

Doing Gender for Different Reasons: Why Gender Conformity Positively and Negatively

Predicts Self-Esteem

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## Abstract

Past research has shown that valuing gender conformity is associated with both positive (Guerrero-Witt & Wood, 2009; Wood, Christensen, Hebl, & Rothgerber, 1997) and negative (Sanchez & Crocker, 2005) consequences for self-esteem and positive affect. The current research (women,  $n = 226$ , and men,  $n = 175$ ) explored these conflicting findings by separating out investing in societal gender ideals from personally valuing one's gender identity (*private regard*) and investigating the relationship to self-esteem, through either *autonomous* (behaviors that are freely chosen) or *pressured* (behaviors engaged in due to pressure from others or situation) motivation for gender consistent behavior (communal behavior for women and agentic behavior for men). Confirming predictions, structural equation modeling revealed that investment in gender ideals predicted pressured but not autonomous motivation whereas private regard predicted autonomous but not pressured motivation. Additionally, autonomous motivation for gender consistent behavior was positively associated with self-esteem whereas pressured motivation was negatively associated with self-esteem. Thus, investing or valuing one's gender identity was not shown to be costly for the self directly, but instead influence self-esteem through motivation to enact gender conforming behavior. Although the present research demonstrates a positive link between some aspects of gender conformity and self-esteem, we discuss how gender conforming behavior can still have negative consequences (e.g., communal behavior in the context of male-sex typed domains).

*Keywords:* conformity, gender norms, sex roles, motivation, self esteem, femininity, masculinity, autonomy

## Doing Gender for Different Reasons: Why Gender Conformity Positively and Negatively Predicts Self-Esteem

Gender roles are taught to children in our society at a very young age. Through media, parents, and peers, young boys and girls are taught to behave in gender normative ways (Bem 1983; Bryant & Check, 2000; Bussey & Bandura, 1992; Egan & Perry, 2001; Lott, 1987; Raag & Rackliff, 1998). Further, people who violate gender norms are often sanctioned by society (Bussey & Bandura, 1992; Rudman, 1998; Rudman & Fairchild, 2004; Rudman & Glick, 2001). For example, women who behave in agentic (i.e., assertive and dominant) ways are evaluated less favorably than comparably agentic men (Eagly, Makhijani, & Klonsky, 1992) and men who behave communally (i.e., warm and caring) are viewed as less competent and hireable than agentic men (Rudman, 1998). Thus, gender norms, which specify differential behaviors for men and women, serve to create and maintain differences between the sexes, and these norms are experienced as a part of daily life (Eagly, 1987; Eagly & Wood, 1991).

Research on gender conformity and self-esteem, however, has revealed seemingly conflicting findings. *Investing in gender ideals*, that is, feeling that it is important to be like society's ideal man or woman, has been linked to both positive and negative consequences for the self (Sanchez & Crocker, 2005; Wood et al., 1997). We refer to the construct here as *investment in gender ideals*, however it has been referred to in the past as *self-relevance of sex-role norms* (Wood et al., 1997). In the present study, we seek to reconcile this past work by examining investment in gender ideals and private regard for gender as predictors of distinct motivations for gender conforming behavior. In addition, we consider how different motivations for gender conforming behavior link to self-esteem.

### **Costs and Benefits of Gender Norm Conformity**

How does conforming to gender norms affect feelings of self-worth? Some research suggests that the pressure for gender conformity experienced by boys and girls negatively affects self-esteem (Carver, Yunger, & Perry, 2003; Egan & Perry, 2001). Early pressure during childhood for gender conformity and the costs of breaking social norms may make some adult men and women *invest in gender ideals*, which has been found to predict lower self-esteem among both men and women (Sanchez & Crocker, 2005). Men and women who were highly invested in being like society's ideal man or woman were more likely to have lower self-esteem because they had external contingencies of self worth (i.e., they based their self-esteem on the approval of others).

Gender conformity may also have costs for close relationships between men and women. Specifically, investment in gender ideals was found to be negatively associated with sexual pleasure, a relationship that was accounted for by contingent self-worth and restricted sexual autonomy (Sanchez, Crocker, & Boike, 2005). Placing importance on gender conformity was associated with basing self-esteem on the approval of others as well as decreased feelings of autonomy within sexual situations. Basing self-esteem on others' approval and restricted sexual autonomy were then associated with lower reported sexual pleasure. In sum, gender norm conformity has been shown to have negative effects on women's and men's self-esteem and close relationships.

