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**Development of Gender Typicality and Felt Pressure
in European French and North African French Adolescents**

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Abstract

Trajectories of gender identity were examined from Grade 6 ($M_{\text{age}} = 11.9$ years) to Grade 9 in European French ($n = 570$) and North African French ($n = 534$) adolescents, and gender and ethnic group differences were assessed in these trajectories. In Grade 6, boys of both ethnic groups reported higher levels of gender typicality and felt pressure for gender conformity than girls. European French girls and boys and North African French girls reported decreasing gender typicality from Grade 6 to Grade 9, whereas North African French boys did not change. Felt pressure decreased among girls, did not change in European French boys, and increased in North African French boys. Ethnic and gender differences in gender identity development are discussed.

Keywords: gender typicality, felt pressure, gender identity, development, ethnicity, early adolescence

Development of Gender Typicality and Felt Pressure in European French and North African French Adolescents

Gender – one’s conception of the self as male or female – is nearly universally experienced as a key characteristic of identity (Leaper & Friedman, 2007). In the current paper we use aspects of Egan and Perry’s (2001; Tobin et al., 2010) multidimensional model to better understand gender identity development in French adolescents, focusing specifically on gender typicality and felt pressure for gender conformity (henceforth called “felt pressure”). Gender typicality refers to individuals’ self-perceptions of their similarity to same-gender others. Felt pressure indicates the degree to which individuals feel pressured by parents, peers, and themselves to adhere to traditional gender roles and norms. We chose these constructs because of their established relations to well-being. Higher levels of gender typicality are associated with lower levels of psychopathology, positive psychosocial adjustment, and greater academic motivation in adolescent and young adult racially/ethnically diverse samples (DiDonato & Berenbaum, 2013; Jewell & Brown, 2014; Skinner, Kurtz-Costes, Wood, & Rowley, 2017; Smith & Leaper, 2006; Vantieghem, Vermeersch, & Van Houtte, 2014). In contrast, higher

levels of felt pressure in preadolescents and adolescents are associated with lower levels of psychosocial adjustment (Corby, Hodges, & Perry, 2007; Younger, Carver, & Perry, 2004). Thus, understanding individual differences in these constructs as well as how they change over the course of adolescence is important.

Many aspects of gender identity development are linked to normative physical and cognitive change during adolescence and therefore are common to most adolescents (Ruble, Martin, & Berenbaum, 2006). In addition, group differences in gender identity development might emerge because of cultural factors, and these phenomena might vary by sex. Indeed, ethnic, racial, and gender differences have been found in levels of gender typicality and felt pressure in children and adolescents (Corby et al., 2007; Egan & Perry, 2001; Vantieghem & Van Houtte, 2015). Moreover, ethnic differences might vary for boys as compared to girls, and gender differences might vary by ethnicity.

Intersectionality theory suggests that individuals have a constellation of social identities, and that different configurations of these social identities create unique social positions that are likely to color the individuals' experiences, beliefs, and worldviews (Cho, Crenshaw, & McCall, 2013; hooks, 1982). In the current study, using a sample of European French and North African French early adolescents, we investigated ethnic and gender differences in gender typicality and felt pressure as well as their development across four years (from Grade 6 to Grade 9). Consistent with intersectionality theory, we investigated differences among the four gender/ethnic groups. Before discussing reasons to anticipate gender and cultural differences, we provide a brief summary of theories regarding normative gender identity development.

Gender Identity Development During Adolescence

Contemporary theories suggest that gender development is driven by three primary influences during adolescence: biological changes, cognitive changes, and changes in socialization (Galambos, Berenbaum, & McHale, 2009). From these theoretical perspectives two competing hypotheses have surfaced regarding patterns of change. *Gender intensification* suggests that biological, cognitive, and social aspects of adolescents' lives result in amplified awareness of gender during adolescence (Hill & Lynch, 1983). Hill and Lynch argued that with the advent of puberty, gendered physical development acts as a notification of advancing sexual maturity and imminent gendered adult roles. Gendered physical development also signals socialization agents such as parents and peers to engage with adolescents in more gender-typed

ways, resulting in adolescents' increasing awareness of gender roles and norms (Hill & Lynch, 1983). A contrasting perspective posits that individuals are likely to experience increasing *gender flexibility* during adolescence (Galambos et al., 2009). According to cognitive-developmental theory, changes that occur in the brain during adolescence lead to increased complexity in formal reasoning, judgment, and decision making, leading to greater flexibility in gender roles, attitudes, and behaviors (Liben & Bigler, 2002).

Empirical evidence regarding these competing hypotheses is mixed. In support of the gender intensification hypothesis, two longitudinal studies with primarily White American samples found evidence of increasing traditionality of attitudes toward gender roles during adolescence, particularly among boys (Crouter, Whiteman, McHale, & Osgood, 2007; Galambos, Almeida, & Petersen, 1990). In contrast, several longitudinal studies (conducted with German, European-American, and Mexican-American samples) have reported increasing gender flexibility during childhood and adolescence using measures such as perceived gender-specificity of occupations, personality characteristics, and household chores (Bartini, 2006; Liben & Bigler, 2002; Trautner et al., 2005; Updegraff et al., 2014).

As suggested by Liben and Bigler (2002), increased flexibility would permit adolescents to engage in more behavior that is traditionally atypical of their gender and to be more comfortable in reporting that they are not typical of their gender. Conversely, increased flexibility in gender norms should result in decreases in felt pressure. It is important to note, however, that these two constructs—gender typicality and felt pressure—are not opposite sides of the same coin. As Egan and Perry (2001) argued, whereas felt pressure reflects social influences on a desire or drive to be typical of one's gender, many other factors also influence gender typicality (e.g., biological maturation; imitation of same-sex models). Thus, a child or adolescent might perceive him- or herself to be highly typical of his or her gender, yet feel very little pressure from others to conform to gender norms. Therefore, the two constructs would not necessarily follow the same developmental trajectories. For example, after entering middle school, a girl might begin to imitate older girls in her style of dress and behavior, leading to increases in her sense of gender typicality. Yet because imitation occurs often without the perception of external pressure (Bandura & Barab, 1971), she would not necessarily report increasing felt pressure. As discussed below, there are reasons to expect both gender and ethnic differences in initial levels and patterns of change.

