# Group Norms Moderate the Association Between Individual-Level Characteristics and Peer-Perceived Gender Typicality

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#### **Abstract**

Group Norms Moderate the Association Between Individual-Level Characteristics and Peer-Perceived Gender Typicality

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A multilevel analysis conducted with a cross-sectional sample of 324 pre -adolescents (N= 324) in grades five and six ( $M_{age} = 11.5$ ) of girls (N=170) and boys from three mixed-gender primary school schools in Montreal, Quebec, Canada and two mixed-gender schools in Barranquilla, Colombia (N= 174) was used to examine the effect of group norms on peer perceived gender typicality. Group level variables including descriptive same-gender and other-gender group norms for each of the social behaviors. SES, culture, and gender were examined as moderators of the association between four forms of gendered social behaviors, specifically care, justice, physical aggression, and relational aggression, and children's perceptions of their peers as being typical members of their cis gender group categories. Multilevel modeling indicated distinct patterns of effects for the level 2 group variables on the intercept and slope for each of the four social behaviors. For the intercept, same-gender and other-gender group means were positively associated with gender typicality for three (care, justice and relational aggression) of the four behaviors. For the slope – gender typicality was high when other-gender group means for physical aggression, relational aggression and care were low. Only relational aggression was found to be a significant predictor at level 1. SES and place effects also found. The findings show that perceptions of gender typicality are contextually determined.

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# Group Norms Moderate the Association Between Individual-Level Characteristics and Peer-Perceived Gender Typicality

Gender typicality is a form of perception regarding the degree to which an individual possesses the features that are representative of the individual's gender category. It can be conceived of as the degree to which a person adheres to gender-related characteristics. Gender typicality has been identified as a central and important construct in the study of gender identity (Perry et al., 2019). Interest in the study of gender typicality is supported by evidence that it is associated with well-being (Perry et al., 2019). This interest has increased in the past two decades, especially in the past few years (Egan & Perry, 2001; Perry & Pauletti, 2011; Riggs et al., 2023; Bukowski, Castellanos, Commisso, et al., 2019; Bukowski, Perry, & Castellanos, 2019; Andrews et al., 2019; Menon & Hannah-Fisher, 2019; Jewell & Spears, 2014). The bulk of this research has been concerned with <u>self-perceptions</u>. The goal of most prior studies was to examine the antecedents and consequences of children's perceptions of themselves as typical or atypical members of their gender category. Recently, Bukowski, Castellanos, Commisso, et al. (2019) have provided an alternative perspective by studying children's perception of gender typicality within peer groups. These perceptions refer to the degree to which children see others as typical members of their gender category. The goal of the present study is to examine how peer perceptions of gender typicality vary as a function of contextual parameters.

This study has four interrelated conceptual points of departure. The first is the well-known claim that development needs to be studied from an ecological perspective (Bronfenbrenner, 1979; Bukowski et al., 2021). The essential point of this claim is that developmental outcomes and processes are affected by the features of the social contexts where they occur. The second point of departure is taken from anthropological theory. It claims that contexts function as significant systems that ascribe meaning to experiences or characteristics that occur at the level of the person or dyad (Geertz, 1995; Mead, 1946; Bukowski et al., 2021). In this way, the association between variables that occur at the level of the individual will vary as a function of the group characteristics especially norms; both descriptive norms (i.e., average mean for the classroom-based same-sex peer groups) and status norms (i.e., correlation of individual behaviors with popularity within classroom same-sex peer groups).

The third is the well-known perspective that the features and effects of peer experiences exist at multiple levels of social complexity (Rubin et al., 2006). According to this perspective, a full understanding of peer processes requires a systemic multilevel approach that can account for the effects of group features on variables that occur at lower levels of complexity. For peer relations these levels would be the person, the dyad and the group (Bukowski et al., 2018). Fourth, this study is an extension of the gender prototypicality theory proposed by Mayeux and Kleiser (2020). According to this perspective, gender typicality is ascribed disproportionality to young adolescents, particularly during the early adolescent years, who conform to gender-typical roles in behavior, appearance, and other features. In the present study, a multilevel approach is used to examine within-group and between-group variations in the association between a measure of peer assessed gender typicality and measures of social behaviors in the same-gender classroom peer-group.

Gender typicality can be defined as a form of perception indicating the degree to which an individual possesses the features that are normative or are defining characteristics of the individual's gender category. As a form of perception, it is not an objective indicator but is instead subjective. As with other forms of perception it is likely to vary as a function of individual and contextual properties. Theory and research on peer perceptions of gender typicality is currently limited and underdeveloped. Accordingly, one needs to rely on ideas taken from the conceptual points of departure discussed earlier and on the existing, though limited empirical evidence. Currently, there is some evidence of what accounts for individual differences about self-perceptions of gender typicality.

Research on gender typicality is motivated by evidence that it is seen to be associated with well-being (Yunger et al., 2004) and with aspects of social interactions (Smith & Leaper, 2006; Bukowski, Castellanos, Commisso, et al., 2019). Specifically, young adolescents who perceive themselves to be as their same-gender peers report higher self-esteem, higher self-perceived social competence, and lower depression (Perry et al., 2019) than the children who feel less comfortable with their gender (Bailey & Zucker, 1995; Egan & Perry, 2001; Kagan, 1964; Kohlberg, 1966; Spence & Buckner, 1995). In addition, they are also viewed as prosocial, likeable, and are rarely victimized by both their same-sex and other-sex peers. Furthermore, the benefits of same-gender typicality for self-esteem have been supported by studies involving not

only North American children, but also for children in Britain, China, Colombia, India, and the Netherlands (Perry et al., 2019).

Self-perceptions of gender typicality are known to be related to a small number of highly gender-differentiated attributes (Perry et al., 2019). In our study, we chose to assess the effects of specific social behaviors as powerful correlates of peer-perceived gender typicality. We specifically argue that the importance of social behaviors at the level of the individual is going to vary according to the degree that they are normative.

#### Gender Typicality and social behaviors and gender

If perceptions of gender typicality refer to how well a person conforms to gendered characteristics, then the study of gender typicality should emphasize features that are known to differ for boys and girls. Many individual level characteristics are known to be gendered. Specifically, characteristics such as altruism, moral orientations, and aggression are known to be seen more frequently with the members of one gender category than the other. We focus on these features in the present study.

Similar claims can be made about the moral orientations of care and justice. A care orientation, often associated with girls, refers to making decisions based on the needs of others (Blum, forthcoming). We examined care (e.g., someone who cares about how other students in our class are doing), which was defined by a boy's or girl's willingness to provide help to other members of their peer group to ensure their well-being. In contrast, justice orientation, often associated with boys, involves making decisions based on equality and fairness (Kohlberg, 1981). We assessed justice (e.g., someone who plays fair) which was defined as preadolescents concern to ensure that others are treated fairly. However, meta-analysis by Walker (2006) and Jaffe and Hyde (2000) did not reveal any significant differences between girls and boys regarding the use of care and justice orientations.

In contrast, there is clear evidence that forms of aggression are gendered. Well documented findings have referred to stable higher incidences of physical aggression for boys than for girls (Cillenssen & Mayeux, 2004) Previous theories suggested that girls are more likely than boys to engage in relational aggressive acts (Cillessen & Mayeux, 2004; Crick & Grotpeter,

1995). However, meta-analysis by Card et al., (2008) and Lansford et al. (2012) found trivial small gender differences in comparable direct and indirect measures of aggression.

### Gender typicality and context-level factors as moderators

A key feature of our study is the assessment of context-level factors as moderators of associations observed at the level of the individual. We examined the five context-, or group-, level variables: gender, two types of same-gender norms, two types of other-gender norms, SES, place or cultural context.

We chose to emphasize group norms as a group level factor that would account for between group variations. Group norms have taken many forms, including descriptive norms and status norms (Velasquez et al., 2023; Dijkstra & Gest, 2015). Descriptive norms are measured as the average of a given behavior in a peer context (Velasquez et al., 2023, Dijkstra & Gest, 2015). In contrast, status norms point to the influence of popular peers' behaviors as being perceived attractive and valuable in the peer group (Kruglanski, et al., 2002). Both descriptive and status norms have been assumed to be indices and values associated with individual behavior development (Bukowski & Sippola, 2001).

Group norms form the basis of social comparison processes. In the realm of social psychology, the concept of typicality is closely tied to processes of social comparison (Bukowski & DeLay, 2020). Developmentally, it is most likely that as children move into school-age years, they acquire and use cognitive abilities (e.g., social comparison and comparison to a prototype) necessary for them to appraise theirs, *and others*, overall similarity to a gender collective (Carver et al., 2003; Egan & Perry, 2001). Children engage in social comparison as a way to evaluate themselves and their abilities, often by comparing their attributes, behaviors, or achievements to those of others, that is those belonging to their same-gender peer group, and to the other-gender peer group. Specifically, the concept of the 'other', as the members of the opposite gender-peer group claims that the salience of social group memberships (including gender) is the product of practices based in a given context and that clearly delineate social category memberships (Bukowski & DeLay, 2020). This comparative process helps individuals form judgments about their own standing within a social context. The perceived typicality of both members of the same-sex peer group and that of the 'others' becomes a comparative benchmark for self-

evaluation, influencing one's sense of identity, self-esteem, and well-being. For our study, comparison of the other gender mean group was done at a classroom level (i.e., if looking at same gender group of girls, the "other" would be the same gender group of boys within the same classroom).

It has been shown already that gender intersects with norms. To the degree that groups of girls and of boys differ in the idea of being friends to boys and girls (Bukowski & Kramer, 1986; Bukowski, 1990). However, to our knowledge there is no research that has been conducted in regards to this particular relation between peer-perceived gender typicality and group norms (descriptive norms and status norms). We expect variations in group norms from classroom to classroom, and thus point to the importance of studying the present relation. Specifically, we will observe if level 1 measures of peer perceived gender typicality are moderated by level 2 measure of group norms (descriptive and status norms).

Similar points can be applied to the group level constructs of SES and culture. Broadening the peer group-norm context, we consider two increasingly relevant factors in peer development studies of socio-economic status (SES) and measures of 'culture' setting, in specific country wherein the peer group is found.

Regarding SES, we can speculate, similarly to Bukowski, Castellanos, Commisso, et al. (2019), that among upper-middle-class individuals there may be a stronger adherence to practices that are traditional or more conservative. Individuals who have achieved high status and obtained resources within a context could be more motivated to support their contexts social structures, including traditional gender role expectations. On the other hand, lower SES context individuals could experience less of be free of the pressure to conform to expectations (Douglass, 1992). Thus, one can speculate that upper-middle-class children will be more likely than lower-middle-class children to perceive their peers as gender typical.

Furthermore, the participants in this study come from two different places. Some of them are in Barranquilla, Colombia, and some are in Montreal, Canada. Specifically, Barranquilla is a northern coastal Caribbean city in Colombia. Blank (2013) has pointed out that although there has been some change towards more lenient gender roles in this society, females and males are

still commonly expected to adopt different lifestyles. In addition, the study found that women in lower -SES Caribbean cultures are less bound by gender roles expectations (Blank, 2013).

In contrast, in Canada, there has been a recent decrease in the difference between women's and men's roles for the past decades, however, differences still exist (Marshall, 2006).

Accordingly, we speculated that peer-reported gender typicality would be perceived more frequently in peers among the Barranquilla participants than among the Montreal participants.

Such findings relating with SES and place, point to the importance of studying the features (e.g. group norms) of same-gender peer groups within both these varied contexts. Furthermore, individual level attributes such as behaviors could also provide information about features and functions associated with gender typicality in varied contexts.

### **Present Study**

The goals of the present study are two-fold. First, we wanted to assess the associations between forms of individual characteristics of social behavior and perceptions of gender typicality. Second, we wanted to assess group variations, specifically same-gender group norms (aggregated measures of group-level characteristics), SES, gender and place, in the associations between forms of individual social behaviour and competence and gender typicality. The focus of the analysis will be to assess the effect of group level variables on the association between individual-level social behaviors and perceptions of gender typicality. To achieve this goal, we conducted a two-level hierarchical model of perceived gender typicality. These types of analyses were employed to examine the intercept and slope of perceived gender typicality in early adolescents and to further understand how the group-level variables influence various behavioural manifestations of peer perceived gender typicality. We hypothesize that the individual characteristics predicting perceptions of gender typicality will be moderated by grouplevel variables characteristics of the peer group context. Specifically, we believe that individual characteristics at the level of the intercept and slope will be more likely to positively correlated with higher perceived gender typicality than others. Additionally, that group-level characteristics meaning of the behaviours at the level of the pre-adolescent will vary as a function of peer group characteristics.

