NOTE TO USERS

This reproduction is the best copy available.

 $UMI^{"}$

 -				
			•	
		•		
	•			

Gender Identity and Well-Being in Early Adolescence: Exploring the Roles of Peer Culture and the Gender Composition of the School Context

Kate-Mills Drury

A Thesis

in

The Department

of

Psychology

Presented in Partial Fulfillment of the Requirements
For the Degree of Master of Arts (Psychology) at
Concordia University
Montreal, Quebec, Canada

September, 2009

© Kate-Mills Drury, 2009



Library and Archives Canada

Published Heritage Branch

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque et Archives Canada

Direction du Patrimoine de l'édition

395, rue Wellington Ottawa ON K1A 0N4 Canada

> Your file Votre référence ISBN: 978-0-494-63098-3 Our file Notre référence ISBN: 978-0-494-63098-3

NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.



ABSTRACT

Gender Identity and Well-Being in Early Adolescence: Exploring the Roles of the Peer Group and the Gender Composition of the School Context

Kate-Mills Drury

Research on gender development draws on two principal hypotheses: gender is a multi-dimensional construct and gender develops within social contexts. The present study examines the associations between gender identity, peer acceptance and self-worth across two contexts, single-sex (all-girls) and mixed-sex schools. The investigation examined whether peer relations mediate the association between gender identity and self-worth and whether type of school moderates the association between gender identity and peer relations. Early adolescents (N = 676, mean age = 10.13 years) rated their gender typicality, felt pressure to conform, social competence and self-worth and indicated which of their peers was a friend. We present competing theories, one favouring a stronger association between gender identity and peer acceptance for the girls in the all-girls schools, the other for the girls in the mixed-sex schools. We hypothesized that the associations between gender identity and peer acceptance would be higher for the boys as compared to girls in the mixed-sex schools. We expected our mediational model to be applicable to all groups. Multi-group structural equation modeling was used. Mediation was found in the case of the girls in the all-girls schools. Higher typicality was related to higher social competence in the all-girls schools while the inverse was true for the girls in the mixed-sex schools. This study provides further evidence for the conceptualization of gender within a social context. It highlights the importance of the association between gender identity and social competence, which has a strong impact on well-being.

Acknowledgments

I would like to express my gratitude to my supervisor Dr. William Bukowski for his guidance, support, enthusiasm, sense of humour and commitment to research. I am grateful to Dr. Anna-Beth Doyle for her insightful suggestions and careful review of previous drafts and to Dr. Lisa Serbin for her help as a member on my committee. I would also like to thank my friends and colleagues, Holly Recchia, Jonathan Santo, Lina Saldarriaga, Felicia Meyer, Ana Velasquez, Darya Sodo, Ivy Brooker, Rami Nijjar, Anne Bailey and Lindsey Barrieau for their practical help, advice and understanding. Thank you to my friends and family outside of school who engaged in countless hours of discussion and debate on a subject that is very dear to me. Lastly, I would like to thank my partner, Patrick for having patience in the moments when mine was difficult to find.

My research was supported in part by fellowships from Concordia University, the Social Sciences and Humanities Research Council (SSHRC) and the Fonds québécois de recherché en société et culture (FQRSC). The current project would not have been possible without the participation of the students, their parents and the school administrations, muchas gracias.

Table of Contents

		Page
List of	f Figures	viii
List of	f Tables	ix
Introd	uction	1
	Evolving Approaches to Research on Gender Development	2
	Gender Identity Development: The Individual Within the Group	4
	Development of Gendered Behaviours	6
	Peer group as Site of Gender Socialization	8
	Group Socialization Processes	9
	Group Socialization Theory	9
	Social Dosage Effect	11
	Gender Differences in Socialization	12
	The Present Study	13
	Hypotheses	15
Metho	d	18
	Participants	18
	Measures	18
	Multidimensional Gender Identity Inventory	18
	Perceived Competence Scale	18
	Sociometric Nomination	18
	Procedure	19
Result	s	21

	Descriptives	21
	Bivariate Correlations Between Variables	21
	Reliabilities	21
	Hypothesis 1	21
	Within-Sex Analyses	22
	Between-Sex Analyses	26
-	Data Analyses	27
	Confirmatory Factor Analyses	27
	Place Effects	28
	Within-Sex Analyses	28
	Moderation	28
	Mediation	35
	Between-Sex Analyses	35
	Moderation	38
	Mediation	38
Discu	ssion	42
	Developmental Implications	42
	Implications for Single vs. Mixed-Sex Schooling Debate	43
	Hypothesis 1: Interpretations & Implications	44
	Hypothesis 2: Moderation Interpretations & Implications	46
	Hypothesis 3: Mediation Interpretations & Implications	47
	Strengths and Limitations	48
	Conclusion	50

References	52
Appendix A	56
Appendix B	59
Appendix C	61
Appendix D	64
Appendix E	69
Annendix F	77

List of Figures

		Page
Figure 1.	Within-sex confirmatory factor analysis: Girls in both schools.	29
Figure 2.	Between-sex confirmatory factor analysis: Girls and boys in mixed-sex schools.	30
Figure 3.	Unconditional within-sex model.	32
Figure 4.	Multi-group analysis: Girls in all-girls schools Compared to girls in mixed-sex schools.	33
Figure 5.	Mediation step one: Girls in all-girls schools Compared to girls in mixed-sex schools.	34
Figure 6.	Mediation step two: Girls in all-girls schools Compared to girls in mixed-sex schools.	36
Figure 7.	The association between gender typicality and perceived social acceptance varies as a function of school context.	37
Figure 8.	Unconditional between-sex model.	39
Figure 9.	Multi-group analysis: Girls compared to boys in mixed-sex schools.	40
Figure 10.	Mediation step one: Girls compared to boys in mixed-sex schools.	41

List of Tables

		Page
Table 1.	Descriptive Statistics	23
Table 2.	Bivariate Associations Between Variables	24
Table 3.	Reliability Statistics for Subscales of Measures	25

Gender is one of the most important categories underlying human social understanding and behaviour. As a ubiquitous social category permeating language, social roles, division of labour, belief systems and cultural expectations (Maccoby, 1988), our gender identities are inextricably bound to our social identities and experiences. As such, understanding the processes of gender socialization as well as the mechanisms through which gender interacts with other fundamental processes of social development is of vital importance.

One way of shedding light on the role of gender in social development is to look for similarities and differences across cultures. In a cross-cultural examination of gender socialization, Wood & Eagly (2002), found that though gendered division of labour and social space was consistent across cultures, there was considerable cross-cultural variation in the content of gender stereotypes and the social roles assigned to each gender. These findings suggest that although gender might be a universal category of social organization, the processes and outcomes of gender socialization vary culturally (Wood & Eagly, 2002).

Another way to clarify gender is to look for similarities and differences within a culture. Within North American culture, accumulating evidence from social psychology demonstrates that sex roles are not fixed characteristics that individuals carry from situation to situation, but rather that "any individual varies greatly, from one situation to another, with respect to how gender-linked his or her behaviour is" (Deaux & Major, 1987). This finding led Deaux and Major (1987) to describe gender-linked social behaviour as being "multiply determined, highly flexible and, context dependent" (p. 369). Taken together, these two findings suggest that (1) gender-typed behaviours are

socialized and culturally dependent and that (2) gendered behaviours are emergent given the characteristics of particular social contexts.

Gender informs human development across the life-course. Traced across childhood and adolescence, gender plays a significant role in determining, among other things, cognitions, emotions, behaviours and social interaction styles (Hibbard & Burhmester, 1998; Hill & Lynch, 1983; Maccoby, 1998; Ruble & Martin, 1998). Considering the pervasiveness and magnitude of the influence of gender on human development, the need to understand the relationship between gender and well-being while it is emerging becomes imperative.

The present study sought to investigate the associations between gender identity, peer relations and self-worth in a sample of Colombian elementary school students. The goals of the study were threefold: (1) to extend current research on gender identity in middle childhood, (2) to further understanding of the role of peers in fundamental social processes such as gender development and, (3) to explore the interaction between gender identity and the role of peers across two contexts: same-sex schools and mixed-sex schools.

Evolving Approaches to Research on Gender Development

Historically, developmental researchers have studied gender development in accordance with the zeitgeist of individual differences: giving scores to individuals on a wide variety of skills and attributes and assessing their standing relative to other individuals in a given sample population. Following this, the individuals would be classified according to an antecedent variable, such as gender, in order to determine how much of the variance among individuals could be accounted for by the antecedent

variable. However, research on gender differences conducted from the individual differences perspective has yielded few conclusive results (Maccoby, 1990). Furthermore, when consistent differences have been found, the amount of variance accounted for by gender was small compared to the within-gender variance.

A second historical approach to research on gender development has been to emphasize the role of the family as the primary context of gender socialization, and thus de-emphasize the more distal social relationships such as peer relations. However, to date only weak and inconsistent findings have been found between within-family socialization practices and children's sex-typed behaviours (Ruble & Martin, 1998). Therefore, according to Maccoby (2002), "efforts to understand gender development by studying individual differences in rate or degree of gender-typing, and the connections of these differences to presumed antecedent factors (family variables), have not been very successful" (p.55). This actuality led researchers to broaden their perspectives beyond the individual differences paradigm and the family context. Specifically, they turned towards explanatory models addressing context effects and group processes.

An example of the shift from testing individual differences to examining the effects of group processes can be found in research addressing gender identity and self-worth. Initially, this research revealed a positive direct association, such that within individuals, high gender typicality (how typical one feels for one's gender) was associated with higher self-worth and low gender typicality was associated with lower self-worth (Egan & Perry, 2001). Recently, Smith and Leaper (2005) tested an implicit assumption of this finding: gender typical children have higher self-esteem because their peers accept them, and gender atypical children have lower self-esteem because their

peers do not accept them. In other words, the authors wished to address the role of the peer group in the social process of gender development. In a sample of adolescents attending a summer sports camp, they found that the positive association between gender typicality and perceived self-worth was mediated by a measure of perceived peer acceptance (Smith & Leaper, 2005). Put another way, gender atypical adolescents had comparable self-worth to gender typical adolescents as long as they were accepted by their peers.

One goal of the present study was to replicate the mediational model proposed by Smith and Leaper (1995) and test whether it could be generalized to a more representative sample, to a different age group and across contexts (mixed sex and samesex schools). Thus, broadly speaking, this study investigated associations between gender identity, peer relationships and the self-concept. Before turning to how these concepts relate to one another, let us examine them independently.

Gender Identity Development: The Individual Within the Group

An individual's sense of being either a male or a female person is thought to be a core element in the developing sense of self. The acquisition of these gender-distinctive characteristics has been called gender-typing, and much research has focused on how and why these processes of gender-typing occur. Once children can recognize their gender group (~3 years of age), children make broad assumptions about similarities within the gender groups and about differences between girls and boys. This fundamental knowledge of in group/out group underlies the development of gender identity throughout childhood.

Gender cognitions play a significant role as organizers of gender development (Martin & Ruble, 2004). The emergence of gender identity and growing understanding of the stability of social group membership affects children's motivation to learn about gender, to gather information about their gender group, and to act like other group members (Ruble & Martin, 1998). This motivation involves the child's "deliberate efforts to learn about a social category that he or she is actively constructing as part of a process of finding meaning in the social world" (Martin & Ruble, 2004, p. 68). In other words, children's recognition of the social significance of gender motivates them to learn about and comply with gender norms.

Recent research on gender identity (Egan & Perry, 2001) suggests a conceptualization along four dimensions: felt typicality (how typical one feels for one's gender), contentedness (how content one is with socially prescribed gender), felt pressure (how much pressure one feels to conform to gender norms) and inter-group bias (how much one favours their own gender category over the other). As we shall see, the dimensions can differentially affect adjustment depending on a child's developmental period.

