantaged middle school youth, especially males, when given opportunity and adult support show a decreased inclination toward violence (Marano, 2012; University of Chicago, 2012).

A key finding of this study from Research Question 1 is that exposure to watching television 3 or more hours per day and playing video and computer games 3 or more hours per day had a statistically significant positive association with violent behavior among middle school students in urban Chicago public schools. The key finding from Research Question 2 was that there was a statistically significant positive association between watching 3 or more hours of TV per day and having been electronically bullied. Moreover, having been electronically bullied was a statistically significant factor in being the perpetrator of bullying others.

As described in Chapter 2, adolescence is a heightened time of vulnerability and susceptibility to the influence of one's surroundings, especially among peers (Smit, 2009;

Stoddard et al., 2013). According to Stoddard et al. (2013), association with peers who are delinquent increases the possibility for engagement in violence or other maladaptive behavior. This study showed that 71.5% of the students surveyed agreed that they would smoke a cigarette if offered to them by a peer, thus confirming a small portion of Stoddard et al.'s (2013) claim of peer influence. The literature supports the need for programs that promote primary prevention and structure (Jones, 2007; LeBlanc et al., 2011; Medina et al., 2002).

### **Interpretation of the Findings**

After analysis of secondary data from the 2013 YRBSS survey using logistic regression modeling, multiple regression, and chi-square tests, I found a positive association between prolonged exposure to non-school related media and youth violence. Youth violence was measured by the variables of violence or violent behaviors from the 2013 YRBSS (carrying a weapon, physical fighting, physical fighting with injuries, being bullied (victim), being a bully (perpetrator), and being harassed due to GLBT). After examining the results, I found a statistically significant positive relationship between exposure to non-school related media and the likelihood of carrying a weapon, physical fighting, and physical fighting resulting in injuries and bullying (both victim and perpetrator). This finding confirmed the research of Huesmann et al., (2003) and Anderson et al., (2012), which supported the need to create more programs that offer structured free time to middle school students, lessening the potential for maladaptive behavior. After conducting a longitudinal study, Huesmann et al. found that exposure to non-school related media use in childhood affects children in adolescence and young

adulthood, increasing the potential for aggressive behavior. Anderson et al. found that exposure to violent video content increased the potential for negative outcomes. Unlike Anderson et al., I did not test for content of video games played, but rather the amount of time played, thus supporting the need to minimize the amount of time engaged in media overall. Anderson et al. examined research that showed a link between playing video games and aggression; however, it is uncertain whether or not that link was a result of prolonged exposure to non-school related media, as defined in my study. Anderson et al. concluded that media that encourages positive socialization can be helpful for adolescents; however, exposure to excessive (my study uses the term *prolonged*) video game playing can be deleterious to the social well-being of 11-14 year olds. In other words, the greater the exposure, the greater the risk for aggressive behavior (bullying and hurting other people). Anderson et al. concluded that adolescents ages 11-14 play video games the most, but did not provide a definition for *excessive*. I provided clarity from the CDC that excessive (prolonged) exposure is 3 or more hours per day on an average school day.

Analysis of Research Question 2 showed some level of association between prolonged exposure to non-school related media, in the form of video and computer games, and electronic bullying. Logistical regression results showed a statistically significant positive relationship between watching television or playing video or computer games 3 or more hours per day and having been electronically bullied. This finding supports the assertion that young people require support because of the stress that personal victimization can create (Wade et al., 2014). For urban youth who live in



underprivileged neighborhoods and have adverse childhood experiences (ACE), there is considerable risk for the means in which they problem-solve, thus placing them at greater vulnerability (Anderson et al., 2012; Stoddard et al., 2013). Critical attention to the association between prolonged media exposure and being electronically bullied is important when creating programs that include family and social networks, schools, and youth programs that reduce the impact of violence among youth (LeBlanc et al., 2011).

Adolescent urban youth reported involvement in carrying weapons, engaging in physical fights, and being victims of bullying and perpetrating bullying, all which showed an association with engaging in 3 or more hours of non-school related watching television or playing video or computer games. Violence is rarely the result of a single variable (Anderson et al., 2012); therefore, finding an association between non-school related media and youth violence may be a catalyst for further discussion on prevention.

### **Limitations of the Study**

The YRBSS elicited self-reported data that do not allow the researcher to account for over/under reporting of adolescent behavior. The use of data from a sample based in a school setting does not allow for inclusion of adolescent behavioral health risks from those who do not attend school or who did not attend school on the day the survey was administered. Without parental permission, students were not allowed to take the survey, thus limiting student participation. This study was further limited by data that needed to be recorded as missing due to student participants who did not answer all of the questions on the survey. Consequently, the results may not be an accurate representation of students who fit the criteria (adolescent, middle school, urban dwelling) for participation. That this

study was further limited to behavior obtained from a survey that did not solicit composite information regarding individual risk factors. Although health risk behavior was documented, the motivation leading to the behavior could not be accounted for.

### **Recommendations**

This study was limited to the city of Chicago. I recommended that future research include adolescents from suburban areas as well.

I also recommend that the cross-sectional data for YRBSS from previous years be analyzed for any changes and similarities and compared with 2013 results, which might indicate a difference in behavior from year to year of middle school students who are exposed to 3 or more hours of television or video and computer games. The 2015 YRBSS data is now available, and I recommend that further research be conducted addressing the differences in electronics used among middle school adolescents, which might affect the outcome of subsequent violence noted within the data. The CDC may want to extend its administration of the YRBSS to youth centers within inner city regions in an effort to capture the responses of adolescent, middle-school, urban dwelling youth, which might not be otherwise obtained in a school setting.

In Chapter 3, I provided the rationale for looking at prolonged exposure to non-school related media based on the guidelines set forth by the National Institutes for Health in 2013. In Chapter 3, I noted that The National Institutes for Health (2013) shared guidelines as follows for appropriate screen time: Under the age of 2, there should be no screen time, and over the age of 2, screen time should be limited to 1-2 hours per day (DHHS, 2013; Kaneshiro et al., 2013). Brown, Shifrin and Hill (2015) called

attention to whether this guideline should be altered, given that over 30% of children in the United States are introduced to a mobile device before toilet training begins.