#### Method

### **Participants**

The sample consisted of 324 pre-adolescents in fifth and sixth grade girls (N= 170) and boys (Mage = 11.5 years) from three mixed-gender primary schools in Montreal, Quebec, Canada and two mixed-gender schools in Barranquilla, Colombia (N= 174). Ethnicity of students in Montreal (80% European-American, 20 % Black, Indigenous and people of colour) and in Barranquilla (80% Mestizos, 10% Afro-Colombians, 10% Afro-Caribbean, Indigenous or Raizal). Information provided by the school commission showed that the majority of the students in two of the schools from Montreal were from lower middle-class families, while the majority of the students in the third school were from upper middle class families. Socioeconomic status (SES) of each neighborhood in Colombia is rated by an agency of the federal government on a six level *estrato* scale in which a 1 is "very low" and a 6 is "very high". Students from one of the schools were from *estrato* 1 and 2 neighborhoods, whereas students from the other school were from *estrato* 5 and 6 neighborhoods.

Parental permission was obtained using an active consent procedure. The preadolescents also signed an assent statement. The sample included more than 85% of the potential pool of participants. The participation rate in each classroom was at least 80%. Explicit approval had been given by the ethical review board of the principle investigator's home institution. The study was conducted in accordance with the ethical principles and procedures of all relevant institutions and scientific societies.

#### **Procedures and Measures**

As part of their participation in a larger study, the participants completed a peer assessment questionnaire (Bukowski et al., 2012) in which they indicated which of their same – and other -gender peers fit specific descriptions that indicated forms of social competence, personal characteristics and social behavior. Eight forms of behavior and personal characteristics were assessed in the peer assessment procedure. They were care, justice, relational aggression, physical aggression, proactive help, reactive help, academic competence, and popularity. Sociometric techniques were used to measure peer acceptance. The items used with each type of behavior or characteristic are shown in Table 1. The data were collected with tablet computers.

Table 1.Measures and items

Measure	Items		
Peer-report			
Gender Typicality (ωt=.75)	A girl who acts like the other girls in the grade.		
	A girl who is very similar to other girls in the grade.		
	Una niña que se comporta como las otras niñas del grado.		
	Una niña que es muy similar a las otras niñas del grado.		
	A boy who acts like the other boys in the grade.		
	A boy who is very similar to other boys in the grade.		
	Un niño que se comporta como los otros niños (hombres) del grado.		
	Un niño que es muy similar a los otros niños (hombres) del grado.		
Care (SGα=.789; OGα=.708)	Someone who cares about others in our class and grade.		
	Someone who cares about how the other students in our class are doing.		
	Someone who helps others in our class and grade when they need it even if it means that they treat some people differently than others.		
	Alguien que se preocupa por los demás en nuestro curso o grado.		
	Alguien que se preocupa por cómo están los demás, en nuestra clase.		
	Alguien en nuestra clase o grado que ayuda los demás cuando lo necesitan, incluso si esto significa que traten a algunas personas de manera diferente a los demás.		

Justice (SG $\alpha$ =.841;

 $OG\alpha = .815$ )

Someone who makes sure that all people in our class and grade are treated the same.

Someone who tries to make sure that everyone in our class and grade is treated equally.

Someone who plays fairly.

Alguien que se asegura de que todas las personas en nuestro curso o grado sean tratadas de la misma manera.

Alguien que trata de asegurarse de que todos en nuestra clase o grado sean tratados igualmente.

Alguien que juega limpio.

Relational Aggression

Someone who tries to keep others out of the group.

 $(SG\alpha = .761; OG\alpha = .632)$ 

Someone who talks badly about others behind their backs to hurt them.

Someone who ignores or stops talking to someone when they are mad at them.

Alguien que deja a otras personas por fuera de su grupo.

Alguien que habla de otras personas a sus espaldas para hacerles daño.

Alguien que deja de hablar con alguien cuando se pone bravo con esa persona.

Physical Aggression

Someone who hits other students in our grade and school.

 $(SG\alpha = .673; OG\alpha = .811)$ 

Someone who gets involved in physical fights with other students in our grade and school.

Alguien que golpea a otros estudiantes en nuestro curso o en el colegio.

Alguien que se mete en peleas físicas con otros estudiantes en nuestro grado o colegio.

Popularity ( $\alpha$ =.841)

Someone who stands out because he/she is good looking, wears nice clothes, or is really good at things like sports.

Someone who is popular.

Alguien que sobre sale porque el/ella se ve muy bien, con ropa bien puesta o le va bien en los deportes

Alguien que es popular

For the peer assessment procedure, each participant was shown a list of all the participating children in their class and a list of several characteristics and behaviours. They were asked to indicate which of their participating classmates fit each characteristic or behaviour in the list. Each child was given two scores on each item, one indicating how often they were nominated for it by their participating same-gender classroom peers and the other indicating how often they were nominated for it by their participating same-gender classroom peers. A procedure developed by Saldarriaga et al. (2012) was used to adjust these observed scores for potential biases that may result from variations in group size. Scores for each construct were created by calculating the mean of the adjusted scores for the items in each measure. The reliability of each composite score, as measured by Cronbach's alpha, is reported in Table 1.

The participants also completed two sociometric measures. These measures produced indices of acceptance. One measure was a traditional unlimited choice nomination procedure in which children identified the participating peers whom they perceived to be their friends (Bukowskiet al., 2012). Children identified the same-gender peers whom they perceived to be their first-best friend, their second-best friend, and their third-best friend, and any other samegender peers whom they perceived to be a friend. A nomination-based acceptance score was created for each participant by computing the number of times the child was chosen as a perceived friend by participating same-gender peers. A second measure of peer acceptance used a rating scale format. Using a five-point scale each participant rated how much they liked each of their participating classroom peers a score of "1" meant "Do not like" and "5" meant "Like a lot". The rating scale-based measure of acceptance was the number of times the child received a rating of "5" from same-gender peers. Again, the procedures described by Saldarriaga et al. (2012) were used to correct these measures for potential biases that may result from betweenclassroom differences in the number of same-gender peers. An overall acceptance measure was created by computing a mean of the nomination-based and rating-based measures. The reliability of this measure, as indexed by Cronbach's alpha, was .95.

Scores were also computed at the level of the group. The group to which a child belonged was the classroom-based same-gender peer group. In each classroom there were two groups, specifically a group of girls and a group of boys. A mean for each of the predictors was computed as the norm for both the same-gender group and for the other-gender group within

each classroom. Finally, two within-group correlations were computed. One was a within-group correlation between each of the predictor variables and the measure of popularity and the second was between each of the predictor variables and the measure of acceptance for each of the samegender groups.

Three dichotomous group variables were used. They were gender (i.e., whether the group included girls or boys), SES, and place (i.e., Barranquilla or Montreal). The gender was scored as -1 for boys and 1 for girls. Place was indexed as -1 for Montreal and 1 for Barranquilla. The measure of SES indicated whether the children in the class were from a lower-middle-class neighborhood (scored as -1) or an upper-middle-class neighborhood (scored as 1). The interactions between these measures were also used as Level 2 predictors. The interactions were the multiplicative product of the two dichotomous variables (e.g., the interaction between place and SES was the value for place multiplied by the value for SES).

#### Results

The data were analyzed with multilevel modeling conducted with HLM version 6 (Raudenbush & Bryk, 2002). The analysis examined a two-level data structure. In this hierarchical structure individuals were nested within their classroom-based same-gender peer group. This "nest" was the Level 2 unit in the multilevel analyses. The outcome variable in each model was the peer assessment measure of gender typicality. Four models were assessed, one for each of four Level 1 predictors, specifically care, justice, relational aggression, and physical aggression. In each analysis, a three-step approach was used. The first step consisted of an unconditional model in which included only the outcome variable (i.e., the peer-assessed measure of gender typicality). The unconditional model would provide preliminary information about the intercept and would indicate the proportions of within group and between group variance. The intercept is an index of the grand mean for the outcome variable. An important parameter available in the unconditional model is whether the intercept is fixed (i.e., invariant across the Level-2 groups) or random (i.e., that it varies across the Level-groups.

The second step was a Level 1 model used to assess the association between three individual level predictors and the outcome variable (i.e., peer-assessed gender typicality). Three measures were included as predictors in the Level 1 mode. They were one of the four forms of social behavior (i.e., either care, justice, relational aggression, and physical aggression) and the measure of peer acceptance and popularity. The measure of social behavior was entered as a random effect (i.e., it could vary across groups); acceptance and popularity were entered as fixed effects. The purposes of the level 1 model were to assess (a) the degree to which the predictor accounted for variability in the outcome and (b) whether this association was random (i.e., it varied across groups) or was fixed (i.e., it did not vary across groups).

The third step consisted of a Level-2 model in which variables from the level of the group were used to account for between-group variability in the random effects observed in the Level-1 model assessed on steps one and two. The Level 1 effects were the intercept and the slope for the association between the predictor and the outcome. Six level 2 measures were used to account for variability in the intercept and slope observed at Level 1. They were(a) an index of the child's gender, scored as -1 for boys and 1 for girls; (b) an index of place, indicating whether a classroom was in Montreal (scored as -1) or in Barranquilla (scored as 1); (c) an index of SES,

indicating whether the children in the class were from a lower-middle-class neighborhood (scored as -1) or an upper-middle-class neighborhood (scored as 1); (d) an index of interactions, for example, the multiplicative product between place and SES used as an index of the interaction between these measures; (e) a measure of the number of participating children in the class as indicated by the mean in different categories (same gender, other gender and group acceptance; (f) descriptive norm (g) an index of the correlation between popularity and form of social behavior used as the Level 1 predictor. variables, for example popularity and Justice.

#### The unconditional model

Each of the four analyses began with the same unconditional model. It had two purposes. It served as a baseline model to which subsequent models could be compared and it provided estimates of within group and between group variance that could be used to calculate an initial intra-class correlation (ICC). The only variable in the model was the outcome variable, specifically the measure of perceived peer gender typicality. This analysis indicated that the intercept (coefficient = 1.78, t = 14.95, p< .000) was random (Chi-square (df = 32) = 170.09, p < .001) at level 2. The observed values of tau and sigma squared were (.390) and (.899) respectively. The intraclass correlation was .304 indicating that 30.4% of the variability was between classes.

The finding from the subsequent analyses conducted at Levels 1 and 2 are shown in Table 2.

Table 2 . Effects at the level of the intercept and slope for each of the social behaviors 3

Predictor	Level 1 Effect	Effects	Level 2 Effects	Coefficient	t Ratio	P value
Care	0.05, $t = 0.625$ , $p > .99$					
		Intercept	Same-gender group mean for	0.72,	4.83	< 0.000
			Care			
			Gender	-0.33	4.83	< 0.003
		Slope	Other-gender group mean for	0.19	2.55	< 0.000
			Care			
			Gender	-0.35	-4.22	< 0.017
			SES	0.19	2.32	< 0.028
Justice	-0.125, t = $-0.638$ ,	Intercept	Same-gender group mean for	0.52	4.54	< 0.000
	p>.528		Justice			
			Place by Justice	-0.29	-2.62	< 0.01
			Gender by Justice	-0.36	-3.30	< 0.00
		Slope	Gender	-0.12	-1.86	<0.04
			Place	-0.22	-3.86	< 0.00
			SES	-0.20	-3.86	< 0.00

Physical	.36, t = 1.6, p> $.109$	Intercept	Gender by Physical	0.39	2.11	< 0.04
Aggression			Aggression			
			SES by Physical Aggression	0.40	2.80	< 0.01
			SES	0.28	3.48	< 0.00
		Slope	Same-gender group mean for	0.37	2.51	< 0.01
			Physical Aggression			
			Other-gender group mean for	-0.311	-8.18	< 0.00
			Physical Aggression			
			Place by gender	-0.15	-3.98	< 0.00
			Gender	-0.10	-2.24	< 0.03
Relational	.47, $t = 3.32$ , $p > .003*$	Intercept	Same-gender group mean for	0.86	3.90	< 0.00
Aggression			Relational Aggression			
			Place	0.19	2.82	< 0.00
			SES	0.21	2.90	< 0.00
		Slope	Other-gender group mean for	-0.22	-2.38	< 0.02
			Relational Aggression			
			SES	0.08	1.89	<.04

#### Care as a predictor of gender typicality

**Level 1 Model.** The first analysis used care as the level 1 predictor of the measure of gender typicality. The effect of care was observed to be statistically nonsignificant, coefficient = 0.05, t = 0.625, p > .99 and to be a random effect at level 2 (Chi-square (df = 31) = 71.81, p < .000). The effects of acceptance and popularity were observed to be statistically significant (.643, t = 3.19, p < .002, and .315, t = 3.08, p < .003), respectively.