Prior to middle childhood, children strive to comprehend their membership in a gender category (gender constancy), exhibit considerable inter-group bias, experience strong pressure to conform to gender stereotypes, and generally report high satisfaction with their gender assignment (Ruble & Martin, 1998). As such, at this age, these components of gender identity are positively associated with adjustment outcomes such as self-esteem (Yunger, Carver & Perry, 2004). During middle childhood, gender identity undergoes further development: "advances in cognitive development – improved social

comparison skills, the ability to infer stable, abstracted attributes of the self, and the ability to imagine what the collective other is thinking about the self – set the stage for the emergence of an additional component of gender identity: an estimate of one's overall gender typicality" (Yunger, Carver & Perry, 2004, p. 573). Accordingly, gender typicality has been shown to be positively associated with adjustment in early adolescence (Carver, Yunger & Perry, 2004; Egan & Perry, 2001; Yunger, Carver & Perry, 2003).

Furthermore, by this age, it is normative for children to relinquish or temper certain developmentally immature components of gender identity – namely felt pressure to conform to gender norms and inter-group bias (Ruble & Martin, 1998). In younger children's groups, ridiculing nonconformists often enforces group norms, however by late childhood, perhaps due to developing social understanding, overt peer pressure to conform to gender norms is typically no longer necessary (Yunger, Carver & Perry, 2004). As such, feeling strong pressure to conform to gender stereotypes has been shown to be negatively associated with children's well-being in middle childhood (Carver, Yunger & Perry, 2004; Egan & Perry, 2001; Yunger, Carver & Perry, 2003). Now that we have outlined some of the cognitive aspects of gender identity, let us now turn to the behavioural components.

Development of Gendered Behaviours

Gender-typed behaviours, meaning behaving like a girl or a boy, are social behaviours. Social behaviours are never a function of the individual alone, but rather are the products of interactions between two or more people (Maccoby, 1990; Deaux & Major, 1987). Research on dyadic interactions has shown that children's gender-typed

behaviour varies as a function of the situation (for a review, see Maccoby, 1990). In a foundational study, Maccoby and Jacklin (1987) investigated how one aspect of the situation, namely dyadic gender composition, affects children's behaviour. Do girls and boys act differently depending upon whether they are interacting with boys or girls? They found that they do, and that this is especially true of girls, who, for example, in a study of social behaviour, in same-sex and other-sex dyads, were found to be more passive than boys during mixed-sex interactions. The gender difference could only be seen when the sex of the interactant partner was considered: girls were not more passive than boys overall, but rather were only more passive when observed during their interactions with boys (Maccoby and Jacklin, 1987).

This finding could be understood in light of a previous study indicating that from a very young age girls find it difficult to influence boys (Serbin, Sprafkin, Elman, & Doyle, 1984). The influence technique typically adopted by girls (polite suggestions) was instrumental in influencing other girls, teachers and other adults, but increasingly ineffective with boys. Furthermore, girls have been found to increase their use of typically male power-assertive strategies during disagreements with boys whereas boys have not been found to increase their use of typically female conflict-mitigation strategies in their disagreements with girls (Miller, Danaher & Forbes, 1986). Thus, research on dyadic interactions reveals that whether or not a child behaves in a gender typical way depends on the gender composition of the dyad. A logical extension of this research could be an examination of gender effects within group processes. In fact, current research and theorizing is considering "how gender is implicated in the formation, interaction processes, and socialization functions of childhood social groupings" (Leaper,

2007, p. 563). In other words, researchers are looking to the peer group as an important social context for gender development.

Peer Group as Site of Gender Socialization

The last 25 years of research on peer relations has revealed that peers "provide essential socialization experiences that are necessary for the acquisition of several fundamental skills, for healthy personality development and for psychosocial adjustment" (Bukowski, 2003, p.221). Recent research has shown that from childhood into late adolescence the peer group becomes the most influential site of gender socialization (Harris, 1995; Leaper & Friedman, 2007). In fact, peers are vigilant in their enforcement of gender norms and generally disapprove of cross-gender-typed behaviour (Martin, 1989). An example of the role of peers in gender socialization is found in the research of Hibbard and Buhrmester (1998) who examined sex-linked interaction styles and found that youth respond more positively to peers who display sex-typed behaviours. These findings are in support of the earlier idea that "the social interactions among children constitute a major milieu in which development of sex-typing takes place" (Maccoby, 1988, p.755).

The importance of peers as agents of socialization seems to increase throughout childhood and conformity to peers generally peaks in adolescence (Hibbard & Burhmester, 1998). As a result, preadolescent children have spent many years learning and experiencing what it means to be a girl or a boy in their culture(s). By this age (9-11 years old) we already see pronounced changes in the development of gender-typed behaviours. An example of this can be found in the work of Thorne and Luria (1986) who found distinctive gender differences in physical intimacy: "Kindergarten and first

grade boys touch one another frequently and with ease, with arms around shoulders, hugs and holding hands. By fifth grade, touch among boys becomes more constrained, gradually shifting to mock violence and the use of poking, shoving and ritual gestures like "giving five" to express bonding" (p.182). In contrast, fifth and sixth grade girls, in interactions with one another, use "relaxed gestures of physical intimacy, moving bodies in harmony, coming close in space and reciprocating cuddly touches" (p.183). Therefore, the same-sex peer group is an important forum within which children experience potent gender socialization forces, and thus an important social context within which their gender identity takes shape. In order to better understand gender socialization, we can draw upon existing theory and research examining group socialization processes.

Group Socialization Processes

Gender identity, at least in part, emerges through a process of social comparison within a distinct social context, the peer group. Eleanor Maccoby (1988) said that "there is little research that compares the power of gender identity with that of other aspects of identity (e.g. race and age) in producing group identification, but one might predict that it would be very powerful between the ages of 6-12 – perhaps more powerful than at any other time" (p.763). There are two proposed group process models that are of relevance here: group socialization theory and the social dosage effect.

Group Socialization Theory

Considering that the same-sex peer group is one of children's primary social contexts, Harris' (1995) group socialization theory of development may shed light on the socialization and differentiation of gender-typed processes. Children learn how to behave outside the home by becoming members of, and identifying with, a social group – the

same-sex peer group. With the acquisition of a gender self-concept, children form a social identity of themselves as a member of a particular gender group. Being a member of a group typically leads to in-group bias. Children value their in-group membership and become sensitive to how others view them in order to gauge their status within the group. In this manner, same-gender peer groups, like all groups, tend to promote within-group and between-group processes.

Drawing on the work of influential researchers of intergroup processes (Sherif, Harvey, White, Hood, & Sherif, 1961; Tajfel, 1970; Zimbardo, 1972), Harris (1995) enumerates several well-established basic phenomena of group processes. She maintains that these processes are helpful when understanding within- and between-group gender dynamics. These processes include (1) within-group favoritism: members of a group prefer their own group; (2) out-group hostility: sometimes the tendency to favour the ingroup is accompanied by hostility towards the out-group; (3) between-group contrast: assumptions of differences between groups arise even when there is no justification for those inferences other than the mere existence of those groups. Furthermore, people act to increase the magnitude of assumed intergroup differences; (4) within-group assimilation: when individuals categorize themselves as members of a particular group, they identify with that group and take on its norms and beliefs.

Harris (1995) applies intergroup processes (Sherif et al. 1961, Tajfel, 1970) to gender socialization processes. Accordingly, children are expected to behave in sex-typed ways most consistently when sex-segregation is strong and when same-sex in-groups and opposite-sex out-groups are formed. Intergroup processes research shows that assimilation is most likely to occur when a social category is salient (Tajfel, 1970), which

is the case when two or more social categories, such as girl and boy, are present at the same time. When only one group is present, that social category declines in salience. This analysis of group processes could be applied to comparisons of mixed-sex and same-sex schools, in which the groups "boy" and "girl" are more or less salient.

In a mixed-sex setting, a possible adverse effect of gendered between-group processes is an amplification of the gender intensification process that is hypothesized to occur in adolescence. The hypothesis posits that with the onset of puberty girls and boys experience an intensification of gender-related expectations (Hill & Lynch, 1983). Accordingly, observed behavioural, attitudinal and psychological differences between adolescent girls and boys are a result of increased socialization pressures to conform to traditional masculine and feminine gender roles. This process has been linked to a myriad of negative outcomes for girls especially, such as low self-esteem, depression, increased self-consciousness and greater concern with physical appearance (Hill & Lynch, 1983). Furthermore, in academic settings, between-group contrast may lead girls to downplay their academic achievements and lead boys to dismiss academic work and success as feminine pursuits (Leaper & Friedman, 2007). Therefore, based on group socialization theory, if the school setting includes both groups this may lead to an amplification of gender differences and the concomitant adjustment problems. Interestingly, the rationale underlying social dosage effect makes the exact opposite prediction. Let us now turn to an examination of the social dosage effect and its implications for single-sex schooling.

Social Dosage Effect

Research has shown that same-sex peers socialize children in predictable ways. Martin and Fabes (2001) demonstrated that the degree to which youth are exposed to same-sex peers contributes to how much sex-typed behaviour they exhibit. "Higher same-sex peer exposure resulted in more strongly sex-differentiated behaviour after only a few months of exposure" (p.443), a phenomenon they termed *the social dosage effect*. They postulate that this is the case because children who spend more time with same-sex peers have more opportunities and feel more pressure to conform to gender-typed behaviours. In same-sex schools, children have limited opportunities to interact with children of the opposite sex. Research has shown that youth who have more exposure to same-sex peers are most likely to exhibit sex-linked relationship processes and their corollary sex-linked adjustment problems (Rose & Rudolph, 2006).

According to Rose and Rudolph's peer socialization model (2006) same-sex peers elicit and strengthen sex-linked relationship processes, which in turn contribute to the development of sex-linked adjustment outcomes. Differences in emotional and behavioural adjustment can be partially accounted for by sex differences in peer relationship processes, which are fostered at least in part by same-sex peers. These relationship processes lead to important trade-offs in the development of boys and girls. In particular, Rose and Rudolph (2006) propose that relationship processes characteristic of girls place them at risk for developing emotional problems, such as low self-esteem, anxiety, and depression but also inhibit antisocial behaviour. In contrast, relationship processes characteristic of boys enhance their likelihood of developing behavioural problems, such as aggression and other antisocial conduct, but also protect them against

developing emotional problems. In this sense, single-sex schooling may perpetuate the social dosage effect by precluding opportunities for interactions with other-sex peers.

Now that we have considered possible mechanisms of gender socialization in the presence or absence of the other-sex, and some issues that may arise, let us examine some of the known gender differences in the socialization of gender-typed behaviours.

Gender Differences in Socialization

In general, children who feel strong pressure for sex-typing (especially pressure to avoid cross-sex activities) will be less likely to explore a wide range of options when deciding what interests to pursue or talents to cultivate, and therefore may be less likely to settle on options that are maximally fulfilling (Yunger et al., 2004). Specifically, research suggests that males may react more harshly to gender-inconsistent behaviour in same-gender peers. For example, researchers found that boys displaying feminine characteristics were judged more harshly than girls displaying masculine characteristics (Zucker, Wilson-Smith, Kurita & Stern, 1995). Similarly, Fagot (1977, 1985) showed that male toddlers received negative reactions from other boys for playing with dolls, while girl tomboys were more accepted by their peers. Group socialization processes, including gender-typing, can have different impacts on groups depending on their relative status and power. High status groups are more concerned with maintaining group boundaries than low-status groups. Consistent with the greater status and power accorded to males in society, boys are more likely to maintain role and group boundaries. Partly for this reason, gender-typing pressures tend to be more rigid for boys than for girls (Leaper & Friedman, 2007). Similarly, characteristics associated with high status groups are valued more than those of low-status groups. Accordingly, cross-gender-typed

behaviours tend to be more common among girls than boys (Leaper & Friedman, 2007). Providing children with social environments that optimize their adjustment and wellbeing is one of society's basic concerns. Research is needed to further our understanding of how gendered social processes affect children's adjustment. As seen above, one possible characteristic of the social context that could differentially affect adjustment is single-sex versus mixed-sex schooling.

