



Published in final edited form as:

Child Dev. 2009 ; 80(5): 1531–1544. doi:10.1111/j.1467-8624.2009.01349.x.

Adolescent Gender-Role Identity and Mental Health: Gender Intensification Revisited

Heather A. Priess, Sara M. Lindberg, and Janet Shibley Hyde

Department of Psychology, University of Wisconsin—Madison.

Abstract

Gender intensification, an increased pressure for adolescents to conform to culturally sanctioned gender roles, has been posited as an explanation for the emergence of the gender difference in depression. This longitudinal study assessed whether individuals became more stereotypical in their gender-role identity across adolescence, and whether such patterns predicted depressive symptoms. Girls reported higher femininity than boys at ages 11, 13, and 15, but girls and boys did not differ in masculinity. Contrary to prevailing views, there was not evidence of intensification in femininity or masculinity. Positive trajectories in masculinity for both girls and boys predicted fewer depressive symptoms, particularly at moderate levels of stress. Findings suggest a need to reconceptualize gender intensification in ways that characterize contemporary adolescence.

The gender intensification hypothesis, proposed by Hill and Lynch (1983), states that beginning in adolescence, girls and boys face increased pressure to conform to culturally sanctioned gender roles. These pressures come from a variety of sources that convey messages about appropriate gender roles, such as parents, peers, educators, and the media. In the face of these pressures, adolescents are thought to become more differentiated in their gender-role identities, which presumably will be adaptive for their adult roles as women and men. Gender intensification has been used to explain an array of characteristics in which gender differences emerge or intensify during adolescence. As such, the concept is intuitively appealing because it so readily explains these systematic changes. Nonetheless, little empirical research has directly tested the gender intensification hypothesis. The purpose of the present research, therefore, was to test two key assumptions underlying gender intensification: the divergence of girls and boys in their gender-role identities across adolescence and the ability of gender intensification to explain the emergence of the gender difference in depressive symptoms, which occurs in adolescence.

Gender Intensification and Gender-Role Identity

When Hill and Lynch (1983) proposed their gender intensification hypothesis 25 years ago, they commendably integrated a vast literature regarding adolescent gender differences and similarities, addressing domains such as psychological well-being, mental health, academic and career aspirations, and parent and peer relationships. Although little empirical research

existed at the time regarding parent and peer socialization of gender roles in adolescence, Hill and Lynch were clearly interested in how adolescents came to be socialized into gendered roles and behaviors, suggesting that these pressures intensified during adolescence with the onset of puberty and resulted in increased attraction from opposite-sex partners and better adaptation for adult roles. In their literature review, which was based primarily on studies conducted in the United States, Hill and Lynch reported that across adolescence and relative to boys, girls became more self-conscious, reported lower self-esteem, were more concerned with interpersonal relationships and with their physical appearance, and were more likely to be accommodating and compliant in their interactions with others. Parents were seen as an important contributor to these changes. For instance, parents were more likely to encourage independence, achievement, self-confidence, and competitiveness in sons than daughters, and more expressivity, warmth, and courtesy for others in daughters compared with sons (Hill & Lynch, 1983). The messages that parents conveyed varied with their own gender-role identities, particularly for fathers. As daughters developed, mothers and traditionally masculine fathers increasingly discouraged instrumentality and autonomy for girls, whereas egalitarian, androgynous fathers increasingly encouraged autonomy (Lynch, 1981 as cited in Hill & Lynch, 1983). These studies imply that parents, at least a few decades ago, had distinct developmental goals for their daughters and sons, which may in turn have affected their children's gender-role identities.

More recently, research has explored the nature of gender development in everyday family life. Crouter, Manke, and McHale (1995) conducted a one-year longitudinal study in the United States of 144 young adolescents (fourth and fifth graders). Among other criteria, participants were selected if they were the oldest children in their families and had younger siblings, allowing them to explicitly test the impact of sibling constellation and other family contextual factors on gender-role development. Crouter and colleagues observed that during the transition to adolescence, girls and boys became more sex-typed in their household chores, particularly in families with traditional gender divisions of labor, and that girls and boys spent increasing amounts of time with the same-sex parent, particularly if opposite-sex siblings were present in the home. Likewise, in families with both girls and boys, girls reported more warmth from their mothers and less warmth from their fathers compared to brothers' reports of warmth across the transition to adolescence (Shanahan, McHale, Crouter, & Osgood, 2007).

The trajectories of child and adolescent attitudes toward traditional gender roles also vary by individual characteristics and family context. For instance, Crouter and colleagues found that girls tended to become less traditional in their gender role attitudes across adolescence whereas boys first declined and then increased in traditionality of gender role attitudes; however, these patterns varied with children's age, gender, and birth order, as well as with their parents' traditional gender role attitudes and the gender of younger siblings (Crouter, Whiteman, McHale, & Osgood, 2007). Notably, the shifts in attitudes and behavior reported in these studies tended to occur during the transition to adolescence and illustrated how the family context might influence the nature and extent of gender intensification.

The gender intensification hypothesis posits that, as adolescents experience these and other socializing influences, they will become more stereotypical in their gender-role identities

and gendered attitudes and behaviors. These consequences of gender intensification are commonly examined with classic sex-role inventories, such as the Bem Sex Role Inventory (Bem, 1974) and the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1974; 1975), which allow researchers to measure the extent to which individuals perceive themselves in stereotypically gendered ways. Research regarding the intensification of gender-role identities in adolescence has yielded mixed results. In their analysis of data collected from 200 adolescents in the United States in the late 1970s, Galambos, Almeida, and Petersen (1990) reported that sixth grade boys were more likely than similarly aged girls to endorse masculine items on the Bem Sex Role Inventory. The magnitude of this gender difference increased across grades seven and eight, providing evidence of intensification in masculinity. Girls were more likely than boys to endorse feminine items in sixth grade; however, both genders increased in femininity across grades seven and eight, indicating a gender difference, but not intensification, in femininity.

Boldizar (1991) reported gender-role identity data for a more recent cohort of children and adolescents in the United States in her paper outlining a derivation of the Bem Sex Role Inventory for use with children (Children's Sex Role Inventory). In her cross-sectional data, she found that on average, boys were consistently higher than girls on masculinity across grades three through seven. Likewise, girls were consistently higher than boys on femininity, although this difference was larger at grades three and seven and smaller at grades four and six, indicating that gender differences were largest earlier in childhood and as participants approached adolescence. A one-year follow-up study did not indicate differentiation in gender-role identity. These results provide unclear evidence regarding systematic changes over time in gender-role identity.

Somewhat similar results have been reported internationally. In a large, national, cross-sectional study, Wichstrøm (1999) examined femininity and masculinity in 12,287 Norwegian adolescents ages 12–20, using a brief version of the Bem Sex Role Inventory. He found that boys endorsed slightly more masculine items overall (though at many ages this difference did not reach significance), whereas girls consistently scored higher in femininity. The magnitude of these gender differences did not vary by age; that is, older adolescents were not more gender-differentiated than were younger adolescents.

The research on intensification of gender-role identities is clearly mixed, with some researchers reporting large gender differences and evidence of intensification, and others reporting smaller differences and fewer instances of intensification, particularly in recent cohorts of adolescents. Furthermore, the degree to which adolescents become differentiated in their gender-role identities may depend on their environment, particularly their family context. Thus, our first goal in the current study was to clarify whether gender differences and gender intensification exist in contemporary adolescents' gender-role identities and to determine whether gender-role trajectories vary by family context. First, however, we turn to a common application of gender intensification – its potential ability to explain the emergence of a gender difference in depressive symptoms.