Level 2 Model. The Level 2 model revealed associations between the Level 2 predictors and the intercept and the slope for care. Two level 2 variables, specifically, the descriptive same gender mean for care (coefficient = 0.72, t = 4.83, p< .000), and gender (-0.33, t = -3.25, p< .00), were observed to have a statistically significant association with the intercept. These findings indicate that the scores on the measure of gender typicality were higher for (a) participants from groups that have high mean (int = .53) on the measure of care than the same-gender groups that have a low mean for care (int = -.48) (Figure 1) and for (b) boys (int= .36) than for girls (int =-.31) (Figure 2).

Figure 1

Effect for same-gender group Care mean on the Intercept

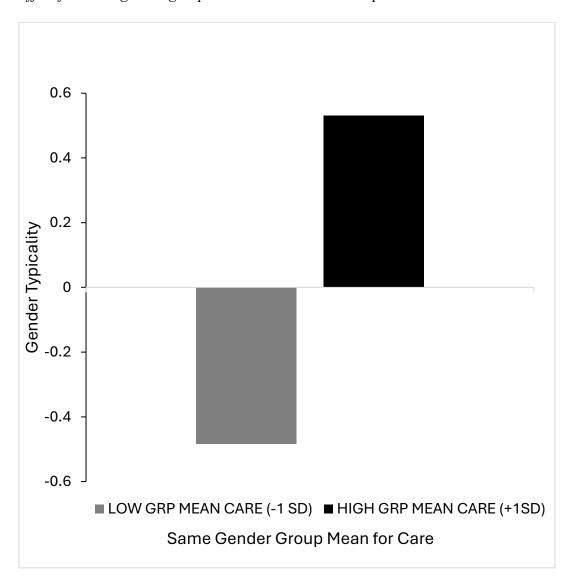
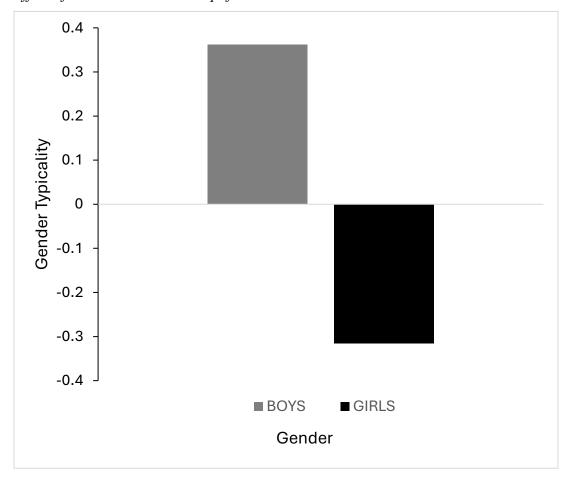


Figure 2

Effect of Gender on the Intercept for Care



Three Level 2 variables were observed to have a statistically significant association with variability in the slope for care as a predictor of the measure of gender typicality. They were (a) the descriptive mean for the other-gender group (-0.35, t = -4.22, p< .000), (b) gender (coefficient = 0.19, t = 2.55, p< .01), and (c) SES (0.19, t = 2.32, p< .028). Clarification of these effects show (a) that the association between care and gender typicality was negative in groups when the descriptive mean for the other-gender group was high (slope = -.49) and positive groups when the descriptive mean for the other-gender group was low (slope = .15) (Figure 3). Also, (b) boys who are low in care (slope = .50) are seen as more gender typical than boys that are high in care (slope = .22). In contrast, girls who are high in care (slope = -.05) are perceived to be more gender typical than the girls who are low in care (slope = -.57) (Figure 4). And that (c) upper-middle class individuals who are high in care (slope = -.17). Lower-middle class individuals who are low in care (slope = -.17). Lower-middle class individuals who are high in care (slope = -.15) (Figure 5).

Figure 3

Effect of other-gender group Care mean on the effect Care on Gender Typicality

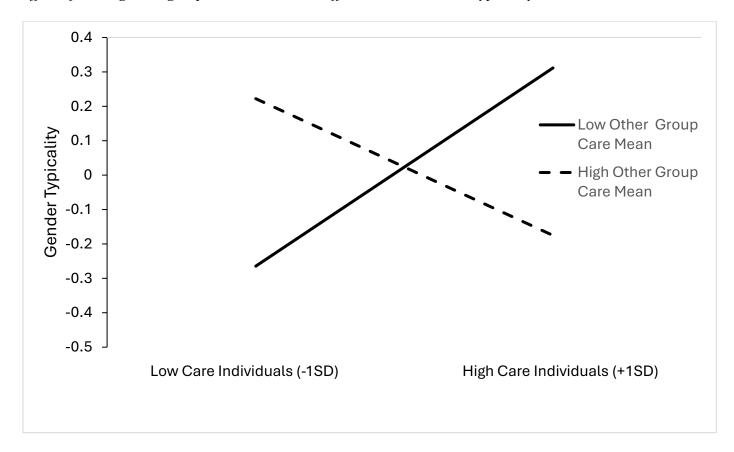


Figure 4

Effect of gender on the effect of Care on Gender Typicality

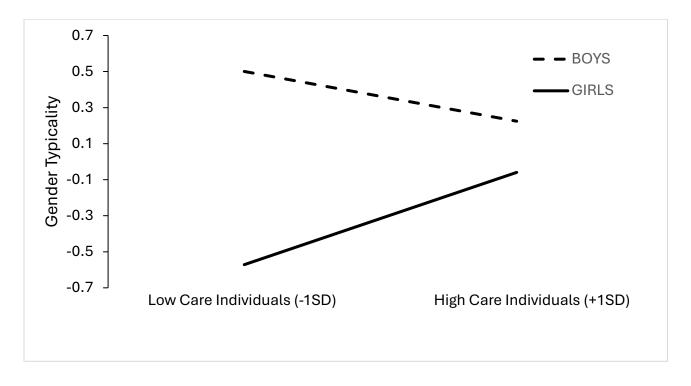
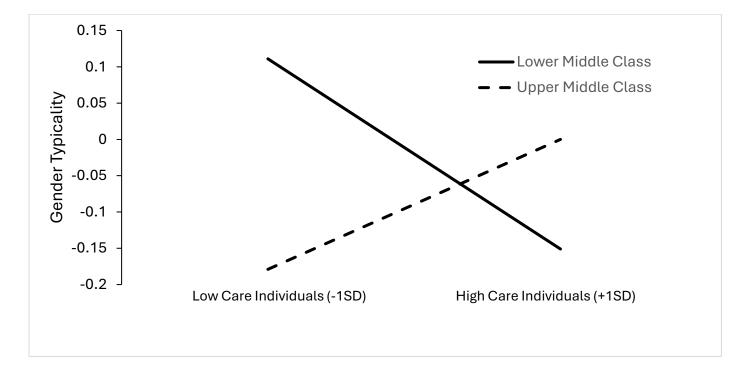


Figure 5

Effect of SES on the effect of care on Gender Typicality



### Justice as a predictor of gender typicality

**Level 1 Model.** The first analysis used justice as the level 1 predictor of the measure of gender typicality. The observed coefficients for the level 1 measures of justice, popularity, and acceptance were .-0.125 (t =-0.638, p>.528), .644 (t = 3.29, p < .001), .367 (t = 3.37, p < .001), respectively. The effect of justice was observed to be random at level 2 (Chi-square (df = 31) = 77.19, p < .000).

Level 2 Model. The next step in the analysis consisted of a level 2 model in which variables at the group level were used to account for between-group variability in the intercept and in the random effect of justice as a level 1 predictor of gender typicality. Three Level 2 variables were observed to have statistically significant associations with the intercept. They were (a) same-gender group mean for justice (coefficient = .0.527, t = 4.545, p< .000), (b) place by same-gender group mean for justice (coefficient = -0.295, t = -2.628, p< .01), and (c) gender by same-gender group mean for justice (coefficient = -0.367 t = -3.307, p< .01). Clarification of these effects revealed (a) participants in same-gender groups who have a high mean for justice (int =.55) are seen to be higher in gender typicality than the same-gender groups that have a low mean for justice (int = -.50) (Figure 6). Also, (b) individuals in Barranquilla who are in highjustice-groups (int = .55) are seen as more gender typical than individuals in Barranquilla who are in low-justice groups (int = -.51). In a similar manner but to a much smaller degree, participants in Montreal who are in high-justice-groups (int = .18) are perceived as more gender typical than individuals in Montreal in low -justice- groups (int = -.12) (Figure 7). And, (c) boys who are in high-justice groups (int = .75) are seen as more gender typical than boys who are in low-justice groups (int. = -.38). Similarly, but to a lesser extent, girls in high-justice groups (int= -.04) are seen as more gender typical than girls in low-justice groups (int= -.25) (Figure 8).

Figure 6

Effect for same-gender group Justice mean on the Intercept

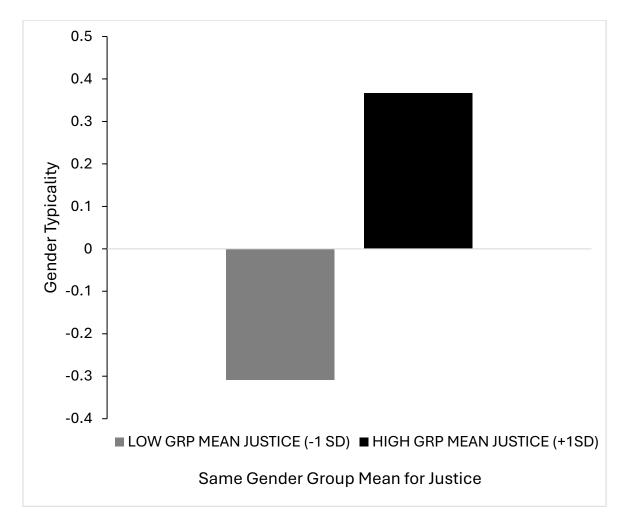


Figure 7

Effect of place by same-gender group Justice mean on the Intercept

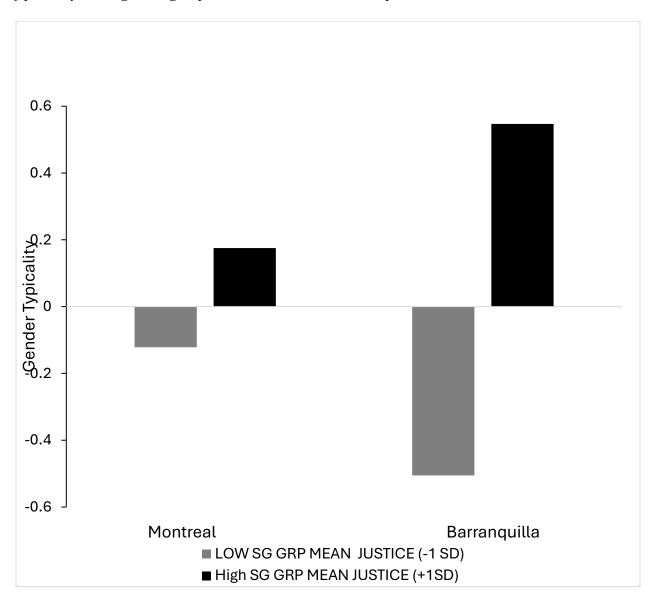
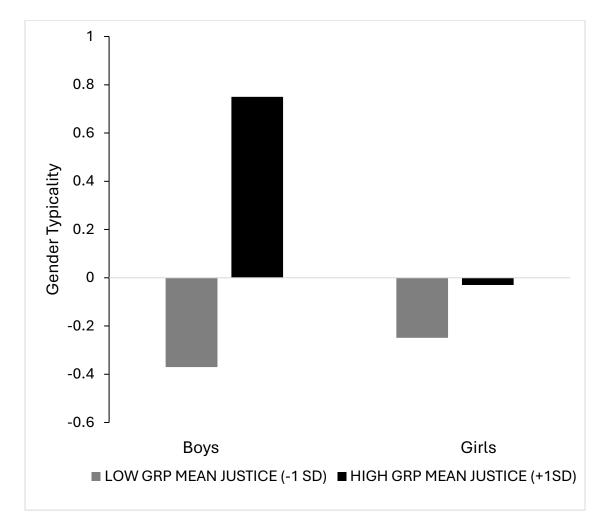