In contrast, other research has suggested that conforming to gender norms may improve feelings of self-worth (Wood et al., 1997). These researchers proposed that societal gender norms can become incorporated into personally held self-standards, such that behaving in accordance with these standards yields positive feelings about the self. Indeed, research has shown that for people who were highly invested in gender ideals, recalling norm-congruent behavior led to

positive affect and less discrepancy between the actual, ought, and ideal selves which make up the self-concept (Wood et al., 1997). Thus, for people who are highly invested in gender norms and gender conformity, behaving in accordance with those norms may close the gap between their actual and ideal selves, leading to positive feelings about the self. Additionally, Guerrero-Witt and Wood (2009) utilized experience sampling by asking participants to record all social interactions lasting more than ten minutes over the course of one week, as well as their feelings immediately following the interactions. Results showed that for people who held gender-typed self standards (i.e., men holding agentic self standards, women holding communal self standards), interacting in gender norm congruent ways was associated with higher daily explicit state self-esteem, greater positive emotion, and less negative emotion (Guerrero-Witt & Wood, 2009).

Importantly, researchers have also shown that if these highly invested individuals perceive themselves as failing to live up to their gender ideal by engaging in gender non-conforming behavior, they may experience more negative affect, lower state self-esteem, and greater self-discrepancy (Guerrero-Witt & Wood, 2009; Wood et al., 1997). Thus, Wood and colleagues do not argue that investing in gender ideals is inherently positive or negative, rather that gender conforming (non-conforming) behavior determines positive (negative) self-outcomes for highly invested men and women.

To summarize, research on investment in gender ideals and gender conforming behavior has revealed seemingly conflicting findings. On the one hand, researchers have found evidence that investment in gender ideals is associated with negative evaluations of the self when self-esteem is informed by external sources (i.e., the motivation for others' approval; Carver, Yunger, & Perry, 2003; Egan & Perry, 2001; Sanchez & Crocker, 2005; Sanchez et al., 2005). In contrast,

Wood and colleagues' work (Guerrero-Witt & Wood, 2009; Wood et al., 1997) suggests that gender ideals may be internalized and freely chosen, such that conforming to behavioral gender norms yields positive feelings about the self, and violating gender standards yields negative feelings. However, none of the previous studies explicitly examined the role of motivation for gender conforming behavior, or the link between investment in gender ideals and gender motivation.

### **Investment in Gender Ideals vs. Private Regard**

Measures of investment in gender ideals often ask participants to think about society's ideal man or woman and then indicate how important it is for them to be similar to that ideal or dissimilar to the ideal of the other sex (Sanchez & Crocker, 2005; Sanchez et al., 2005; Wood et al., 1997). Aspiring to be similar to ideal women or men may stem from a desire to uphold a societal ideal, or it may also be due to *private regard*, a subset of collective self-esteem that captures one's positive feelings toward one's gender group or pride in being a man or woman (Luhtanen & Crocker, 1992). Because feelings about oneself generally are related to feelings about oneself as a member of social groups (stemming from Social Identity Theory; Tajfel, 1982; Tajfel & Turner, 1979), private regard is often positively correlated with self-esteem (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Rowley, Sellers, Chavous, & Smith, 1998). Investment in gender ideals, therefore, may negatively predict self-esteem when it is measuring adherence to an imposed societal ideal, but positively predict self-esteem when it is measuring positive feelings toward one's gender group (i.e., private regard). By including measures of both constructs in a single structural model, we can isolate the distinct aspects of the two and investigate how they relate to self-esteem.

### **Motivation for Gendered Behavior**

Self-determination theory states that motivation can be described as falling on a continuum from self-determined or autonomous to externally controlled or pressured (Deci & Ryan, 1980; Deci & Ryan, 1987; Deci, Schwartz, Sheinman, & Ryan, 1981). Both poles represent intentional behavior, but they differ in the degree to which the behavior is self-determined as opposed to externally determined. Autonomous behaviors are freely chosen and anchored within the self, such that autonomous actors see *themselves* as initiators of their own behavior. Pressured or controlled behaviors are also intentional, but they are not freely chosen. Thus, pressured motivation is “experienced as having to do what one is doing” (Deci & Ryan, 1987, p. 1025). Pressured motivation may result from rewards for behaving in a given manner or sanctions for not behaving in the prescribed way. Thus, we can consider gender conforming behavior from an autonomous or pressured perspective. We may “do” gender because we enjoy it, or because we feel pressure from others or fear sanction for gender-violating behavior (Rudman, 1998).