Gender Intensification and the Gender Difference in Depression

The gender difference in depression and depressive symptoms is one of the most consistent findings in the depression literature, and this difference emerges at about ages 13–14 (Ge, Lorenz, Conger, Elder, & Simons, 1994; Hankin, Abramson, Moffitt, Silva, McGee, & Angell, 1998). By early adulthood, women are twice as likely to be depressed as are men, a difference that holds in both community and clinical samples and cannot be explained by gender differences in help-seeking behavior (Nolen-Hoeksema, 1987; Nolen-Hoeksema & Girgus, 1994). Given the magnitude and timing of this gender difference, gender intensification has been proposed as one explanation for the gender difference in depression and depressive symptoms (e.g., Davies & Windle, 1997; Petersen, Sarigiani, & Kennedy, 1991; Wichstrøm, 1999; Windle, 1992). This potential association rests primarily on a large, cross-national, and mostly cross-sectional gender-role literature that links high masculinity – whether “sex-typed” as masculine or androgynous and whether female or male – to psychological well-being (Bassoff & Glass, 1982; Taylor & Hall, 1982) and lower endorsement of depressive symptoms in adults (Napholz, 1994; Stoppard & Paisley, 1987; Whitley, 1985) and adolescents (Allgood-Merten, Lewinsohn, & Hops, 1990; Craighead & Green, 1989; Hart & Thompson, 1996; Wilson & Cairns, 1988). Mediation analyses suggest that masculinity may reduce depressive symptoms because it is positively associated with self-efficacy (Whitley, 1985), perceived competence (Wilson & Cairns, 1988), or self-esteem (Craighead & Green, 1989).

A smaller, inconsistent literature has suggested that femininity increases one’s likelihood of depression and depressive symptoms, perhaps by encouraging emotionality, helpless styles of coping with stress, or sacrifice of one’s own needs for those of others (Aubé, Fichman, Saltaris, & Koestner, 2000; Broderick & Korteland, 2002; Wichstrøm, 1999). In a series of meta-analyses, Whitley (1985) reported that the effects of femininity on depression were inconsistent, whereas others have found no effects of femininity in U.S., Canadian, and British samples (Allgood-Merten et al., 1990; Aubé et al., 2000; Craighead & Green, 1989; Petersen et al., 1991; Wilson & Cairns, 1988). In contrast, Wichstrøm (1999) found a concurrent positive correlation between femininity and depressive symptoms, particularly in older adolescent girls compared with young adolescents and boys. Similarly, Aubé and colleagues (2000) reported that “feminine” qualities, such as feeling overly responsible for others’ welfare and difficulty in asserting oneself, concurrently predicted depressive symptoms in Canadian teenagers. However, there were not consistent gender differences in these interpersonal characteristics, and these qualities did not explain the gender difference in symptoms.

Thus, there exists consistent evidence that masculinity is negatively associated with depression and depressive symptoms, perhaps by conferring self-efficacy and self-esteem. In contrast, some researchers have argued that femininity may influence depression by encouraging a helpless or overly emotional style of coping with stress, but the evidence for this is unclear. If girls and boys do become more differentiated in their gender-role identities during adolescence, such that girls become relatively more feminine and boys become relatively more masculine, then gender intensification could lead to a gender difference in depressive symptoms, particularly when individuals with low masculinity or high femininity

face stressful conditions. The second goal of the current study was to examine this possibility.

The Current Study

The present research tested key assumptions underlying gender intensification in a contemporary cohort of adolescents using longitudinal data. First, we examined whether individuals become more stereotypical in their gender-role identities across adolescence, and whether these trajectories were influenced by family characteristics such as family socioeconomic status or sibling composition, as suggested by previous research. Second, we considered whether intensification of gender-role identities, if it occurred, could explain the development of depressive symptoms and the emergence of a gender difference in depression. Here we tested two models – one in which the relation between gender-role identity and depressive symptoms is simple and direct, as proposed by some researchers, and an alternative, interactive model in which gender-role identity is conceptualized as an individual characteristic that may confer a vulnerable style of coping with stress. Thus, the latter model examined gender-role identity-by-stress interactions to determine whether the influence of gender-role identity on depressive symptoms depended on stress.

Few studies have examined the relation between gender-role identity and depressive symptoms longitudinally, and to our knowledge, research has not yet drawn upon appropriate methodology and analytic techniques to examine whether *changes* over time in masculinity and femininity – gender intensification – predict later depressive symptoms or trajectories of symptoms. Therefore, we addressed both research questions by modeling latent growth curve trajectories of gender-role identity and depressive symptoms across adolescence. This analytic technique offers a more direct test of gender intensification than was allowed by earlier statistical methods.

Method

Participants

Participants were 410 adolescents (210 female) in the United States who have been part of the longitudinal Wisconsin Study of Families and Work since birth (formerly named the Wisconsin Maternity Leave and Health Project; see Hyde, Klein, Essex, & Clark, 1995). Participants were originally recruited from the Madison and Milwaukee, Wisconsin areas and currently reside in a range of communities, including a large Midwestern city, a small Midwestern city, several small towns, and rural areas. Of participants in the present study, 89.3% were White, 1.7% African American, 1.7% Hispanic, 1.2% American Indian/Alaskan, and 6.15% biracial or multiracial. Participants are ethnically representative of the communities from which they were recruited.

Average annual family income at the beginning of the study (1990–91), at which time children's parents were married or living together (a condition of inclusion), was \$49,500 (median = \$45,000, range \$2,000 – \$200,000). In 1991, the median income of married couple families in the United States with the wife in the paid labor force was \$48,169 (U. S. Department of Labor, 1993). Therefore, the sample matches the national figure well. The

mothers' occupations were coded using the Bose index of occupational status (Bose, 1985), which ranges from 10 to 100 (physician = 100, registered nurse = 65, bookkeeper = 43, private household cleaner = 16). The mean for our sample was 52.7 (range 25 – 100); the national mean for women based on the census of occupations is 50.3 (Bose, 1985, p. 193). Again, our sample matches national statistics well.

Data were collected during the summer following grades five (mean age 11.52, $SD = 0.31$; summers of 2002 and 2003), seven ($M = 13.53$, $SD = 0.33$; summers of 2004 and 2005), and nine ($M = 15.5$, $SD = 0.33$; summers of 2006 and 2007). These ages were chosen because they capture the transition to adolescence, when we would expect to see intensification of gender-role identity (Hill & Lynch, 1983), as well as middle adolescence, when we expect the gender difference in depressive symptoms to emerge (Hankin et al., 1998). The present study included data from all participants who completed at least one of these three assessment waves, which is 74.8% of those who first participated at one month of age. Participants who remained in the study at adolescence did not differ from those who discontinued participation prior to adolescence in terms of race/ethnicity, family income, or parents' depressive symptoms. Likewise, of those participants who completed at least one adolescent assessment, those who participated in a given assessment ($N = 316$ at age 11, 375 at age 13, and 340 at age 15) were similar to those who did not participate in that assessment in race/ethnicity, family income, parents' depressive symptoms, own depressive symptoms, masculinity, and femininity at age 11. Reports of femininity were slightly higher among participants than non-participants at age 13, $t(375) = 2.05$, $p = 0.04$, $\eta^2 = 0.01$, and at age 15, $t(339) = 2.06$, $p = 0.04$, $\eta^2 = 0.01$. Although this indicates extremely small but significant differences in femininity based on participation, it is unclear why this group difference exists. However, given the small magnitude of these effects, we do not believe that these differences substantially affect the results reported below. The smaller sample size at age 11 than at age 13 was the result of a funding shortage that kept the researchers from collecting data with all potential participants at age 11.