Figure 8

Effect of gender by same-gender group Justice mean on the Intercept



Three Level 2 variables were observed to have statistically significant associations with variability in the slope for justice as a predictor of the measure of gender typicality. They were (a) gender (coefficient = -0.12, t = -1.86, p< .05), (b) place (coefficient = -0.22, t = -3.87 p< .01), and (c) SES (coefficient = -0.21 t= -3.865, p < .01). Clarification of these effects shows (a) that boys who are high in justice (slope = .49) are perceived higher in gender typicality than boys who are low in justice (slope = -.09). Similarly, but to a smaller degree, girls who are high in justice (slope = -.08) are perceived as higher in gender typicality than girls who are low in justice (slope= -.19) (Figure 9). The clarification of the effect of (b) place indicated that participants in Barranquilla who are high in justice (slope = .41) are seen as more gender typical than those who are low in justice (slope = -.36). In Montreal the opposite pattern was observed. Montreal participants who are low in justice (slope = .07) are seen as higher in gender typicality than preadolescents in Montreal who are high in justice (slope = -.02) (Figure 10). Regarding the effect of (c) SES, upper-middle class individuals who are low in justice (slope = .22) are perceived as higher in gender typicality than upper-middle class individuals who are high in justice (slope= .16). In contrast, lower-middle class individuals who are high in justice (slope = .24) are seen as higher in gender typicality than lower-middle class individuals who are low in justice (slope = -.51) (Figure 11).

**Figure 9** *Effect of gender on the effect of Justice on Gender Typicality* 



Figure 10

Effect of place on the effect of Justice on Gender Typicality

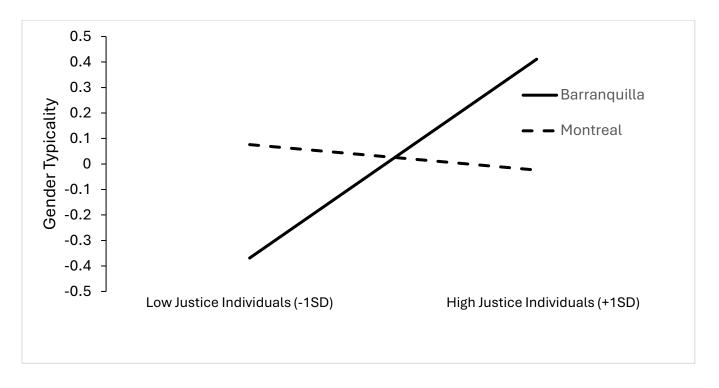
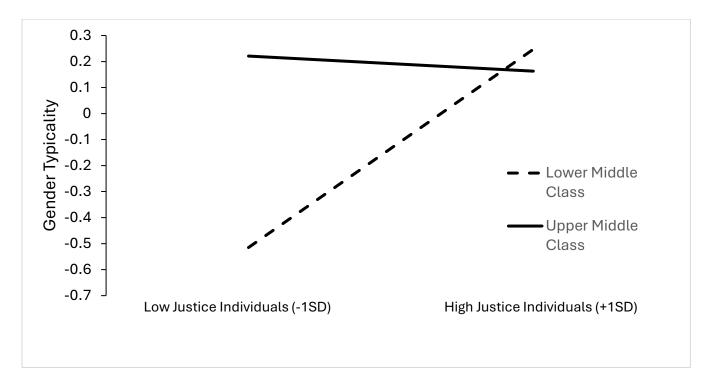


Figure 11

Effect of SES on the effect of Justice on Gender Typicality



## Physical aggression as a predictor of gender typicality

**Level 1 Model.** The observed coefficients for the effect of the Level 1 measures of physical aggression, popularity, and acceptance on the measure of gender typicality .361 (t = 1.67, p > .109), .471 (t = 2.56, p < .011), and .400 (t = 5.24, p < .000), respectively. The effect of physical aggression was observed to be random at Level 2 (Chi-square (df = 29) = 52.47, p < .005).

Level 2 Model. The next step in the analysis consisted of a level 2 model in which variables at the group level were used to account for between-group variability in the intercept and in the random effect of physical aggression as a level 1 predictor of gender typicality. Three Level 2 variables were observed to have statistically significant associations with the intercept. They were (a) SES (coefficient = 0.287, t = 3.480 p< .002), (b) SES by physical aggression (coefficient = 0.39, t = 2.11 p< .004), and (c) gender by physical aggression. Clarification of this effect shows (a) upper-middle class children are perceived to be more gender typical (int = .31) than lower-middle class children (int = -.25) (Figure 12); (b) upper-middle class participants who are high in physical aggression are seen as more gender typical (int = .56) than uppermiddle class participants who are low in aggression (int= 0.04). In contrast, lower-middle class participants who are high (int= -0.48) and low (int= -0.00) are not found to be associated with gender typicality at all (Figure 13). And (c) boys who are low physical aggression groups (int = .27) are seen as more gender typical than boys who are in high physical aggression groups (int = -.19) whereas girls who are in high physical aggression groups (int = .26) are seen as more gender typical (int = .26) than girls who are in low physical aggression groups (int = -.23) (Figure 14).

Figure 12

Effect of SES for Physical Aggression on the Intercept

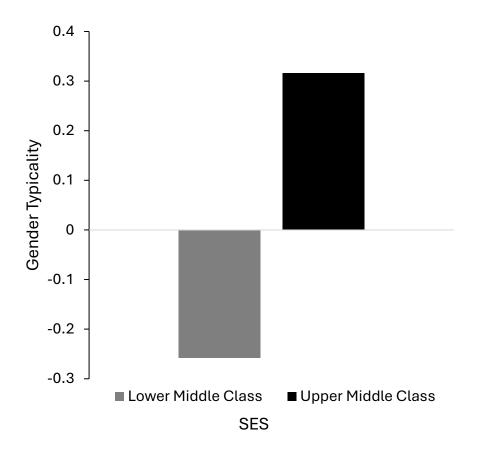


Figure 13

Effect of SES by same-gender group Physical Aggression on the Intercept

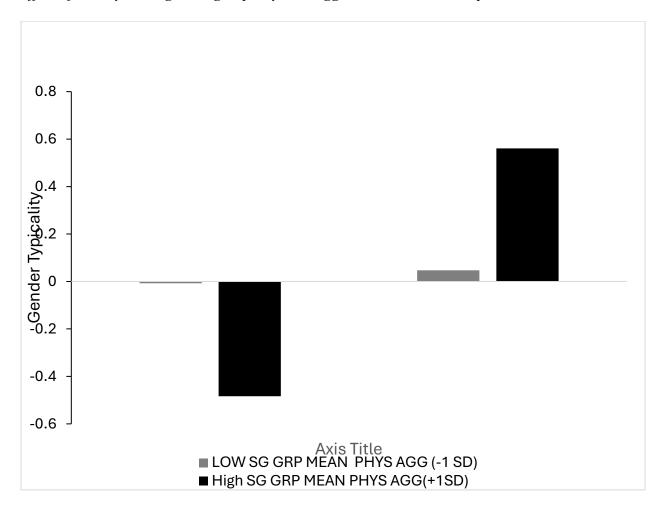
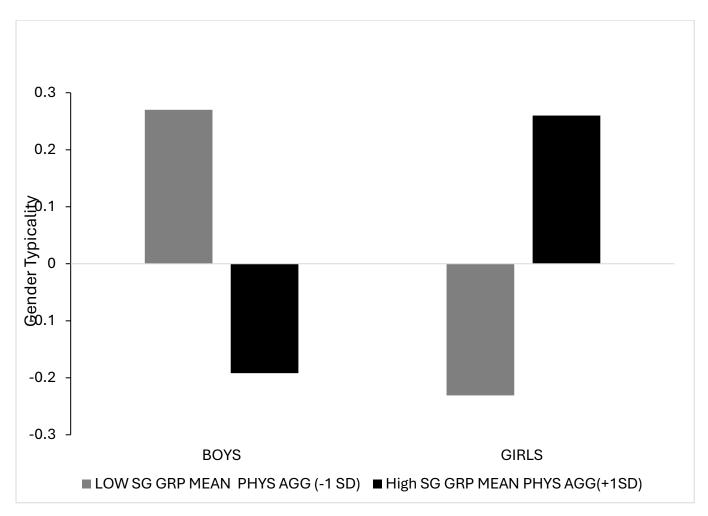


Figure 14

Effect of Gender by same-gender group Physical Aggression mean on the Intercept



Four Level 2 variables were observed to have statistically significant associations with variability in the slope for physical aggression as a predictor of the measure of gender typicality. They were (a) same-gender group descriptive mean for physical aggression (coefficient = 0.37 t = 2.51, p< . 0.18); (b) other-gender group descriptive mean for physical aggression (coefficient = -0.311 t = -8.182, p < .000); (c) place by gender (coefficient = -0.16 t = -3.987, p < .001) and (d) gender (coefficient = -0.11 t = -2.247, p< .033). Clarification of these effects shows (a) the effect of group descriptive mean, the slope was positive for groups whose same-gender group mean was high (slope = .20) and negative for groups whose same-gender group mean was low (slope = -.25) (Figure 15). (b) the opposite pattern was seen with the descriptive mean for the othergender group. When the descriptive mean for the other gender was high, the slope for the association between physical aggression and gender typicality was negative (slope= -.22); when the descriptive mean for the other gender was low, the slope was positive (slope= .17) (Figure 16). (c) The interaction between gender and place indicated that the effect of physical aggression on gender typicality was positive for boys from Montreal (slope = .34) but weaker and negative for boys from Barranquilla (slope = -.17). For girls, this slope was negative in both places and stronger in Montreal (slope = -.18) than Barranquilla (slope = -.07) (Figure 17). And (d) boys who are high in physical aggression (slope=.11) are seen as more gender typical than boys who are low in physical aggression (slope = -.05) whereas girls who are low in physical aggression (slope = .15) are perceived as higher in gender typicality than girls who are high in physical aggression (slope = -.09) (Figure 18).