According to the American Academy of Pediatrics, Growing Up Digital: Media Research Symposium, parents should take an active role in spending time with children, infants, and toddlers as they engage in media use involving screen time (Brown et al., 2015).

Children still require set limits and parental role models; however, because unstructured play time is a time that children are most creative (Brown et al., 2015), these new guidelines should be further researched.

My study confirmed the need for vigilance in the amount of time adolescent youth are engaged in non-school related media. Surveillance is recommended for adolescent screen time. Education about media should be implemented in the home and among constituents who work with urban adolescents, including enforcing time limits for watching television or playing of video/computer games on an average school day, using media effectively, and helping adolescents exercise self-control when engaging in media use. Anderson et al. (2012) confirmed that adolescent youth spend a substantial amount of time engaged in the media. The need for vigilance remains vital, as violent media may be accessed during unstructured free time and may be substantially influential during the growing years (Anderson et al., 2012).

### **Implications**

In support of the collaborative efforts of Healthy People 2020, CDC, and the U.S. Department of Health and Human Services, local effort in the city of Chicago should continue to be centered on decreasing violence among the adolescent population.

In using YRBSS data, the differences among the adolescent students in Chicago may not be captured. The data received were not stratified by where the students lived in the city, what their home setting was like, what other risks the students were exposed to, and what supports were in place. A statistically significant association between prolonged exposure to non-school related media and the likelihood of violent behavior among urban middle school youth is one of the findings from this study. Another finding is that being a bully was associated with other violence variables, including carrying a weapon, engaging in a physical fight, and being injured as a result of physical fighting and electronic bullying. Historically, youth violence is higher in urban areas. However, according to my review of the literature, not all youth in urban environments engage in violent behavior (Johnson et al., 2012). Also noted in the literature review is adult support may serve as a protective factor deterring youth away from violence. Within the ancillary data analysis, I noted that some urban middle school youth with the support of an adult (teacher or otherwise) have been able to maintain grades of A's and B's in school. The findings from this study support the need to create strategies tailored to urban adolescent youth and to promote preventive efforts. Because of the deleterious impact that prolonged use (3 or more hours per day) of non-school related media can have, it is important to initiate programs that provide structure and sensitivity to urban adolescents. In an effort to support social change, encouraging policymakers to implement programs that minimize screen time, address violence variables, discourage prolonged media use outside of the school setting, and encourage youth engagement with at least one adult in a positive relationship would support youth violence prevention. The launch of programs

that systematically and holistically address how youth occupy free time, why there is a need for carrying a weapon or physically fighting, and alternative positive activities would promote a nonviolent climate for individuals, families, and communities where these youth reside.

### **Conclusion**

This study was focused on a sample ( $N = 1228$ ) of adolescent middle school students from Chicago public schools who participated in the CDC, YRBSS biennial survey, 2013. This survey solicited self-reported information in six main areas including unintentional injuries and violence, tobacco use, alcohol and other drug use, sexual behaviors, dietary behaviors, and physical activity.

Through the literature review, I learned that adolescents 11-14 years old are a vulnerable population (Anderson et al., 2012; Smit, 2009; Stoddard et al., 2013). During unstructured free time, some adolescents play video or computer games or watch television for 3 or more hours per day on an average school day (Brener et al., 2013; CDC 2015; City of Chicago, 2010). I also learned that youth violence among urban youth is most likely in individuals with other risk factors such as low socioeconomic status and poor family support (Hall et al., 2012b; Krahe et al., 2011; Ybarra et al., 2008), and that primary prevention efforts are worthwhile (Heller et al., 2013). After finding that urban youth who are exposed to 3 or more hours of non-school related media are susceptible to carrying weapons and physical fighting, I concluded that prevention should focus on positive communication and problem-solving along with minimizing time spent watching

television or playing video or computer games, also noted in the literature and study results (Brown et al., 2015; DHHS, 2013).

For the 70.2% of students who had at least one adult or teacher within the school setting to whom they could talk to about problems, those same students also reported that their grades were A's and B's. Having at least one adult to talk to may be one of the primary prevention efforts that may be helpful in modifying maladaptive behaviors among urban youth and minimizing negative peer influence as noted in the literature review and analyzed among the ancillary data. Urban inner-city adolescent youth require structured free time, adult support, family support and community commitment (City of Chicago, 2009; City of Chicago, 2010)

This study aligns with the overarching goals of the City of Chicago's desire to maintain a safe living environment, a safe working environment and a safe place for the public at-large. And because this has been the focus of this study, it remains important to continue surveillance of the mental and emotional complexities that often accompany adolescence. While the question of whether overexposure to non-school related media is deleterious in-whole remains unanswered. However, one perspective which has been highlighted as a result of this study is this: some of the middle school students from Chicago public schools reported violent behavior (carrying a weapon, physical fighting, being electronically bullied, bullying others) and watching television and playing video or computer games three or more hours a day on an average school day. Although violent behavior among adolescents is not unique to Chicago alone, however, there was a statistically significant relationship between exposure to non-school related media three

or more hours per day and the likelihood of violent behavior among Chicago middle school students. The results from this study can help with the visibility of social change as parents, agency workers, teachers and policy makers are consistently educated about the perils of prolonged media use among middle school students. Through the results of this study, all caregivers are encouraged to apply constructive support for students who require assistance with conduct, attitude, and overall learning. Learning that is directed away from prolonged non-school related media use and siphoned toward the availability of programs which promote: growing in knowledge, learning positive life-long skills, reaching toward goals for a better future and maintaining the wisdom that decisions and actions of today impact society at-large. It is my hope that with continued efforts to limit the amount of time middle students spend watching television and playing video games, that it is one way to steer these youth onto the path away from violence (carrying weapons, engaging in physical fights, being victims of bullying and perpetrating bullying), as youth violence is preventable.