Procedure

Participants completed a number of questionnaires administered on a laptop computer during in-home visits. These questionnaires included measures of gender-role identity, depressive symptoms in the past two weeks, and significant life events in the past year, all of which were collected at all three assessments. In addition, parents answered questions regarding family income, mother's education level, and number and gender of siblings older than the participating adolescent.

Measures

Gender-role identity—Gender-role identity was measured using a 15-item version of the Children's Sex Role Inventory (CSRI; Boldizar, 1991), which was derived from the Bem Sex Role Inventory (Bem, 1974) and adapted for use with children and adolescents. The Children's Sex Role Inventory was normed on children in grades three through eight and exhibits strong correlations ($r = 0.86$ – 0.89) with the Bem Sex Role Inventory in older populations, suggesting that among older participants, scores on the Children's Sex Role Inventory and the Bem Sex Role Inventory are comparable. This measure has been used

successfully in previous research on gender and depression in adolescence (e.g., Aubé et al., 2000 with participants ages 11 to 16). Participants rated on a 4-point scale the degree to which they identified with traditionally feminine and masculine statements, such as “I care about what happens to others” for femininity and “I am good at taking charge of things” for masculinity. The Children’s Sex Role Inventory has demonstrated good internal consistency ($\alpha = .84$ for femininity, $.75$ for masculinity), adequate test-retest reliability over one year ($.71$ for femininity, $.56$ for masculinity) and excellent validity (Boldizar, 1991). In the present study, internal consistency across assessment waves ranged from $.80$ to $.82$ for the femininity scale and $.71$ to $.73$ for the masculinity scale.

Depressive symptoms—Depressive symptoms were assessed with the short (10-item) form of the Children’s Depression Inventory (CDI), which is the abbreviated version of the full (27-item) form (Kovacs, 1981). Each item presents three statements of increasing severity, to assess affective, behavioral, and cognitive symptoms of depression. For each item, adolescents were asked to pick which of three statements best described them in the past two weeks, for instance, by choosing “I was sad once in a while,” “I was sad many times,” or “I was sad all the time,” to produce a three-point scale for each item. Answers to individual items are typically summed, such that a CDI score can range from 0 to 54 on the full CDI and 0 to 20 on the short CDI. In the current study, however, mean item responses are instead reported to avoid confusion between the 10-item and 27-item forms of the CDI. In large, normative community samples of children and adolescents in the United States, mean summed scores have ranged from approximately 6.84 to 11.26 on the full CDI (Chartier & Lassen, 1994; Finch, Saylor, & Edwards, 1985; Smucker, Craighead, Craighead, & Green, 1986), which is equivalent to 2.53 to 4.17 on the short CDI, or 0.25 to 0.42 on an individual item. The CDI has demonstrated good internal consistency (typically $.71$ to $.89$) and adequate test-retest reliability (typically $.72$ to $.87$) (e.g., see Kovacs, 1981; Saylor, Finch, Spirito, & Bennett, 1984; Smucker et al., 1986), and has been widely used in depression research (Sitarenios & Stein, 2004). In the present study, internal consistency across assessment waves for the CDI short form ranged from $.69$ to $.77$.

Negative life events—Stressful experiences were measured with a 59-item version of the Adolescent Perceived Events Scale (APES; Compas, Davis, Forsythe, & Wagner, 1987), which assesses the number of significant life events an adolescent has experienced in the previous year in the domains of family, friends, school, and romantic relationships. Adolescents noted which of 59 events they had experienced in the past year and then rated the degree to which each experienced event was negative or positive, with scores ranging from -4 (*extremely bad*) to $+4$ (*extremely good*). For the purposes of the present study, events rated with a negative score at age 15 were summed to determine the number of negative life events an adolescent had experienced in the past year. Measures of internal consistency are not meaningful on this measure since occurrences of significant life events are largely independent.

Analytic Technique

The following analyses were conducted using latent growth curve and path models in Mplus (Muthén & Muthén, 2007), which have several distinct advantages over other types of

analyses (Kaplan, 2000). First, latent growth curves allow one to model trajectories in a given construct, such as the pattern of changes over time in gender-role identity or depressive symptoms, if measures were collected at three or more time points (Muthén, 2003; Willett & Sayer, 1994). Second, path models allow for simultaneous analysis of all parts of a model, such as mediating processes (Kaplan, 2000), rather than needing to parse tests of mediation into three or more analyses. Finally, sophisticated statistical programs such as Mplus offer state-of-the-art methods for handling missing values using an approach proposed by Arbuckle (1996), in which separate means and covariances are calculated for each group of participants who have the same pattern of data completion and then combined to predict the log likelihood for the full sample using full information maximum likelihood. This technique is particularly useful given the common problem of missing values in longitudinal studies, and allowed us to use data from all participants who completed at least one assessment.

In each latent growth curve model, data from assessment waves were used to estimate latent “intercepts” and “slopes”. The intercept represents scores at one point in time, and can be set to a time point of interest, such as the beginning or end of data collection. The slope represents the trajectory, or pattern of change over time in a construct. Multiple fit indices were used to assess goodness of fit, including the Comparative Fit Index (CFI; ideal >.95), the Tucker-Lewis Index (TLI; ideal >.95), the root mean squared error of approximation (RMSEA; ideal <.06), and the χ^2 test of model fit (ideally non-significant).

Results

Descriptive Statistics

Table 1 displays descriptive statistics for mean ratings of femininity, masculinity, and depressive symptoms, by gender and age. We reported mean item endorsement of depressive symptoms, rather than summed scores, to avoid confusion between the 10-item and 27-item forms of the CDI. These results indicate that the present sample exhibited slightly fewer depressive symptoms than national averages but varied markedly from person to person.

Gender-Role Intensification

First, we analyzed a latent growth curve model (Figure 1) to determine whether there were gender differences in gender-role identity at age 11 (following fifth grade) and in linear trajectories across ages 11 to 15 (fifth to ninth grades). As shown in Table 2 (Model 1a), girls were higher in their reports of feminine gender-role identity at age 11 (femininity intercept, or FI), whereas the genders did not differ in their trajectories (femininity slope, or FS), with both girls and boys showing slight increases in femininity from age 11 to 15. That is, girls consistently endorsed more feminine items than boys, but there was no evidence of intensification. There was no gender difference in masculinity at age 11 (masculine intercept, or MI), and there was also no difference in trajectories of masculinity (masculinity slope, or MS), with both girls and boys showing, on average, no change in masculinity from age 11 to 15. That is, girls and boys did not differ in masculinity at age 11 or over time.

Gender-role identity varied somewhat by family characteristics, as indicated by the addition of these factors to Model 1 (Table 2, Model 1b). The gender difference in feminine gender-role identity at age 11 was no longer significant. However, gender differences in the linear slopes for both femininity and masculinity indicated that in both cases, it was girls who exhibited increases in gender-role identity.

Follow-up tests to significant interactions revealed gender-specific effects. Among girls, mothers' education was positively associated with the femininity intercept but negatively associated with the femininity slope. That is, mothers with more education had daughters whose femininity scores were slightly higher in late childhood, but whose femininity scores were less likely to increase from age 11 to 15. In addition, girls with older brothers showed marginally less increase in femininity (femininity slope) than did girls without older brothers, who exhibited greater increases in femininity.