Figure 15

Effect of same gender group Physical Aggression mean on the effect Physical Aggression on Gender Typicality

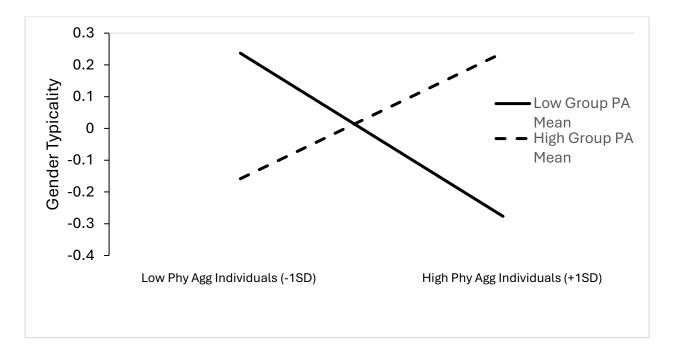


Figure 16

Effect of other-gender group Physical Aggression Mean on the effect Physical Aggression on Gender Typicality

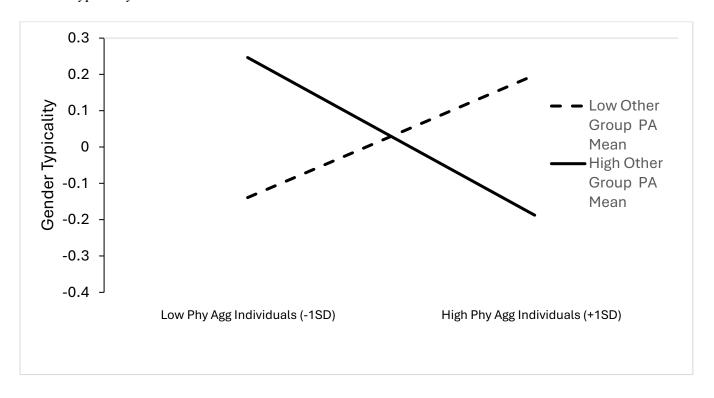


Figure 17

Effect of place by gender on the effect of Physical Aggression on Gender Typicality

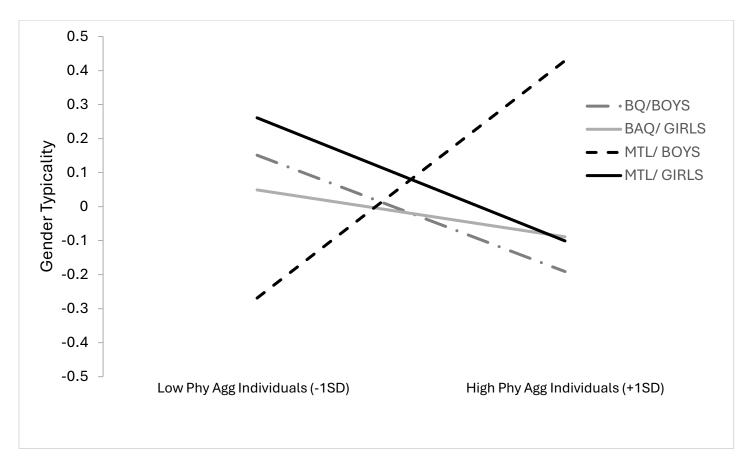
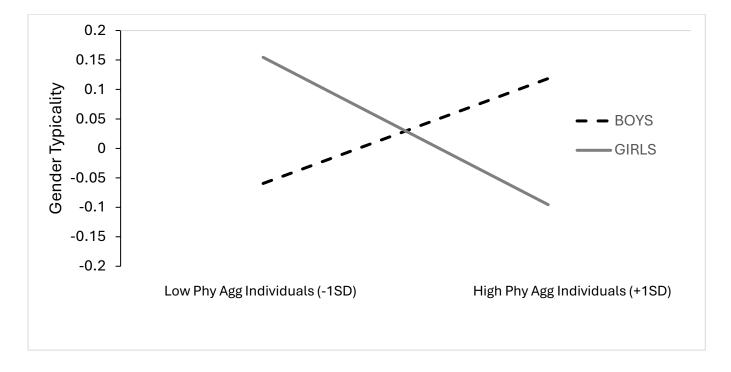


Figure 18

Effect of Gender on the effect Physical Aggression on Gender Typicality



## Relational aggression as a predictor of gender typicality

<u>Level 1 Model.</u> The observed coefficients for the measures of relational aggression, popularity, and acceptance were .126 (t = 2.63, p < .01), .123 (t = 1.81, p < .05), and .432 (t = 3.82, p < .000), respectively. The effect of relational aggression was observed to be random at Level 2 (Chi-square (df = 31) = 40.45, p < .119).

Level 2 Model. The next step in the analysis consisted of a level 2 model in which variables at the group level were used to account for between-group variability in the intercept and in the random effect of relational aggression as a level 1 predictor of gender typicality. Three Level 2 variables were observed to have statistically significant associations with the intercept. They were (a) the same-gender descriptive group mean for relational aggression (coefficient = 0.863, t = 3.901, p < .001), (b) place (coefficient = 0.195 t = 2.826, p < .009), and (c) SES (coefficient = 0.213 t = 2.909, p < .007). Clarification of (a) the same-gender descriptive group mean for relational aggression showed that the mean for same-gender groups who have a low mean for relational aggression (int = .37) than the mean for same-gender groups who have a low mean for relational aggression (int =.0.30) (Figure 19) . Also, (b) the effect of SES showed that upper-middle class participants are seen as more gender typical (int = .25) than are lower-middle class individuals (int= .18) (Figure 20). And, (c) the results of place revealed participants in Montreal are seen as more gender typical (int= 0.22) than participants in Barranquilla (int= -0.16) (Figure 21).

Figure 19

Effect for same-gender group Relational Aggression mean on the Intercept

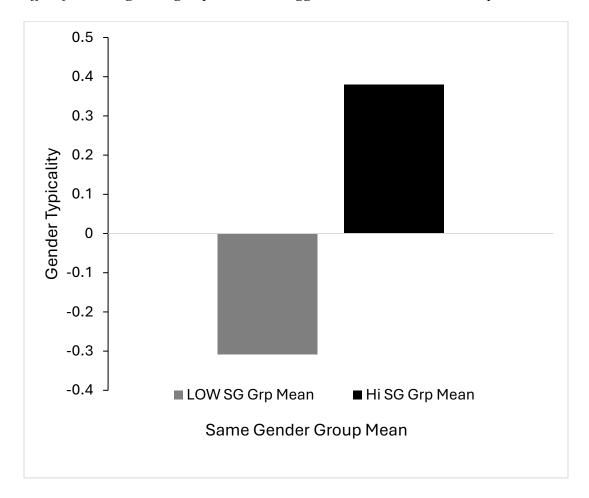


Figure 20

Effect of place for Relational Aggression on the Intercept

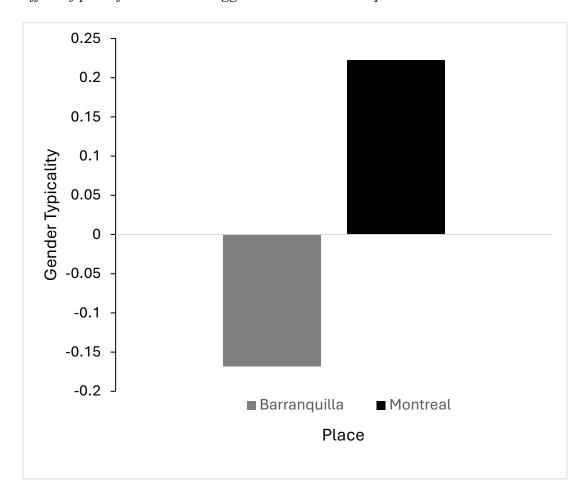
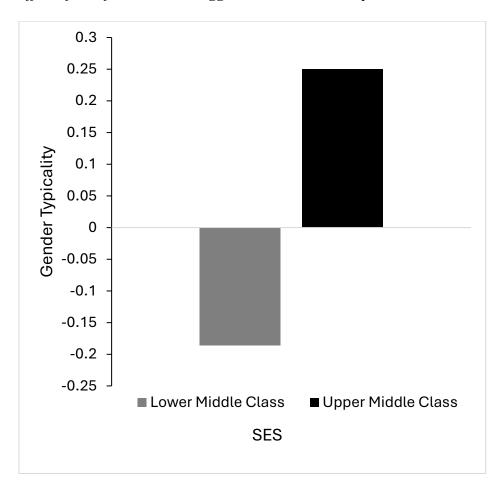


Figure 21

Effect of SES for Relational Aggression on the Intercept



Two Level 2 variables were observed to have statistically significant association with variability in the slope for relational aggression as a predictor of the measure of gender typicality. It was (a) other-gender group mean (coefficient = -0.221 t = -2.38, p < .024) and (b) SES (coefficient = 0.084 t = 1.892, p < .05). Clarification of this effect shows (a) Children who are high in relational aggression and are in classrooms where the other-gender group has a low mean for relational aggression (slope = .28) are seen as more gender typical than children who are low in relational aggression and are in groups in classrooms where the other-gender group has a low mean for physical aggression (slope = -.23) (Figure 22). (b) Upper-middle class individuals who are high in relational aggression are seen as more gender typical (slope= .46) than upper-middle class individuals who are low in relational aggression (slope = .03). Similarly, lower-middle class individuals who are high in relational aggression are seen as more gender typical (slope = -.14) than lower-middle class individuals who are low in relational aggression (slope= -.22) (Figure 23).

Figure 22

Effect of other-gender group Relational Aggression mean on the effect Relational Aggression on Gender Typicality

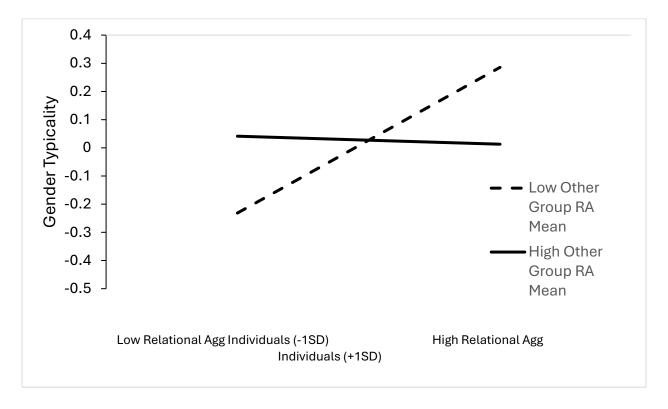
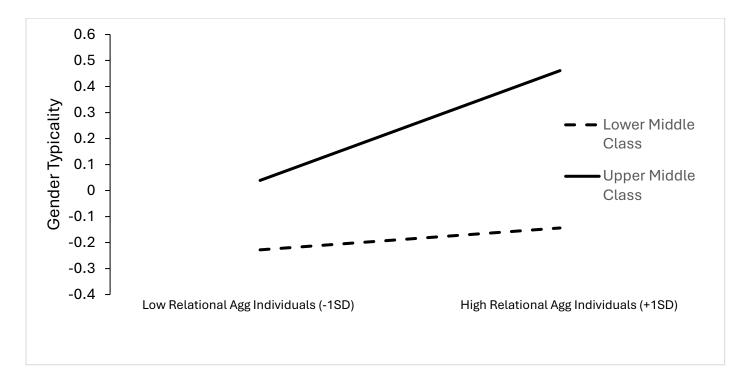


Figure 23

Effect of SES on the effect Relational Aggression on Gender Typicality



#### **Discussion**

The goal of our study was to account for between-group differences in the forms of social behavior associated with gender typicality. Using a multilevel approach with a hierarchically organized multinational sample, we assessed the degree to which the association between specific forms of social behavior and perceptions of gender typicality vary as a function of group level features (e.g., place, SES) especially descriptive group norms (e.g., same-gender and other gender). A basic premise of the study was that gender typicality is a social construct that is dependent on the intersection between features of the group and gender. We tested these ideas with four forms of gendered social behavior, specifically care, justice, physical aggression, and relational aggression. In three of our four analyses, the association between a measure of social behavior and gender typicality was, as expected, moderated by gender and by group descriptive norms. Although a different pattern of findings was observed with each of the social behaviors we studied, one can conclude that gender typicality is, for the most part, dependent on group norms.

The Level 2 variables associated with the intercept varied across the groups. The intercept can be thought of as the group mean for the measure of gender typicality. The most consistent findings across the analyses for the four forms of social behavior were for the features of SES and for the same-gender descriptive mean. SES was observed to have statistically significant results for physical aggression (Figure 12) and relational aggression (Figure 21). The effect of SES showed that the mean for the measure of gender typicality was higher for upper middle class groups. Perhaps conformity to traditional social expectations are higher in upper middle class. One can speculate that upper SES offers material wealth including clothing, media devices, opportunities to engage in extra curricular activities that give them access to places (virtual as well as physical) to both practice, reinforce and observe gender roles dynamics (Mccoby ,1980). Families in upper SES may be more likely to have more traditional male and female structures, although this is changing more and more as traditional heterogenous nuclear families structures are less likely to be default, as both parents are present in their lives. We could speculate that upper SES children have more access to references to help them create the concepts of what it means to be a boy or a girl. The mean for the measure of gender typicality was also higher for high descriptive- same-gender- mean groups. This finding provides more

evidence that when there are high levels of conformity to a particular norm, then gender typicality is higher, overall in the group. The same-gender descriptive mean was positively associated with gender typicality for care (Figure 1), justice (Figure 6) and relational aggression (Figure 19).