Gender Differences in Gender Typicality and Felt Pressure

Studies with American and Flemish samples indicated that boys report higher levels of gender typicality and felt pressure than girls (Corby et al., 2007; Egan & Perry, 2001; Smith & Leaper, 2006; Vantieghem, & Van Houtte, 2015; Younger et al., 2004). Social identity theory (Tajfel & Turner, 1986) offers two possible explanations for these gender differences. First, during late childhood youth become increasingly aware of cultural values regarding gender, and within most societies, cultural values offer more prestige to masculine traits and behaviors than to feminine traits and behaviors (Ruble et al., 2006). A second and related argument also rooted in social identity theory suggests that compared to low-status group members, members of a high status group have more of an investment in the maintenance of an in-group identity (Tajfel & Turner, 1986). Therefore, both boys and girls may amplify masculine traits (e.g., agency, independence) and downplay traditionally feminine traits (e.g., emotionality), causing boys to view themselves as more gender typical than girls. Similarly, boys are more likely than girls to experience higher levels of felt pressure for gender conformity and to be negatively sanctioned through teasing and bullying for gender norm transgressions (Birkett & Espelage, 2015; Leaper & Friedman, 2007). Indeed, a host of empirical evidence substantiates the notion that gender role expectations and norms are more flexible for girls and women than for boys and men, supporting these ideas (Blakemore, 2003; Blackmore & Hill, 2008; Wilbourne & Kee, 2010).

Consistent with these theoretical arguments and with prior research with American samples, we hypothesized that European French and North African French boys would report higher levels of gender typicality and felt pressure than their female counterparts. However, given numerous cultural differences between the two ethnic groups, we anticipated ethnic differences in both levels of and change in adolescents' gender typicality and felt pressure. In the next section we provide information about differences between European French and North African French cultures, and our expectations for ethnic differences in gender identity development.

North African French in France and Anticipated Ethnic Differences in Gender Typicality and Felt Pressure

North African or Maghrebin French comprise the largest ethnic minority group in France, the majority of whom have ancestral ties to Algeria, Morocco, and Tunisia. Thus, in this article, "North African French" refers to individuals who have immigrated to France from Algeria,

Morocco, or Tunisia, or who are of Algerian, Moroccan, or Tunisian descent. Many contrasts can be drawn between traditional European French and North African cultures and customs, including language use and religion (Alba, 2005; Killian, 2006). Some differences in the cultural ideologies, philosophies, and customs of these two ethnic groups are closely linked to gender. Although France is traditionally patriarchal (i.e., adult men holding primary power), the European French family model changed during the twentieth century to be more egalitarian, as a significant number of women entered the workforce, gaining economic independence, and civic and social rights (Castelain-Meunier, 1998). In contrast, North African culture is more socially conservative. The North African family model is patriarchal, patrilineal (i.e., family inheritance/wealth is passed through males), and patrilocal (i.e., the female partner moves to live with the male partner). The roles of the male as the sole financial provider and the female as the primary caregiver and housekeeper are still common in North African French families (Zehraoui, 1998).

Not surprisingly, ethnic or cultural differences in gender roles and norms can be observed between the European French and the North African French. In European French families, as in other Western European countries, women are more likely to be employed outside the home, and in other ways, traditional gender roles and norms are less pronounced and more flexible than in many other parts of the world (Olsen, Parsons, Martins, & Ivanaj, 2016). Active advances toward gender equality in education and the workplace have been fostered by government actions such as the creation of the Ministry for Women's Rights in 2012 and passing of legislation aimed to eliminate gender discrimination in the workplace and schools (French Ministry of Families, Children, and Women's Rights, 2014).

To understand the gender roles and norms of North Africans in their countries of origin and in France, Killian (2006) conducted qualitative interviews with 45 North African French women immigrants. Killian found that gender roles and norms in North African countries tended to be traditional and rigid, especially in small, rural communities. Women and girls were generally not permitted to leave home, even to attend school, and were expected to clean the home and prepare meals for the family. Men and boys practiced many liberties enjoyed by men in European cultures, leaving the home as they pleased and attending school (Killian, 2006).

Women in Killian's (2006) sample felt that transitioning to European French culture represented a radical change compared to their lives in North African countries, citing increased

independence and freedom from traditional gender attitudes and norms. North African men felt the increased independence and freedom from traditional gender norms to a lesser degree. In contrast to within their countries of origin, the North African women in France were able to leave the home as they wished, and many were employed (though typically part-time) outside of the home (Killian, 2006). Despite these freedoms, Killian (2006) found that traditional gender attitudes from North African culture were still evident in the lives and choices of North African French individuals. Because of these cultural differences, we expected that North African French adolescents of both genders, though particularly boys, would report higher levels of gender typicality and felt pressure than their European French counterparts.

Hypotheses

Our goals were to examine gender and ethnic differences in initial levels of gender typicality and felt pressure at Grade 6, and to assess developmental change in trajectories of gender typicality and felt pressure from Grade 6 to Grade 9 in the four groups: European French girls, European French boys, North African French girls, and North African French boys. Using an intersectionality approach (Cho et al., 2013; hooks, 1982) that recognizes the influences of both gender and ethnicity in the development of gender identity, we hypothesized that initial levels and trajectories of gender typicality and felt pressure for gender conformity would differ across the four groups. In particular, we expected the following:

Hypothesis 1: Gender and ethnic differences in Grade 6 gender typicality. As summarized above, girls have fewer negative consequences than boys for deviating from traditional gender roles (e.g., Leaper & Friedman, 2007). Conversely, for boys, projection of traditional masculine traits is likely to be positively reinforced, while deviation from prescribed male roles and norms is likely to be negatively sanctioned. Thus, we expected that both European French and North African French girls would have lower initial levels of gender typicality at Grade 6 than European French and North African French boys. We also anticipated ethnic differences, with North African French adolescents reporting higher gender typicality than European French adolescents. Thus, we expected highest perceptions of gender typicality in Grade 6 among North African French boys and lowest among European French girls.