Among boys, family income was positively associated with masculinity at age 11 (masculinity intercept). Increases in mothers' education, decreases in family income, and presence of older brothers predicted increases in masculinity across the transition to adolescence (masculinity slope). In other words, boys whose mothers had more education and boys with older brothers had masculinity scores that increased more sharply from age 11 to 15. Boys whose families had higher income had slightly higher masculinity scores in late childhood but more notably declining masculinity scores from age 11 to 15.

Emergence of Gender Difference in Depressive Symptoms

Next, we examined whether there were gender differences in depressive symptoms. Due to the positive skew of the distribution of depressive symptoms, these scores were log-transformed prior to analyses. We developed a latent growth curve model similar to that for gender-role identity, with the exception that we set the intercept to age 15 rather than 11. This modification allowed us to consider whether a gender difference was present by age 15 and to make use of the greater variance in individuals' scores at this time point. Table 3 (Model 2) shows that on average, girls were higher in their endorsement of depressive symptoms at age 15 than boys, and they showed a steeper increase in their symptoms from ages 11 to 15.

Gender-Role Intensification and Depressive Symptoms

In Model 3, we combined the latent growth curves from Models 1a and 2 to examine the relation between gender-role identity and depressive symptoms, and more specifically, whether gender-role identity mediated the relation between gender and depressive symptoms (Figure 2). Although a gender difference in femininity remained, femininity was not associated with depressive symptoms (Table 3; Model 3a). In contrast, the masculinity trajectory was related to depressive symptoms: those individuals who increased in masculinity over ages 11 to 15 were less likely to increase in depressive symptoms over time and endorsed fewer depressive symptoms at age 15. However, the lack of a gender difference in masculinity signaled that masculinity did not explain the gender difference in depressive symptoms. Indeed, with the addition of latent gender-role identity variables as mediators, the gender difference in depressive symptoms at age 15 remained significant,

while the depressive trajectory was reduced to marginal significance ($p < 0.07$). Thus, after controlling for gender-role identity, there was little change in the relation between gender and depressive symptoms, suggesting that gender-role identity did not explain this gender difference.

Because model fit was poor for Model 3, we modified pathways to remove femininity from the model. The resulting model showed greatly improved fit and indicated that steeper masculinity trajectories were associated with flatter symptom trajectories from age 11 to 15 and lower endorsement of depressive symptoms at age 15 (Table 3; Model 3b). Once again, gender-role identity did not mediate the gender difference in depressive symptoms.

Consistent with previous gender-role literature, therefore, we found negative associations between masculinity and depressive symptoms, and no associations between femininity and depressive symptoms.

Gender-Role Intensification in Interaction with Negative Life Events

Given the failure of gender intensification to predict depressive symptoms, we proposed a final, interactive model in which the relation between gender-role identity and depressive symptoms depended on amount of stress. Specifically, we tested whether gender-role identity at age 11 or across adolescence interacted with the number of negative life events the adolescent had experienced in the past year to predict depressive symptoms in the past two weeks. In this model, gender differences in depressive symptoms were no longer significant, due in large part to girls' higher report of negative life events. Two significant interactions emerged. As shown in Table 3 (Model 4), there was a significant stress-by-femininity slope interaction predicting the depressive intercept and a significant stress-by-masculinity slope interaction predicting the depressive slope. To provide follow-up tests to these interactions, participants were grouped into quartiles based on their reports of negative life events, which allowed us to capture low, moderate-low, moderate-high, and high levels of stress, relative to the stress experienced by other adolescents. We found that masculinity was only protective for depressive symptoms among adolescents with moderate-low levels of stress (those in the second lowest quartile), as shown by a negative relation between the masculinity and depressive symptoms slopes. At lower and higher levels of stress, gender-role identity was unrelated to depressive symptoms. Once again, there was no gender difference in masculinity, suggesting that this association did not explain the gender difference in depressive symptoms. Finally, despite a stress-by-femininity slope interaction, femininity did not predict depressive symptoms for any group.

Discussion

The gender intensification hypothesis contends that, beginning in adolescence, girls and boys face increased pressures to conform to stereotypical gender roles, which in turn causes them to develop increasingly differentiated gender-role identities, attitudes, and behaviors. This process has also been used to explain the emergence of the gender difference in depression and depressive symptoms in adolescence. Although gender intensification has offered a compelling and intuitive explanation for adolescent gender differences, our findings did not support intensification of gender-role identity in adolescence. Furthermore,

gender-role identity trajectories, specifically in masculinity, predicted depressive symptoms but by themselves did not explain the gender difference in symptoms since girls and boys did not differ in their masculinity trajectories.

Gender Intensification

Our finding that gender differences in masculinity may have disappeared in recent cohorts of adolescents mirrors that of Wichstrøm (1999), who found small to non-significant masculinity differences in Norwegian adolescents. It may be the case that it remains more acceptable, and perhaps even encouraged, for girls to take on “masculine” traits and behaviors such as confidence in one’s abilities, competitiveness, leadership roles, and participation in sports, than it is for boys to take on “feminine” traits such as gentleness and kindness, concern for interpersonal relationships, and emotional expression. Indeed, numerous studies have found that parents and peers are more likely to disapprove of gender-role violations in boys than in girls (Kane, 2006; Martin, 1990; McCreary, 1994; Petersen et al., 1991; Sirin, McCreary, & Mahalik, 2004). Furthermore, the masculine role generally enjoys higher status than the feminine role (Feinman, 1981; 1984), which may lead girls to adopt masculinity more readily than boys adopt femininity. Another possibility, given that many of the femininity items in the Children’s Sex Role Inventory tap interpersonal orientation, is that these gender differences reflect a lag in boys’ relationships relative to those of girls. For instance, Way and Green (2006) found that girls reported high-quality friendships across adolescence, whereas boys slowly increased in their reports of high-quality friendships, not becoming level with girls until age 18. It may be that girls and boys will eventually converge on feminine items of interpersonal relationships if they are followed for a few more years.

More generally, however, remains the question of gender intensification. Hill and Lynch (1983) provided an exceptional synthesis of the literature on the gendered nature of adolescence, but from the beginning it has been unclear whether gender intensification actually *explains* adolescent gender differences, or if it rather has provided a handy way to *describe* differences. That our results do not provide evidence of intensification in gender-role identity, nor in the ability of intensification to explain its common application to the gender difference in depressive symptoms, leads us to question gender intensification as an explanatory mechanism and to conclude that adolescents do not necessarily perceive themselves in a more gendered light as they develop.

Another possibility is that Hill and Lynch were accurate in their description of gender intensification 25 years ago, but that patterns of socialization and adolescents’ gender-role identities have changed over a quarter of a century. Contemporary adolescents may not feel these socialization pressures to the degree experienced by earlier cohorts or may do so only in a limited number of domains. These possibilities remain an important question for future research.

Finally, although we did not find support for gender intensification in general, trajectories of gender-role identity varied somewhat with family characteristics. For instance, when older brothers were present, girls showed smaller increases in femininity and boys showed greater increases in masculinity compared to adolescents who did not have an older brother. This

finding demonstrates that the gendered context of one's family may influence one's own development, as has been previously demonstrated by Crouter and colleagues (1995, 2007). Reasons for associations between gender-role identity and socioeconomic family characteristics, such as parental education and income, are less clear and signal a need for better understanding of the gendered nature of adolescent development within various socioeconomic contexts.