More specifically, Level 2 effects were seen with each of the four social behaviors. The mean for the measure of gender typicality was particularly high for groups of boys which had a high descriptive mean for care (Figure 2). Perhaps boys are having availability to more male gender role models depictions of non-traditional male behavior of care expressions, which is more prevalent nowadays, and finding structural support in their system to enact and reinforce such behavior. Previously, similar gender-role expansions were observed and reported by (Adler et al., 1992) for girls, in which more achievement- oriented female role models for girls opened avenues for them to be more active and accomplished. Furthermore, analysis conducted with the measure of care showed that the mean for gender typicality was highest in groups of boys and girls who had a high descriptive mean for care (see Figure 1). This shows evidence that care continues to be important gendered behavior for girls as well (Blum, 2023).

The analysis conducted with the measure of justice showed that the mean for gender typicality was highest in groups from Barranquilla who had a high descriptive mean for justice (Figure 10). Perhaps in a place that has had so much political chaos and struggle without an overall ethos that promotes order, the concern with rules that is inherent in the concept of justice is seen as a defining feature of being an exemplar of one's gender (Vargas Llosa, 2005). The analysis conducted with the measure of justice also showed that the mean for gender typicality was high in groups of boys who had a high descriptive mean for justice (Figure 9). It seems like the characteristic of challenging 'authority' and the 'toughness' pattern for the traditional expression of the male ethos is perhaps changing. Similarly, analysis conducted with the measure of justice showed that the mean for gender typicality was also high, to a lesser extent, in groups of girls who had a high descriptive mean for justice. Perhaps girls are shifting into having justice be an important social behavior associated with their gender identity.

Finally, analysis conducted with the measure of justice showed that the mean for gender typicality was highest in groups of boys and girls who had a high descriptive mean for justice (Figure 6). Perhaps being fair and following 'rules' continues to be a basic tenant for the

cohesion of social groups. Maybe justice is a social behavior for which boys and girls relate to and recognize as important moral component that is ideal to the prototypical features of their gender. And especially relevant to many physical activities, such as sports, for which boys are also highly identified with. Abiding to rules and regulation is also important to sustain participation in competition and organized social settings. This shift, similar to the one of care for boys, could be revealing a pattern into a more androgenized set of categories for both genders.

The mean for the measure of gender typicality was particularly high for upper middle class groups which had a high descriptive mean for physical aggression (see Figure 12). Perhaps physical aggression is a clear visible characteristic to be assertive within this social milieu. Maybe upper middle class individuals are less likely to experience negative consequences to this type of behavior and thus recognize that it plays a role in their gender identity categorization.

The mean for the measure of gender typicality was particularly high for groups of upper middle class, and in contrast, it was very low - essentially a zero effect - for lower middle class participants, who had a high descriptive mean for physical aggression (Figure 13). Perhaps this reflects a more penalizing tendency in lower middle class milieus for physical aggression and therefore a more distancing of this concept as a gender typical feature.

Analysis conducted with the measure of physical aggression showed that the mean for gender typicality was highest in groups of girls that had a high descriptive mean for physical aggression, and in contrast, to boys who had a low descriptive mean for physical aggression (Figure 10). It could be that there is a shift in gender roles collective- perhaps the idea of 'tomboy' or asserting strength is more open and available to girls, so that more girls who are in groups with high norms for physical aggression, are more likely to see other members of their group with this behavior as typical members. Whereas for boys who see other boys as high in physical aggression are less likely to see them as typical members.

Analyses conducted with the measure of relational aggression showed that the mean for gender typicality was highest in groups of both boys and girls who had a high descriptive mean for relational aggression (see Figure 19). Similar to findings from a meta-analysis (nine countries including Colombian sample) study reporting no gender differences for relational aggression (Lansford et al., 2012), our findings add to the evidence that relational aggression is

not higher for girls than for boys, as previously found (Crick & Grotpeter, 1995), but that it is a variable that has an important functional role in the social dynamics of the early adolescent peer group.

The mean for the measure of gender typicality was particularly high for upper middle class groups which had a high descriptive mean for relational aggression (Figure 21). Similar to the finding for physical aggression in upper SES, relational aggression may be less likely to have negative consequences and therefore perhaps offer more benefits within this social milieu. In addition, perhaps this social behavior is practiced more often in settings where the relationships and networks among peers are more robust, and dense. Whether it poses a negative or positive moral ideal, it appears that relational aggression is a concept that is identified as part of a gender typical individual in this specific upper SES culture.

Also, the mean for the measure of gender typicality was higher for participants in Montreal (Figure 20). Perhaps the extent to which participants in Montreal identify with the concept of relational aggression as part of their gender identity has to do with both views about cultural values and SES influences. One might make the arguments that due to the importance of harmony and interdependence in social relationships in 'collectivistic' cultures, children may be less likely relate relational aggression with typical characteristics of either gender.

However, the previous finding of upper middle class individuals could also be attributing rationale to explain this particular result. Although high SES could be comparably similar in both countries, one could argue that lower SES is not comparable at all, and therefore the high SES findings would be more prevalent in Montreal as it is considered a rich, industrialized country compared to Colombia (Santo et al., 2013, Bukowski, Castellanos, Commisso, et al., 2019). In addition, in a meta-analysis study (Lansford et al., 2012) countries regarded as collectivist (China, Colombia, Thailand; Hofstede, 2001) did not differ systematically in relational and physical aggression from countries that have been regarded as individualist (Italy, United States), and therefore lend arguments for higher SES view.

Turning to the findings regarding the Level 2 effects on the slope, one can begin with results observed with physical aggression. It is the most clearly gendered social behavior examined in our study. The moderating effect of gender revealed, as expected, that physical aggression is more positively correlated with gender typicality for boys rather than girls (Figure

18). Boys who had high scores on the measure of physical aggression were seen as more gender typical than boys with low scores on the measure of physical aggression. The opposite pattern was seen with girls. Girls who had high scores on the measure of physical aggression were seen as less gender typical than girls with low scores on the measure of physical aggression. The clarification of the interaction between Place and Gender showed that the effect of gender was limited to boys in Montreal (Figure 17). The association between physical aggression and gender typicality was positive for boys in Montreal, in contrast to the other groups, where the association was minimal or slightly negative. Clearly the meaning of being a boy differs from one context to the other. It is important to note that regarding the association between physical aggression and gender typicality, the boys in Barranquilla are more similar to the girls in Montreal and Barranquilla than they are to the boys in Montreal.

Our findings also point to the power of norms. Both same-gender and other-gender descriptive norms were observed to moderate the association of between physical aggression and gender typicality. For groups of boys and girls, the association between physical aggression and gender typicality was more positive in groups with a high descriptive same-gender mean for physical aggression than in groups with a lower descriptive same-gender mean (Figure 15). An opposite pattern was seen with the moderating effect of the other-gender descriptive mean (Figure 16). In this case, with groups of boys and girls, the association between physical aggression and gender typicality was more negative in groups with a high descriptive othergender mean for physical aggression than in groups with a lower descriptive same-gender mean. These findings confirm the complex importance of norms. Same-gender descriptive norms had an effect that was opposite that of other-gender norms. Matching the norms of one's own gender increased the degree to which someone was seen as gender typical; matching the norms of the other-gender group decreased the degree to which someone was seen as gender typical. This pattern reveals the multifaceted comparative processes that underlie judgments of gender typicality. The process involves both same-gender comparisons and other-gender comparisons. Being similar to same-gender norms <u>increases</u> the degree to which an early adolescent is seen as gender typical while being similar to other-gender norms decreases it.

In contrast, results for relational aggression show a very different pattern. It is important to keep in mind that of the four forms of social behavior that we studied prior evidence of a

gender difference was weakest for the construct of relational aggression. Although some studies had shown that this form of aggression was more frequent among girls than boys, meta-analysis have shown that this gender difference tends to be very small (Card et al., 2008; Langsford, 2012). In the present study the measure of relational aggression was the only form of social behavior that had a statistically significant association with the measure of gender typicality. This positive effect, unmoderated by gender, indicate that for both boys and girls, relational aggression was associated with higher levels of gender typicality. Regardless of their gender, early adolescents who engage in relational aggression are perceived to be gender typical. Using relational aggression, apparently shows that you are an engaged member of the group that, in turn, adds to one profile as typical.

Although the level 1 effect was not moderated by the Level 2 effect of gender it was moderated by SES and by the other-gender descriptive mean. The effect of SES indicated that the association between relational aggression and gender typicality was stronger for upper-middle class early adolescents than lower middle class participants (Figure 23). The significance of relational aggression for gender typicality is stronger for upper SES girls and boys than for lower SES boys and girls. Perhaps relational aggression is a well-established means by which upper-SES individuals acquire and maintain social power.

The moderating effect of other-gender descriptive mean was the same as what was observed with the measure of physical aggression. The association between relational aggression and gender typicality was stronger when the other-gender descriptive was low (Figure 22). When relational aggression is uncharacteristic of other-gender peers, its effect on being seen as gender typical by same-gender peers is strengthened. This pattern shows that a process within the same-gender peer group is affected by features of the other-gender group (Velásquez et al., 2010).

The moderating effects of other-gender descriptive means were also seen in the analyses of the association between care and gender typicality (Figure 3). The moderating effect of gender is consistent with prior evidence showing that care is more prevalent in girls than in boys (Blum, 2023). The Level 2 gender effect for care (Figure 4) showed that the association between care and gender typicality was stronger for girls than boys. This finding adds to evidence that care is a gendered concept. The Level 2 SES effect shows that the association between care and gender

typicality is positive for upper middle class individuals whereas the association between care and gender typicality is negative for lower-middle class individuals (Figure 5). It may be that upper middle class participants see care as a more valued or recognized component of their gender typical categories.

Analyses of justice as a predictor of gender typicality provided a meager set of results. The Level 2 gender effect for justice reveals that the association between justice and gender typicality was stronger for boys than for girls (Figure 9). High levels of fairness and rule following can predict higher gender typicality scores for boys. Similar to description for boys and justice as described in the intercept findings. The clarification for the level 2 place effect was limited to participants in Barranquilla (Figure 10). The association between Justice and gender typicality was positive for individuals in Barranquilla, in contrast to Montreal, where the association was nonexistent. Why is justice important in Barranquilla? We believe that a possibility is to understand that despite care being a collective ethos in the country, the importance of justice arises due to weaknesses of cultural factors limiting delinquent behavior (Vargas Llosa, 2005). Justice is all about rules, and rules are typically reinforced in Barranquilla in Colombia, because order cannot come from other sources. The concept of justice is perhaps a defining feature of gender typicality in Barranquilla more than in Montreal. Clearly the association of justice and gender typicality is different from one contextual place to the other.

Finally, we found an SES effect (Figure 11) in the association between justice and gender typicality was limited to lower middle-class groups, in contrast to upper middle class groups where the association was nonexistent. Perhaps individuals in lower middle-class contexts, for whom life may have many challenges, see the concept of justice as ascribed with special salience and integrated with concepts of typicality as a source of orderliness. Teachers within the lower middle-class contexts could also be reinforcing the notions of justice for boys and girls in the classrooms. In contrast, upper middle-class individuals may see the rules in their environment as flexible and easily manipulated, and therefore do not ascribe significant meaning to the association between justice and being a typical member of their same -gender group.

#### Conclusion

Overall, there is a good support for norms, specifically descriptive same- and othergroup norms. There were no findings for status norm. There was evidence that social behaviors correlated with popularity moderated any of the associations between social behaviors and gender typicality. Although we did not find evidence for the prototypical theory (Mayeux & Kleiser, 2020), we pose the question of pre-adolescence (10 – 12 years) as a stage of transition for gender typifying process, so that popularity and gender typicality are not yet fully associated, but will soon be in adolescence (12- 14 years). It would be during these early pre-adolescent years that children engage in gender typifying process which is closely related to the social comparison process (Bukowski and DeLay, 2020).

We found that group norms explain many of the gender effects at the level of the intercept and the slope. Specifically, we found some intriguing results for the group feature of SES. Further studies should point to understanding the mechanisms through which these effects take place in the peer group. Place effects were also observed, and as it goes beyond the scope of this paper, it remains intriguing to develop further understanding to expand on differences found in different places.