The Present Study

An important component of recent research on gender and adjustment is the concern with how the multiple dimensions embedded in the construct of gender (Egan & Perry, 2001) interface with fundamental processes of other domains of social development such as peer relations and the self-concept. When examining the associations between gender identity and adjustment, Egan and Perry (2001) found differential influences on two dimensions: perceived typicality was positively associated with adjustment whereas felt pressure was negatively associated with it. Smith & Leaper (2005) replicated the finding that typicality is related to perceived well-being and extended it by showing that this association is mediated by a measure of perceived peer acceptance. The present study sought to expand on the research on gender identity and adjustment by examining the associations found by Egan and Perry (2001) across two different contexts: single-sex and mixed-sex schools. The mediation model proposed by Smith and Leaper (2005) was re-tested in the two distinct school environments. The schools were located in two cities (Bogotá and Baranquilla) in Colombia.

Children's peer contexts are segregated by sex, meaning that children tend to group themselves according to sex or into boys' groups and girls' groups. Sex

segregation is one of the most powerful and pervasive social phenomena to exist in early childhood (Leaper 1994; Maccoby, 1990). Accordingly, same-sex peer interactions provide a primary peer socialization context for young children (Fabes, Martin & Hanish, 2007). Sex-segregation begins to attenuate in adolescence when mixed-sex groups become more common (Maccoby & Jacklin, 1987), however, considering our sample of preadolescents, we chose to use a sociometric measure of same-sex peer acceptance. Using self- and peer-report measures, the present study assessed whether the association between gender typicality and general self-worth would be explained by measures of experiences with same-sex peers.

Hypotheses

Hypothesis 1: Group Differences in Gender Identity

In response to a call for research addressing within-sex variation (Rose & Rhiannon, 2008), the primary focus of the study was within-sex differences across contexts. How would the associations between gender identity, social competence and well-being differ for the girls in the all-girls schools and the girls in the mixed-sex schools? In regards to the mean levels of typicality and felt pressure, predicted outcomes differ depending on which of the group process theories is privileged: the social dosage effect (Martin & Fabes, 2001) or peer group socialization theory (Harris, 1995).

According to Martin and Fabes (2001), because girls in single-sex schools have limited opportunities to interact with other-sex peers they would experience more gender socialization and as a result report higher levels of gender typicality and felt pressure. In contrast, Harris' theory (1995) would predict that between group processes would amplify gender differences resulting in more gender typicality and felt pressure in the

girls in the mixed-sex schools. In terms of the between-sex comparisons, we hypothesized that the boys would report more typicality and pressure as a result of the more rigid gender constrictions experienced by boys as compared to girls (Zucker, Wilson-Smith, Kurita & Stern, 1995). Although we expected the boys and the girls in the single-sex schools to report more typicality and pressure than the girls in the mixed-sex schools, comparisons of the boys and girls in the single-sex schools were exploratory. No hypotheses were formulated concerning group differences in perceived social acceptance and general self-worth.

Hypothesis 2: Context as Moderator; Sex as Moderator

In regard to the contextual variations in the associations between gender identity and social acceptance, predicted outcomes again differ depending on which of the abovementioned theories is privileged: the social dosage effect (Martin & Fabes, 2001) or peer group socialization theory (Harris, 1995). From the perspective of Martin and Fabes' (2001) Social Dosage Effect, the associations between gender identity (typicality and felt pressure) and peer acceptance would be higher in the all-girls school because these girls, as a function of their environment, have fewer opportunities to interact with boys. One possible outcome of spending more time in same-sex groups is that being like a girl takes greater social importance in that girls who feel that they are like other girls also feel that they are more socially competent.

Conversely, according to Harris's (1995) group socialization theory, the associations between gender identity (typicality and felt pressure) and peer acceptance would be higher for the girls in the mixed-sex schools because the presence of boys would cause these identity features to become more salient. In other words, when two

gender groups co-exist, gender becomes a primary feature of in-group/out-group categorization. As a result, the children who feel they are more gender typical, or more similar to the in-group would also consider themselves to be more socially competent. Therefore, it is hypothesized that the association between gender identity and perceived social acceptance will be moderated by the type of school (single-sex or mixed-sex), and the direction of the moderation will either provide evidence for the social dosage effect or group socialization theory. Considering past research on sex differences in gender socialization (see above) it is hypothesized that the association between gender identity and perceived social acceptance will be moderated by sex such that there will be a positive association for boys and a significantly less positive, if not negative association for girls between the variables.

Hypothesis 3: Mediation

Finally, in light of the crucial role played by the peer group in gender socialization, we hypothesized that the association between gender typicality and general self-worth would be mediated by perceived social acceptance for all the groups: girls in all-girls schools, girls in mixed-sex schools and boys in mixed-sex schools.

Method

Participants

The participants were 676 fourth, fifth and sixth graders (Mean for age = 10.13 years, SD = 1.22) attending either all-girls schools (N = 336) or co-ed schools (girls N = 147; boys N= 193). The schools were located in two Colombian cities, Bogotá (N=412) and Barranquilla (N=264), with one single-sex and one mixed-sex school in each city. The majority of children were from lower and lower-middle class backgrounds. *Measures*

Multidimensional Gender Identity Inventory (Egan & Perry, 2001). The Gender Identity Inventory is a 30-item self-report measure. However, for the purpose of this study a revised 17-item version was administered. This version includes three subscales; gender typicality ($\alpha = .68$) (e.g., "I like to do the things that most girls like to do), felt pressure from peers ($\alpha = .73$) (e.g., "It would bother the kids in my class if I acted like a boy") and gender contentedness ($\alpha = .81$) (e.g., "I am glad I am a girl"). Items are rated on a 5-point likert scale (1= Really disagree, 5 = Really agree).

The Perceived Competence Scale for Children (Harter, 1982). The Perceived Competence Scale is a 40-item self-report measure including four 10-item subscales. For the purpose of this study, two subscales were examined: perceived social competence (α = .68) (e.g., "It is easy for me to make friends") and general self-worth (α = .74) (e.g., "I am happy with who I am"). Items are rated are rated on a 5-point likert scale (1 = Really disagree 5 = Really agree).

Peer-rated Social Acceptance. Participants completed a friendship nomination form, which consisted of a list of every participating member of the class, organized into

two columns, with girls on one side and boys on the other. The children were asked to identify their same-sex best friends by writing a number in the box beside the name of each child they considered a friend (1 = best friend, 2 = second best friend, 3 = third best friend, 4 = other friend). Children were asked to write only one 1, one 2 and one 3, however they could write as many 4s as they wished, as long as they considered that person to be a friend. The score on same-sex peer acceptance is a standardized composite score representing the number of times each child was nominated as a friend (1s, 2s, 3s, & 4s).

Procedure

Recruitment procedures differed slightly in the two cities. In Bogotá, permission for the study was first obtained from the school principals. The researchers then described the purpose of the study, the time commitment, confidentiality and distributed a consent form to be signed by the students and their parent/guardian. Using this recruitment procedure, a participation rate of approximately 89% was obtained. In Barranquilla, permission for participation was obtained from the school principals, who often act as proxy for the parents. Participants were then informed of the purposes and procedures of the study in their classrooms and consent forms were signed. Using this recruitment procedure, a participation rate of approximately 95% was obtained, with the last 5% being children who were absent on the day of testing.

The scales of interest in this project were embedded in a larger questionnaire package administered for the purposes of the overarching study. The questionnaires took approximately one hour to complete. The participating students filled out the questionnaires during class time. They completed a Spanish version of the questionnaire

originally administered in English. The original English scales were given to psychologists from Colombia, who assessed their meaning and relevance for Colombian children. The questionnaires were translated into Spanish by translators working in the fields of education and psychology, and then back-translated into English by a separate group of individuals to ensure that the meaning of items was retained in the translation. The students who decided to participate were rewarded with school supplies.

Results

Descriptives

Means, standard deviations and ranges for the variables that were used in this study are reported in Table 1.

Bivariate Correlations between Variables

The social acceptance and general self-worth subscales of the Social Competence measure were positively correlated (r = .51, p = .00) as were the typicality and felt pressure Gender Identity subscales (r = .19, p = .00) (see Table 2). One should note that the social competence and general self-worth measures are both positively associated with the typicality and felt pressure measures. In this same table, one can observe that the correlation between perceived and actual social acceptance is positive but low (r = .22), suggesting these are associated but relatively independent concepts.

Reliabilities

The reliabilities for the subscales of The Multidimensional Gender Identity

Inventory (typicality and felt pressure to conform to gender norms) and for the subscales
of The Perceived Competence Scale (social acceptance and general self-worth) are
reported in Table 3. The reliabilities are reported for the subsets of items chosen for the
confirmatory factor analyses and used in the path analyses.

Hypothesis 1

Twelve ANCOVAs were run to ascertain the mean differences attributable to city (Bogotá and Baranquilla), type of school (mixed-sex and all-girls) and sex on the following variables: typicality, felt pressure, general self-worth, and perceived social acceptance. These analyses were done separately for (1) the girls in the all-girls and

mixed-sex schools, (2) the girls and boys in the mixed-sex schools and (3) the girls in the all-girls schools and boys in the mixed-sex schools. The purpose of the analysis of place effects was to determine whether differences between the groups could be attributed to the cities, rather than being an examination of specific hypotheses concerning differences between the cities. In order to control for the differences resulting from the individual's grade level, grade was entered as a covariate in all the analyses. The reported means are adjusted for values of the covariate. Interaction effects were tested for in all the analyses; only significant results are reported.

Within-Sex Analyses

The first ANCOVA (N = 469) examined whether mean levels of typicality vary as a function of place and type of school with a 2 (place) x 2 (typeschool) between-subjects design. Results of the analysis showed significant main effects of place, indicating that girls showed significantly higher levels of typicality in Bogotá (M = 3.13, SD = 0.09) than in Baranquilla (M = 2.62, SD = 0.10), F(1,469) = 11.09, p = .001 with an effect size of $\eta^2 = 0.02$ and typeschool indicating significantly higher levels of typicality in all-girls schools (M = 3.04, SD = 1.07) than in mixed-sex schools (M = 2.73, SD = 0.09), F(1,469) = 7.34, p = .007 with an effect size of $\eta^2 = 0.02$.

The second ANCOVA (N = 469) examined whether mean levels of felt pressure vary as a function of place and type of school with a 2 (place) x 2 (typeschool) between-subjects design. Results of the analysis showed a significant main effects of typeschool, indicating significantly higher levels of felt pressure in the all-girls schools (M = 3.73, SD = 0.06) than in the mixed-sex schools (M = 3.00, SD = 0.09), F(1,469) = 49.46, p = .00 with an effect size of $\eta^2 = 0.10$.

Table 1.

Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
Gender Identity				
Typicality	1.00	5.00	3.07	1.11
Felt Pressure	1.00	5.00	3.50	1.05
Harter Scales				
Social Acceptance	1.00	5.00	3.78	.93
General Self-worth	1.00	5.00	4.20	.72

N = 664

Table 2. Bivariate Associations between Variables

	Gender Typicality	Felt Pressure	Social Acceptance	General Self-Worth	Actual Acceptance
Gender Typicality					
Felt Pressure	.185**		·		
Social Acceptance	.117**	.148**			
General Self-Worth	.128**	.143**	.506**		
Actual Acceptance	.030	.080*	.224**	.072	

^{*} p < .05, ** p < .01

Table 3. Reliabilities for Subsets of Items from Gender Identity and Harter subscales.

	Cronbach's alpha (unstandardized)		
Gender Identity Scales			
Typicality	.61		
Felt Pressure	.69		
Harter Scales			
Social Acceptance	.69		
General Self-Worth	.63		

25

The fourth ANCOVA (N = 469) examined whether mean levels of perceived social acceptance vary as a function of place and type of school with a 2 (place) x 2 (typeschool) between-subjects design. Results of the analysis showed a significant main effect of typeschool indicating significantly higher levels of perceived social acceptance in all-girls schools (M = 3.84, SD = 0.05) than in mixed-sex schools (M = 3.66, SD = 0.07), F(1,469) = 4.02, p = .045 with an effect size of $\eta^2 = 0.01$.