Gender-Role Identity and Depressive Symptoms

Our findings regarding depressive symptoms align with an extensive gender-role literature that links masculinity to lower rates of depressive symptoms. Thus, our results indicate that this pattern appears to hold among contemporary adolescents. Interestingly, however, this association was most pronounced among adolescents who had experienced moderate levels of stress in the previous year. This finding may be explained by various diathesis-stress models of depression, in which specific vulnerabilities exert the most impact when stress is moderate, as opposed to very low (where depression is unlikely for most individuals) or high (when depression is much more likely for a range of individuals) (e.g., gene-by-stress interactions; see Kendler, Kuhn, Vittum, Prescott, & Riley, 2005). If future research supports this possibility, then the adoption of masculine gender-role characteristics may offer protection against depression and depressive symptoms.

Another new finding in our study was that gender-role identity did not explain the gender difference in depressive symptoms, in part because there was no gender difference in masculinity and because boys and girls differed only in femininity, which did not predict depressive symptoms. Several possibilities exist with regard to potential connections between femininity and depressive symptoms. It may be that femininity is indeed unrelated to depressive symptoms, as prior research has suggested, despite longstanding assumptions that there is something depressive or otherwise psychopathological about femaleness. On the other hand, the relation between femininity and depression may be more complex than previously considered. For instance, the interpersonal nature of the feminine role, as tapped by classic sex-role inventories, could result in competing outcomes. For some girls, closer friendships may offer social support that protects against depressive symptoms (Colarossi & Eccles, 2000; Jackson & Warren, 2000), whereas for other girls, these relationships may provide opportunities for co-rumination and stress generation, which would increase one's likelihood of depressive symptoms (Broderick & Korteland, 2002; Rose, 2002; Rose & Rudolph, 2006). Furthermore, even if femininity does confer vulnerability to depressive symptoms, it may be in itself an insufficient predictor, and instead act as a moderator to increase depressive symptoms in those who have other vulnerabilities. A fruitful direction for future research, therefore, would be to examine more complex and interactive ways in which femininity might predict depression and depressive symptoms and to also consider the possibility that femininity is itself unrelated to depression.

Limitations and Future Directions

An advantage of the present research is that it assessed gender intensification in a group of adolescents who came from families that were diverse socioeconomically. Likewise, this research and other studies have included as participants adolescents who live in a variety of

urban, suburban, and rural areas. Although these factors speak to the diversity of gender development on some levels, research on gender intensification has been limited primarily to the experiences of white adolescents in Western nations. Given that gender development in adolescence is heavily influenced by one's ethnicity and culture (e.g., Shorter-Gooden & Washington, 1996), an important next step is to investigate the gendered nature of adolescence among ethnic minorities in Western countries and among those in non-Western cultures to better understand the nature of gender intensification in diverse cultures.

A second limitation in the present research is that it examined gender-role identity with only a single measure, a classic sex-role inventory. Importantly, these inventories capture individuals' own perceptions of their gendered identity and have shown strong ability to predict various outcomes, including the development of depressive symptoms. On the other hand, sex-role inventories as currently administered do not allow us to consider the gendered nature of adolescents' interactions with others, nor the extent to which these interactions may vary across contexts. More generally, our findings raise questions about what exactly is being measured by sex-role inventories. Although it may be premature to conclude that adolescent girls and boys are converging in masculinity, the small to non-significant gender differences reported in the present research and by Wichstrøm (1999) suggest that researchers may want to consider whether masculinity remains synonymous with maleness, or if other measures might prove more useful to examine how male and female individuals differ in personality traits or other characteristics.

Another limitation of this and other research is that it does not speak directly to processes of socialization. Although they reviewed little evidence regarding the ways in which parents, peers, and others encouraged conformity to culturally sanctioned gender roles, Hill and Lynch (1983) were first and foremost interested in socialization processes. The present research and that conducted by Crouter and colleagues (Crouter et al, 1995, 2007; Shanahan et al., 2007) indicate that the family context may play an important role in adolescents' gender development. As such, a fruitful direction for future research on gender intensification would be to more explicitly examine the processes by which family members and other agents increase or do not increase pressures for gender-role conformity in adolescents, and in turn how these pressures are manifested in adolescents' own identities, attitudes, and behaviors. The integration of literatures on gender intensification and gender-role identity with theoretical and empirical research concerning gender development may prove a helpful approach in this task. For instance, Bussey and Bandura's (1999) application of social-cognitive theory to gender development, which contends that children learn about gender through modeling, reinforcements, and punishment, could be drawn upon to examine how individuals who interact with adolescents employ various strategies to encourage gender-role conformity, as well as how adolescents react to these pressures (e.g., Lindberg, Hyde, & Hirsch, 2008). This merging of approaches to development would likely bring insight into new ways of studying gender intensification and inform our understanding of which socializers (parents, siblings, peers, school) are most influential in adolescents' lives and if the relative influence of these agents varies with development.

A related point concerns the relation between socialization and adolescent depressive symptoms. The prevalent finding remains that by age 15, girls report more depressive

symptoms than boys and are more likely to be diagnosed with depression. Additional research on socialization would shed light on whether girls and boys are being socialized in particular ways that influence their likelihood of developing later depression, and whether these processes occur in adolescence, as the gender intensification hypothesis and depression literature suggest, or perhaps begin even earlier. Our understanding of the etiology and gendered nature of depression will be enhanced as we consider how parents, peers, schools, and the media convey messages about appropriate gender roles, and how these messages, in turn, affect adolescents' mental health in complex, interactive ways.

Acknowledgments

This research was supported by funding from the Graduate School of the University of Wisconsin and the Hertz Foundation Research Fellowship. We thank the participating families of the Wisconsin Study of Families and Work for their continued involvement in this research.

References

- Allgood-Merten B, Lewinsohn P, Hops H. Sex differences and adolescent depression. *Journal of Abnormal Psychology*. 1990; 99:55–63. [PubMed: 2307767]
- Arbuckle, JL. Full information estimation in the presence of incomplete data. In: Marcoulides, GA.; Schumacker, RE., editors. *Advanced structural equation modeling: Issues and techniques*. Mahwah NJ: Erlbaum; 1996. p. 243–277.
- Aubé J, Fichman L, Saltaris C, Koestner R. Gender differences in adolescent depressive symptomatology: Towards an integrated social-developmental model. *Journal of Social and Clinical Psychology*. 2000; 19:297–313.
- Bassoff ES, Glass GV. The relationship between sex roles and mental health: A meta-analysis of twenty-six studies. *Counseling Psychologist*. 1982; 10:105–112.
- Bem SL. The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*. 1974; 45:155–162. [PubMed: 4823550]
- Boldizar JP. Assessing sex typing and androgyny in children: The Children's Sex Role Inventory. *Developmental Psychology*. 1991; 27:505–515.
- Bose, CE. *Jobs and gender: A study of occupational prestige*. New York: Praeger; 1985.
- Broderick PC, Korteland C. Coping style and depression in early adolescence: Relationships to gender, gender role, and implicit beliefs. *Sex Roles*. 2002; 46:201–213.
- Bussey K, Bandura A. Social cognitive theory of gender developmental and differentiation. *Psychological Review*. 1999; 106:676–713. [PubMed: 10560326]
- Chartier GM, Lassen MK. Adolescent depression: Children's Depression Inventory norms, suicidal ideation, and (weak) gender effects. *Adolescence*. 1994; 29:859–864. [PubMed: 7892796]
- Colarossi LG, Eccles JS. A prospective study of adolescents' peer support: Gender differences and the influence of parental relationships. *Journal of Youth and Adolescence*. 2000; 29:661–678.
- Compas C, Davis G, Forsythe C, Wagner B. Assessment of major and daily stressful events during adolescence: The Adolescent Perceived Events Scale. *Journal of Consulting and Clinical Psychology*. 1987; 55:534–541. [PubMed: 3624609]
- Craighead LW, Green BJ. Relationship between depressed mood and sex-typed personality characteristics in adolescents. *Journal of Youth and Adolescence*. 1989; 18:467–474. [PubMed: 24272029]
- Crouter AC, Manke BA, McHale SM. The family context of gender intensification in early adolescence. *Child Development*. 1995; 66:317–329. [PubMed: 7750368]
- Crouter AC, Whiteman SD, McHale SM, Osgood DW. Development of gender attitude traditionality across middle childhood and adolescence. *Child Development*. 2007; 78:911–926. [PubMed: 17517012]