Research has shown that self-determined or autonomously motivated behavior, as opposed to pressured behavior, is associated with psychological and physical benefits. Autonomous motivation is associated with greater enjoyment of a cognitive task and more positive affect (Enzle & Ross, 1978; Ryan, Mims, & Koestner, 1983) than pressured motivation. Autonomy-supportive environments or situations have also been associated with greater self-esteem and greater perceived competence than controlling situations (Deci, Nezlek, & Sheinman, 1981; Ryan & Grolnick, 1986). For example, children placed in autonomy-supportive classrooms demonstrated increased self-esteem and perceived competence relative to children in controlling classrooms (Deci et al., 1981). Feelings of autonomy have been found to positively predict well-being in the form of academic success (Steinberg, Elmen, & Mounts, 1989), less engagement in

risky health behaviors (Turner, Irwin, Tschann, & Millstein, 1993), greater daily vitality, well-being, and positive affect (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000), and greater sexual pleasure (Sanchez et al., 2005; see Deci & Ryan, 2000, for a review). Thus, we expected autonomous motivation to be linked with greater self-esteem whereas pressured motivation will be linked to lower self-esteem.

Societal gender norms, with their capacity to reward conformity and sanction counter-normative behavior, may lead to subjective pressure to meet gender ideals, experienced as pressured motivation. Hence, investment in gender ideals may predict pressured motivation to act in accordance with gender norms, which may negatively relate to self-esteem. However, as proposed in Wood et al.'s (1997) work, gender norms may instead become incorporated into the self-concept, and therefore be autonomously motivating, such that a gendered behavior is freely chosen when it reflects one's true inner desires. Private regard, or feeling positively about being a man or woman, may predict more autonomous motivation for gender conforming behavior, which likely is associated with increased self-esteem.

### **The Present Research**

In the present research, we attempted to reconcile past conflicting findings regarding investment in gender ideals. By measuring investment in gender ideals and private regard, and by including both in a single structural model, we were able to test how each predicts motivation for gender conforming behavior. We predicted that investment in gender ideals and private regard would be positively correlated, but separate constructs, as indicated by their differential prediction of gender motivation. To assess motivation for gender conforming behavior, we adapted past motivation scales to measure the extent to which women and men feel autonomous or pressured motivation to engage in communal or agentic behavior.

Although different gender stereotypes and norms exist in American culture, many traits and behaviors that people associate with masculinity and femininity fall into the categories of communion and agency. Women are believed to be communally oriented, that is others expect women to be warm and caring, sensitive to others needs, and more group-focused, whereas men are expected to be agenticly oriented, that is assertive and confident, dominant over others, and more individually-focused (Conway, Pizzamiglio, & Mount, 1996; Deaux & LaFrance, 1998; Diekman & Eagly, 2000; Prentice & Carranza, 2002). Although studies have documented an increasing trend for women to endorse more agentic/ masculine-stereotyped traits over time, (Twenge, 1997, 2001), many people still hold traditional expectations that men *should* be agentic and women *should* be communal. Thus, our paper focuses on motivation for gender conformity.

It is, however, important to note that not all men and women conform to gender stereotypes. In fact, there is a growing literature on gender deviance (Doorn, Poortinga, & Verschoor, 1994; Elkins & King, 1995; Munt, 1997; Rudman & Glick, 2008; Sandnabba & Ahlberg, 1999) as well as an older literature on androgyny suggesting that some individuals possess both masculine and feminine traits and do not necessarily engage in gender expressions that match their biological sex (Bem, 1984; Bem, Martyna, & Watson, 1976). Depending on the social context, men will engage in communal behavior and women will engage in agentic behavior (Abele, 2003). Although communality and agency are not mutually exclusive (Abele, 2003), the two traits are negatively correlated when positive valence is controlled (Suitner & Maass, 2008). Moreover, agency is still *viewed* as masculine and communality as feminine (Diekman & Eagly, 2000). Additionally, in their day-to-day behavior, men and women report acting in more gender stereotypical than gender atypical ways: men reported acting more agenticly than did women, whereas women reported acting more communally than did men

(Guerrero-Witt & Wood, 2009). Thus, the current paper focuses on the motivation to engage in stereotypic behavior for one's gender.