Between-sex Analyses

The fifth ANCOVA (N=327) examined whether mean levels of typicality differed between the sexes in the mixed-sex schools in the two cities with a 2 (place) x 2 (sex) between-subjects design. The results indicated a significant main effect of place with significantly higher levels of typicality in Bogotá (M = 3.30, SD = 0.10) than in Baranquilla (M = 3.70, SD = 0.11), F(1,327) = 12.07, p = .001 with an effect size of $\eta^2 = 0.04$, and of sex with boys endorsing significantly higher levels of typicality (M = 3.28, SD = 0.08) than girls (M = 2.73, SD = 0.09), F(1,327) = 19.76, p = .00 with an effect size of $\eta^2 = 0.06$.

The sixth ANCOVA (N=327) examined whether mean levels of felt pressure differed between the sexes in the mixed-sex schools in the two cities with a 2 (place) x 2 (sex) between-subjects design. The results indicated a significant main effect of sex with boys endorsing significantly higher levels of felt pressure (M = 3.50, SD = 0.07) than girls (M = 3.00, SD = 0.08), F(1,327) = 19.35, p = .00, with an effect size of with an effect size of $\eta^2 = 0.06$.

The ninth, tenth and eleventh ANCOVAs (N = 512) examined whether mean levels of typicality, felt pressure and general self-worth differed between the girls in the all-girls schools and the boys in the mixed-sex schools with a 2 (place) x 2 (sex) between-subjects

design. The results indicated a significant difference in mean levels of typicality with boys endorsing higher levels (M = 3.28, SD = 1.11), than girls (M = 3.04, SD = 1.07), F(1,510) = 5.48, p = .02 with an effect size of η^2 = 0.01. A significant difference in mean levels of felt pressure was observed with girls reporting higher levels (M = 3.72, SD = 1.05), than the boys (M = 3.51, SD = 1.05), F(1,510) = 6.72, p = .01 with an effect size of η^2 = 0.01. Finally, girls reported significantly higher mean levels of general self-worth (M = 4.27, SD = .72) than boys (M = 4.09, SD = .73), F(1,510) = 8.77, p = .003 with an effect size of η^2 = 0.01.

Data Analyses

In order to test the hypotheses concerning context as moderator of the association between gender identity (typicality and pressure) and peer acceptance and peer acceptance mediating the association between typicality and general self-worth, several steps were taken. Firstly, in order to eliminate measurement error, latent factors were created from the observed items for each variable. Secondly, using latent factor path models, place effects were tested to ensure no structural differences in patterns of association between Bogotá and Baranquilla. Thirdly, two tests of moderation were conducted: (1) using within-sex and between-sex multi-group comparisons, latent factor path models were run to assess hypothesized contextual differences in the strength of associations; (2) two interaction terms were computed and the model was tested separately for typicality and pressure with all the girls. And finally, the hypothesis of mediation was tested for all the groups.

Confirmatory Factor Analyses

Two confirmatory factor analyses were run (using EQS 6.1) in order to create four latent factors: typicality, felt pressure, perceived social acceptance and general self-

worth, and thereby eliminate measurement error. The analyses were run separately for the within (girls in all-girls and mixed-sex schools) and between-sex (girls and boys in mixed-sex schools) models. The typicality, felt pressure, and perceived social acceptance and the general self-worth factors all consisted of 3 items. The subsets of items that would create the most reliable measure were chosen for the analysis. Each factor was set as a covariate of every other factor. The within-sex latent factor model reached a good fit $(\chi_2(59) = 58.17, p = .51, CFI = 1.0, RMSEA = .00)$ (See Figure 1). The between-sex latent factor model reached a good fit as well $(\chi_2(59) = 73.30, p = .10, CFI = 0.98, RMSEA = .03)$ (See Figure 2). The confirmatory factor analyses assured us that the groups of children to be compared understood the concepts in a similar fashion.

Place Effects

Once the latent factors were established, path analyses were conducted using Mplus (Muthén & Muthén, 2007). Before collapsing across place, a multi-group analysis comparing Bogotá and Baranquilla was run in order to assess structural differences in patterns of associations between the cities. All the paths in the model were constrained. The model reached a good fit ($\chi 2_{(148)}$ = 242.37, p= 0.00, CFI= .94, RMSEA=.04), suggesting no structural differences between the two places.

Within-sex Analyse

Hypothesis 2: Moderation

Prior to making group comparisons, an unconditional model was run with all of the girls (N=482). The model that provided the best fit to the data ($\chi 2_{(60)}$ =87.46, p=0.01; CFI=.98; RMSEA=.03) included pathways from (a) typicality to perceived acceptance,

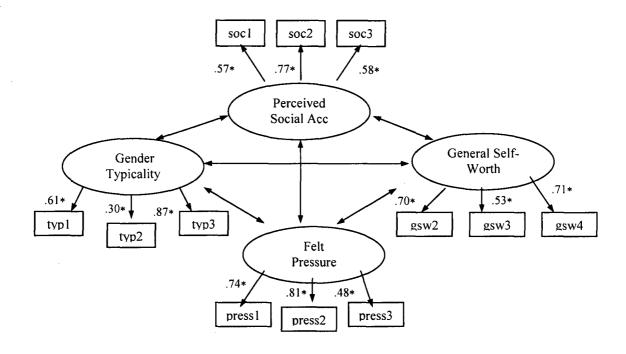


Figure 1. Within-sex confirmatory factor analysis: Girls in both schools. Significant effects (p < .05) shown as standardized coefficients (betas) are noted with the symbol (*).

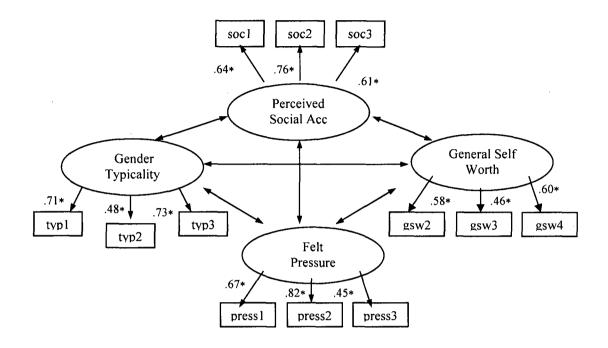


Figure 2. Between-sex confirmatory factor analysis: Girls and boys in mixed-sex schools Significant effects (p < .05) shown as standardized coefficients (betas) are noted with the symbol (*).

(b) felt pressure to perceived acceptance, (c) actual acceptance to perceived acceptance, and (d) perceived acceptance to general self worth (see Figure 3). Interestingly, both gender identity variables were indirectly associated with general self-worth via perceived social acceptance. Finally, in order to test for differences between the groups, on the associations of interest, namely between typicality and social acceptance and felt pressure and social acceptance, these paths were constrained to be equal. The model reached a good fit ($\chi 2_{(136)}$ =212.41, p=0.00; CFI=.93; RMSEA=.05), suggesting no structural differences in the strength of associations between the two groups (See Figure 4).

Second Test of Moderation

In order to test whether type of school moderated the association between gender identity and perceived peer acceptance models were run separately for typicality and felt pressure. When the interaction term (school-type X typicality) was added to the model regressed on perceived social acceptance, the model reached a good fit ($\chi 2_{(11)}$ =5.57, p=0.35; CFI=.99; RMSEA=.02) and included a significant interaction term (path coefficient = -1.12; p=0.008). This result suggests that girls in the single-sex schools who report more gender typicality also report more social acceptance whereas the girls in the mixed-sex schools who report more gender typicality report less social acceptance (See Figure 5). This provides preliminary evidence for the possible role of the social dosage effect in the development of gender identity in childhood. Not only did the girls in the all-girls schools endorse higher mean levels of typicality as compared to the girls in the mixed-sex schools, but their perceptions about whether or not they were accepted by their peers were associated with their perceptions of themselves as typical girls: the girls

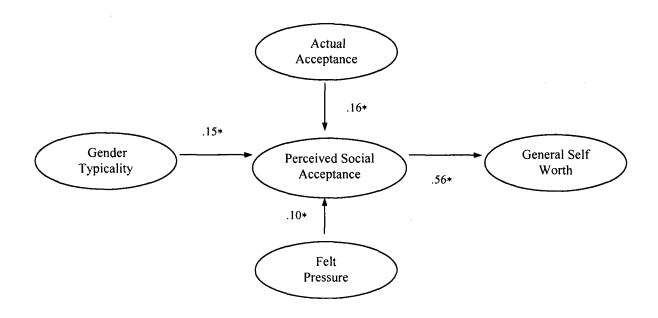


Figure 3. Unconditional within-sex model. Significant effects (p < .05) shown as standardized coefficients (betas) are noted with the symbol (*).

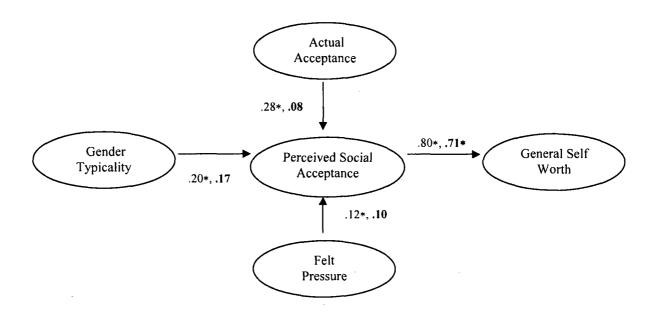


Figure 4. Multi-group Analysis: Girls in all-girls schools compared to girls in mixed-sex schools. Significant effects (p<.05) shown as standardized coefficients (betas) are noted with the symbol (*). Coefficients for all-girls schools are shown in normal font and coefficients for mixed-sex schools are shown in bold.

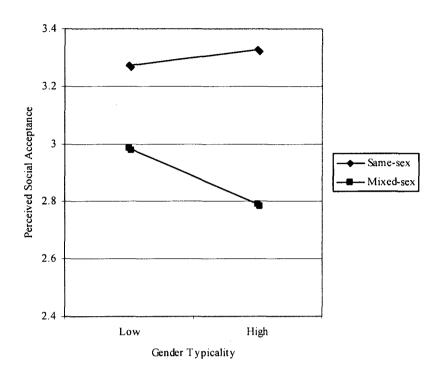


Figure 5. The association between girls' gender typicality and perceived social acceptance varies as a function of school context.

who see themselves as more gender typical also see themselves as more socially competent.

Hypothesis 3: Mediation

Using a multi-group model, two steps were followed in order to test for mediation. First, a path was added to the model between typicality and general self-worth, and the path between perceived social acceptance and general self-worth was removed. The model reached a good fit ($\chi 2_{(134)}$ =214.65, p=0.00; CFI=.93; RMSEA=.04) (See Figure 6). The association between typicality and general self-worth was not significant for the girls in the mixed-sex schools (path coefficient = 0.05, p =.71), but was for the girls in the all-girls schools (path coefficient = 0.12, p =.03). Thus the mediational model could only be tested for the girls in the all-girls schools.

Second, the path between social acceptance and general self-worth was replaced in order to assess its effect on the association between typicality and general self-worth. The association between typicality and general self-worth changed from significant (path coefficient = 0.12, p = .03) to nonsignificant (path coefficient = 0.00, p = .943) indicating that social acceptance mediated the association between typicality and general self-worth for the girls in the all-girls schools (Baron & Kenny, 1986) (See Figure 7).