Hypothesis 2: Changes in gender typicality from Grade 6 to Grade 9. As individuals proceed through early adolescence, increased cognitive flexibility and awareness of tolerant social attitudes should facilitate adoption of more nontraditional gender behaviors (Galambos et

al., 2009). Therefore, we predicted that girls' reported gender typicality would decrease across time. In contrast, because boys face greater sanctioning than girls for atypical behavior and greater reinforcement for gender typical behavior, in spite of increasing cognitive flexibility, we expected that boys' gender typicality would either remain stable or that declines would be less than those of girls. We also explored ethnic differences in these processes. We hypothesized that as North African French adolescents are exposed to gender flexibility from growing up and living within French society, adolescents might show declines in gender typicality as they enter adolescence. However, North African French adolescents, particularly boys, are also likely to experience pressures to conform to traditionally gendered expectations from family members, and therefore might show smaller declines in gender typicality across this period than European French adolescents. Thus, among European French girls, we expected to observe decreases in gender typicality. For North African French girls and European French boys, we expected decreases in gender typicality; however these decreases were expected to be less than those of European French girls. Finally, of the four ethnic/gender groups, we expected that North African French boys would be least likely to report decreases in gender typicality.

Hypothesis 3: Gender and ethnic differences in Grade 6 felt pressure. As summarized above, we expected boys in each ethnic group to report higher Grade 6 levels of felt pressure than girls in each group. Ethnic group differences were also expected, with North African French adolescents reporting more felt pressure than European French adolescents because of greater pressure to conform to cultural norms. Thus, we expected that felt pressure reports would be highest among North African French boys and lowest among European French girls.

Hypothesis 4: Changes in felt pressure from Grade 6 to Grade 9. We anticipated gender differences in felt pressure change during middle school. Because of their increasing social cognition during adolescence and therefore increasing awareness of pressures on boys and men to adhere to traditional gender roles and norms, we hypothesized that boys would have stable or increasing levels of felt pressure across the four years. Conversely, with fewer expectations to maintain traditional female gender roles coupled with increasing understanding of gender flexibility, we hypothesized that girls would report decreasing levels of felt pressure. Similar to Hypothesis 2, we examined ethnic differences in these processes and developed competing hypotheses. On one hand, given the pressures of North African gender norms that are

likely to come from parents and other family members, North African French adolescents might experience increasing pressure from parents and themselves to adhere to gender norms as they age closer to adulthood. On the other hand, North African French adolescents may experience static or declining levels of felt pressure because of their increasing exposure to European French culture outside of the home. Thus, European French girls were expected to report decreasing felt pressure, and North African French girls' reports of felt pressure were expected to either decrease or remain stable across the middle school years. Among European French and North African French boys we expected felt pressure to remain stable or increase.

Method

Participants

Data for the study were drawn from a larger longitudinal study that focused on the development of identity, academic stereotypes, and achievement motivation among French adolescents. In France, *collège* is the equivalent to middle school in the United States (U.S.), as French youth transition from elementary school to *collège* at the age of 11 or 12. *Collège* consists of four grade levels: *sixième* (U.S. Grade 6), *cinquième* (Grade 7), *quatrième* (Grade 8), and *troisième* (Grade 9). In this article, we refer to *collège* as “middle school” and to the grade levels as “Grades 6, 7, 8, and 9.” Data collection began when adolescents entered Grade 6 ($M_{\text{age}} = 11.9$ years old), and students completed surveys annually for the duration of middle school (Grades 6, 7, 8, and 9).

The current article used data from 1104 adolescents (549 boys and 555 girls) who participated in at least one of the four waves. With regards to ethnicity, 570 adolescents (51.6% of the sample) identified as European French and 534 adolescents (48.4%) identified as North African French. Data from adolescents who identified their ethnicity as anything other than “European French” or “North African or Maghrebin” (e.g. “Portuguese French” or “Martiniquais”) were not used in the analyses for this article. All adolescents in the European French subsample were born in France. Among the North African French subsample, 78% ($n = 417$) were born in France and 12% ($n = 64$) were born in Algeria, Morocco, or Tunisia; 10% ($n = 54$) did not indicate their country of birth. A majority of the North African French adolescents identified Algeria as their family's country of origin ($n = 340$ or 63.7%), followed by Morocco ($n = 154$; 28.8%), and Tunisia ($n = 40$; 7.5%). A majority of the North African French subsample ($n = 413$; 77.3%) reported speaking Arabic at home.

Data collection for the study began in 2006 and was completed in 2010. Students were permitted to join in each year of the study, and some students failed to complete a survey in Year 2 or 3 but subsequently rejoined the study. Therefore, 755 youth participated in Year 1, 760 in Year 2, 768 in Year 3, and 694 in Year 4; 401 (36.3%) completed all four waves, 232 (21%) completed three waves, 206 (18.7%) completed two waves, and 265 (24%) completed one wave of data collection. Adolescents were recruited from nine public middle schools in a city in southern France. Given the sensitive nature of the question, adolescents were not asked to report their family's household income. However, schools from which students were recruited served economically disadvantaged neighborhoods and families. Thus, the sample is considered to be of a lower socioeconomic (SES) background.

Although all schools were ethnically integrated, the two ethnic groups were not equally represented across those schools. Because France prohibits official records tied to ethnicity or race (Simon, 2008), the ethnic/racial make-up of schools is not available. However, 67.3% of North African French participants came from Schools 1, 2, 3, and 7, whereas 94.2% of the European French students came from Schools 4, 5, 6, 8, and 9.

Procedure

Approval of the study from multiple institutions was required before data collection could begin. Required procedures included assurance that the potential knowledge gained from the research warranted making ethnic and gender comparisons. First, approval was sought from the regional governing body of the various schools that were targeted. The study was framed as research investigating how social identities and their development were related to important academic and psychosocial outcomes in students' lives. Upon receiving approval from the larger governing body of schools, meetings were organized with the school boards of each school. One of the authors presented the study goals, procedures, and materials to each of the school boards. All school boards granted approval and committed to the four-year study. Next, researchers met with parent-teacher organizations of each school, giving similar presentations and highlighting the potential knowledge that could be gained from the research. The parent-teacher organizations also granted approval of the study.

Parent and adolescent consent was obtained for all participants at each wave. Parents and adolescents were told that the study was designed to explore how perceptions of the self were related to adolescents' academic motivation and achievement, and that the research had been

approved by the regional governing body of the local schools, the school board and parent-teacher organization of the school, and the school principal. Participants' anonymity and confidentiality were guaranteed at each wave. During each year of middle school, adolescents completed questionnaires in their classrooms at approximately the middle of the academic school year (i.e., December or January). Adolescents who were not enrolled in the initial wave of data collection (Grade 6) were allowed to participate in subsequent waves. Adolescents did not receive an incentive for participating in the study.