## References

- Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *Canadian Journal of Psychiatry, 56*(5), 266-72.
- Ahmed-Ullah, N. S. (2014, July 14). Put an end to fraudulent applications submitted for the free and reduced lunch program. *Chicago Tribune, online*. Retrieved from <http://my.chicagotribune.com/#section/-1/article/p2p-80714039>
- Aisenberg, E., & Herrenkohl, T. (2008). Community violence in context: Risk and resilience in children and families. *Journal of Interpersonal Violence, 23*(3), 296-315. doi:10.1177/0886260507312287
- Aldwin, C. M., Cunningham, M., & Taylor, A. L. (2010). Resilience across the lifespan: A tribute to Emmy E. Warner. *The Official Journal of The Society of Human Development, 7*(3), 159-163. DOI: 10.1080/15427609.2010.504502
- Allison, K. W., Edmonds, T., Wilson, K., Pope, M., & Farrell, A. D. (2011). Connecting youth violence prevention, positive youth development, and community mobilization. *American Journal of Community Psychology (September 2011), 48*(1-2), 8-20. doi:10.1007/s10464-010-9407-9
- American Academy of Pediatrics. (2001). Children, adolescents, and television. Retrieved from [pediatrics.aappublications.org/content/107/2/423](http://pediatrics.aappublications.org/content/107/2/423)
- American Psychological Association. (2014). *Violence*. Retrieved from <http://www.apa.org/topics/violence/index.aspx>
- Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J. D., Linz, ... Wartella, E. (2003). The influence of media in youth violence. *The*



*Journal of the Association for Psychological Science*, 4(3), 81-110.

doi:10.1111/j.1529.1006.2003.pspi\_1433x.

Anderson, C. A., & Warburton, W. A. (2012). The impact of violent video games: An overview. In W. Warburton & D. Braunstein (Eds.), *Growing up fast and furious: Reviewing the impacts of violent and sexualized media on children* (pp. 56-84). Annandale, NSW, Australia: The Federation Press.

Askins, J. (2010). *Mapping violent crimes in Chicago 'hoods*. Retrieved from

<http://yochicago.com/mapping-violent-crimes-in-chicago-hoods/16501/>

Bandura, A. J. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.

*Journal of Personality and Social Psychology*, 51(6), 1173-82. Retrieved from

<http://dx.doi.org/10.1037/0022-3514.51.6.1173>.

Beresin, E. (2014). The impact of media violence on children and adolescents:

opportunities for clinical interventions. *American Academy of Child and Adolescent Psychiatry*. Retrieved from

[http://www.aacap.org/AACAP/Medical\\_Students\\_and\\_residents/Mentorship\\_Matters/DevelopMentor/The\\_Impact\\_of\\_Media\\_Violence\\_on\\_Children\\_and\\_Adolescents\\_Opportunities\\_for\\_Clinical\\_Interventions.aspx](http://www.aacap.org/AACAP/Medical_Students_and_residents/Mentorship_Matters/DevelopMentor/The_Impact_of_Media_Violence_on_Children_and_Adolescents_Opportunities_for_Clinical_Interventions.aspx)

Borowksy, I. W., & Ireland, M. (2004). Predictors of future fight-related injury among

adolescents. *Journal of the American Academy of Pediatrics*, 113(3 Pt. 1), 530-6.

- Boxer, P., Huesmann, L. R., Bushman, B. J., O'Brien, M., & Mocerri, D. (2008). The role of violent preference in cumulative developmental risk for violence and general aggression. *Journal of Youth and Adolescence*, 38(3), 417-428.  
doi:10.1007/s10964-008-9335-2
- Braveman, P. (2010). Social conditions, health equity, and human rights. *Health and Human Rights: International Journal*, 12(2), 31-48. Retrieved from <http://www.hhrjournal.org/index.php/hhr/article/view/367/563>
- Brener, N. D., Kann, L., Shanklin, S., Kinchen, S., Eaton, D. K., Hawkins, J., & Flint, K. H. (2013). Methodology of the youth risk behavior surveillance system – 2013. *Morbidity and Mortality Weekly Report*, March 1, 2013, 63(1). Retrieved from [www.cdc.gov/mmwr/preview/mmwrhtml/rr6201a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6201a1.htm)
- Brook, D. W., Brook, J. S., Rosen, Z., DelaRosa, M., Montoya, I. D., & Whiteman, M. (2004). Early risk factors for violence in Columbia. *Journal of the American Psychiatric Association*, 160(8), 1470-8. doi:10.1176/appi.ajp.160.8.1470
- Browne, K. J., & Hamilton-Giachritsis, C. (2005). The influence of violent media on children and adolescents: A public health approach. *The Lancet*, 365(9460), 702-710. doi:10.1016/S0140-6736(05)17952-5
- Centers for Disease Control and Prevention. (2008). *Violence prevention*. Retrieved from <http://www.cdc.gov/violenceprevention/pdf/EA-brief-a.pdf>
- Centers for Disease Control and Prevention. (2011). *Youth violence: Risk and protective factors*. Retrieved from <http://www.cdc.gov/ViolencePrevention/youthviolence/riskprotectivefactors.html>

Centers for Disease Control and Prevention. (2011b). *Youth violence: Risk and protective factors*. Retrieved from

<http://www.cdc.gov/ViolencePrevention/youthviolence/riskprotectivefactors.html>

Centers for Disease Control and Prevention. (2011c). *Youth violence: Definitions*.

Retrieved from

<http://www.cdc.gov/ViolencePrevention/youthviolence/definitions.html>

Centers for Disease Control and Prevention. (2012a). *Understanding youth violence: Fact sheet*. Retrieved from [cdc.gov/violenceprevention](http://cdc.gov/violenceprevention)

Centers for Disease Control and Prevention. (2012b). *Injury center: Violence prevention*.

Retrieved from <http://www.cdc.gov/violenceprevention/youthviolence/index.html>

Centers for Disease Control and Prevention. (2013). *Youth violence national and state statistics at a glance*. Retrieved from

[http://www.cdc.gov/ViolencePrevention/youthviolence/stats\\_at-a\\_glance/](http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at-a_glance/)

Centers for Disease Control and Prevention. (2014). *CDC helps prevent global violence*.