Between-Sex Analyses

Hypothesis 2: Moderation

Prior to making group comparisons, an unconditional model was run with all of the participants in the mixed-sex schools (N=346). The model that provided the best fit

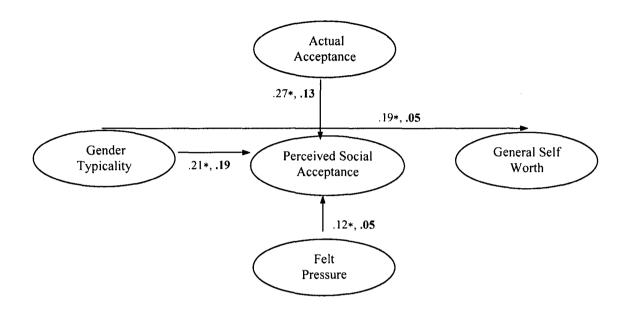


Figure 6. Mediation step one: Girls in all-girls schools compared to girls in mixed-sex schools. Significant effects (p<.05) shown as standardized coefficients (betas) are noted with the symbol (*). Coefficients for all-girls schools are shown in normal font and coefficients for mixed-sex schools are shown in bold.

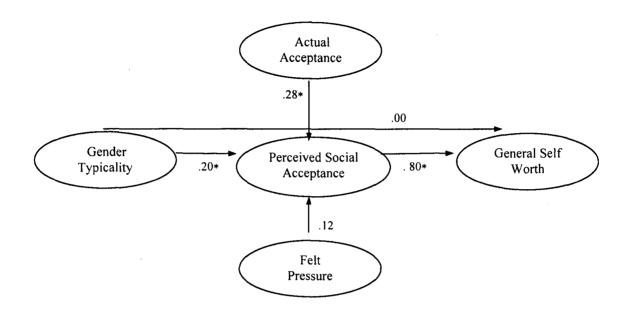


Figure 7. Mediation step two: Girls in all-girls schools only. Significant effects (p<.05) shown as standardized coefficients (betas) are noted with the symbol (*).

to the data ($\chi 2_{(60)}$ =71.63, p=0.14; CFI=.98; RMSEA=.02) was structurally equivalent to the within-sex model and consisted of pathways from (a) typicality to perceived acceptance, (b) felt pressure to perceived acceptance, (c) actual acceptance to perceived acceptance, and (d) perceived acceptance and general self worth (see Figure 8). Next, the associations were modeled in a multi-group analysis comparing the girls (N=147) and the boys (N=193). The model reached a good fit ($\chi 2_{(136)}$ =162.95, p=0.06; CFI=.96; RMSEA=.03) (see Figure 9). Finally, in order to test for differences between the groups, on the associations of interest, namely between typicality and social acceptance and felt pressure and social acceptance, these paths were constrained to be equal. The model reached a good fit ($\chi 2_{(138)}$ = 163.21, p = 0.07; CFI =.96; RMSEA = .03), suggesting no structural differences in patterns of associations between the two groups.

Hypothesis 3: Mediation

The hypothesis of mediation was tested using a multi-group model. As in the within-sex analyses, a path was added to the model between typicality and general self-worth, and the path between social acceptance and general self-worth was removed. The model reached a good fit ($\chi 2_{(134)}=162.40$, p=0.05; CFI=.96; RMSEA=.04) (See Figure 10). Given that the association between typicality and general self-worth was not significant for the girls (path coefficient = 0.10, p=0.45) or the boys (path coefficient = 0.24, p=0.13), the mediational model could not be tested.

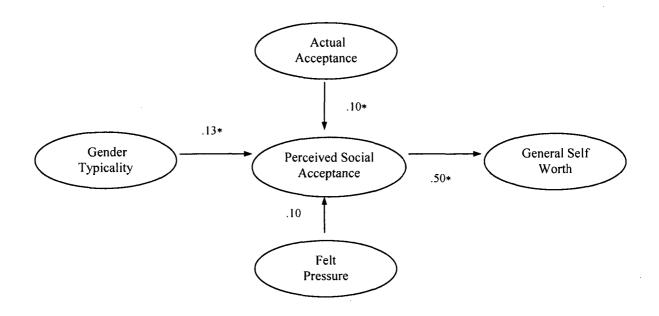


Figure 8. Unconditional between-sex model. Significant effects (p < .05) shown as standardized coefficients (betas) are noted with the symbol (*).

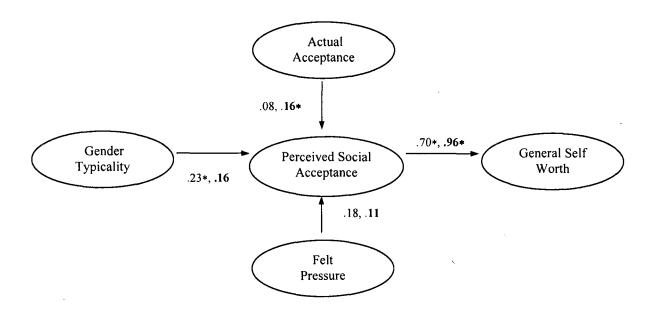


Figure 9. Multi-group analysis: Girls compared to boys in mixed-sex schools. Significant effects (p<.05) shown as standardized coefficients (betas) are noted with the symbol (*). Coefficients for girls are shown in normal font and coefficients for boys are shown in bold.

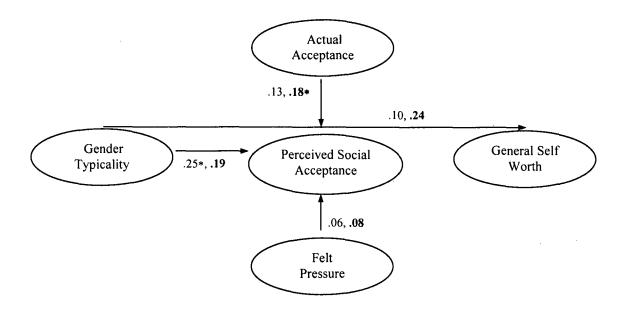


Figure 10. Mediation step one: Girls compared to boys in mixed-sex schools. Significant effects (p<.05) shown as standardized coefficients (betas) are noted with the symbol (*). Coefficients for girls are shown in normal font and coefficients for boys are shown in bold.

Discussion

The subject matter at hand cannot be distilled into a simple account. Systems models are, by design, complex. Our aim was to further understanding of the associations between gender identity and well-being in childhood and examine the moderating effects of type of school and as well the mediating role of the (same-sex) peer group. In other words, we examined the processes by which an individual's gender identity influences perceptions of the quality of his/her relationships with peers, how this relates to children's well-being and how these processes differ depending on the gender composition of the social context and the sex of the child. Although our findings are not what we expected on all accounts, they certainly provide additional support for the central role of peers in children's social lives. They also highlight the importance of considering the characteristics of the context, such as gender composition, when studying social and developmental processes in children.

Developmental Implications

This study was unique given that, to date, little is known about peer socialization of gender-typed behaviour after the period of early childhood (Rose & Rhiannon, 2009). Our work represents an initial effort to fill this lacuna in the research. Given the intensification of gender-typed behaviours that is seen at the transition to adolescence (Hill & Lynch, 1983), we aimed to fill another gap in the research by shedding light on gender-related social processes in the developmental period preceding adolescence. Furthermore, the vast majority of research addressing differences between single and mixed-sex schooling has done so in high school and college populations. The current extends this research into the earlier years of elementary school.

Implications for Single vs. Mixed-Sex Schooling Debate

Although addressing the myriad merits and demerits of single-sex versus mixed-sex schooling is far beyond the scope of this study, some of our findings could be interpreted in light of past research, keeping in mind that the research was conducted with high school students. For example, Lee and Marks (1990), found that girls educated in single-sex as compared to mixed-sex schools endorse less stereotypical views of gender roles into their college years. Likewise, Lee and Bryk (1986) found that girls in single-sex schools had less stereotypical adult sex role attitudes and had higher self-esteem. These findings seem contrary to what we found, however they may be interpreted as follows: the category "girl" for girls in single-sex schools is more flexible, encompasses more features and is therefore less stereotypical than the category "girl" for girls in single-sex schools. As a result, more girls identify as gender typical in single-sex schools because the category "girl" is more accommodating.

Stables (1990) found greater polarization of attitudes towards school subjects (particularly physics) in mixed-sex schools. This finding was especially strong for boys who are understood as being more prone to gender role stereotyping. This finding is consonant with some of the results of the current study and dissonant with others. It supports our finding that of the three groups, boys reported the highest levels of felt pressure. On the other hand, our findings could be interpreted as suggesting greater polarization of gender identity for girls in the all-girls schools, which is contrary to what Stables (1990) found. However, it is possible that our findings do not point to greater polarization but rather to a more flexible gender category as was mentioned above, and it

is also possible that the polarization (which could be a component of gender intensification) occurs in high school in the post-pubescent developmental phase.

Hypothesis 1: Interpretations & Implications

Although we are advocating for an exploration of social processes extending beyond the limits of mean differences, we nonetheless believe that the information conveyed by mean differences is an important consideration. When comparing the girls in the single-sex schools to the girls in the mixed-sex schools, several mean differences in the variables of interest appeared. The girls in the single-sex schools endorsed significantly higher levels of gender typicality and felt pressure to conform to gender norms than the girls in the mixed-sex schools. This finding suggests that an all-girls environment may produce a social dosage effect: spending more time with same-sex peers leads to higher levels of gender typicality and increased feelings of pressure to conform to gender norms. This finding may also refute Group Socialization Theory. The girls in the mixed-sex environment rated themselves as less typical and as feeling less pressure to conform to gender norms, suggesting that the presence of boys does not increase the salience of girls' gender identity, but rather, the presence of other girls does.

These findings present a challenge to the gender intensification hypothesis, which would predict higher levels of typicality and felt pressure for the girls existing in a mixed-sex context than the girls in a single-sex context. Alternately, the findings may be consistent with other past research, which has shown that both males and females in single-sex schools engage in more cross-gendered behaviour (Stables, 1990). Engaging in cross-gendered behaviour may serve to expand the parameters of gender roles to include more behaviours and as a result more individuals. It is also possible that the

intensification of gender-typed behaviour does not begin before the transition to adolescence when individuals initiate more interactions with other-sex peers. If not intensification, we have shown that differences in levels of gender-typed behaviours are present before puberty and that these differences are associated with the gender composition of the school context.

The girls in the single-sex schools also reported significantly higher levels of perceived social acceptance than the girls in the mixed-sex schools. Thus, although gender identity is seemingly more important for these girls, they also feel more socially competent in general. This finding could be understood in light of research on mixed-gender interactions (Serbin, Sprafkin, Elman, & Doyle, 1984; Maccoby & Jacklin, 1987) suggesting that girls may have more difficulty in social interactions with boys than with other girls. If this is the case, then girls in an all-girl environment may feel more socially competent as a result of the absence of other-sex interactions when compared to girls whose social environment includes both boys and girls.

Like the girls in the single-sex schools, the boys endorsed significantly higher levels of gender typicality and felt pressure to conform to gender norms than the girls in the mixed-sex schools confirming our hypothesis. This finding is consistent with past research suggesting that boys enforce and adhere to gender norms more strictly than girls. However, the boys reported higher levels of gender typicality than the girls in the mixed-sex schools but lower levels of felt pressure than the girls in the all-girls schools. This finding suggests that of the three groups, the boys perceive themselves as adhering most closely to gender norms and that the girls in the all-girls schools feel the most pressure to conform to gender norms. A possible explanation for this finding is that pressure to

conform to group norms is strongest when the group is homogeneous, or there is no outgroup; and feelings of being like the members of a group are strongest when there are in and out-groups and particularly for the members of the higher status group. An interesting subsequent analysis might include boys attending single-sex schools in order to investigate this hypothesis.