Measures

Although other measures were included in the questionnaire, only adolescents' reports of gender typicality and felt pressure were used in this article. Both measures were adapted from Egan and Perry's (2001) gender identity subscales and were restructured to be similar to the other questions in the questionnaire. In Egan and Perry's study, each child was individually tested by the researcher, who read the items aloud, asking children to choose one of two opposing statements and then to indicate to what extent the statement was true for them. Such a method was not realistic with a four-year longitudinal study with more than a thousand participants. Thus, items were restructured into Likert-like items, and adolescents indicated their agreement with each item on a 6-point scale (1 = *strongly disagree*; 6 = *strongly agree*).

Two of the authors translated the items from English into French. Teachers in participating schools were consulted to ensure that vocabulary and syntax of each item were appropriate and could be understood by the participants. As in Egan and Perry's (2001) measure, both gender typicality and felt pressure measures included items that were gender specific; thus, girls and boys completed separate versions. It was also important to ensure that the gendered activities mentioned in some items were relevant for French culture. For that purpose, "Learning how to fix cars and bicycles" was changed to "learning how to play rugby," and "taking ballet or baton twirling lessons" was changed to "taking figure skating lessons."

Gender typicality. Gender typicality was assessed using six adapted items from the Egan and Perry (2001) Gender Typicality subscale, measuring the extent to which individuals perceive that they are similar to others of their gender. Adolescents indicated their agreement with each item (e.g., "You are just like other girls/boys your age") on a 6-point scale (1 = *strongly disagree*; 6 = *strongly agree*). Item scores were averaged to create a mean score, with higher scores indicating higher levels of gender typicality. One item from the original scale was not

included in order to improve alpha reliability; thus, five items were used in the current study. Alpha reliabilities for the measure were .76, .82, .82, and .82 at Grades 6, 7, 8, and 9, respectively.

Felt pressure. An adapted version of Egan and Perry's (2001) 10-item Felt Pressure subscale was used to assess adolescents' perceptions of expectations of parents, peers, and themselves to conform to traditional gender roles and norms. Students indicated their agreement with each item (e.g., "You get really mad if someone says you're acting like a boy/girl") on 6-point scales (1 = *strongly disagree*; 6 = *strongly agree*). Two items were removed from the original scale to improve reliability. Thus, felt pressure was operationalized by averaging the responses to eight items at each of the four waves ($\alpha = .55, .68, .75, \text{ and } .78$ at Grades 6, 7, 8, and 9, respectively). Although the alpha reliabilities at Grades 6 and 7 are not strong, these reliabilities are consistent with prior research examining felt pressure in adolescent samples (e.g., Smith & Leaper, 2006).

Results

In order to better understand the gender typicality and felt pressure of adolescents in our sample, descriptive statistics and zero-order correlations were computed for each study variable for each ethnic and gender group. Multiple-group unconditional growth curve models were then estimated for gender typicality and felt pressure to assess the functional form of their trajectories and whether or not these trajectories differed by gender and/or ethnicity. All analyses were conducted with Mplus Version 7, and maximum likelihood estimation was used to account for missing data (Muthén & Muthén, 1998–2015). Given the longitudinal nature of the study design, attrition analyses were conducted to ensure that data were missing at random. Pearson's chi square tests were employed to assess the association between ethnicity/gender of the adolescent and number of waves completed. Results across all groups yielded two significant associations: North African French boys were less likely to complete as many waves as European French boys and girls, $\chi^2(3, N = 549) = 10.53, p = .02, \chi^2(3, N = 549) = 17.36, p = .001$, respectively. Cramer's *V*, an assessment of effect size in chi square associations, suggested that the associations' effect sizes are small to medium. Ultimately, these small effects are not likely to impact the results due to the use of maximum likelihood in the model estimation.

Descriptive statistics and zero-order correlations of the study variables for European French and North African French girls and boys appear in Tables 1 and 2. Correlations of gender

typicality across the four waves (i.e., correlations between gender typicality at Wave 1 and Wave 2, Wave 2 and Wave 3, etc.), were moderate and positive in European French girls and North African French boys (ranging from .51 to .63). Small positive correlations in gender typicality across the four waves were observed in European French boys and North African French girls (ranging from .37 to .52). Correlations between reports of felt pressure across the four waves were positive and small to moderate in each of the four groups (ranging from .31 to .51).

Gender Typicality and Felt Pressure Multiple-Group Latent Growth Curve Models

To assess both the initial levels and developmental change in trajectories across the different ethnic and gender groups, we used multiple-groups unconditional latent growth curve models. In our review of the gender typicality and felt pressure means of the four groups, it appeared that the intercepts (i.e., Grade 6 scores) and slopes (i.e., change across time) could differ across the groups. Thus, multiple-groups unconditional latent growth curve models in the structural equation modeling framework were estimated for both variables of interest.

In multiple-groups latent growth curve models, latent intercept and slope factors of the variable are estimated. For all of the models estimated in the current study, trajectories were centered at Time 1 (i.e., Grade 6). To assess the intercepts of the trajectories, the latent intercept factor was modeled from Grade 6 reports, and paths from the observed variable at each time point to the latent intercept factor were set to 1. To assess change across time, paths from observed variables across the four time points were set to 0, 1, 2, and 3, respectively. Model fit was determined by five goodness-of-fit indices: chi-square test of model fit, comparative fit index (CFI), Tucker-Lewis index (TLI), standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA). Following guidelines of Hu and Bentler (1999), models with a non-significant chi-square test of model fit, a CFI and TLI at or above 0.95, and an SRMR and RMSEA at or below 0.08 were considered an excellent fit.

Considering both developmental theory and the unique characteristics of each group, we tested a series of nested models to identify the optimal functional form and the appropriateness of equality constraints on the factor means of the trajectories of gender typicality and felt pressure (Bollen & Curran, 2006). For both gender typicality and felt pressure, initial models freely estimated the factor intercepts and slopes. We compared results for linear versus quadratic models in order to assess which pattern of change provided the best fit for the data. Then chi-square difference tests were used to assess whether imposed parsimony of intercepts and slopes

across groups resulted in a significant decrease in model fit. This procedure provided a test of whether a model in which the factor intercepts and slopes were considered to be the same across groups was a better fit than a model in which intercepts or slopes varied across groups. First equality constraints on factor intercepts and slopes were tested across all four groups, then equality constraints among just three or two of the groups were assessed.