Retrieved from [cdc.gov/violenceprevention/globalviolence/index.html](http://cdc.gov/violenceprevention/globalviolence/index.html)

Centers for Disease Control and Prevention. (2015). *Youth Risk Behavior Surveillance*

*System (YRBSS)*. Retrieved from

<http://www.cdc.gov/healthyyouth/yrbs/index.htm>

Center for Sport Policy and Conduct. (1999). *Children, violence and the media: A report for parents and policy makers*. Retrieved from

<http://www.indiana.edu/~cspc/ressenate.htm>

- Chicago Community Trust. (CCT) (n.d.). Impact Chicago: Youth violence fact sheet. *The Chicago community trust and affiliates*. Retrieved from [http://www.cct.org/sites/cct.org/files/CCT\\_YouthViolenceFactSheet\\_0.pdf](http://www.cct.org/sites/cct.org/files/CCT_YouthViolenceFactSheet_0.pdf)
- Chicago Public Schools. (n.d.). *District and Community Demographics*. Retrieved from [http://www.cps.edu/FY13Budget/documents/AppendixA\\_DistrictCommunity.pdf](http://www.cps.edu/FY13Budget/documents/AppendixA_DistrictCommunity.pdf)
- Chicago Public Schools (2015). *Stats and facts*. Retrieved from [http://www.cps.edu/about-CPS/At-a-glance/Pages/stats\\_and\\_facts.aspx](http://www.cps.edu/about-CPS/At-a-glance/Pages/stats_and_facts.aspx)
- Child Family Community Australia. (2013). *Australian institute of family studies*. Retrieved from <http://www.aifs.gov.au/cfca/pubs/papers/a141718/06.html>
- City of Chicago. (2009). Juvenile justice. *Juvenile arrest trends: 2003-2008*. Retrieved from [www.chicagopolice.org](http://www.chicagopolice.org)
- City of Chicago. (2010). *National forum on youth violence prevention*. Retrieved from [http://www.cityofchicago.org/content/dam/city/depts/mayor/supp\\_info/ylpFINAL.pdf](http://www.cityofchicago.org/content/dam/city/depts/mayor/supp_info/ylpFINAL.pdf)
- City of Chicago. (2011). *National forum on youth violence prevention: City of Chicago youth violence prevention plan*. Retrieved from [http://www.cityofchicago.org/dam/city/depts/mayor/supp\\_info/ylpFINAL.pdf](http://www.cityofchicago.org/dam/city/depts/mayor/supp_info/ylpFINAL.pdf)
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Crosby, R., DiClemente, R., & Salazar, L. (2006). *Research methods in health promotion*. San Francisco: Jossey-Bass.

- Datner, E. (2004). *Resilience in inner city African American youth exposed to community violence*. West Hartford, CT: University of Hartford.
- David-Ferdon, C. & Hertz, M. F. (2009). Electronic media and youth violence: A CDC issue brief for researchers. Retrieved from <http://www.cdc.gov/ViolencePrevention/pdf/EA-brief-a.pdf>
- Davis, C. (2012). *Youth violence as a social determinant of health*. Unpublished manuscript, Walden University.
- Department of Health and Human Services. (2013). *Tips to reduce screen time*. Retrieved from <http://www.nhlbi.nih.gov/health/educational/wecan/reduce-screen-time/tips-to-reduce-screen-time.htm>
- DeRavello, L., Everett Jones, S., Tulloch, S., Taylor, M., & Doshi, S. (2014). Substance use and sexual risk behaviors among American Indian and Alaska Native high school students. *Journal of School Health*, 84(1), 25-32. Retrieved from [www.ncbi.nlm.nih.gov/pmc/articles/PMC4311718/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4311718/)
- Donnellan, M. B., Conger, K. J., McAdams, K. K., & Neppi, T. K. (2009). Personal characteristics and resilience to economic hardship and its consequences: Conceptual issues and empirical illustrations. *Journal of Personality*, 77(6), 1645-1675. DOI: 10.1111/j.1467-6494.2009.00596.x
- Doolan and Froelicher (2009). Using an existing data set to answer new research questions. *Res Theory Nurs Pract* 23(3). Retrieved from <http://dx.doi.org/10.4135/9781412952644>

DuRant, R. H., Cadenhead, C., Pendergrast, R. A., Slavens, G. & Linder, C. W. (1994).

Factors associated with the use of violence among urban black adolescents.

*American Journal of Public Health*, 84(4). Retrieved from

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1614778/>

Ferguson, C. et al (2008). The school shooting/violent video game link: Causal

relationship or moral panic? *Journal of Investigative Psychology and Offender*

*Profiling*, 5(1-2). Retrieved from

<http://onlinelibrary.wiley.com/doi/10.1002/jip.76/pdf>

Ferguson, C. J., San Miguel, C., & Hartley, R. D. (2009a). A multivariate analysis of

youth violence and aggression: The influence of family, peers, depression, and

media violence. *The Journal of Pediatrics*, 155(6). DOI:

10.1016/j.jpeds.2009.06.021

Ferguson, C. & Kilburn, J. (2009b). The public health risks of media violence: A meta-

analysis review. *The Journal of Pediatrics*. DOI: 10.1016/j.jpeds.2008.11.033

Ferguson, C. (2010). Blazing angels or resident evil? Can violent video games be a force

for good? *Review of General Psychology*, 14(2). DOI: 10.1037/a0018941

Ferguson, C. J. (2011). Video games and youth violence: A prospective analysis in

adolescents. *Journal of Youth and Adolescence*. Retrieved DOI 10.1007/s10964-

010-9610-x

Folke, C. (2007). What is resilience. *Stockholm Resiliency Center*. Retrieved from