Hypothesis 2: Moderation Interpretations & Implications

The direction of the association between gender typicality and perceived social competence varied as a function of school context. For the girls in the all-girls schools, who endorsed higher levels on both subscales of the gender identity measure, social acceptance was positively associated with typicality. Conversely, for the girls in the mixed-sex schools, social acceptance was negatively associated with gender typicality. Once again we see evidence for the social dosage effect, the more time one spends with girls, the more one becomes like girls and presumably, the more social importance is ascribed to being like a girl. It is logical to assume that this effect would be attenuated in an environment that affords the opportunity to interact with non-girls. Therefore, it is difficult to explain an inverse rather than attenuated finding suggesting that typical girls in mixed-sex schools perceived themselves as less socially accepted, particularly if our understanding of Colombian culture as emphasizing traditional gender roles is accurate.

These findings also present a challenge to the gender intensification hypothesis, which would predict stronger association between typicality and perceived social competence in the mixed-sex schools. It is possible that processes that contribute to gender development may be phase dependent in that the social dosage effect is a more powerful explanatory model in elementary school and group socialization theory in high

school. Likewise, gender intensification may be a distinctly post-pubescent phenomenon and as a result longitudinal research examining the associations between gender identity, peer relationships and well-being adolescence during the time period spanning the advent of puberty would be worthwhile.

Hypothesis 3: Mediation Interpretations & Implications

The structural model proposed a central role for peer acceptance in the association between gender identity and general self-worth. Though this association was only mediated in the case of the girls in the single-sex schools, an indirect effect was present in the other groups. In the case of the girls in the single-sex schools, the association between gender typicality and general self-worth was fully mediated by the measure of perceived social acceptance, thereby replicating the Smith & Leaper (2005) finding. In other words, for girls in single-sex schools, the relationship between gender identity and the self-concept can be explained through relationships with peers. It is worth noting that the group that endorsed the highest levels of felt pressure to conform to gender norms is also the only group found to have a direct association between typicality and general selfworth. Though no conclusions can be drawn from this observation, it suggests an association between internalized social pressures and the self-concept. In the case of the boys and girls in the mixed-sex schools, an association between gender typicality and general self-worth existed indirectly via the measure of perceived social acceptance. One way of understanding the indirect effect is by conceptualizing social competence as a multidimensional construct with different dimensions associated with gender identity than are associated with general self-worth. Notably, in all cases, children's perceptions of whether or not they are socially competent have a strong impact on their well-being.

Strengths and Limitations

This study has several methodological limitations. Firstly, it was difficult to identify selection criteria of girls in all-girls schools, as such it was assumed that the girls were distributed randomly between the types of schools and that there were no pre-exiting differences between the groups. These possible systemic and yet unidentified differences between the girls in the all-girls schools and the girls in the mixed-sex schools might be confounded in our analyses of between-group processes. Likewise, we did not identify any school variables that could have been controlled for in our analyses.

Secondly, there is the problem of directionality in that without a longitudinal design it is impossible to determine whether gender identity contributes to social acceptance and self-worth or vice versa. It is possible that children with high self-esteem are better able to develop and maintain relationships and that their gender identity is then influenced by these relationships. Likewise, children with low self-esteem may have more difficult building and sustaining relationships (Stocker, 1994) and as a result their gender identity is less influenced by their perceived lack of social competence. In sum, we cannot determine from our data whether a more complex bidirectional relationship exists between these variables. Another limitation of the study lies in the gender typicality measure. The measure does not provide information about what a typical girl or boy looks, acts and feels like and this would be very useful information to have when interpreting the findings and considering the issue of stereotype categories.

Finally, though the fact that the study was conducted in Colombia is one of its strengths, having a Colombian sample without a comparable Canadian sample makes it difficult to interpret findings in light of past research conducted in a North American

context. In so far as generalizations can be made about a culture, Colombia culture is characterized by catholic values that dictate relatively traditional gender roles. We speculate that the adherence to more traditional gender roles may have several implications for the current project. The following are two examples, which naturally represent a non-exhaustive exploration of possible implications. Firstly, adherence to more traditional gender roles may have amplified previous findings (Egan & Perry, 2001), suggesting that the measured phenomenon is positively associated with traditionalism such that more traditional societies would yield a stronger effect and less traditional societies a weaker one. Or, it may have acted to dampen the effect, possibly as a result of lower awareness of gender roles in the general population. In this sense, more traditional societies presumably engage in less deconstruction, analysis and dialogue about gender roles and therefore have a less articulated understanding of the concepts. If gender roles are taken for granted and thereby not questioned, then responses to queries about them may be more superficial causing it to be harder to detect an effect.

An example of a finding that is difficult to interpret without a cross-cultural comparison is the positive rather than negative association between felt pressure to conform to gender norms and general self-worth. Is this a cultural difference, in that perhaps in more traditional cultures, felt pressure is not associated with negative adjustment because everybody experiences a relatively high degree of pressure? Or, is it the case that we did not replicate previous findings for a reason other than cultural differences? Our findings would benefit from an interpretation informed by cultural differences and a parallel study in Canada would allow for these comparisons. Future

research will examine these questions with Canadian participants, providing a reference point from which to better understand the Colombian findings.

Multiple perspectives are preferable when conducting social research, therefore, a strength of the current study was the reliance on multiple reporters (self and other).

Although we made no hypotheses about the actual acceptance variable, it is worth noting that the associations between actual and perceived acceptance were generally quite low (range: .08-.28). An interesting avenue for future research would to explore which domains of social functioning produce higher or lower correlations between self and peer report (example: emotional competence, academic achievement, etc.) The inclusion of both within and between-sex comparisons was another strength of the study. Gender research is often too focused on between sex comparisons and as a result overlooks the substantial within sex differences.

Conclusion

This study aimed to begin tracing the paths between normal processes of gender development in childhood and later detrimental outcomes in adolescence and adulthood. Clearly, more research is needed to better understand the processes of gender socialization and the ways in which children and adolescents experience their gender (both internally and socially), affects their general well-being. Socialization practices are designed to prepare children for the dominant adult roles and opportunities that are available in a given cultural community. To the extent that gender divisions exist in the society, gender-differentiated socialization practices follow (Wood & Eagly, 2002). The socialization of gender-typed social-interaction styles perpetuates traditional adult gender roles as well as power imbalances between men and women (Leaper, 2007, p.573). If we

propose to equalize the imbalance of power we must first understand the mechanisms through which these imbalances take shape.

References

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

 The Journal of Personality and Social Psychology, 51, 1173-1182.
- Bukowski, W.M. (2003). Peer Relationships. In M.H. Bornstein, L. Davidson, C.L.
 Keyes, & K.A. Moore (Eds.), Well-being: Positive development across the life
 course (pp. 221-233). Mahwah, NJ, US: Lawrence Erlbaum Associates
 Publishers.
- Carver, P.R., Yunger, J.L., & Perry D.G. (2003). Gender identity and adjustment in middle childhood. *Sex Roles*, 49, 95-109.
- Deaux, K., & Major, B. (1987). Putting gender into context: An interactive model of gender-related behavior. *Psychological Review*, 94, 369-389.
- Egan, S.K., & Perry, D.G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology*, *37*, 451-463.
- Fabes, R.A., Martin, C.L., & Hanish, L.D. (2007). The next 50 years: Considering gender as a context for understanding young children's peer relationships. In Ladd, G.W (Ed.), Appraising the human developmental sciences: Essays in honor of Merrill-Palmer Quarterly (pp. 186-199). Detroit, MI, US: Wayne State University Press.
- Fagot, B. (1977). Consequences of moderate cross-gender behavior in preschool children.

 Child Development, 48, 902-907.

- Fagot, B. (1985). Beyond the reinforcement principle: Another step toward understanding sex role development. *Developmental Psychology*, 21, 1097-1104.
- Harris, J.R. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review*, 102, 458-489.
- Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53, 87-97.
- Hibbard, D.R., & Buhrmester, D. (1998). The role of peers in the socialization of gender-related social interaction styles. *Sex Roles*, 39, 185-202.
- Hill, J.P., & Lynch, M.E. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A.C. Petersen (Eds.), *Girls at puberty: Biological and psychosocial perspectives* (pp.201-228). New York: Plenum Press.
- Leaper, C., & Friedman, C.K. (2007). The socialization of gender. In J. E. Grusec & P.D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp.561-587). New York: Guilford Press.
- Lee, V.E., & Bryk, A.S. (1986). Effects of single-sex secondary schools on student achievement and attitudes. *Journal of Educational Psychology*, 78, 381-395.
- Lee, V.E., & Marks, H.M. (1990). Sustained effects of the single-sex secondary school experience on attitudes, behavior and values in college. *Journal of Educational Psychology*, 82, 578-592.
- Maccoby, E. (2002). Gender and group processes: A developmental perspective. *Current Directions in Psychological Science*, 11, 54-58.

- Maccoby, E. (2000). Perspectives on gender development. *International Journal of Behavioral Development*, 24, 398-406.
- Maccoby, E. (1990). Gender and Relationships: A developmental account. *American Psychologist*, 45, 513-520.
- Maccoby, E. (1988). Gender as a social category. *Developmental Psychology*, 24, 755-765.
- Maccoby, E., & Jacklin, C.N. (1987). Gender segregation in childhood. In H.W. Reese (Ed.), Advances in child development and behavior (pp.239-288). New York:

 Academic Press.
- Martin, C.L. & Fabes, R.A. (2001). The stability and consequences of young children's same-sex peer interactions. *Developmental Psychology*, *37*, 431-446.
- Martin, C.L., & Ruble, D. (2004). Children's search for gender cues: Cognitive perspectives on gender development. *Current Directions in Psychological Science*, 13, 67-70.
- Muthén, L.K., & Muthén, B.O. (1998-2006). Mplus User's Guide. Fourth Edition. Los Angeles, CA: Muthén & Muthén.
- Oreskes, N. Shrader-Frechette, K., & Belitz, K. (1994). Verification, validation, and confirmation of numerical models in the earth sciences. *Science*, *263*, 641-646.
- Rose, A.J., & Rudolph, K.D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, *132*, 98-131.

- Rose, A.J., & Smith, R.L. (2009). Sex Differences in Peer Relationships. In K.H. Rubin, W.M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions,* relationships, and groups (pp. 379-393). New York: Guilford Press.
- Ruble, D. N., & Martin, C. L. (1998). Gender Development. In W. Damon (Ed.),

 Handbook of Child Psychology (pp. 933-1016). New York: Wiley.

 Serbin,
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup cooperation and competition: The Robbers Cave experiment*. Norman, OK: University Book Exchange.
- Smith, T.E., & Leaper, C. (2005). Self-perceived gender typicality and the peer context during adolescence. *Journal of Research on Adolescence*, 16, 91-103.
- Stables, A. (1990). Differences between pupils from mixed and single-sex schools in their enjoyment of school subjects and attitudes to science and to school.

 Educational Review, 42, 221-230.
- Stocker, C.M. (1994). Children's perceptions of relationships with siblings, friends and mothers: Compensatory processes and links with adjustment. *Journal of Child Psychology and Psychiatry*, *35* (8), 1447-1459.
- Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American*, 223, 96-102.
- Thorne, B., & Luria, Z. (1986). Sexuality and gender in children's daily worlds. *Social Problems*, 33, 176-190.

- Wood, W., & Eagly, A. H. (2002). A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. *Psychological Bulletin*, 128, 699-727.
- Yunger, J.L., Carver, P.R., & Perry, D.G. (2004). Does gender identity influence children's psychological well-being? *Developmental Psychology*, 40, 572-582.
- Zucker, J.K, Wilson-Smith, D.N., Kurita, J.A., & Stern A. (1995). Children's appraisals of sex-typed behavior in their peers. *Sex Roles*, *33*, 703-725.

Appendix A

Information Letter

Abril 16 de 2007

Estimado(s) padre(s):

Mi nombre es William Bukowski y soy profesor del Centro para la Investigación del Desarrollo Humano (CRDH) de la Universidad de Concordia en Montreal, Canadá. Allí trabajo como docente e investigador en temas relacionados con la niñez y la adolescencia. En particular, estudio la manera en la cual las relaciones de amistad, las habilidades y los comportamientos de los niños les ayudan a manejar el estrés y los retos a los que se enfrentan en su vida diaria. Este tema es de gran interés para los padres, profesores y personas que trabajan en el sector de la salud.