Because of the complex relationship between biological sex and gender expression (Butler, 1999; Halberstam, 1998), we do not posit that men are uniformly agentic and never communal, or that women are uniformly communal and never agentic, but rather that masculine and feminine gender stereotypes prescribe expectations that women should be communal and men should be agentic. Because agency and communality are two prominent components of gender stereotypes and norms, the present study will focus on autonomous and pressured motivations regarding gender conformity to agency for men, and to communality for women. We predict that autonomous motivation for gender conforming behavior will be positively associated with self-esteem, whereas pressured motivation for gender conforming behavior will be negatively associated with self-esteem. It is important to note that the current paper does not address motivation for gender deviance as this may be more complicated than motivation to engage in gender conformity. For example, men and women may not experience pressured motivation to enact gender deviant behaviors due to social sanctions for such behavior in the form of *backlash* (Rudman, 1998; Rudman & Fairchild, 2004; Rudman & Glick, 2001). Gender conformity however, is consistent with societal expectations and therefore, men and women may experience pressure to conform to such ideals whereas motivation for gender deviance may not be driven by pressure. Thus, we left questions about motivation for gender deviance for future research. Figure 1 illustrates our predicted model.

## **Method**

### **Participants**

The participants were 401 heterosexual undergraduate students (175 men, 226 women) recruited from the University subject pool. Ages ranged from 18 to 58 years ( $M = 18.94$ ,  $SD = 2.95$ ,  $Median = 18.0$ ) and participants' ethnicities were as follows: 48.9% Caucasian, 26.7% Asian American, 9.0% Hispanic/Latino, 8.2% African American, 3.7% Biracial/Multiracial, 3.0% Other, 0.2% Native American, and 0.2% did not indicate race. Compensation was given in the form of credit toward an overall research requirement for introductory psychology classes.

### **Materials**

**Investment in gender ideals.** Two items were included to assess the extent that participants felt committed or invested in being the ideal man or woman (Wood et al., 1997). Participants were told to think about how society defines the ideal man or woman, and they were then asked, "How important is it for you to be similar to the ideal man/woman?" and "To what extent is being similar to the ideal man/woman an important part of who you are?" Participants indicated their responses on a scale of 1 (*not at all*) to 9 (*a great deal*). Internal scale consistency was good,  $r = .76$ .<sup>1</sup>

**Private regard for gender identity.** The Collective Self-Esteem Scale – Gender Version (CSEG; Luhtanen & Crocker, 1992) was used to assess participants' private regard for their gender identity. The private regard subscale consists of four questions, with answer choices ranging from 1 (*strongly disagree*) to 7 (*strongly agree*): "In general, I'm glad to be a member of the gender group I belong to," "I often regret that I belong to my gender group" (reversed), "Overall, I often feel that the gender group of which I am a member is not worthwhile" (reversed), and "I feel good about the gender group I belong to." The CSEG private regard subscale demonstrated good internal consistency (Cronbach's  $\alpha = .77$ ).

**Gender motivation scale.** A previously validated measure of intrinsic and extrinsic motivation (Ryan & Connell, 1989; Vallerand & Bissonnette, 1992) was adapted to measure motivation to engage in gendered behavior along the warmth-agency dimension. In 16 questions, participants were asked to rate on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*) the extent to which they engage in communal and agentic behaviors due to autonomous motivation or felt pressure from others. Example items include, “It is important to me to act sensitively towards others” (Autonomous Communal Motivation), “It is important to me to be assertive” (Autonomous Agentic Motivation), “I am caring to others because that is how others think I should be” (Pressured Communal Motivation), and “I am assertive and confident with others because that is how others think I should be” (Pressured Agentic Motivation). Four 4-item subscales were created that measured motivation for communal and agentic behavior; the resulting Autonomous Communal Motivation ( $\alpha = .76$ ), Autonomous Agentic Motivation ( $\alpha = .78$ ), Pressured Communal Motivation ( $\alpha = .81$ ), and Pressured Agentic Motivation ( $\alpha = .88$ ) subscales demonstrated good scale reliability. See the supplemental materials for the full measure.