The most important conclusion from our study is that the associations between particular types of gendered social behaviors and perceptions of gender typicality are contextually constructed.

The degree to which children are seen as gender typical is not fixed; it varies as a function of SES and culture and the intersection between them. Gender is considered a universal construct, however, it is rarely studied outside monocultural settings, which may not provide sufficiently diverse platform for revealing differences in features of gender identities. These findings show that gender needs to be understood from a multilevel perspective that focuses on diversity.

The measure to study gender identity we chose here is free of content, it does not specify the way in which a child could be similar or dissimilar to hir same-gender peers. Our measure is consistent with other approaches such as self-measures (Egan & Perry, 2001) and previous studies of perceptions of gender typicality by Bukowski, Castellanos, Commisso, et al., 2019

with the same sample of children in Montreal and Barranquilla. A strength of the study is that it has taken place in different cultures.

Our study was amongst the first to examine the degree to which known gendered-social behaviors correlated with the degree of perceived similarity to their gender collective. In this way our study contributed to begin understanding what could be the possible behaviors that account for the defining concepts needed to be observed and that qualify as necessary for the understanding of children's gender typifying categories. This paper points to the importance of the study of peer perceptions in gender typicality instead of only self-perceptions.

#### References

- Adler, P. A., Kless, S. J., & Adler, P. (1992). Socialization to Gender Roles: Popularity among Elementary School Boys and Girls. *Sociology of Education*, *65*(3), 169–187. https://doi.org/10.2307/2112807
- Andrews, N. C. Z., Martin, C. L., Cook, R. E., Field, R. D., & England, D. E. (2019).
  Exploring dual gender typicality among young adults in the United States.
  International Journal of Behavioral Development, 43(4), 314-321.
  <a href="https://doi.org/10.1177/0165025418811125">https://doi.org/10.1177/0165025418811125</a>
- Bailey, J. M., & Zucker, K. J. (1995). Childhood sex-typed behavior and sexual orientation:

  A conceptual analysis and quantitative review. *Developmental Psychology*, 31(1),

  43–55.https://doi.org/10.1037/0012-1649.31.1.43
- Blank, D. S. (2013). An Historical and Contemporary Overview of Gendered Caribbean Relations. *Journal of Arts and Humanities*, 2(4), 1-10. https://doi.org/10.18533/journal.v2i4.90
- Blum, L. (2023). Iris Murdoch. In E. N. Zalta, & U. Nodelman, *The Stanford Encyclopedia ofPhilosophy*.

  https://plato.stanford.edu/archives/fall2023/entries/murdoch/
- Bronfenbrenner, U. (1979). The ecology of human development. Harvard University Press.
- Bukowski W. M. (1990). Age differences in children's memory of information about aggressive, socially withdrawn, and prosociable boys and girls. *Child development*, 61(5), 1326–1334. <a href="https://doi.org/10.1111/j.1467-8624.1990.tb02864.x">https://doi.org/10.1111/j.1467-8624.1990.tb02864.x</a>
- Bukowski, W. M., & Kramer, T. L. (1986). Judgments of the features of friendship among earlyadolescent boys and girls. *The Journal of Early Adolescence*, *6*(4), 331–338. https://doi.org/10.1177/0272431686064004
- Bukowski, W. M., & Sippola, L. K. (2001). Groups, individuals, and victimization: A view of the peer system. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight ofthe vulnerable and victimized* (pp. 355–377). The Guilford Press.

- Bukowski, W. M., Cillessen, A. H. N., & Velásquez, A. M. (2012). Peer ratings. In B. Laursen, T.
  D. Little, & N. A. Card (Eds.), *Handbook of developmental research methods* (pp. 211–228). The Guilford Press.
- Bukowski, W. M., Laursen, B., & Rubin, K. H. (2018). Peer relations: Past, present and promise. In W. M. Bukowski, B. Laursen, & K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups* (2nd ed., pp. 3–20). The Guilford Press.
- Bukowski, W. M., Castellanos, M., Commisso, M., Persram, R., & Lopez, L. S. (2019).

  Contextual variations in children's perceptions of their peers as gender typical. *International Journal of Behavioral Development, 43*(4), 309-313. <a href="https://doi.org/10.1177/0165025419846427">https://doi.org/10.1177/0165025419846427</a>
- Bukowski, W. M., Perry, D. G., & Castellanos, M. (2019). Introduction to the special section: Gender typicality and development. *International Journal of Behavioral Development*, *43*(4), 287-288. <a href="https://doi.org/10.1177/0165025419853389">https://doi.org/10.1177/0165025419853389</a>
- Bukowski, W. M., & DeLay, D. (2020). Studying the Same-Gender Preference as a Defining Feature of Cultural Contexts. *Frontiers in psychology, 11,* 1863. https://doi.org/10.3389/ fpsyg.2020.0186
- Bukowski, W. M., Dirks, M., Infantino, E., & DeLay, D. (2021). Principles for studying contextual variations in peer experiences: Rules for peer radicals. *Journal of Applied Developmental Psychology*, 76, 101295. https://doi.org/10.1016/j.appdev.2021.101295
- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and Indirect AggressionDuring Childhood and Adolescence: A Meta-Analytic Review of Gender Differences, Intercorrelations, and Relations to Maladjustment. *Child Development*, 79(5), 1185–1229. <a href="https://doi.org/10.1111/j.1467-8624.2008.01184.x">https://doi.org/10.1111/j.1467-8624.2008.01184.x</a>
- Carver, P. R., Yunger, J. L., & Perry, D. G. (2003). Gender Identity and Adjustment in Middle Childhood. Sex Roles, 49(3), 95–109. https://doi.org/10.1023/A:1024423012063
- Castellanos, M., Saldarriaga, L., Lopez, L. S., & Bukowski, W. M. (2019). Contextual varianceand invariance in self-perceived gender typicality and pressure to conform

- to gender role expectations. *International Journal of Behavioral Development*, 43(4), 305–308. https://doi.org/10.1177/0165025419844037
- Cillessen, A. H. N., & Mayeux, L. (2004). From Censure to Reinforcement: Developmental Changes in the Association Between Aggression and Social Status. *Child Development*, 75(1), 147–163. https://doi.org/10.1111/j.1467-8624.2004.00660.x
- Crick, N. R., & Grotpeter, J. K. (1995). Relational Aggression, Gender, and Social-Psychological Adjustment. *Child Development*, 66(3), 710–722. <a href="https://doi.org/10.1111/j.1467-8624.1995.tb00900.x">https://doi.org/10.1111/j.1467-8624.1995.tb00900.x</a>
- Dijkstra, J. K., & Gest, S. D. (2015). Peer Norm Salience for Academic Achievement,

  ProsocialBehavior, and Bullying: Implications for Adolescent School Experiences. *The Journal ofEarly Adolescence*, 35(1), 79–96.

  https://doi.org/10.1177/0272431614524303
- Douglass, L. (1992). The power of sentiment: Love, hierarchy, and the Jamaican Family Elite.

  Westview Press.
- Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology*, *37*(4), 451–463.https://doi.org/10.1037/0012-1649.37.4.451
- Geertz, C. (1995). After the fact: Two countries, four decades, one anthropologist. HarvardUniversity Press.
- Hofstede, G. (2001). Culture's consequences: Comparing values, behaviors, institutions, andorganizations across nations. Sage.
- Jaffee, S., & Hyde, J. S. (2000). Gender differences in moral orientation: A meta-analysis.

  \*Psychological Bulletin, 126(5), 703–726. <a href="https://doi.org/10.1037/0033-2909.126.5.703">https://doi.org/10.1037/0033-2909.126.5.703</a>
- Jewell, J. A., & Brown, C. S. (2014). Relations Among Gender Typicality, Peer Relations, and Mental Health During Early Adolescence. *Social Development*, 23(1), 137–156. <a href="https://doi.org/10.1111/sode.12042">https://doi.org/10.1111/sode.12042</a>

- Kagan, J., & Phillips, W. (1964). Measurement of identification: A methodological note. *The Journal of Abnormal and Social Psychology, 69*(4), 442–444. <a href="https://doi-org.lib-ezproxy.concordia.ca/10.1037/h0047149">https://doi-org.lib-ezproxy.concordia.ca/10.1037/h0047149</a>
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.), *The development of sex differences* (pp. 82 173). Stanford University Press.
- Kohlberg, L. (1981). The philosophy of moral development: moral stages and the idea of justice. Harper & Row.
- Kruglanski, A. W., Shah, J. Y., Pierro, A., & Mannetti, L. (2002). When similarity breeds content:Need for closure and the allure of homogeneous and self-resembling groups. *Journal ofPersonality and Social Psychology*, 83(3), 648–662. <a href="https://doi.org/10.1037/0022-3514.83.3.648">https://doi.org/10.1037/0022-3514.83.3.648</a>
- Lansford, J. E., Skinner, A. T., Sorbring, E., Di Giunta, L., Deater-Deckard, K., Dodge, K. A., Malone, P. S., Oburu, P., Pastorelli, C., Tapanya, S., Tirado, L. M. U., Zelli, A., Al-Hassan, S. M., Alampay, L. P., Bacchini, D., Bombi, A. S., Bornstein, M. H., & Chang, L. (2012).Boys' and Girls' Relational and Physical Aggression in Nine Countries.
  Aggressive Behavior, 38(4), 298–308. <a href="https://doi.org/10.1002/ab.21433">https://doi.org/10.1002/ab.21433</a>
- Marshall, K. (2006). Converging gender roles. In *Perspectives on Labour and Income*, 18(3),7-9, 11-19.
- Maccoby, E. E. (1980). Social Development: Psychological Growth and the Parent-Child Relationship. Harcourt Brace Jovanovich.
- Menon, M., & Hannah-Fisher, K. (2019). Felt gender typicality and psychosocial adjustment inIndian early adolescents. *International Journal of Behavioral Development*, 43(4), 334–341. https://doi.org/10.1177/0165025418820669
- Mayeux, L., & Kleiser, M. (2020). A Gender Prototypicality Theory of Adolescent Peer Popularity. *Adolescent Research Review*, *5*(3), 295–306. <a href="https://doi.org/10.1007/s40894-019-00123-z">https://doi.org/10.1007/s40894-019-00123-z</a>
- Mead, M. (1946). Research on primitive children. In L. Carmichael (Ed.), *Manual of childpsychology*, 735–789. John Wiley & Sons.
- Perry, D., & Pauletti, R. (2011). Gender and Adolescent Development. *Journal of Research on Adolescence*, 21, 61–74. https://doi.org/10.1111/j.1532-7795.2010.00715.x

- Perry, D. G., Pauletti, R. E., & Cooper, P. J. (2019). Gender identity in childhood: A review of theliterature. *International Journal of Behavioral Development*, 43(4), 289–304. https://doi.org/10.1177/0165025418811129
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and dataanalysis methods*. Sage.
- Riggs, A. E., Kinard, D., & Long, M. (2023). Children's Evaluations of Gender Non-Conforming Peers. *Sex Roles*, 88(1), 17–34. <a href="https://doi.org/10.1007/s11199-022-01322-0">https://doi.org/10.1007/s11199-022-01322-0</a>
- Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer Interactions, Relationships, and Groups. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 571–645). John Wiley & Sons.
- Santo, J. B., Bukowski, W. M., Stella-Lopez, L., Carmago, G., Mayman, S. B., & Adams, R. E. (2013). Factors Underlying Contextual Variations in the Structure of the Self: Differences Related to SES, Gender, Culture, and "Majority/Nonmajority" Status During Early Adolescence. *Journal of Research on Adolescence*, *23*(1), 69–80. <a href="https://doi.org/10.1111/j.1532-7795.2012.00793.x">https://doi.org/10.1111/j.1532-7795.2012.00793.x</a>
- Saldarriaga, L. M., Bukowski, W. M., & Velásquez, A. M. (2012). The Moderating Effects of Social Problem-Solving in the Relationship between Risk Factors and Peer Victimization in Colombian Early Adolescents. *Revista Colombiana de Psicologia 21*(2):213-231.
- Smith, T. E., & Leaper, C. (2006). Self-Perceived Gender Typicality and the Peer Context DuringAdolescence. <u>Journal of Research on Adolescence</u>, 16(1), 91–103. https://doi.org/10.1111/j.1532-7795.2006.00123.x
- Spence, J. T., & Buckner, C. (1995). Masculinity and femininity: Defining the undefinable. In *Gender, power, and communication in human relationships* (pp. 105–138). Lawrence Erlbaum Associates.
- Vargas Llosa, A. (2005). Liberty of Latin America: How to Undo Five Hundred Years of StateOppression. Farrar, Straus and Giroux.
- Velásquez, A. M., Santo, J. B., Saldarriaga, L. M., López, L. S., & Bukowski, W. M. (2010). Context-Dependent Victimization and Aggression: Differences Between All-Girl and Mixed-Sex Schools. *Merrill-Palmer Quarterly*, *56*(3), 283–302. <a href="https://www.jstor.org/stable/23098071">https://www.jstor.org/stable/23098071</a>