- Davies PT, Windle M. Gender-specific pathways between maternal depressive symptoms, family discord, and adolescent adjustment. *Developmental Psychology*. 1997; 33:657–668. [PubMed: 9232381]
- Feinman S. Why is cross-sex-role behavior more approved for girls than for boys? A status characteristic approach. *Sex Roles*. 1981; 7:289–300.
- Feinman S. A status theory of the evaluation of sex-role and age-role related behavior. *Sex Roles*. 1984; 10:445–456.
- Finch AJ, Saylor CF, Edwards GL. Children's Depression Inventory: Sex and grade norms for normal children. *Journal of Consulting and Clinical Psychology*. 1985; 53:424–425. [PubMed: 4008727]
- Galambos NL, Almeida DM, Petersen AC. Masculinity, femininity, and sex role attitudes in early adolescence: Exploring gender intensification. *Child Development*. 1990; 61:1905–1914. [PubMed: 2083504]
- Ge X, Lorenz FO, Conger RD, Elder GH, Simons RL. Trajectories of stressful life events and depressive symptoms during adolescence. *Developmental Psychology*. 1994; 30:467–483.
- Hankin B, Abramson L, Moffitt T, Silva P, McGee R, Angell K. Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology*. 1998; 107:128–140. [PubMed: 9505045]
- Hart BI, Thompson JM. Gender role characteristics and depressive symptomatology among adolescents. *Journal of Early Adolescence*. 1996; 16:407–426.
- Hill, JP.; Lynch, ME. The intensification of gender-related role expectations during early adolescence. In: Brooks-Gunn, J.; Petersen, A., editors. *Girls at puberty: Biological and psychosocial perspectives*. New York: Plenum; 1983. p. 201-228.
- Hyde JS, Klein MH, Essex MJ, Clark R. Maternity leave and women's mental health. *Psychology of Women Quarterly*. 1995; 19:257–285.
- Jackson Y, Warren JS. Appraisal, social support, and life events: Predicting outcome behavior in school-age children. *Child Development*. 2000; 71:1441–1457. [PubMed: 11108106]
- Kane EW. 'No way my boys are going to be like that!': Parents' responses to children's gender nonconformity. *Gender & Society*. 2006; 20:149–176.
- Kaplan, D. *Structural equation modeling: Foundations and extensions*. Thousand Oaks: Sage; 2000.
- Kendler KS, Kuhn JW, Vittum J, Prescott CA, Riley B. The interaction of stressful life events and a serotonin transporter polymorphism in the prediction of episodes of major depression: A replication. *Archives of General Psychiatry*. 2005; 62:529–535. [PubMed: 15867106]
- Kovacs M. The Children's Depression Inventory (CDI). *Psychopharmacology Bulletin*. 1981; 21:995–998. [PubMed: 4089116]
- Lindberg SM, Hyde JS, Hirsch LM. Gender and mother-child interactions during mathematics homework: The importance of individual differences. *Merrill-Palmer Quarterly*. 2008; 54:232–255.
- Martin CL. Attitudes and expectations about children with nontraditional and traditional gender roles. *Sex Roles*. 1990; 22:151–165.
- McCreary DR. The male role and avoiding femininity. *Sex Roles*. 1994; 31:517–531.
- Muthén, B. Mplus discussion board: What is the minimum number of timepoints needed to estimate a growth model?. 2003 Sep 11. Message posted to <http://www.statmodel.com/discussion/messages/14/20.html#POST30>
- Muthén, LK.; Muthén, BO. *Mplus user's guide*. Fourth edition. Los Angeles: Muthén & Muthén; 2007.
- Napholz L. Sex role orientation and psychological well-being among working black women. *Journal of Black Psychology*. 1994; 20:469–482.
- Nolen-Hoeksema S. Sex differences in unipolar depression: Evidence and theory. *Psychological Bulletin*. 1987; 101:259–282. [PubMed: 3562707]
- Nolen-Hoeksema S, Girgus J. The emergence of gender differences in depression during adolescence. *Psychological Bulletin*. 1994; 115:424–443. [PubMed: 8016286]
- Petersen AC, Sarigiani PA, Kennedy RE. Adolescent depression: Why more girls? *Journal of Youth and Adolescence*. 1991; 20:247–271. [PubMed: 24265009]

- Rose AJ. Co-rumination in the friendships of girls and boys. *Child Development*. 2002; 73:1830–1843. [PubMed: 12487497]
- Rose AJ, Rudolph KD. A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*. 2006; 132:98–131. [PubMed: 16435959]
- Saylor CF, Finch AJ, Spirito A, Bennett B. The Children's Depression Inventory: A systematic evaluation of psychometric properties. *Journal of Consulting and Clinical Psychology*. 1984; 52:955–967. [PubMed: 6520288]
- Shanahan L, McHale SM, Crouter AC, Osgood DW. Warmth with mothers and fathers from middle childhood to late adolescence: Within- and between-families comparisons. *Developmental Psychology*. 2007; 43:551–563. [PubMed: 17484570]
- Shorter-Gooden K, Washington N. Young, Black, and female: The challenge of weaving an identity. *Journal of Adolescence*. 1996; 19:465–475. [PubMed: 9245299]
- Sirin SR, McCreary DR, Mahalik JR. Differential reactions to men and women's gender role transgressions: Perceptions of social status, sexual orientation, and value dissimilarity. *The Journal of Men's Studies*. 2004; 12:119–132.
- Sitarenios, G.; Stein, S. Use of the Children's Depression Inventory. In: Maruish, ME., editor. *The use of psychological testing for treatment planning and outcomes assessment: Volume 2: Instruments for children and adolescents*. 3rd ed. Mahwah, NJ: Lawrence Erlbaum; 2004. p. 1-37.
- Smucker MR, Craighead WE, Craighead LW, Green BJ. Normative and reliability data for the Children's Depression Inventory. *Journal of Abnormal Child Psychology*. 1986; 14:25–39. [PubMed: 3950219]
- Spence J, Helmreich R, Stapp J. The Personal Attributes Questionnaire: A measure of sex-role stereotypes and masculinity-femininity. *JSAS Catalog of Selected Documents in Psychology*. 1974; 4:42. (Ms. No. 617).
- Spence J, Helmreich R, Stapp J. Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. *Journal of Personality and Social Psychology*. 1975; 32:29–39. [PubMed: 1206468]
- Stoppard JM, Paisley KJ. Masculinity, femininity, life stress, and depression. *Sex Roles*. 1987; 16:489–496.
- Taylor MC, Hall JA. Psychological androgyny: Theories, methods, and conclusions. *Psychological Bulletin*. 1982; 92:347–366.
- U.S. Department of Labor. 20 facts on women workers. Washington DC: U.S. Government Printing Office; 1993.
- Way N, Green ML. Trajectories of perceived friendship quality during adolescence: The patterns and contextual predictors. *Journal of Research on Adolescence*. 2006; 16:293–320.
- Whitley B. Sex-role orientation and psychological well-being: Two meta-analyses. *Sex Roles*. 1985; 12:207–225.
- Wichstrøm L. The emergence of gender different in depressed mood during adolescence: The role of intensified gender socialization. *Developmental Psychology*. 1999; 35:232–245. [PubMed: 9923478]
- Willett JB, Sayer AG. Using covariance structure analysis to detect correlates and predictors of individual change over time. *Psychological Bulletin*. 1994; 116:363–381.
- Wilson R, Cairns E. Sex-role attributes, perceived competence and the development of depression in adolescence. *Journal of Child Psychology and Psychiatry*. 1988; 29:635–650. [PubMed: 3192665]
- Windle M. A longitudinal study of stress buffering for adolescent problem behaviors. *Developmental Psychology*. 1992; 28:522–530.