**Self-esteem and demographics.** The widely used and well-validated 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to assess participants’ self esteem at time of testing. Answers are on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include, “I feel that I have a number of good qualities” and “I feel that I do not have much to be proud of” (reversed). Scale reliability was high ( $\alpha = .88$ ). The final page of the packet asked participants to indicate their age, gender, and ethnicity.

## Procedure

After agreeing to informed consent, participants completed the questionnaires in groups of one to six students. Participants were told that they were completing a study on societal roles and motivations. Following completion of the questionnaire packet, participants were debriefed and thanked. Materials were presented in the order described above, with one exception. The gender motivation scale was presented as the first questionnaire, in the middle of the packet, or as the last questionnaire (prior to demographic questions), creating three possible orders. Analyses on all dependent variables showed no significant order effects,  $ps > .50$ , and therefore this variable will not be discussed further.

## Results

Means and standard deviations for all variables are shown in Table 1. Independent *t*-tests were performed on all variables to examine gender differences (see Table 1). Men and women differed significantly only in their autonomous motivation for communal behavior, with women reporting greater autonomous motivation for communal behavior than men. Zero-order correlations among all study variables are presented in Table 2.

Because we were primarily interested in how investment and gender ideals and private regard for gender identity would relate to motivation to act in a gender conforming manner, we created two motivation subscales: autonomous motivation for gender conforming behavior (communal for women, agentic for men;  $\alpha = .82$ ), and pressured motivation for gender conforming behavior (communal for women, agentic for men;  $\alpha = .85$ ). These subscales demonstrated good scale reliability and will be used in all further analyses.

Structural equation modeling was used to assess hypothesized relationships among investment in gender ideals, private regard for gender identity, motivation to engage in gendered

behavior, and self-esteem. Domain representative parcels were created for all variables (Kishton & Widaman, 1994), with the exception of investment in gender ideals, for which the two items were used as indicators.<sup>2</sup> Analyses were conducted with EQS 6.1 software using maximum likelihood estimation, and the model was specified such that cases with missing data were deleted, which resulted in three cases being removed from analyses. According to past research on model fit (see Hu & Bentler, 1999), a good fit can be claimed for the model if the comparative fit index (*CFI*), the nonnormed fit index (*NNFI*), and Bollen's (1989) incremental fit index (*IFI*) are .95 or higher, and the root mean square of approximation (*RMSEA*) is .06 or lower ( $\chi^2$  is also reported to compare fit between nested models).

### **Measurement Model**

Before testing the fit of a structural model utilizing latent variables, it is important to first test how well the indicators relate to the latent variables in the measurement model (i.e., demonstrate a good fitting measurement model). Measurement models essentially test a confirmatory factor analysis of all latent variables included in the model, linked by covariances, but without any direct paths between the factors (Kline, 2005). The *measurement model* for the entire sample fit the data well,  $\chi^2/df = 24.37/25$ , *CFI* = 1.0, *NNFI* = 1.0, *IFI* = 1.0, *RMSEA* = .00 (90% Confidence Interval: .00 - .04) (see Table 3).

### **Hybrid Models**

A hybrid model, with both measurement and structural components included, was specified with the hypothesized paths illustrated in Figure 1. A correlation was specified between the disturbances of the motivation variables; feeling motivated to behave in a given way may include both autonomous and pressured motivations, and therefore overlap may occur between those variables.<sup>3</sup>

The fit of the *hypothesized model* for the entire sample was good,  $\chi^2/df = 73.83/29$ ,  $CFI = .97$ ,  $NNFI = .96$ ,  $IFI = .97$ ,  $RMSEA = .06$  (90% Confidence Interval: .045 - .08) (see Table 4). All paths were significant and in the predicted direction. Because the hypothesized model did not include paths between investment and gender ideals and autonomous motivation, and between private regard and pressured motivation, we next tested to ensure that these paths were indeed nonsignificant. A *full path* model was specified, that included all paths present in the hypothesized model as well as the two additional paths mentioned above. The *full path* model did not fit significantly differently than the *hypothesized model*,  $\chi^2/df = 72.83/27$ ,  $CFI = .97$ ,  $NNFI = .95$ ,  $IFI = .97$ ,  $RMSEA = .065$  (90% Confidence Interval: .05 - .08),  $\chi^2\Delta = 1.0$ ,  $p = .61$ . As predicted, in the *full path* model, investment in gender ideals did not significantly predict autonomous motivation, nor did private regard predict pressured motivation. Therefore, we concluded that the *hypothesized model* correctly represented the links between investment in gender ideals, private regard, and the motivation variables.