<http://www.stockholmresilience.org/research/whatisresilience.4.aeea46911a31274>

27980004249.html

- Garbarino, J. (1995). *Raising children in a socially toxic environment*. Jossey-Bass Publishers, San Francisco.
- Garmezy, N. (1991). Resilience and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*, 34(4), 416-430.  
Retrieved from  
[search.proquest.com/openview/7060d20f88620769d8fcb2cd09a6fef6/1?pq-origsite=](http://search.proquest.com/openview/7060d20f88620769d8fcb2cd09a6fef6/1?pq-origsite=)
- Gartland, D., Bond, L., Olsson, C., Buzwell, S. & Sawyer, S. M. (2011). Development of a multi-dimensional measure of resilience in adolescents: The adolescent resilience questionnaire. *BMC Medical Research Methodology*, 11(134), 1-10.  
Retrieved from <http://www.biomedcentral.com/1471-2288/11/134>
- Gentile, D. A., Coyne, S. & Walsh (2011). Media violence, physical aggression and relational aggression in school age children: A short term longitudinal study. *Journal of Aggressive Behavior*, 37(2), 193-206. DOI:10.1002/ab.20380
- Gorski, T. (2013). *Youth violence: A report of the surgeon general*. Retrieved from <http://terrygorski.com/2013/12/05/youth-violence-a-report-of-the-surgeon-general>
- Hall, J.E., Simon, T. R., Mercy, J.A., Loeber, R., Farrington, D. P. & Lee, R. D. (2012a). Centers for Disease Control and Prevention's expert panel on protective factors for youth violence perpetration. *American Journal of Preventive Medicine*, 43(2S1), S1-7. Retrieved from <http://dx.doi.org/10.1016/j.amepre.2012.04.026>
- Hall, J. E., Simon, T. R., Lee, R. D. & Mercy, J. A. (2012b). Implications of direct protective factors for public health research and prevention strategies to reduce

youth violence. *American Journal of Preventive Medicine*, 43(2S1), S76-83.

Retrieved from <http://dx.doi.org/10.1016/j.amepre.2012.04.019>

Healthy People 2020. (2014). *Injury and violence prevention*. Retrieved from

<http://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives>

Heller, S. B., Pollack, H.A., Ander, R. & Ludwig, J. (2013). Preventing youth violence and dropout: A randomized field experiment. *University of Chicago*. Retrieved from

[http://home.uchicago.edu/~sbheller/UC\\_Site/Welcome\\_files/Heller%20et%20al%20draft%2020130425.pdf](http://home.uchicago.edu/~sbheller/UC_Site/Welcome_files/Heller%20et%20al%20draft%2020130425.pdf)

Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. (2011). What Is Resilience?. *Canadian Journal of Psychiatry*, 56(5), 258-265.

Retrieved from

<http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=c1b43998-c66b-4b96-bf54-7cfcf844a41b%40sessionmgr114&vid=1&hid=102>

Jain, S., Buka, S. L., Subramanian, S. V., & Molnar, B. E. (2012). Protective factors for youth exposed to violence: Role of developmental assets in building emotional resilience. *Youth Violence and Juvenile Justice*, 10(1), 107-129. DOI

10.1177/1541204011424735

Jain, S. & Cohen, A. K. (2013). Fostering resilience among urban youth exposed to violence: A promising area for interdisciplinary research and practice. *Health Education and Behavior*, 20(10), 651-62. DOI. 10.1177/1090198113492761



- Johnson, S. L., Finigan, N., Bradshaw, C., Haynie, D. & Cheng, T. (2012). Urban African American parent's messages about violence. *Journal of Adolescent Research*, 28(5), 511-534. Retrieved from <http://jar.sagepub.com/content/28/5/511.full.pdf+html>
- Jones, J. M. (2007). Exposure to chronic community violence: Resilience in African American children. *Journal of Black Psychology*, 33(2), 125-149. DOI: 10.1177/0095798407299511
- Kann, L., Kichen, S., Shanklin, S. L., Flint, K. H., Hawkins, J., Harris, W. A., ... & Zaza, S. (2014). Youth Risk Behavior Surveillance – United States, 2013. *Morbidity and Mortality Weekly Report, June 13, 2004*, 63(4), 1-162. Retrieved from <http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf>
- Kassis, W., Artz, S., Scambor, C., Scambor, E. & Moldenhauer, S. (2012). Finding the way out: A non-dichotomous understanding of violence and depression resilience of adolescents who are exposed to family violence. *Child Abuse and Neglect*, 37(2-3), 181-99. Retrieved from <http://dx.doi.org/10.1016/j.chiabu.2012.11.001>
- Kirsh, S. J. (2003). The effects of violent video games on adolescents: The overlooked influence of development. *Aggression and Violent Behavior Journal*, 8(2003), 377-389. Retrieved from <http://geneseo.edu/~kirsh/vita/avb.pdf>
- Krahé, B., Möller, I., Huesmann, L. R., Kirwil, L., Felber, J. and Berger, A. (2011). Desensitization to media violence: Links with habitual media violence exposure, aggressive cognitions, and aggressive behavior. *Journal of Personality and Social Psychology*, 100(4), 630-646. DOI: 10.1037/a0021711

- Kraemer, H. C., Stice, E., Kazdin, A., Offord, D. & Kupfer, D. (2001). How do risk factors work together? Mediators, moderators, and independent, overlapping and proxy risk factors. *American Journal of Psychology*, 158(6), 848-56. Retrieved from <http://ajp.psychiatryonline.org/data/Journals/AJP/3725/848.pdf>
- LeBlanc, M., Self-Brown, S., Shepard, D., & Kelley, M. L. (2011). Buffering the effects of violence: Communication and problem-solving skills as protective factors for adolescents exposed to violence. *Journal of Community Psychology*, 39(3), 353-367. DOI: 10.1002/jcop.20438
- Lewis, K. M., Schure, M. B., Bavarian, N., DuBois, D. L., Day, J., Ji, P., . . . & Flay, B. R. (2013). Problem Behavior and Urban, Low-Income Youth: A Randomized Controlled Trial of Positive Action in Chicago. *American Journal of Preventive Medicine*, 44(6), 622-30. doi: 10.1016/j.amepre.2013.01.030
- Lowry, R., Robin, L., Kann, L., & Galuska, D. A. (2014). Association of body mass index with sexual risk taking and injection drug use among U.S. high school students. *Journal of Obesity*, Article ID 816071. Retrieved from <http://dx.doi.org/10.1155/2014/816071>
- Marano, H. E., (2012). *The art of resilience*. Retrieved from <http://www.psychologytoday.com/articles/200305/the-art-resilience>
- Mark, R., Groskopf, C., Germuska, J. & Boyer, B. (2014). Tracking homicides in Chicago. *Redeye project*. Retrieved from <http://homicides.redeyechicago.com/date/2013/1/>

- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-38. Retrieved from <http://dx.doi.org/10.1037/0003-066X.56.3.227>
- Masten, A. S. & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologists*, 53(2), 205-220. Retrieved from <http://dx.doi.org/10.1037/0003-066X.53.2.205>
- Medina, A. M., Margolin, G., Gordis, E. B., Osofsky, J. D., Osofsky, H. J., & Miller, D. (2002). Violence, Children's exposure to. *Encyclopedia of Education*. Retrieved from <http://education.stateuniversity/pages/2531/Violence-Children-s-Exposure.html>
- Mello, C. and Nader, K. (2013). *Teaching coping and social skills to elementary school children*. Retrieved from [https://books.google.com/books?id=oZ8zZJUICUwC&pg=PA103&lpg=PA103&ots=AlfWZI\\_SQx&focus=viewport&dq=problem](https://books.google.com/books?id=oZ8zZJUICUwC&pg=PA103&lpg=PA103&ots=AlfWZI_SQx&focus=viewport&dq=problem)
- Miller, G. W., & Jones, D. P. (2013). The nature of nurture: Redefining the definition of the exposome. *Toxicological Sciences*, 137(1), 1-2. DOI: 10.1093/toxsci/kft251
- National Forum. (2012). *National forum on youth violence prevention*. Retrieved from <http://www.findyouthinfo.gov/youth-topics/preventing-youth-violence>
- National Institutes of Health. (2013). *Screen time and children*. Retrieved from [www.nlm.nih.gov/medplus/ency/patientinstructions/000355.htm](http://www.nlm.nih.gov/medplus/ency/patientinstructions/000355.htm)

- Nowell, B. & Boyd, N. (2010). Viewing community as responsibility as well as resource: Deconstructing the theoretical roots of psychological sense of community. *Journal of Community Psychology, 38*(7), 828-841. DOI: 10.1002/jcop.20398
- Office of Juvenile Justice and Delinquency Prevention. (2014). *Juvenile arrest rate trends*. Retrieved from [http://www.ojjdp.gov/ojstatbb/crime/JAR\\_Display.asp?ID=qa05201](http://www.ojjdp.gov/ojstatbb/crime/JAR_Display.asp?ID=qa05201)
- O’Keeffe, G. S. & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and family. *Journal of The American Academy of Pediatrics, 127*(4), 800-804. DOI: 10.1542/peds.2011-0054
- Peeters, J. (2012). Social work and sustainable development: Towards a social-ecological practice model. *Journal of Social Intervention: Theory and Practice, 21*(3), 5-26. Retrieved from <http://www.journalssi.org>
- Phaneuf, M. (2007). *Resilience: Abstract concept or survival skill?* Retrieved from [www.infiressources.ca/fer/Depotdocument\\_anglais/Resilience\\_and\\_nursing.pdf](http://www.infiressources.ca/fer/Depotdocument_anglais/Resilience_and_nursing.pdf)
- Pittman, K. J., Irby, M., Tolman, J., Yohalem, N., & Ferber, T. (2011). Preventing problems, promoting development, encouraging engagement. Washington, DC: *Forum for Youth Investment*. Retrieved from <http://dev.forumfyi.org/files/Preventing%20Problems,%20Promoting%20Development,%20Encouraging%20Engagement.pdf>
- Prot and Gentile (2014). *Effects of media violence on development*. Retrieved from [www.sciencedirect.com/science/article/pii/B978012800285800008X](http://www.sciencedirect.com/science/article/pii/B978012800285800008X)

- Rosenstock, I, Strecher, V. & Becker, M. (1988). Social learning theory and the health belief model. *Health, Education and Behavior*, 15(2), 175-83. Retrieved from <http://heb.sagepub.com/content/15/2/175.full.pdf+html>
- Rouse, K. A., Longo, M., & Trickett, M. (1999). *Fostering resilience in children*. Retrieved from <http://ohioline.osu.edu/b875/index.html>
- Rutter, M. (2012). Resilience as a dynamic concept. *Developmental and psychopathology*, 24(2), 335-44. doi:10.1017/S0954579412000028
- Salkind & Rasmussen (2007). Encyclopedia of measurement and statistics. Chapter, Secondary data analysis (Brewer, E. W.)
- Sampson, R. J. (2011). The Community. *Crime and Public Policy*. Retrieved from <http://books.google.com/books?hl=en&lr=&id=C3Gi1ob0W4oC&oi=fnd&pg=PA210&dq=the+community.+crime+and+public+policy+sampson&ots=oUFztLcn37&sig=EUipD8l6E84zRDV7DPbeZsy5Hdo#v=onepage&q=the%20community.%20crime%20and%20public%20policy%20sampson&f=false>
- Schaefer, R. T. (2013). *Racial and ethnic groups*. Pearson, 13<sup>th</sup> Edition
- Smit, E. (2009). *High-risk youth*. Retrieved from <http://youthspecialties.com/articles/high-risk-youth/>
- Stoddard, S. A., Whiteside, L., Zimmerman, M. A., Cunningham, R. M., Chermack, S. T., & Walton, M. A. (2013). The relationship between cumulative risk and promotive factors and violent behavior among urban adolescents. *American Journal of Community Psychology*, 51(1-2), 57-65. doi: 10.1007/s10464-012-9541-7

Surgeon General, Office of the (2001). Youth violence: A report of the surgeon general.

*Ch. 4: Risk factors for youth violence.* Retrieved from

<http://www.ncbi.nlm.nih.gov/books/NBK44293/>

Surgeon General, Office of the (2013). *A report of the surgeon general.* Retrieved from

[www.surgeongeneral.gov/initiatives/prevention/strategy/injury-violence-free.pdf](http://www.surgeongeneral.gov/initiatives/prevention/strategy/injury-violence-free.pdf)

Swahn & Bossarte (2009). Assessing and quantifying high risk: Comparing risky

behaviors by youth who live in an urban disadvantaged community with

nationally representative youth. *Public Health Reports, 124*(2), 224-233.

Swartz, T. (2014, November 20). Homicide tracker. *Redeye: Chicago Tribune*

*Publication*, p. 8.

Tortolero, S. R., Peskin, M. F., Baumler, E. R., Cuccaro, P. M., Elliott, M. N., Davies, S.

L., Lewis, T. H., Banspach, S. W., Kanouse, D. E., & Schuster, M. A.. Daily violent video game playing and depression in preadolescent youth.