Esta carta tiene como propósito informarles que actualmente mis estudiantes y yo nos encontramos realizando un estudio con niños de 4° y 5° grado del colegio de su hija. Esta investigación nos ayudará a entender de una mejor manera cómo se da el proceso de desarrollo de los niños.

Como parte de este estudio, cinco de mis estudiantes se reunirán con las niñas para pedirles que nos ayuden a responder dos cuestionarios. El primero de ellos lo responderán una vez en dos sesiones, y el segundo dos veces, en la segunda sesión del primer cuestionario y una semana después en una reunión más corta. Les pediremos que nos cuenten, por ejemplo, (a) qué tanto les agradan sus compañeras y cómo las ven con respecto a características como su capacidad para ayudar, su desempeño en el colegio, su relación con los demás, etc. También les preguntaremos (b) qué tanto sienten que sus compañeras y los miembros de su familia se involucran en actividades que implican ayudar a otros, trabajar en grupo, etc. Por último les pediremos que nos cuenten (c) qué tanto ellas sienten que se parecen a otras niñas del colegio y (d) qué cosas creen que son importantes para sus compañeras.

En el segundo cuestionario les pediremos a las niñas que nos cuenten sobre las cosas que comieron el día anterior, las emociones que han sentido durante este período, si se han sentido enfermas durante la semana, y sobre las personas con las que han hablado de su desempeño en el colegio. Las estudiantes responderán a estas preguntas en sus salones de clase y ninguna niña tendrá acceso a las respuestas de sus compañeras. Adicionalmente la directora del grupo de la niña nos proporcionará información acerca del peso y la talla de su hija y de su rendimiento académico.

Es importante aclarar que les pediremos a las niñas que protejan la confidencialidad de sus respuestas y además nosotros mismos nos aseguraremos que esta situación se mantenga así.

Como un gesto de agradecimiento por la participación, las niñas recibirán algunos útiles escolares. Adicionalmente, organizaremos un taller con los maestros en el que hablaremos de algunos temas relacionados con convivencia pacífica y competencias ciudadanas. También los docentes recibirán retroalimentación sobre los resultados de la

investigación, de tal forma que sus conocimientos sobre las competencias sociales y académicas de sus estudiantes serán enriquecidos.

Las personas que nos dedicamos a hacer investigaciones con niños o adultos debemos describir claramente los riesgos y beneficios relacionados con la participación en ellos. Podemos asegurarle(s) que la participación en este proyecto no tiene riesgo alguno, diferentes a aquellos a los que usualmente se enfrentan las niñas en su vida diaria. Este no es un estudio de intervención y su propósito no es brindar beneficios directos a las niñas que participan a pesar de que la mayoría de los estudiantes que nos ayudan disfrutan hacerlo.

La información recolectada en este estudio será <u>completamente confidencial</u> y la participación es voluntaria. Incluso, si usted(es) le da(n) permiso a su hija para participar, ella no estará obligada a hacerlo, y podrá retirarse sin ningún problema. Las mismas condiciones dispuestas para los niños aplican en su caso; es decir, ustedes pueden retirarse del estudio si así lo consideran.

Este estudio ha sido aprobado previamente por el Comité de Ética en Investigación Humana de la Universidad de Concordia. Si usted(es) tiene(n) preguntas sobre sus derechos o los derechos de su hija como participante del proyecto, por favor diríjase Gloria Inés Rodríguez, coordinadora del proyecto en Colombia. (Teléfono: 315-4023, correo electrónico: glorodriga@etb.net.co. Si tiene alguna otra pregunta adicional, puede comunicarse escribiéndome al correo electrónico: william.bukowski@concordia.ca.

Le(s) pido el favor entonces que llene(n) el desprendible adjunto y lo envíe(n) de vuelta mañana al colegio con su hija. Como incentivo para motivar a las niñas a que nos ayuden a reunir los desprendibles, recibirán un pequeño regalo de parte del equipo de investigación.

Muchas gracias por su ayuda.

wm3-1

Cordialmente,

William M. Bukowski

Profesor

Appendix B

Parental Consent Form (Spanish)

PROYECTO CULTURE, SOCIAL RELATIONS AND ACADEMIC COMPETENCIES (GRADOS 4° y 5°)

2007

PERMISO PARA PARTICIPACIÓN

Por favor lea y firme el siguiente texto:

Comprendo que se está solicitando mi autorización para que mi hija participe en la investigación del Dr. W. M. Bukowski. Comprendo que el propósito de este estudio es examinar la manera cómo las relaciones de amistad, las habilidades y los comportamientos de los niños les ayudan a manejar eventos que pueden ser estresantes en su vida diaria. Comprendo que si mi hija participa se le pedirá que conteste algunos cuestionarios en su salón de clase. Se me ha informado que los cuestionarios son acerca de las relaciones sociales de las niñas y sobre lo que ellas piensan y sienten sobre sí mismas y sobre sus compañeras. Comprendo que mi hija no tiene que participar en el estudio, e incluso, que si empieza a llenar los cuestionarios y no quiere continuar, puede parar en cualquier momento. También comprendo que todas las respuestas serán confidenciales y no serán mostradas a ninguna persona. Solamente el Dr. W. M. Bukowski y sus asistentes conocerán la información de los cuestionarios.

Por favor marque alguna de las dos siguientes respuestas y pida a su hija que lleve este desprendible mañana al colegio y lo entregue a los asistentes de investigación.

	Mi hija <u>tiene</u> permiso para participar en la investigación del Dr. Bukowski			
Mi hija <i>no tiene</i> permiso para participar en la investigación del Dr. Bukowski				
Nombre del padre:			Teléfono:	
Firma:			Fecha:	
Nombre de la estudiante:				
Curso		Nombre del colegio		

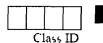
Appendix C

Child Consent Form (English & Spanish)



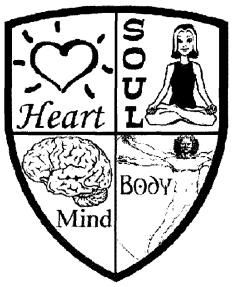
First Name:





OWWC 2007 Study

	Please read and sign the following if you wish to participate in the study:
I S	We would like to invite you to take part in a research project. We



We would like to invite you to take part in a research project. We are interested in learning more about how young people feel about themselves and how they get along with others. Although your parents have given us permission to ask you about this, you are still free to make your own choice. If you agree to be part of our project, we will ask you to answer some questions in class. These questions should take two classes to complete.

Last Name: ___

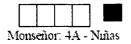
All of your answers to the questions will be kept confidential. "Confidential" means that no one will know what you wrote. We will write a code number, not your name, on all forms. No one will see your answers to the questions except the people here today. That means we are not going to share your answers with your parents, teachers, or classmates.

You are free to say no to participating in this project or to stop answering questions at any time. If you want to stop, all you have to do is let us know. We will not be mad or sad if you decide to stop; nothing bad will happen to you and we will still give you a reward for your help. If you have any questions, please feel free to ask us at any time.

Signature Here:(day - month - year)
Please fill in the boxes completely: ■
and not like this
If you make a mistake, cross out the incorrect box and fill in the correct one:
■1 □2 □3 📜 4 □5







Nombre:	Apellido:
Edad:	
Heart L. Body	Por favor lee y firma la siguiente carta si deseas participar en este estudio: Queremos invitarte a hacer parte de un proyecto de investigación. Estamos interesados en conocer más sobre la forma en que los niños y las miñas se sienten acerca de si mismos y sobre la manera en que se relacionan con las otras personas. Aunque nis papás ya nos dieron permiso para hacerte estas preguntas, tú puedes tomar nu propia decisión. Si decides hacer parte de maestro proyecto, te pediremos que respondas algunas preguntas en clase. Todas tas respuestas serán confidenciales. Esto quiere decir que nosotros no les vamos a dar a conocer tus respuestas a tus padres, profesores o compañeros. Tú eres libre de decidir no participar en este proyecto o de dejar de contestar las preguntas en cualquier momento. Si quieres parar, lo único que
Mind	tienes que hacer es decirnoslo. No nos encoarennos mal si decides no seguir contestando las preguntas. Nada malo te sucederá si decides parar y, aún así, te daremos un pequeño regalo en agradecimiento por tu ayuda. Si tienes alguna pregunta, por favor no dudes en acudir a nosotros en cualquier momento.
Firma:	igia - mes - arroj
Por favor, rellena las casilla	s completamente, así: ■
No lo hag:	asasi: 🕱 ☑ □2

Si cometes un error, tacha con una X la casilla incorrecta y rellena la correcta: **■**1 02 03 **)(**4 05

Appendix D

Perceived Competence Scale (English & Spanish)



How I feel about myself

Now, we'd like to know more about you. Read each description and tell us how well that description fits you.	Really disagree	Disagro

Now, we'd like to know more about you. Read each description and tell us how well that description fits you.		Disagree	Neither agree nor disagree	Agree	Really agree
Example: I would rather play outdoors in my spare time.		- 2	□3	■ 4	5
01. I am very good at school.	1	= 2	3	□ ÷	□ 5
02. I have trouble making friends.		□2	□3	□ 4	5
03. I am good at all kinds of sports.	1	= 2	□3		5
04. There are lots of things about myself that I would change if could.	fI 🗆 1	□2	□ 3	□ 4	5
05. I can influence others in my classroom.		= 2	□ 3	□ ♣	□ 5
06. I am just as smart as other kids my age.	1	□2	□3	□ 4	□ 5
07. I have a lot of friends.		□2	□3	□ ₹	□ 5
08. I am sure of myself.			□3	4	5
09. The other kids in the class like me and are kind to me.		□2	□ 3	□ 4	5
10. I am slow in finishing my schoolwork.		□2	□3		5
11. I don't think I am an important member of my class.	□ 1	= 2	□ 3	□ 4	□5
12. It is easy for me to learn a new sport or activity.		□2	□ 3	- \$	D 5
13. I feel good about the way I act.		□2	□ 3		5
14. I can get others to agree with me.	- 1	□2	□ 3	□ 4	□ 5
15. I often forget what I learn.	□ 1	□2	□3	□ 4	□ 5
16. I am always doing things with other kids.		□2	□ 3	□ ÷	□ 5
17. I am better at sports than other kids my age.	□ 1	□2	□ 3		5
18. I think that I am not a good person.	1	□2	□3	- 4	□.5
19. Other kids in the class like me for who I am.	□ 1	- 2	□3	4	□ 5
20. I do well in school.	□ 1	- 2	□3	□ 4	- 5
21. I prefer watching rather than participating in sports.	1	- 2	□3	□4	- 5
22. I am happy with who I am.	- 1	□2	□ 3	□ 4	□ 5
23. I can get others to do what I want them to do.	□ 1	□2	□ 3	□ 4	= 5
	Really disagree	Disagree	Neither agree nor disagree	Agree	Realiy agree



How I feel about myself

1	- {	- 1	1 1	
1	ŧ		1	
1	ł	1	1	
1		1	1	_

Remember, how well does each description fit you?		Disagree	Neither agree nor disagree	Agree	Really agree
24. I am popular with others my age.	- 1	- 2	3	□4	5
25. I am not good at new sports.		= 2	3	□4	5
26. I don't like the way I do a lot of things.	1	□ 2	3	□ 4	= 5
27. I feel accepted by the other kids in my class.	- 1	- 2	□3	□4	5
28. It is hard for me to figure out the right answers in school.	1	= 2	3	□ 4	□ 5
29. I get along well with others.		= 2	3	□ 4	□ 5
30. I am a good athlete.	- 1	- 2	3	4	5
31. I am generally sure that what I am doing is right.		□ 2	П3	□ 4	□ 5
32. I complete my homework quickly.	□ 1	= 2	3	□ 4	□ 5
33. It is easy for me to make friends.	□ 1	□ 2	□ 3	□ 4	□ 5
34. Sports are easy for me.	1	- 2	3	□ 4	- 5
35. If I could, I would change a lot of things about myself.	□ 1	-2	□3	□ 4	5
36. There are a lot of things about myself that I am proud of.	-1	□2	□3	□4	□ 5
	Really disagree	Disagree	Neither agree nor disagree	Agree	Really agree



¿CÓMO ME SIENTO ACERCA DE MÍ MISMO?