Although we determined that the two excluded paths were indeed nonsignificant, examination of the Lagrange modification indices for the *hypothesized model* suggested that an additional path be added, with private regard directly predicting self-esteem. The *modified hypothesized model* fit the data well,  $\chi^2/df = 25.98/28$ ,  $CFI = 1.0$ ,  $NNFI = 1.0$ ,  $IFI = 1.0$ ,  $RMSEA = .00$  (90% Confidence Interval: .00 - .035), and significantly better than the *hypothesized model*,  $\chi^2\Delta = 47.85$ ,  $p < .001$ . The *modified hypothesized model* is presented in Figure 2. As predicted, although investment in gender ideals and private regard were positively correlated, investment in gender ideals significantly predicted pressured motivation for gender conforming behavior whereas private regard predicted autonomous motivation for gender conforming behavior. Also consistent with hypotheses, autonomous motivation positively predicted self-esteem whereas

pressured motivation negatively predicted self-esteem. Private regard was shown to directly positively predict self-esteem; this association may simply be because feelings about one's group identity are highly related to feelings about one's personal self-identity.

To test whether the *modified hypothesized model* fit the data equally well for both men and women, we first tested the *measurement model* nested within gender, with all factor loadings and covariances between factors constrained to be equal for men and women. This model also demonstrated good fit,  $\chi^2/df = 66.46/65$ ,  $CFI = 1.0$ ,  $NNFI = 1.0$ ,  $IFI = 1.0$ ,  $RMSEA = .01$  (90% Confidence Interval: .00 - .04). This pattern suggests that the measurement of latent variables operates in the same way for both men and women. We next tested the *modified hypothesized model* nested within gender, with all paths constrained to be equal. The fully constrained gender model demonstrated good model fit,  $\chi^2/df = 61.95/66$ ,  $CFI = 1.0$ ,  $NNFI = 1.0$ ,  $IFI = 1.0$ ,  $RMSEA = .00$  (90% Confidence Interval: .00 - .04), suggesting that the structural model fits the data in the same way for both men and women.

### **Alternative Models**

Because the data are correlational, causal paths cannot be determined. Therefore it is possible that other model specifications may fit the data equally as well as the modified hypothesized model. For example, private regard may be conceptualized as an outcome variable rather than a predictor; feeling motivated to act in a gender conforming manner may increase one's positive feelings about one's gender group. In the present study, private regard and self-esteem are significantly correlated and may represent two related identity outcomes. To test this possibility, two alternative models were computed.

In *Alternative Model A*, a model was specified such that investment in gender ideals predicted pressured motivation, and pressured and autonomous motivation in turn predicted both

self-esteem and private regard. This model did not fit the data adequately,  $\chi^2/df = 88.59/28$ ,  $CFI = .96$ ,  $NNFI = .94$ ,  $IFI = .96$ ,  $RMSEA = .07$  (90% Confidence Interval: .06 - .09); additionally, private regard was not significantly predicted by either autonomous or pressured motivation. In *Alternative Model B*, a model was specified such that investment in gender ideals predicted pressured motivation for gender conforming behavior, and both pressured and autonomous motivation then predicted self-esteem. Self-esteem predicted private regard. This model also did not fit the data adequately,  $\chi^2/df = 94.93/30$ ,  $CFI = .96$ ,  $NNFI = .94$ ,  $IFI = .96$ ,  $RMSEA = .07$  (90% Confidence Interval: .06 - .09).