Gender typicality. Because we hypothesized linear change across time in adolescents' gender typicality, we first assessed the functional form of the trajectories of gender typicality by estimating a linear and quadratic multiple-groups unconditional latent growth curve model for gender typicality. The chi-square difference test indicated a significant improvement in model fit with the quadratic factor. However, all goodness-of-fit indices suggested that the addition of a quadratic factor in the model was overfitting the data or that the model was overly complex (Preacher, 2006). Thus, a linear trajectory was retained as the best fitting functional form for gender typicality.

Next, to test group differences in factor means of the intercept and slope, a series of equality constraints were tested. These tests enabled us to assess whether the four groups differed from one another in Grade 6 variables or in change across time. In Hypothesis 1, we expected European French and North African French boys to have higher levels of gender typicality at Grade 6 than European French and North African French girls. Further, we expected ethnic differences such that European French adolescents would report lower levels of gender typicality than North African French adolescents. Therefore, this hypothesis would be supported by equality constraint tests showing that none of the groups were comparable in Grade 6 gender typicality. The tests of equality constraints on the factor mean intercepts for all four groups together as well as only three of the four groups resulted in significant decrements in model fit, indicating differences in Grade 6 gender typicality across the four groups. Tests of equality constraints on the factor intercepts among pairs of groups showed that two constraints should be retained, as the addition of equality constraints between factor means in did not result in decrements in model fit. Results suggested that boys from both groups differed from girls in Grade 6 reports of gender typicality, but the intercepts of each gender did not differ across ethnic groups (i.e., European French and North African French girls did not differ in Grade 6 gender typicality, and European French and North African French boys similarly did not differ in Grade 6 gender typicality, $\chi^2(1) = 0.06, p = .80$; $\chi^2(1) = 0.01, p = .92$, respectively). These results

support the hypothesis of gender differences in Grade 6 gender typicality, but students' reports did not differ by ethnicity.

To assess group differences in developmental change in gender typicality, equality constraints were imposed on the slope factors. In Hypothesis 2, we predicted that girls would report decreasing levels of gender typicality, and that boys' reported gender typicality would either decrease (however, less than that of girls) or remain stable across the four years. We also expected to observe some ethnic differences in developmental change of gender typicality. Thus, results from the tests of equality constraints would support Hypothesis 2 if results suggested that none of the groups were equal in their levels of change.

Results showed decreased model fit with equality constraints on the slope factors of all four groups, but not on three of the four groups, $\chi^2(2) = 4.11, p = .12$. French boys and both groups of girls reported similar declines in gender typicality. Those three groups differed from North African French boys, who did not change in reported gender typicality across the four years of middle school. Although the chi-square test of model fit only approached non-significance, all other final fit indices suggested that the model fit the data well, $\chi^2(24) = 46.78, p = .004$; CFI = 0.97; TLI = 0.97; RMSEA = .06; SRMR = .06. Unstandardized parameter estimates and standard errors for the multiple-group unconditional latent growth curve model of gender typicality appear in Table 3.

In summary, girls of both ethnic groups reported lower gender typicality in Grade 6 than boys, but contrary to Hypothesis 1, reports did not vary by ethnicity. Hypothesis 2 was also partially supported. Average slopes of gender typicality among European French boys and both groups of girls were negative, indicating decreases across time. On average, girls and European French boys reported drops in gender typicality at a rate of 0.12 point for each year of middle school. These results partially support Hypothesis 2, as we expected decreases in gender typicality among girls. However, contrary to Hypothesis 2, European French boys decreased at the same rate as the girls. Results from North African French boys support Hypothesis 2, as their average levels of gender typicality differed from the other three groups, and did not change across time.

Felt pressure for gender conformity. Next, we estimated a multiple-groups unconditional latent growth curve model using adolescents' reports of felt pressure for gender conformity. To ensure that a linear trajectory was the optimal functional form to characterize

change in reports across time, both a linear model and a quadratic model were estimated. Similar to results with gender typicality, the addition of the quadratic factor suggested overfitting the data. Thus, a linear trajectory for the functional form was retained.

According to Hypothesis 3 we expected differences among the four groups in Grade 6 felt pressure, with North African French boys reporting greatest felt pressure and European French girls reporting the least. Equality constraints on the factor intercepts for both four and three of the four groups showed significant decrements in model fit, but equality constraints calculated between pairs of groups led to the retention of two constraints. Chi-square tests indicated that boys reported greater felt pressure in Grade 6 than girls. Contrary to predictions, the two ethnic groups did not differ either among girls or boys, $\chi^2(1) = 1.14, p = .29$; $\chi^2(1) = 0.36, p = .54$, respectively.

Next we assessed group differences in changes of felt pressure. According to Hypothesis 4, European French girls' reports of felt pressure would decrease over the four years. Among North African French girls we expected levels of felt pressure to either decrease or remain stable. Finally, we expected felt pressure in European and North African French boys would either remain stable or increase. Equality constraints imposed on the factor slopes across the four groups and on three of the four groups resulted in significant decrements in model fit. Equality constraints among pairs of groups were assessed, and one constraint was retained that did not decrease model fit. Chi-square tests indicated that European French and North African French girls did not differ in felt pressure change, $\chi^2(1) = 2.08, p = .15$. Both groups of girls reported average declines in felt pressure and differed from North African French boys, who reported increasing felt pressure, and European French boys, who reported no change. Final fit of the model was good, $\chi^2(23) = 38.36, p = .02$; CFI = 0.97; TLI = 0.96; RMSEA = .05; SRMR = .07. Unstandardized parameter estimates and standard errors for the multiple-groups unconditional latent growth curve model of felt pressure appear in Table 4.

In summary, in Hypothesis 3 we expected North African French adolescents and boys to report higher levels of felt pressure in Grade 6 than European French adolescents and girls, respectively. As expected, boys reported greater felt pressure than girls, but contrary to Hypothesis 3, Grade 6 felt pressure did not differ by ethnicity. In terms of change in felt pressure, we had hypothesized that European French girls would report decreases in felt pressure across time, and that the felt pressure of European French boys would decrease or remain stable. We

had competing hypotheses regarding felt pressure change in North African French adolescents. On one hand, we postulated that if adolescents were becoming more aware of North African French cultural expectations for adult roles, felt pressure would increase. On the other hand, to the extent that adolescents are becoming more aware of French attitudes toward gender norms, reports of felt pressure might decrease during middle school. Results for European French girls and boys supported Hypothesis 4: Reported felt pressure did not change among European French boys, but decreased among European French girls at an average rate of 0.16 per year on the 6-point scale. In contrast, the reported felt pressure of North African French boys increased at an average rate of 0.08 per year, and North African French girls showed the same pattern as European French girls, with average decreases of 0.16 per year across the four years.