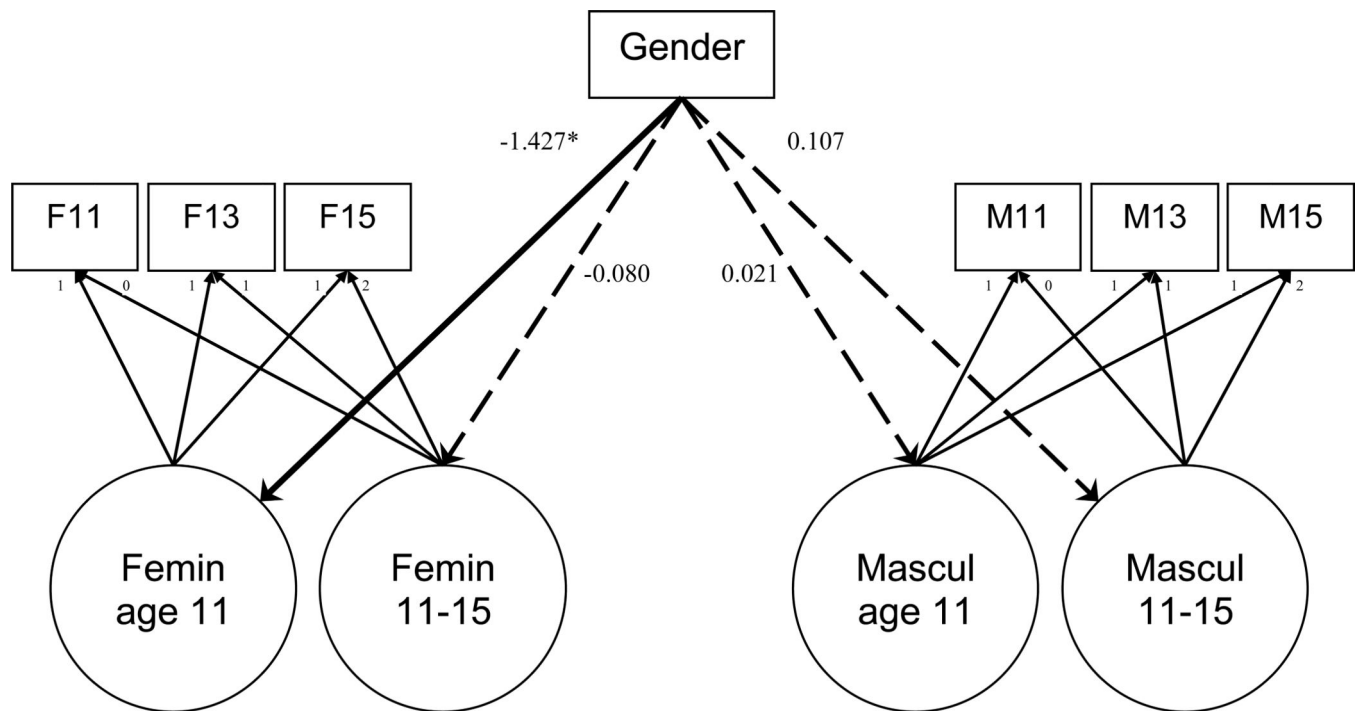


Figure 1. Gender differences in gender-role identity latent variables. Dark solid lines denote significant pathways. Dashed lines denote non-significant pathways.

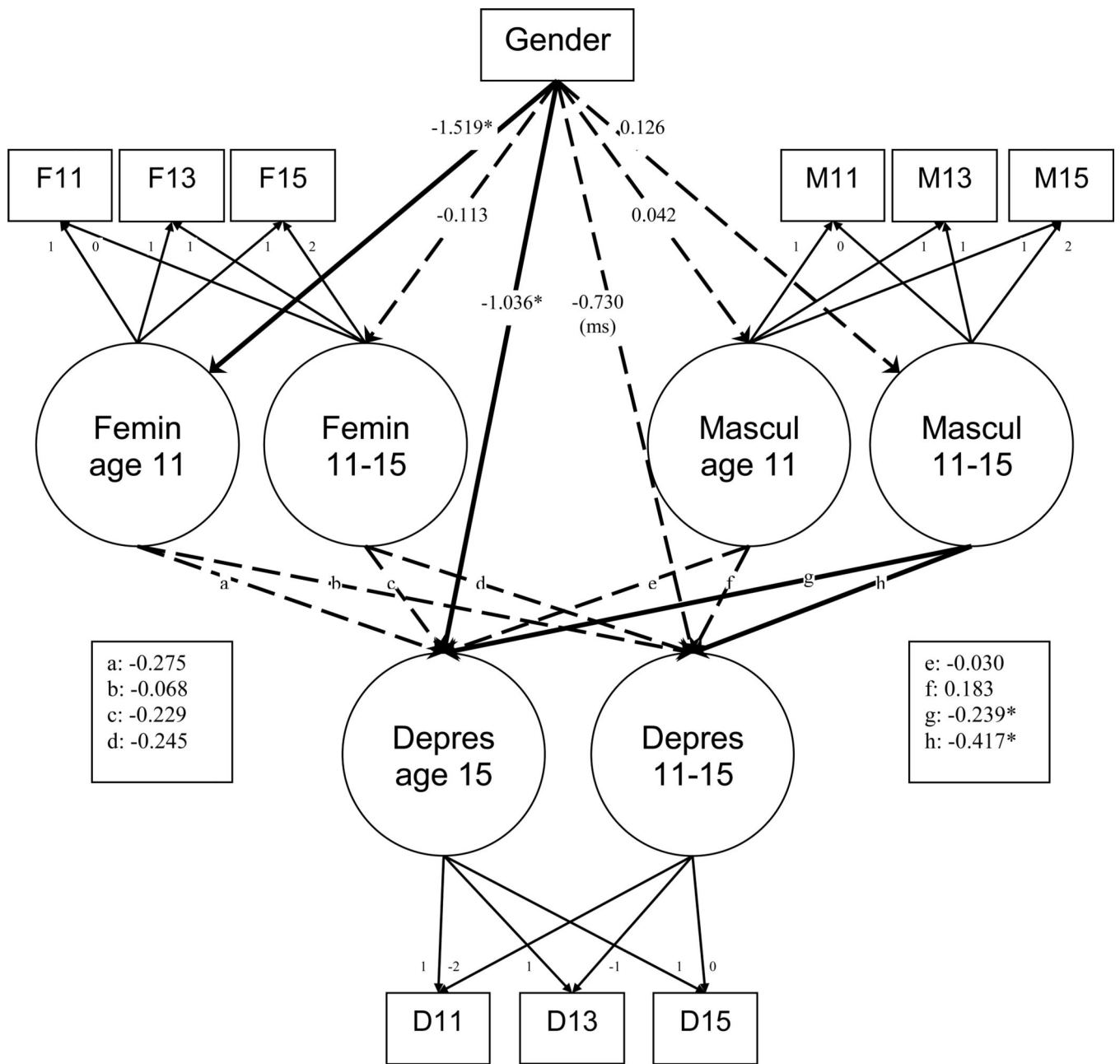


Figure 2. Gender-role identity latent variables as mediators of gender difference in depressive symptoms. Dark solid lines denote significant pathways. Dashed lines denote non-significant pathways.