- Velásquez, A. M., Saldarriaga, L. M., & Bukowski, W. M. (2023). Predicting changes in classroom aggression status norms: The role of teachers' normative beliefs and students' perceived support. *International Journal of Behavioral Development*, 47(3),275–281. https://doi.org/10.1177/01650254231152423
- Walker, M. U. (2006). The Curious Case of Care and Restorative Justice in the U.S. Context. In M. Hamington, & D. C. Miller (Eds.), *Socializing Care: Feminist Ethics and PublicIssues*. Rowman & Littlefield.
- Yunger, J. L., Carver, P. R., & Perry, D. G. (2004). Does Gender Identity Influence Children's Psychological Well-Being? *Developmental Psychology*, 40(4), 572–582. https://doi.org/10.1037/0012-1649.40.4.572

Appendix A

Information Letter to Parents

September 2, 2014

Dear Parent(s),

I am a professor at Concordia University, where I teach and do research on children and adolescents. One of the topics I study is how children's experiences with their parents, friends, and teachers affect their well-being. This topic is of interest to many parents, teachers, and health professionals. The purpose of this letter is to tell you about a study my students and I are conducting with fifth- and sixth-graders at the St. John's School. This study will help us learn more about children, their health, and their development.

As part of the study, I will meet with the participating children in their classrooms six times over the school year, from October to December. These meetings will last about 20 minutes. We will meet the children in their school and I will ask them to fill out some questionnaires.

In these questionnaires, we will be asking children to identify:

- Who they typically associate with in school;
- The characteristics of other children in their class;
- Behaviors performed by other children in the class (e.g. helping, participating in certain types of activities, etc.);
- How they perceive themselves;
- How they perform in school and in their social relations.

All the questionnaires will be completed at the child's desk in school and none of the other children will know how any other child has answered the questions. The teachers will also complete a questionnaire about each child's competencies and their functioning in school.

We will also ask the participating children's parent(s) to complete a questionnaire for us. It will ask questions about family functioning, parental education and employment, and family income. As an expression of our gratitude we will give two tickets to a local movie theater to parents who return the parent questionnaire to us. Parents who choose not to fill out the parent questionnaires can still allow their children to take part in the study.

As a token of thanks, all participating children will receive a gift of school supplies and a t-shirt from the research team at the conclusion of the final data collection. In addition, we will be providing lectures to the students about mental health, and about ways to cope with the stressors they encounter in their daily lives.

We ask the children to maintain the privacy of their answers and we make certain that their answers are kept confidential.

People who do research with children or adults are required to describe the risks and benefits related to participating in their studies. We assure you that this study poses no risks, other

than what children encounter in their day-to-day lives. It is not a treatment study, and it is not intended to provide direct benefits to the students who participate, though most children enjoy participating in such studies.

The information collected in this study will be <u>completely confidential</u>, and participation is entirely voluntary. Your child is not required to participate in this study. Furthermore, you may change your mind at any time even if you already gave your permission. Again, even if your child takes part in the study you are free to decide whether or not you wish to complete the parent questionnaire.

This study has been approved by both the School Board and the Concordia University Human Research Ethics Committee. If at any time you have questions or concerns regarding your rights or your child's rights as research participants, please feel free to contact the Research Ethics and Compliance Advisor of Concordia University, at <a href="ethics@alcor.concordia.ca">ethics@alcor.concordia.ca</a>.

If you have any other questions about the study, please call me at 514-848-2424 Ext. 2184 or send me a letter at: Department of Psychology, Concordia University, 7141 Sherbrooke Ouest, Montreal, QC, H4B 1R6. You can also email me at william.bukowski@concordia.ca.

Please fill out the attached form and have your child return it to his/her teacher tomorrow.

As an incentive for the children to return the permission slip, any child who returns a slip, regardless of whether his/her parent has given permission for participating, will get a Concordia University pen from the research team.

Thank you for your help. We very much appreciate it.

Sincerely,

William M. Bukowski

WWZ

Professor

2 de septiembre de 2014

Estimado(s) padre(s),

Soy profesor en la Universidad Concordia, donde enseño e investigo sobre niños y adolescentes. Uno de los temas que estudio es cómo las experiencias de los niños con sus padres, amigos y maestros afectan su bienestar. Este tema es de interés para muchos padres, maestros y profesionales de la salud. El propósito de esta carta es informarles sobre un estudio que mis estudiantes y yo estamos llevando a cabo con estudiantes de quinto y sexto grado en la Escuela St. John's. Este estudio nos ayudará a aprender más sobre los niños, su salud y su desarrollo.

Como parte del estudio, me reuniré con los niños participantes en sus aulas seis veces durante el año escolar, de octubre a diciembre. Estas reuniones durarán aproximadamente 20 minutos. Nos reuniremos con los niños en su escuela y les pediré que completen algunos cuestionarios.

En estos cuestionarios, les pediremos a los niños que identifiquen:

- Con quiénes suelen asociarse en la escuela;
- Las características de otros niños en su clase;
- Comportamientos realizados por otros niños en la clase (por ejemplo, ayudar, participar en ciertos tipos de actividades, etc.);
- Cómo se perciben a sí mismos;
- Cómo les va en la escuela y en sus relaciones sociales.

Todos los cuestionarios se completarán en el escritorio del niño en la escuela y ninguno de los otros niños sabrá cómo ha respondido cualquier otro niño a las preguntas. También los maestros completarán un cuestionario sobre las competencias de cada niño y su funcionamiento en la escuela.

También pediremos a los padres de los niños participantes que completen un cuestionario para nosotros. Este cuestionario incluirá preguntas sobre el funcionamiento familiar, la educación y el empleo de los padres, y los ingresos familiares. Como muestra de nuestro agradecimiento, daremos dos entradas para un cine local a los padres que devuelvan el cuestionario. Los padres que decidan no completar los cuestionarios aún pueden permitir que sus hijos participen en el estudio.

Como muestra de agradecimiento, todos los niños participantes recibirán un regalo de útiles escolares y una camiseta del equipo de investigación al concluir la recopilación final de datos. Además, proporcionaremos charlas a los estudiantes sobre salud mental y sobre formas de enfrentar los estresores que encuentren en su vida diaria.

Pedimos a los niños que mantengan la privacidad de sus respuestas y nos aseguramos de que estas se mantengan confidenciales.

Las personas que realizan investigaciones con niños o adultos deben describir los riesgos y beneficios relacionados con la participación en sus estudios. Le aseguramos que este estudio no presenta riesgos, aparte de los que los niños enfrentan en su vida cotidiana. No es un estudio de tratamiento y no tiene la intención de proporcionar beneficios directos a los estudiantes que participen, aunque la mayoría de los niños disfrutan participar en este tipo de estudios.

La información recopilada en este estudio será completamente confidencial y la participación es totalmente voluntaria. Su hijo no está obligado a participar en este estudio. Además, puede cambiar de opinión en cualquier momento, incluso si ya ha dado su permiso. Nuevamente, incluso si su hijo participa en el estudio, usted es libre de decidir si desea o no completar el cuestionario para padres.

Este estudio ha sido aprobado tanto por la Junta Escolar como por el Comité de Ética en Investigación Humana de la Universidad Concordia. Si en algún momento tiene preguntas o inquietudes sobre sus derechos o los derechos de su hijo como participantes en la investigación, no dude en comunicarse con el Asesor de Ética y Cumplimiento de la Investigación de la Universidad Concordia, en ethics@alcor.concordia.ca.

Si tiene alguna otra pregunta sobre el estudio, por favor llámeme al 514-848-2424 Ext. 2184 o envíeme una carta a: Departamento de Psicología, Universidad Concordia, 7141 Sherbrooke Ouest, Montreal, QC, H4B 1R6. También puede enviarme un correo electrónico a william.bukowski@concordia.ca.

Por favor, complete el formulario adjunto y pida a su hijo que lo devuelva a su maestro mañana.

Como incentivo para que los niños devuelvan el formulario de permiso, cualquier niño que lo devuelva, independientemente de si sus padres han dado permiso para participar, recibirá un bolígrafo de la Universidad Concordia del equipo de investigación.

Gracias por su ayuda. Lo apreciamos mucho.

Atentamente,

William M. Bukowski

WMB

Profesor

Appendix B

Parental Consent Forms

### ONE WORLD WHOLE CHILD PROJECT

(GRADES 5 and 6)

#### PERMISSION SLIP

Please read and sign the following:

I know that my daughter/son has been asked to be in a study conducted by Dr. W. M. Bukowski.

I know that the study is about children's experiences with their parents, friends, and teachers and their adjustment. I know that if my daughter/son participates she/he will be asked to answer some questionnaires at his/her desk in the classroom. I have been told that the questionnaires are about how young people think and feel about themselves and their friends. I know that the children will complete the questionnaires six times across the school year. I know also that all participating children will receive a gift of school supplies and a t-shirt from the research team at the conclusion of the final data collection.

I know that my daughter/son does not have to be in the study. I know also that even if she/he starts to be in it but changes her/his mind she/he can quit at any time. I also know that all answers are confidential and will NOT be shown to anyone. Only Dr. Bukowski and his assistants will know what is in the questionnaires.

Please check one of the following and ask your daughter/son to bring this permission slip into the homeroom class tomorrow.

My son/o	daughter <u>has permission</u> to take part in Dr. Bu	Bukowski	's study		
My son/o	daughter DOES NOT have permission to take	e part in	Dr. Buk	owski's s	tudy.
Parent's Name:			_		
Signature:	DATE:	_			
Child's Name:	C	CHILD'S	S SEX:	□ Male	☐ Female

# PROYECTO UN MUNDO, TODO UN NIÑO

(GRADOS 5 and 6)

#### **PERMISO**

Por favor, lea y firme lo siguiente:

Sexo del niño/a: ☐ Masculino ☐ Femenino

Sé que a mi hija/hijo se le ha pedido participar en un estudio conducido por el Dr. W. M. Bukowski.

Sé que el estudio trata sobre las experiencias de los niños con sus padres, amigos y maestros, así como su ajuste. Sé que si mi hija/hijo participa, se le pedirá que responda algunos cuestionarios en su escritorio en el aula. Me han informado que los cuestionarios tratan sobre cómo los jóvenes piensan y sienten acerca de sí mismos y sus amigos. Sé que los niños completarán los cuestionarios seis veces a lo largo del año escolar. También sé que todos los niños participantes recibirán un regalo de útiles escolares y una camiseta del equipo de investigación al concluir la recopilación final de datos.

Sé que mi hija/hijo no tiene que participar en el estudio. También sé que aunque empiece a participar, puede decidir dejar de hacerlo en cualquier momento. También sé que todas las respuestas son confidenciales y NO serán mostradas a nadie. Solo el Dr. Bukowski y sus asistentes sabrán qué hay en los cuestionarios.

Por favor, marque una de las siguientes opciones y pida a su hija/hijo que entregue este

formulario de permiso en el salón de clases mañana.

\_\_\_\_ Mi hijo/hija tiene permiso para participar en el estudio del Dr. Bukowski.

\_\_\_\_ Mi hijo/hija NO tiene permiso para participar en el estudio del Dr. Bukowski.

Nombre del padre/madre:

Firma: \_\_\_\_ Fecha:

Nombre del niño/niña: \_\_\_\_\_