Discussion

Whereas a growing literature illustrates the importance of Egan and Perry's (2001) dimensions of gender identity for youth's well-being, few longitudinal studies have examined change in youth's gender typicality and felt pressure for gender conformity during early adolescence. Our study sheds light on ways that these aspects of gender identity development might differ in theoretically-predicted ways for different gender and ethnic/cultural groups. We first discuss gender and ethnic differences in initial (Grade 6) levels of adolescents' gender typicality and felt pressure. Next we consider group differences in change across the four years of the study. We conclude with limitations of this study and suggestions for future research.

Gender and Ethnic Differences in Gender Typicality and Felt Pressure in Early Adolescence

As we had predicted in Hypotheses 1 and 3, girls of both ethnic groups reported lower levels of gender typicality and felt pressure than boys in Grade 6. These results are consistent with prior research showing higher levels of self-reported gender typicality and felt pressure in boys than girls across Black, Hispanic, and non-Hispanic White samples in North America (Corby et al., 2007; Egan & Perry 2001; Smith & Leaper, 2006; Younger et al., 2004). Theorists have suggested that violations of gender norms tend to be tolerated less in boys and men than in girls and women because masculine traits tend to be valued more highly than feminine traits (Auster & Ohm, 2000; Ruble et al., 2006). Given the greater behavioral flexibility afforded to boys and men than to girls and women within traditional Muslim families (Killian, 2006), greater reported felt pressure among North African French girls would not have been surprising.

Nonetheless, our results showed similar gender differences at Grade 6 across the two ethnic groups, with boys in both groups reporting greater gender typicality and felt pressure than girls.

Gender typicality means were above the scale midpoint for all four groups, reflecting that on average adolescents felt that they were typical of their gender. In contrast, felt pressure means for European French and North African French girls were close to 3, indicating some level of disagreement with statements such as “The girls you know would be upset if you wanted to play with boys’ toys.” In contrast, boys’ scores averaged close to 4 for both ethnic groups, indicating that on average, boys agreed with the felt pressure items. Thus, with ethnic groups in which these research questions had previously not been studied, gender differences showing greater flexibility for girls to be non-gender-conforming than boys appears to be the norm (cf. Crouter et al., 2007; Leaper & Friedman, 2007).

We had anticipated that in addition to gender differences in these aspects of gender identity, we would also find ethnic group differences in reports. Because of stronger gendered expectations within North African (Maghrebin) cultures, we expected that adolescents with North African ancestry would report greater gender typicality and stronger felt pressure for gender conformity than European French adolescents. However, contrary to our hypotheses, gender typicality and felt pressure did not differ across the two ethnic groups at the beginning of middle school.

In a sample of Black, Hispanic, and White American fifth graders, Corby et al. (2007) found that whereas ethnic/racial groups did not differ in their gender typicality, Black and Hispanic pre-adolescents had significantly higher felt pressure than their White counterparts, and aspects of gender identity showed different relations to well being across the three groups. Although the study authors noted that ethnic group differences may have emerged in their results because of cultural differences, they hesitated to attribute group differences to cultural factors such as collectivist versus individualist values. Instead, the authors suggested that perhaps Egan and Perry’s (2001) model of gender identity and adjustment has limited applicability across ethnic/cultural groups because of differing meaning ascribed to gender identity constructs (Corby et al., 2007). Therefore, Corby et al. encouraged researchers to measure youth’s conceptions of gender roles.

It is possible that although no ethnic group differences in gender typicality or felt pressure appeared in our sample in Grade 6, nonetheless, those concepts had qualitatively

different meanings for the two ethnic groups. For example, high gender typicality for a North African French girl might include wearing a hijab and showing modesty in public, whereas for a European French girl it might mean wearing make-up and high heels as well as plans to study medicine. Such qualitative differences in the meaning of the two gender identity constructs might exist concurrently with similar mean levels of reports of gender typicality and felt pressure in the two groups. Alternatively, it is possible that no ethnic differences were observed in either dimension because the cultural and ethnic factors that shape gender typicality and felt pressure are simply not salient in early adolescence. Identity exploration in Grade 6 might be in rudimentary stages that do not yet place the individual within the larger cultural context (Kroger, 2003). Thus, cultural/ethnic factors that are likely to shape adolescents' gender identity may not yet be salient to youth.

Developmental Change in Gender Typicality and Felt Pressure

Consistent with the theoretical framework of increasing gender flexibility during adolescence, small but significant declines in gender typicality and felt pressure were observed in European French and North African French girls over the four years of middle school. In a longitudinal study of American youth in Grades 3 through 7, gender typicality and felt pressure were measured twice across a two-year period (Yunger et al., 2004). Fifth through seventh graders reported higher gender typicality and lower felt pressure than third and fourth graders in that study, and on average, youth reported increases in gender typicality across the two time points. Although our results might seem inconsistent with Yunger et al.'s (2004) results, because of age differences in the samples, the results taken together show that gender typicality increases during middle childhood then begins to drop in adolescence—at least among girls. Support for increasing gender flexibility during adolescence also comes from studies of youth's gender role attitudes regarding occupations, traits, and activities (e.g., Bartini, 2006; Liben & Bigler, 2002; Updegraff et al., 2014).

Whereas we predicted decreases in gender typicality and felt pressure in European French girls, we posed competing hypotheses regarding changes for North African French girls, who might be experiencing increasing pressures to conform to traditional gender norms. However, our results indicate that in this sample, North African French girls showed, on average, the same patterns of change as European French girls. It should be noted, however, that more than three-fourths of our North African French sample were born in France. Results might have differed

had a larger proportion of the sample been first generation immigrants.

Turning to results of developmental change in boys, the reported gender typicality of European French boys declined, but did not change among North African French boys. European French boys showed no change in average felt pressure, whereas North African French boys reported increasing felt pressure across the four years. Perhaps the most unexpected result among European French boys was the observed decrease in gender typicality, which was similar to that of their European French and North African French female peers. We expected that greater sanctioning of boys' nontraditional behavior (as compared to that of girls) would act as an important force in boys' behavior, leading them to report either no change, or decrease less than girls in their gender typicality. As was the case among girls, the decline in boys' gender typicality without an increase in felt pressure is testament to the idea that many factors other than social pressures to conform to traditional norms influence youth's perceptions of their gender typicality. Nonetheless, perceptions of gender typicality and felt pressure are likely to inform one another, and provide a fertile ground for future research.