Ahora, nos gustaria saber más sobre ti. Lee cada frase y cuéntanos qué tanto te describe. Rellena la casilla en la escala que mejor te describa.	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo
Ejemplo: Me gusta jugar en mi tiempo libre.	01	- 2	□3	4	5
01. Me va muy bien en el colegio.	1	- 2	3	□	<u></u> 5
02. Tengo dificulta para hacer amigos.	□ 1	□2	□3	□ 4	-5
03. Soy muy bueno en todos los deportes.	1	□2	3	- 4	5
04. Hay muchas cosas de mí que cambiaria si pudiera.	□ 1	- 2	3		5
05. Puedo influir en mis compañeros.	1	□2	3	□ 4	5
06. Soy tan inteligente como los otros niños de mi edad.	□1	□2	□ 3	□ 4	□ 5
07. Tengo muchos anugos.	□ 1	□ 2	□ 3	□ 4	□ 5
08. Me siento seguro de mí mismo.	1	□2	3	□	0 5
09. Mis compañeros me aprecian.		□ 2	3	□4	5
10. Soy lento para terminar mis tareas.	1	= 2	□3	□	□ 5
11. No creo que sea un miembro importante de mi salón.	□ <u>1</u>	□2	□3	□	5
12. Para mi es făcil aprender un mievo deporte o actividad.	□ 1	□2	□3	4	5
13. Me siento bien con la manera en que actito.		□,2	□ 3	□ 4	= 5
14. Puedo lograr que los otros estén de acuerdo comnigo.	- 1	□2	□ 3	□ 4	□5
15. Frecuentemente olvido lo que aprendo.	- 1	□2	3	□ 4	5
16. Siempre estoy haciendo cosas con otros niños.		□2	3	□ 4	□ 5
17. Soy más hábil para los deportes que otros niños de nu edad.		□ 2	3	□ 4	5
18. Pienso que no soy una buena persona.	1	□2	3	□ 4	□ 5
19. Mis compañeros me aprecian por lo que soy.	□ 1	□2	□ 3	□	5
20. Me va bien en el colegio.	□ 1	□2	□ 3	□ 4	□ 5
21. Prefiero ver más que participar en deportes.	1	□2	□3	□ 4	□ 5
22. Me siento feliz con lo que soy.	□ 1	□2	□ 3	□ 4	5
23. Puedo hacer que los otros hagan lo que yo quiero.	□ 1	2	□3	□	□ 5
	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo



frase te describe.

orgulloso.

¿CÓMO ME SIENTO ACERCA DE MÍ MISMO?

10439					
ecuerda, para contestar, piensa en qué tanto cada ase te describe.	Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo
24. Soy popular entre las personas de mi edad.	1	= 2	3	□4	□ 5
25. No soy bueno para los nuevos deportes.	1	= 2	3	□4	5
26. No me gusta la manera en que hago muchas cosas.	1	-2	3	□4	5
27. Me siento aceptado por mis compañeros.	□ 1	= 2	□ 3	□4	5
28. Se me dificulta encontrar las respuestas correctas en el colegio.	- 1	□ 2	- 3	□4	□ 5
29. Me la llevo bien con los otros.	1	□ 2	□ 3	□4	5
30. Soy un buen atleta.	1	= 2	□ 3	□ 4	□ 5
31. Generalmente estoy seguro de que lo que hago es lo correcto	. 🗆 1	= 2	3	□4	□ 5
32. Termino mis tareas rapidamente.	□ 1	- 2	3	□4	□ 5
33. Es fàcil para mi hacer amigos.	1	- 2	□ 3	□4	5
34. Los deportes son fáciles para mi.	1	□ 2	□3	□ 4	5
35. Si pudiera, cambiaria muchas cosas acerca de mi mismo.	1	- 2	□3	- 4	□ 5
36. Hay muchas cosas de mi mismo de las que me siento	- 1	- 22	3	□ 4	□ 5

□ 1	= 2	3	□4	□ 5
Totalmente en desacuerdo	En desacuerdo	Ni de acuerdo, ni en desacuerdo	De acuerdo	Totalmente de acuerdo

Appendix E

Multidimensional Gender Identity Inventory (English & Spanish)



ROLES - B

Please fill in the the box that best describes how you feel.		Disagree	Neither agree nor disagree	Agree	Really agree
I am glad I am a boy.	- 1	- 2	3	- 4	D 5
It bothers the kids in my class when a boy acts like a girl.	□ 1	□ 2	□3	□ 4	□ 5
I think that I am very similar to the other boys in my class.	□1	$\square 2$	3	□ 4	□5
Kids in my class don't like boys who act like girls.	<u> </u>	□ 2	□3	□ 4	- 5
Some boys think it might be more fun to be a girl but I am happy to be a boy.		□ 2	□ 3	□4	□ 5
Boys in my class feel that they have to be like the other boys	. 🗆 1	 2	□3	□4	□5
I am just like the boys in my class.		□ 2	3	□ 4	□ 5
Kids in my class would tease me if I did something that girls like to do.		□ 2	□ 3	- 4	□ 5
I like to do the things that most boys like to do.	- 1	□ 2	3	- 4	□ 5
Sometimes, I wish I were a girl.	- 1	□ 2	□ 3	□ ↓	□ 5
It would bother the kids in my class if I acted like a girl.	□ 1	□2	□ 3	□4	□ 5
I fit in with the other boys in my class.	1	□2	□3	□4	□ 5
Most kids would think it is wend if I did something that girls like to do.	- 1	□2	□ 3	4	5
	Really disagree	Disagree	Neither agree nor disagree	Agree	Really agree



ROLES DE GENERO

M			

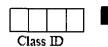
Ni de Totalmente Totalmente Ahora te vamos a preguntar sobre las cosas que hacen Εn Оe acuerdo, ni y piensan los niños/niñas. Por favor rellena la casilla en desacuerdo ರ್ಷ desacuerdo acuerdo en acuerdo que mejor describa lo que tu piensas. desacuerdo 01. En la vida es más fácil ser un miño que una mña. \Box $\square 3$ 02. Tener buenos resultados en el colegio es mas difícil para ב 🗆 \square 3 los niños que las para los niñas. 03. A las niñas se les permiten hacer más cosas que a los □ 2 $\Box 3$ \Box 4 D 5 niños. $\Box 2$ \Box 5 04. En la vida es más fácil ser una niña que un niño. \Box 1 $\square 3$ 05. A los niños se les permiten hacer más cosas que a las \Box 1 \Box 2 $\square 3$ $\square 4$ \Box 5 06. Tener buenos resultados en el colegio es más dificil para $\square 3$ \Box 1 \Box 2 \square 4 \Box 5 las niñas que los para los niños. 07. Soy como los otros mãos (hombres) de mi curso. נם $\square 3$ $\square 4$ \Box 5 08. A mis compañeros les molesta cuando un niño actúa como \Box 1 $\square 3$ \square 4 D 5 09. Algunas veces desearia ser una niña. □ 3 $\square 3$ \Box 4 D 5 \Box 1 **口** 5 **D**2 $\square 3$ $\Box 4$ 10. Mis compañeros se molestarían si vo actuara como niña. \Box 1 $\Box 2$ 11. Estoy feliz de ser niño (hombre). \Box 1 \Box 3 \Box 4 5 12. Los miños (hombres) de mi curso sienten que ellos tienen $\Box 2$ $\Box 4$ \Box 1 \square 3 \Box 5 que parecerse a los otros miños (hombres). Me gusta hacer las cosas que hacen la mayoría de los \Box 2 \square 3 $\Box 4$ \Box 5 niños (hombres). 14. A mis compañeros no les gustan los niños que actuan \Box **D** 5 \Box 1 \square 3 $\Box 4$ como niñas. 15. Me gusta ser niño (hombre). $\Box 1$ \Box $\square 3$ $\square 4$ D 5 16. Pienso que soy muy parecido a los otros niños (hombres) \Box 3 $\square 4$ **ロ**5 de un curso. 17. A la mayoría de mis compañeros les parecería raro si yo D 5 $\square 3$ $\Box 4$ hiciera algo que usualmente hacen las mínas.

Appendix F

Peer-Rated Social Acceptance (English & Spanish)



Who are your friends?



First we would like to know who you are friends with and who you like to spend time with.

We want to know which boys and which girls are your friends.

In the box beside the name of the boy who is your **best friend** put a "1". In the box beside the name of the boy who is your **second best friend** put a "2".

In the box beside the name of the boy who is your third best friend put a "3".

In the box beside the name of any other boys who are one of your friends out a "4".

Please only put one "1", one "2" and one "3", however you do not have to put a "2" or a "3". Also, you can put a "4" beside as many names as you wish. Just be sure you think of the person as a friend.

Next, do the same for the names of the girls.

Lev Vygotsky	na Karenina na Freud die Foster chaela Joy Santo ginia Wolf dy Recchia ma Bovary enda Milner ne Austen det Capulet rgaret Atwood a Howe icia Meyer ne Rice
--------------	--



¿QUIÉNES SON TUS AMIGOS Y AMIGAS

1	- 1			
ļ		1	1	
ı				
ш				

Class ID

Nos gustaria saber quienes son tus amigos(as), y con quienes te gusta compartir tu tiempo.

Primero, queremos saber cuáles minas son tus amigas:

En la casilla junto al nombre de la niña que es tu mejor amiga escribe un "1". En la casilla junto al nombre de la niña que es tu segunda mejor amiga escribe un "2". En la casilla junto al nombre de la niña que es tu tercera mejor amiga escribe un "3". En la casilla junto al nombre de cualquiera de las niñas que sea tu antiga escribe un "4".

Por favor, solamente escribe un "1", un "2" y un "3". Si no quieres, no tienes que poner un "2" o un "3". Puedes escribir "4" tantas veces como quieras. Solo asegúrate de que esas mñas si sean tus amigas.

Ahora, haz lo mismo para los niños:

Billy Bukowski ☐	\prod	Britney Spears
Harry Leroy 🗍	П	Cara Santo
Jean Chretien 🗍	П	Celine Dion
Jean Piaget 🗌 🛚		Hillary Clinton
Jimmy Hoffa 🗍	\Box	Jessica Grenier
Jonathan Santo ☐ │	П	Jessica McBride
Kayser Soze 🗍		Martha Stewart
Kevin Bacon 🗌		Melissa Bergevin
Lev ∀ygotsky 🗍 │	\Box	Princess Leia
Luke Skywalker	П	Rosy Cotton
Ricky Miners 🗍		Shari Mayman
Ryan Adams 🔲 🖯		Tanya Bergevin
Titus Andronicus ☐ │	П	Tiffany Butachevski
<u> </u>		
Πį	П	
!		
Πi	$\overline{\sqcap}$	
Ħ!	П	
Ţ;	П	
	П	
	П	
-		
in the first term of the second of the secon		

5710

¿QUIÉNES SON TUS AMIGOS Y AMIGAS

• □ Si	□ No	

5710
A veces los niños tienen amigos por fuera de su salón.
¿Tienes un mejor amigo o amiga que está en tu colegio pero que no está en tu curso? □ Si □ No
Si tu respuesta es sí, ¿cuál es el nombre de esa persona?
¿Cuál es el apellido de esa persona?
¿Tienes un mejor amigo o amiga en tu barrio, que no está en tu colegio? □ Si □ No
Si tu respuesta es sí, ¿cuál es el sexo esa persona? 🗆 Masculino 🗇 Feminino