*Cyberpsychology, Behavior, and Social Networking. September 2014, 17*(9), 609-15. doi:10.1089/cyber.2014.0091.

United States Census Bureau. (2014a). *Chicago city, Illinois.* Retrieved from

[http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_fact.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_fact.xhtml)

United States Census Bureau. (2014b). *5-year American community survey.* Retrieved

from

[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?sic](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_af=1&_lang=en)  
=bk

- United States Census Bureau. (2014c). *State and county quick facts*. Retrieved from <http://quickfacts.census.gov/qfd/states/17/1714000.html>
- U.S. Department of Health and Human Services. (2014). Injury and violence prevention objectives. *Healthy people 2020*. Retrieved from <http://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives>
- University of Chicago. (2012). Becoming a man (BAM) – Sports edition findings. *Crime Lab*. Retrieved from <http://crimelab.uchicago.edu/page/becoming-man-bam-sports-edition-findings>
- University of Dayton Law School (2007). *What is a minority group?* Retrieved from [academic.udayton.edu/race/01race/minor01.htm](http://academic.udayton.edu/race/01race/minor01.htm)
- University of Southern California. (2014). *Organizing our social sciences research paper*. Retrieved from [http://libguides.usc.edu/print\\_content.php?pid=83009&sid=615867](http://libguides.usc.edu/print_content.php?pid=83009&sid=615867)
- Voisin, D. R., Bird, J. D. P., Hardesty, M., & Shiu, C. S. (2011). African American adolescents living and coping with community violence on Chicago's southside. *Journal of Interpersonal Violence*, 26(2), 2483-98. DOI: 10.1177/0886260510383029
- Williams, J. L., Aiyer, S. M., Durkee, M. I., & Tolan, P. H. (2013). The protective role of ethnic identity for urban adolescent males facing multiple stressors. *Journal of Youth and Adolescence*, 43(10), 1728-41. Retrieved from <http://link.springer.com/article/10.1007/s10964-013-0071-x>

Wilson, B. J. (2008). Media and children's aggression, fear, and altruism. *The Future of Children*, 18(1), 87-118. Retrieved from [www.futureofchildren.org](http://www.futureofchildren.org)

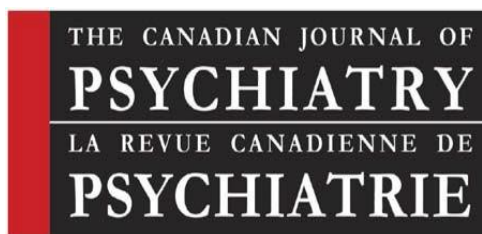
World Health Organization. (2011). *Youth Violence*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs356/en/>

World Health Organization. (WHO) (2014). *Youth Violence*. Retrieved from <http://www.who.int/mediacentre/factsheets/fs356/en/>

Ybarra, M. L., Diener-West, M., Markow, D., Leaf, P. J., Hamburger, M. & Boxer, P. (2008). Linkages between internet and other media violence with seriously violent behavior by youth. *Pediatrics*, (122)5, 929-37. DOI: 10.1542/peds.2007-3377



## Appendix A: Letter of Consent



141 Laurier Avenue West Suite 701  
 141, avenue Laurier Ouest Bureau 701  
 Ottawa, ON K1P 5J3 Ottawa (Ontario) K1P 5J3  
 Tel: (613) 234-2815 tél : (613) 234-2815  
 Fax: (613) 234-9857 téléc : (613) 234-9857  
[www.cpa-apc.org/publications/cjphome.asp](http://www.cpa-apc.org/publications/cjphome.asp)  
[cjp@cpa-apc.org](mailto:cjp@cpa-apc.org)

25 April

2014

Cindy

Davis  
 1653 West Congress Parkway (8-Atrium)  
 Chicago, IL 60612 USA

[cindy.davis2@waldenu.edu](mailto:cindy.davis2@waldenu.edu)

**Re: Permission to Redistribute Material**

Dear Ms Davis

We have received your request to redistribute material from *The Canadian Journal of Psychiatry*. You have been granted permission to reproduce the following figure in your dissertation, as cited in your emails dated 1 and 22 April 2014:

Herrman H, Stewart DE, Diaz-Granados N, et al. What is resilience? *Can J Psychiatry*. 2011;56(5):258-265. Figure 1 Factors that enhance or reduce homeostasis or resilience; p 261.

This permission is granted with the understanding that any information used will include a credit line citing the authors, title of the paper, title of journal, date, volume number, issue number, and page number.

Please contact us if you have any further requests

or questions. Yours sincerely,

*Virginia St Denis*

Virginia St-Denis

Director, Scientific Publications

## **Appendix B: Centers for Disease Control and Prevention – Data Request Form**

### **YRBSS Question, Comment, and Data Request Form**

Answers to many common questions about YRBSS are provided on the Frequently Asked Questions page. If you cannot find your answer there, please contact us by using the form below.

Data are available by site at the national, state, district, territory and tribal government levels. Please see YRBSS Participation History to identify the specific site(s) and year(s) of data needed.

Data files are available in the following formats: ASCII, SPSS, SAS, or Microsoft Access. Below, please specify the site(s) and year(s) of the data that you would like to request as well as the specific file format.

Appendix C: Middle School - Youth Risk Behavioral Surveillance Survey – 2013

2013 Middle School Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

***Thank you very much for your help.***

## DIRECTIONS

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this:  A  B  C  D
- If you change your answer, erase your old answer completely.