In contrast to the other groups, reported felt pressure of North African French boys increased steadily across the four years, the only results of the study that are consistent with the gender intensification hypothesis. These results support the view that cultural differences in gender norms provide North African French boys less freedom to violate traditional gender norms than that experienced by European French boys, implying that cultural factors must be taken into account in understanding whether gender attitudes become more flexible during adolescence (the gender flexibility hypothesis), or whether they become more traditional (the gender intensification hypothesis). The increased felt pressure reported by North African French boys was in sharp contrast to reports of North African French girls, such that by the end of the study, average felt pressure of North African French girls was almost 1.5 points lower than that of their male counterparts on the 6-point scale. The French school environment that promotes gender equality and individual achievement goals might have helped North African French girls to experience fewer pressures to conform to prescribed gender roles (Zehraoui, 1998).

Gender Development in Diverse Groups and Implications for the School Context

Our results show that perceptions of felt pressure to conform to gender norms followed a different developmental trajectory for North African French boys than for the other groups in our sample. A possible reason for the increased pressure experienced by these boys might be the

mismatch between the high status gender identity of North African French boys (Zehraoui, 1998) and their lower-status ethnic identity due to discrimination from the mainstream culture (Lamont, Morning, & Mooney, 2002; Tiboulet, Dambrun, Tourret, & Uhlen, 2012). Whereas European French boys are also members of a high-status gender group, cultural norms lead to more pronounced power/prestige issues associated with masculinity among the North African French than among the European French (Zehraoui, 1998). Thus, North African French boys might be increasingly aware of the meaning of their masculinity within North African French culture at the same time that they are becoming aware of their lower status as members of an ethnic minority group (Phinney, Horenczyk, Liebkind, & Vedder, 2001).

Studies have shown that Turkish and Moroccan boys in the Netherlands and Latino boys in the U.S. report higher felt gender conformity pressure than same-ethnic girls and ethnic majority boys in those contexts (Bos, Picavet, & Sandfort, 2012; Wilson & Leaper, 2016). Bos et al. (2012) suggested that those boys experienced high felt pressure to be accepted by in-group peers because of the importance of masculinity for self-definition in their non-Western cultures. The higher value and status afforded to boys and men within the North African family model (Zehraoui, 1998) may contribute to increased felt pressure in boys to maintain their gender roles and thus their dominant position within their culture.

The pressure experienced by North African French boys to adhere to traditional gender norms conflicts with dominant norms in French schools, which encourage gender equality (Régner & Loose, 2006). Increased felt pressure in particular may be a consequence of the mismatch between cultural values that place North African males in dominant roles, and the school context in which many women are in positions of authority, and school personnel strive for gender equality. This mismatch may be quite salient for North African French boys in school contexts and undermine their academic motivation and achievement (Auduc, 2011; Conseil National d'Évaluation du Système Scolaire, 2016; Régner & Loose, 2006). Ethnic minority boys are more likely than others to perceive academic success as a feminine trait (Heyder & Kessels, 2013). As a result, these boys may view academic success as irrelevant or even threatening for their gender identity. Research has shown that African American boys tend to view school and teachers as imposing female standards and behavioral expectations, and in response are very active in their constructions of masculinity (Rowley et al., 2014; Sewell, 1997; Spencer, Cunningham, & Swanson, 1995). For boys who are stigmatized in school and society, the

affirmation of their male gender identity could also be a means to regain a sense of self-respect (Gosai, 2009).

Study Limitations and Directions for Future Research

The current study offers novel contributions to the field of gender identity development but is not without limitations. First, the participant sample came from families that were relatively low in socioeconomic status. As in many countries, ethnic minority status in France is confounded with low socioeconomic status (Institut National de la Statistique et des Études Économiques, 2012). In order to have a sample with comparable European French students, participants were recruited from the same schools. Further, most of the participating schools were located in or near a large, urban area, and the majority of North African participants had been born in France. Thus, results of the study cannot be generalized to adolescents from middle- and high-SES families, to those who live in rural areas, or to more recent immigrants. As mentioned above, more recent immigrants from North Africa are more likely to experience greater pressure to conform to traditional cultural ideas, and thus would be likely to report higher gender typicality and felt pressure than adolescents in the current sample. Adolescents from middle- or high-SES families might be more likely than adolescents from low-SES families to have parents who work in professional settings where gender equality is actively promoted, and thus might report lower felt pressure initially as well as drops in both aspects of gender identity as they enter adolescence. Indeed, in American adult samples, higher-income individuals are more likely than lower-income individuals to report egalitarian gender beliefs (e.g., Katz-Wise, Priess, & Hyde, 2010).

Another limitation is that alpha reliabilities for the felt pressure measure were low in the first two years of the study. Although low alpha reliabilities for felt pressure are not uncommon in the literature (Smith & Leaper, 2006), the low reliability might indicate that the measure is inappropriate for this population. Egan and Perry's (2001) gender identity scales were developed with a predominantly White American sample; therefore, some items from these scales might not be culturally appropriate or might not be optimal to capture felt pressure in European French and North African French adolescents. For example, rather than items on sports activities, which are not integrated into the school setting in France as they are in the U.S., it might be more appropriate to ask about adolescents' clothing choices or media consumption. In addition, as

mentioned above, general items such as “You are like other girls/boys your age” would not capture ethnic group differences in cultural conceptions of gender typicality.

Gender identity theory and empirical evidence have established relations between gender typicality and felt pressure and academic, mental health, and psychosocial outcomes in American samples; future research should assess whether these aspects of gender identity are similarly important for the healthy development of youth of other countries and cultures. Within societies in which cultural gender norms and roles are highly traditional and highly proscriptive, decreases in gender typicality might put adolescents, especially boys (here North African French boys), at risk for poorer social, academic, and psychological outcomes.