Neither alternative model appeared to fit the data well. Nonetheless, it is useful to directly compare the fit of the alternative models to that of the hypothesized model. Because the alternative models are not nested, a chi square difference test cannot be conducted to compare the alternative models to the *modified hypothesized model*. However, in cases of nonhierarchical models, fit comparisons can be made using the Akaike information criterion (*AIC*; Kline, 2005). For a set of models, the model with the lowest *AIC* value can be said to be preferred over the others. As can be seen in Table 4, the *modified hypothesized model* has a lower *AIC* value (-30.02) than all of the alternative models tested. Therefore, although we cannot claim causal direction, the model presented in Figure 2 best describes the data (see Table 4).

### Discussion

Past research has shown that investment in gender ideals and gender conformity is associated with both costs (Sanchez & Crocker, 2005; Sanchez et al., 2005), and benefits (Guerrero-Witt & Wood, 2009; Wood et al., 1997). The present research adds to the literature by attempting to reconcile these findings by considering motivation to engage in gender conforming behavior as well as separating private regard from investment in gender ideals. Our data suggest

that investment in gender ideals and private regard are positively correlated but distinct constructs. As predicted, investment in living up to a societal gender ideal was associated with pressured motivation for gender conforming behavior, which negatively predicted self-esteem. This result is consistent with past work demonstrating the costs of investment in gender ideals (e.g., Sanchez & Crocker, 2005). Importantly however, the model shows that private regard positively predicted autonomous motivation for gender conforming behavior, which positively predicted self-esteem. Thus, past research demonstrating the benefits of investing in gender ideals may have tapped into the private regard construct, rather than the strict desire to adhere to a societal gender norm. By including both investment in gender ideals and private regard, our model provides a more complete picture of the relationship between gender conformity and self-esteem.

Of note, the measures of gender identity did not show a direct bivariate link to lowered self-esteem as has been shown in previous work (Sanchez & Crocker, 2005). The inconsistency regarding the link between investment in gender ideals and self-esteem may result from the different types of motivation that underlie engagement in gender normative behavior and the pride that can accompany investment in gender ideals. Instead, the cost of investing in gender ideals in our research was demonstrated in its link to pressured motivation. Thus, gender identification was only costly when people felt pressure to conform to gender norms. Otherwise, gender identification could lead to positive outcomes. For example, private regard or pride for one's gender identity was linked to positive self-esteem as was autonomously motivated gender conforming behavior.

It is also important to note that the model fit similarly for women and men. Thus, the predicted relationships between investment and private regard and gender motivation held for

both genders. This suggests that although men and women are held to different gender role expectations, some of the precipitating factors in gender role motivation (e.g., investment in gender ideals and private regard) may be similar. This finding does not mean that the consequences of gender role motivation are always similar for men and women. Indeed, it would be incorrect to interpret the present study as uniformly demonstrating positive outcomes of gender conformity for men and women (feeling positively about one's gender group predicted feeling autonomously motivated to conform to the group's behavioral stereotypes and positively predicted self-esteem). Although both communion and agency are positively valenced trait clusters (Suitner & Maass, 2008), it is important to remember that enacting either trait may not lead to positive outcomes in all situations. For example, communal behavior may not be valued in male-dominated workplace settings, and thus may hinder women's achievement in that context. Because gender conformity can have costs to status, particularly for women, internalizing gender norms may prohibit women in professional settings. For example, in line with the Stereotype Content Model (Fiske, Cuddy, Glick, & Xu, 2002), women who act communally are seen as less competent in a workplace setting than women who act agentially (Rudman & Glick, 1999). Women who feel positively about their gender group may internalize gender norms of communality and feel good about enacting communal behavior, but those norms may still hold them back in a corporate or academic setting. Women who take on more agentic traits and behaviors may prove themselves competent for the corporate world, but risk incurring *backlash*, or social sanction for violating feminine prescriptions of niceness and communality (Rudman, 1998; Rudman & Glick, 2001). Thus, women still find themselves in a double bind. In the present research, we show that internalizing gender norms and feeling autonomously

motivated to fulfill them can predict positive feelings about the self, but we would expect different consequences in the workplace or academic settings.