1. How old are you?
  - A. 10 years old or younger
  - B. 11 years old
  - C. 12 years old
  - D. 13 years old
  - E. 14 years old
  - F. 15 years old
  - G. 16 years old or older
  
2. What is your sex?
  - A. Female
  - B. Male
  
3. In what grade are you?
  - A. 6th grade
  - B. 7th grade
  - C. 8th grade
  - D. Ungraded or other grade
  
4. Are you Hispanic or Latino?
  - A. Yes
  - B. No
  
5. What is your race? **(Select one or more responses.)**
  - A. American Indian or Alaska Native
  - B. Asian
  - C. Black or African American
  - D. Native Hawaiian or Other Pacific Islander
  - E. White

**The next 4 questions ask about safety.**

6. **When you ride a bicycle**, how often do you wear a helmet?
- A. I do not ride a bicycle
  - B. Never wear a helmet
  - C. Rarely wear a helmet
  - D. Sometimes wear a helmet
  - E. Most of the time wear a helmet
  - F. Always wear a helmet
7. **When you rollerblade or ride a skateboard**, how often do you wear a helmet?
- A. I do not rollerblade or ride a skateboard
  - B. Never wear a helmet
  - C. Rarely wear a helmet
  - D. Sometimes wear a helmet
  - E. Most of the time wear a helmet
  - F. Always wear a helmet
8. How often do you wear a seat belt when **riding** in a car?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
9. Have you ever ridden in a car driven by someone who had been drinking alcohol?
- A. Yes
  - B. No
  - C. Not sure

**The next 3 questions ask about violence-related behaviors.**

10. Have you ever carried a **weapon**, such as a gun, knife, or club?
- A. Yes
  - B. No
11. Have you ever been in a physical fight?
- A. Yes
  - B. No

12. Have you ever been in a physical fight in which you were hurt and had to be treated by a doctor or nurse?
- A. Yes
  - B. No

**The next 2 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.**

13. Have you ever been bullied **on school property**?
- A. Yes
  - B. No
14. Have you ever been **electronically** bullied? (Count being bullied through e-mail, chat rooms, instant messaging, websites, or texting.)
- A. Yes
  - B. No

**The next 3 questions ask about attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide or killing themselves.**

15. Have you ever **seriously** thought about killing yourself?
- A. Yes
  - B. No
16. Have you ever made a **plan** about how you would kill yourself?
- A. Yes
  - B. No
17. Have you ever **tried** to kill yourself?
- A. Yes
  - B. No

**The next 8 questions ask about tobacco use.**

18. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
  - B. No
19. How old were you when you smoked a whole cigarette for the first time?
- A. I have never smoked a whole cigarette
  - B. 8 years old or younger
  - C. 9 years old
  - D. 10 years old
  - E. 11 years old
  - F. 12 years old
  - G. 13 years old or older
20. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days
21. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?
- A. I did not smoke cigarettes during the past 30 days
  - B. Less than 1 cigarette per day
  - C. 1 cigarette per day
  - D. 2 to 5 cigarettes per day
  - E. 6 to 10 cigarettes per day
  - F. 11 to 20 cigarettes per day
  - G. More than 20 cigarettes per day

22. During the past 30 days, how did you usually get your own cigarettes? (Select only one response.)
- A. I did not smoke cigarettes during the past 30 days
  - B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station
  - C. I bought them from a vending machine
  - D. I gave someone else money to buy them for me
  - E. I borrowed (or bummed) them from someone else
  - F. A person 18 years old or older gave them to me
  - G. I took them from a store or family member
  - H. I got them some other way
23. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
- A. Yes
  - B. No
24. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal Bandits, or Copenhagen?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days
25. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days



**The next 2 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.**

26. Have you ever had a drink of alcohol, other than a few sips?
- A. Yes
  - B. No
27. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips
  - B. 8 years old or younger
  - C. 9 years old
  - D. 10 years old
  - E. 11 years old
  - F. 12 years old
  - G. 13 years old or older

**The next 2 questions ask about marijuana use. Marijuana also is called grass or pot.**

28. Have you ever used marijuana?
- A. Yes
  - B. No
29. How old were you when you tried marijuana for the first time?
- A. I have never tried marijuana
  - B. 8 years old or younger
  - C. 9 years old
  - D. 10 years old
  - E. 11 years old
  - F. 12 years old
  - G. 13 years old or older

**The next 4 questions ask about other drugs.**

30. Have you ever used **any** form of cocaine, including powder, crack, or freebase?
- A. Yes
  - B. No

31. Have you ever sniffed glue, breathed the contents of spray cans, or inhaled any paints or sprays to get high?
- A. Yes
  - B. No
32. Have you ever taken **steroid pills or shots** without a doctor's prescription?
- A. Yes
  - B. No
33. Have you ever taken a **prescription drug** (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?
- A. Yes
  - B. No

**The next 4 questions ask about sexual intercourse.**

34. Have you ever had sexual intercourse?
- A. Yes
  - B. No
35. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
  - B. 8 years old or younger
  - C. 9 years old
  - D. 10 years old
  - E. 11 years old
  - F. 12 years old
  - G. 13 years old or older
36. With how many people have you ever had sexual intercourse?
- A. I have never had sexual intercourse
  - B. 1 person
  - C. 2 people
  - D. 3 people
  - E. 4 people
  - F. 5 people
  - G. 6 or more people

37. The **last time** you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
  - B. Yes
  - C. No

**The next 5 questions ask about body weight.**

38. How do **you** describe your weight?
- A. Very underweight
  - B. Slightly underweight
  - C. About the right weight
  - D. Slightly overweight
  - E. Very overweight
39. Which of the following are you trying to do about your weight?
- A. **Lose** weight
  - B. **Gain** weight
  - C. **Stay** the same weight
  - D. I am **not trying to do anything** about my weight
40. Have you ever **gone without eating for 24 hours or more** (also called fasting) to lose weight or to keep from gaining weight?
- A. Yes
  - B. No
41. Have you ever **taken any diet pills, powders, or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do **not** count meal replacement products such as Slim Fast.)
- A. Yes
  - B. No
42. Have you ever **vomited or taken laxatives** to lose weight or to keep from gaining weight?
- A. Yes
  - B. No

**The next question asks about eating breakfast.**

43. During the past 7 days, on how many days did you eat **breakfast**?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days

**The next 5 questions ask about physical activity.**

44. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
45. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day

46. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPod, an iPad or other tablet, a smartphone, YouTube, Facebook or other social networking tools, and the Internet.)
- A. I do not play video or computer games or use a computer for something that is not school work
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
47. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
48. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)
- A. 0 teams
  - B. 1 team
  - C. 2 teams
  - D. 3 or more teams

**The next 2 questions ask about other health-related topics.**

49. Have you ever been taught about AIDS or HIV infection in school?
- A. Yes
  - B. No
  - C. Not sure
50. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
  - B. No
  - C. Not sure

**This is the end of the  
survey.  
Thank you very much for  
your help.**