Finally, future research could explore how socializing agents in adolescents’ lives influence the development of gender identity in differing cultural contexts. It is possible, for example, that family influences are relatively more important and peers are less important for North African French adolescents, whose connections to family networks are often strong (Killian, 2006). Separate measurement of felt pressure from same-culture peers, different-culture peers, and from parents would show to what extent immigrant youth have competing pressures to follow proscribed gender norms. The role of teachers as socializing agents in adolescents’ gender identity development might also be important, particularly for youth who experience cultural conflict between their parents’ views of acceptable behavior and what is viewed as normative outside the home. Indeed, it has been suggested that for North African girls, the school context can act as means of escape from traditional gender roles and norms, as girls are encouraged to achieve in school (Zehraoui, 1998).

As one of the first longitudinal examinations of gender typicality and felt pressure for gender conformity in adolescents, one of the most important contributions of this study is the measurement of change during early adolescence in these dimensions of gender identity. In addition, this study is one of the first to measure youth’s gender typicality and felt pressure with a sample outside of the U.S. (see Vantieghem & Van Houtte, 2015, and Vantieghem et al., 2014, for studies of gender typicality in Belgian (Flemish) youth). Our results primarily support theoretical perspectives that posit increasing flexibility of gender norms during adolescence, but with important gender and ethnic variations both in levels of identity dimensions in early adolescence and in longitudinal patterns of change. Future research might further enrich our understanding of possible parallels between the development of North African French boys and

boys who are in other racial/ethnic minority contexts, as well as better illuminating the causes and consequences of felt pressure for gender conformity in these youth.

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Table 1

Means, Standard Deviations, Sample Size and Bivariate Correlations for Gender Typicality with European French and North African French Adolescents by Gender

	European French											
	Girls						Boys					
	<i>M</i> (SD)	<i>n</i>	1	2	3	4	<i>M</i> (SD)	<i>n</i>	1	2	3	4
1. Gender Typicality T1	3.72 (1.27)	185	-				4.03 (1.48)	202	-			
2. Gender Typicality T2	3.66 (1.35)	212	.56**	-			4.10 (1.50)	194	.37**	-		
3. Gender Typicality T3	3.52 (1.29)	211	.47**	.61**	-		4.01 (1.26)	205	.39**	.50**	-	
4. Gender Typicality T4	3.35 (1.15)	203	.37**	.45**	.55**	-	3.80 (1.25)	195	.25**	.39**	.46**	-
	North African French											
	Girls						Boys					
	<i>M</i> (SD)	<i>n</i>	1	2	3	4	<i>M</i> (SD)	<i>n</i>	1	2	3	4
1. Gender Typicality T1	3.71 (1.64)	190	-				4.10 (1.25)	178	-			
2. Gender Typicality T2	3.61 (1.69)	181	.41**	-			4.13 (1.53)	173	.51**	-		
3. Gender Typicality T3	3.53 (1.66)	182	.24**	.47**	-		4.21 (1.53)	170	.37**	.63**	-	
4. Gender Typicality T4	3.14 (1.53)	158	.27**	.27**	.52**	-	4.05 (1.58)	138	.41**	.51**	.64**	-

Note: ** $p < .01$

Table 2

Means, Standard Deviations, Sample Size and Bivariate Correlations for Felt Pressure with European French and North African French Adolescents by Gender

	European French											
	Girls						Boys					
	<i>M</i> (SD)	<i>n</i>	1	2	3	4	<i>M</i> (SD)	<i>n</i>	1	2	3	4
1. Felt Pressure T1	3.07 (0.71)	185	-				3.89 (0.60)	202	-			
2. Felt Pressure T2	2.91 (0.74)	212	.51**	-			3.94 (0.66)	194	.41**	-		
3. Felt Pressure T3	2.77 (0.83)	211	.39**	.43**	-		3.99 (0.85)	205	.30**	.39**	-	
4. Felt Pressure T4	2.56 (0.64)	203	.29**	.39**	.49**	-	3.90 (0.94)	195	.24**	.39**	.46**	-
	North African French											
	Girls						Boys					
	<i>M</i> (SD)	<i>n</i>	1	2	3	4	<i>M</i> (SD)	<i>n</i>	1	2	3	4
1. Felt Pressure T1	3.06 (1.64)	190	-				3.99 (0.84)	178	-			
2. Felt Pressure T2	2.88 (1.69)	182	.33**	-			4.07 (0.94)	172	.35**	-		
3. Felt Pressure T3	2.77 (1.66)	182	.30**	.38**	-		4.12 (0.93)	170	.23**	.31**	-	
4. Felt Pressure T4	2.71 (1.53)	159	.25**	.37**	.51**	-	4.17 (0.91)	138	.15	.31**	.44**	-

Note: ** $p < .01$

Table 3

Unconditional Latent Growth Curve Model for Gender Typicality for European French and North African French Adolescents by Gender

	European French		North African French	
	Girls	Boys	Girls	Boys
	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)	<i>b</i> (SE)
Factor Means				
Intercept	3.75 (0.06)***	4.09 (0.06)***	3.75 (0.06)***	4.09 (0.06)***
Slope	-0.12 (0.02)***	-0.12 (0.02)***	-0.12 (0.02)***	0.01 (0.03)
Factor Variances				
Intercept Variance	0.85 (0.13)***	1.10 (0.11)***	0.79 (0.18)***	0.70 (0.15)***
Slope Variance	0.06 (0.03)**	0.10 (0.02)**	0.11 (0.04)*	0.07 (0.04)
Factor Covariance between Intercept and Slope	-0.12 (0.03)***	-0.22 (0.05)**	-0.13 (0.07)	-0.02 (0.05)

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

Unconditional Latent Growth Curve Model for Felt Pressure for European French and North African French Adolescents by Gender

	European French		North African French	
	Girls	Boys	Girls	Boys
	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>
Factor Means				
Intercept	3.08 (0.04)***	3.95 (0.08)***	3.08 (0.04)***	3.95 (0.09)***
Slope	-0.16 (0.02)***	0.00 (0.02)	-0.16 (0.02)***	0.08 (0.03)**
Factor Variances				
Intercept Variance	0.47 (0.08)***	0.29 (0.07)***	0.24 (0.15)***	0.38 (0.23)***
Slope Variance	0.05 (0.02)**	0.05 (0.02)*	0.04 (0.05)*	0.08 (0.06)*
Factor Covariance between Intercept and Slope	-0.09 (0.03)**	-0.04 (0.03)	-0.02 (0.03)	-0.09 (0.11)

Note: * $p < .05$, ** $p < .01$, *** $p < .001$