Table 1
 Descriptive Statistics for Femininity, Masculinity, and Depressive Symptoms, by Gender and Age

Mean Rating	Girls			Boys				
	M	SD	Min	Max	M	SD	Min	Max
Femininity - age 11	3.27	0.42	1.86	4.00	2.71	0.45	1.57	4.00
Femininity - age 13	3.36	0.39	2.14	4.00	2.64	0.44	1.43	4.00
Femininity - age 15	3.35	0.37	2.14	4.00	2.72	0.43	1.43	3.71
Masculinity - age 11	2.75	0.47	1.63	3.88	2.76	0.41	1.50	3.63
Masculinity - age 13	2.78	0.45	1.38	3.75	2.81	0.44	1.63	3.88
Masculinity - age 15	2.79	0.45	1.38	3.75	2.84	0.42	1.75	3.88
Depr. Symp. - age 11 (mean item response)	0.11	0.19	0.00	1.30	0.10	0.15	0.00	0.90
Depr. Symp. - age 13 (mean item response)	0.16	0.23	0.00	1.30	0.09	0.16	0.00	1.00
Depr. Symp. - age 15 (mean item response)	0.20	0.25	0.00	1.30	0.10	0.17	0.00	1.00
Neg. Events - age 15	10.65	6.45	0.00	25.00	8.75	6.01	0.00	25.00

Note. Mean item endorsement of depressive symptoms, rather than total CDI score, is reported because the full 27-item CDI was not used in the present study. One may multiply these means by 27 to make scores comparable to those commonly reported from the full 27-item CDI, or by 10 to convert scores to the short 10-item CDI.

Table 2

Standardized Coefficients for Pathways in Model 1

Unconstrained Pathways	Model 1a: Gender Intensification	Model 1b: Gender Intensification with Family Variables and Interactions
FI on Gender	-1.427*	0.066
FS on Gender	-0.080	-4.127*
MI on Gender	0.021	-0.612
MS on Gender	0.107	-2.249*
FI on Same Gender Sibling		0.000
FI on Opposite Gender Sibling		0.140
FI on Same X Opposite Sibling Interaction		-0.027
FI on Mother Education		0.089*
FI on Family Income		0.011
FS on Same Gender Sibling		-0.145
FS on Opposite Gender Sibling		-0.534
FS on Same X Opposite Sibling Interaction		0.478
FS on Mother Education		-0.145*
FS on Family Income		0.076
MI on Same Gender Sibling		-0.070
MI on Opposite Gender Sibling		-0.106
MI on Same X Opposite Sibling Interaction		0.437
MI on Mother Education		-0.031
MI on Family Income		0.084
MS on Same Gender Sibling		-0.229
MS on Opposite Gender Sibling		-0.055
MS on Same X Opposite Sibling Interaction		-0.127
MS on Mother Education		-0.057
MS on Family Income		0.017
FI on Same Gender Sibling X Gender		-0.199
FI on Opposite Gender Sibling X Gender		-0.394
FI on Same X Opposite Sibling X Gender		0.168
FI on Education X Gender		-0.107*
FI on Income X Gender		0.059
FS on Same Gender Sibling X Gender		0.635
FS on Opposite Gender Sibling X Gender		0.905*
FS on Same X Opposite Sibling X Gender		-0.931
FS on Education X Gender		0.261*

Unconstrained Pathways	Model 1a: Gender Intensification	Model 1b: Gender Intensification with Family Variables and Interactions
FS on Income X Gender		-0.071
MI on Same Gender Sibling X Gender		-0.241
MI on Opposite Gender Sibling X Gender		-0.029
MI on Same X Opposite Sibling X Gender		-0.005
MI on Education X Gender		0.003
MI on Income X Gender		0.114
MS on Same Gender Sibling X Gender		0.828*
MS on Opposite Gender Sibling X Gender		0.160
MS on Same X Opposite Sibling X Gender		-0.371
MS on Education X Gender		0.179*
MS on Income X Gender		-0.116
CFI	0.941	0.943
TLI	0.863	0.841
RMSEA	0.131	0.072
χ^2 test of model fit	$\chi^2 (9) = 72.105^*$	$\chi^2 (29) = 91.047$

Notes. Significance at $\alpha = .05$ level is denoted by *. A non-significant χ^2 statistic indicates goodness-of-fit. Gender was coded as female = 0, male = 1; therefore, positive coefficients indicate that boys were higher on a latent variable. FI = Femininity Intercept (age 11), FS = Femininity Slope, MI = Masculinity Intercept (age 11), MS = Masculinity Slope, DI = Depressive Symptom Intercept (age 15), DS = Depressive Symptom Slope.

Table 3

Standardized Coefficients for Pathways in Models 2–4

Unconstrained Pathways	Model 2: Gender and Depressive Symptoms	Model 3a: Gender Intensification and Depressive Symptoms	Model 3b: Masculinity and Depressive Symptoms	Model 4: Gender Intensification X Negative Life Events (Not standardized)
DI on Gender	-0.603*	-1.036*	-0.571*	-0.015
DS on Gender	-0.607*	-0.730 (ms)	-0.568*	-0.005
FI on Gender		-1.519*		-0.658*
FS on Gender		-0.113		0.000
MI on Gender		0.042	0.042	0.021
MS on Gender		0.126	0.126	0.009
Negative Events on Gender				-1.903*
DI on FI		-0.275		-0.003
DI on FS		-0.229		0.053
DI on MI		-0.030	-0.108	-0.024
DI on MS		-0.239*	-0.264*	0.061
DS on FI		-0.068		0.004
DS on FS		-0.245		0.032
DS on MI		0.183	0.151	-0.013
DS on MS		-0.417*	-0.444*	-0.104
DI on Negative Events				0.007
DI on FI X Negative Events				0.001
DI on FS X Negative Events				-0.055*
DI on MI X Negative Events				-0.001
DI on MS X Negative Events				-0.025
DS on Negative Events				-0.004
DS on FI X Negative Events				0.000
DS on FS X Negative Events				-0.014
DS on MI X Negative Events				0.003
DS on MS X Negative Events				-0.019*
CFI	1.000	0.884	1.000	N/A
TLI	1.000	0.807	1.000	N/A
RMSEA	0.000	0.116	0.000	N/A
χ^2 test of model fit	$\chi^2 (2) = 0.519$	$\chi^2 (27) = 176.617^*$	$\chi^2 (10) = 9.359$	N/A

Notes. Significance at $\alpha = .05$ level is denoted by *. A non-significant χ^2 statistic indicates goodness-of-fit. Gender was coded as female = 0, male = 1; therefore, positive coefficients indicate that boys were higher on a latent variable. FI = Femininity Intercept (age 11), FS = Femininity Slope, MI = Masculinity Intercept (age 11), MS = Masculinity Slope, DI = Depressive Symptom Intercept (age 15), DS = Depressive Symptom Slope. Model fit and standardized coefficients are not reported for Model 4 because Mplus cannot provide this information for models containing latent variable interactions.