An additional path between private regard and self-esteem was specified as a result of examination of the modification indices in the test of the hypothesized model. The modified hypothesized model suggests that a direct path exists between private regard and self-esteem, rather than just the indirect path through autonomous motivation. This finding is intuitive considering that private regard represents a subscale of collective self-esteem, which is often correlated with personal self-esteem (Luhtanen & Crocker, 1992). However, results showed that private regard does not represent an additional outcome variable in the same manner as self-esteem; alternative models with private regard specified as a dependent variable demonstrated poorer fit. In sum, our model displays a novel approach to measuring the consequences of gender conformity by including investment in gender ideals and private regard and investigating how those variables predict gendered motivation across both men and women.

### **Limitations and Future Directions**

One must be careful in drawing conclusions from the data collected from university populations due to limited sample characteristics. It is unclear whether these effects would replicate in an older, more diverse population. The primary limitation of the current study is its correlational design. Although structural equation modeling specifies directional paths, causality cannot be assumed. Future research should utilize an experimental paradigm in order to induce feelings of high or low private regard or directly manipulate engagement in autonomous versus pressured motivation. For example, a laboratory situation could be created in which motivation is manipulated and real-time behavior is observed; contexts featuring situational pressure versus autonomy support could be used to induce participants to act in a gender conforming manner.

For more ecological validity, future research could utilize experience sampling to record participants' motivation at multiple points in the day as they engage in gender conforming behaviors.

In an effort to remain consistent with past research, our measure of investment in gender ideals may have been somewhat ambiguous. Specifically, participants were able to self-conceptualize who "society" is and what society's ideal man or woman is like. Although research has shown that women and men are viewed as more communal and agentic, respectively (Diekmann & Eagly, 2000), we did not ask participants whether their conceptualization of the ideal woman or man possessed those traits. However, in the present study the investment in gender ideals measure predicted women's felt pressure to act communally and men's felt pressure to act agentially, suggesting that communality and agency are reflected in participants' understanding of societal gender ideals. Moreover, Wood et al. (1997) found that discrepancies between the actual self and society's ideal were reduced when highly invested women acted in communal ways and highly invested men acted in dominant/agentic ways. This pattern also suggests that the content of "society's ideal" includes communal behavior for women and agentic behavior for men. Future research however, should attempt to directly measure the content of participants' gender ideals to determine whether it aligns with stereotypically communal and agentic domains.

Other future directions include examination of the situational causes of investment in societal gender ideals versus private regard for gender identity. Research on self-determination theory shows that reward (and punishment) for behavior is negatively associated with autonomous motivation (Deci & Ryan, 1987; Enzle & Ross, 1978). Perhaps individuals who experience more reward (or sanctions) for their gender typical (or atypical) behavior may be

more likely to act in accordance with gender norms because of societal ideals, and therefore experience pressured gender motivation. In contrast, individuals who have not experienced acute consequences of gender conformity or violation may simply enjoy or value their gender group and incorporate gender into the self-concept.

Additionally, it is not clear whether the effects of pressured and autonomous motivation on self-esteem are specific to gender ideals, or whether the type of behavioral motivation would affect outcomes of behavior in accordance with any societal ideal. For instance, if there is a societal ideal of integrity, would being honest about an indiscretion increase or decrease one's feelings about the self, depending on whether the confession was motivated by choice or pressure? Is one's motivation dependent on whether or not one is invested in living up to the societal ideal or whether one has incorporated integrity into the self-concept and therefore values oneself as an honest person? Or are the findings presented here specific to gender norms of communality and agency? We expect that the type of motivation may differentially affect self-outcomes for any societal ideal that is tied to a specific identity. Therefore, just as the current research showed that autonomously motivated gender consistent behaviors were associated with greater self-esteem, the same may hold for behaviors tied to an ethnic or racial identity, religious identity, or even a career identity. In the same manner, individuals may feel pressure to live up to a group ideal, or they may value or have high regard for the group and therefore feel autonomously motivated to act in accordance with the group's norms.

Finally, the present research is limited by its artificial dichotomization of participants' gender. Because gender is a social construction, individuals may view themselves as more or less masculine or feminine, placing themselves somewhere along a gender continuum (Doorn et al., 1994; Eyler & Wright, 1997). By only allowing our participants to self-categorize as a man,

woman, or other, we limited the range of possible responses. Feminist scholars have critiqued the assumption that biological sex necessarily coincides with gender expression (Butler, 1999; Halberstam, 1998). Although we did not measure participants' gender identity along a continuum, we did examine the extent to which women and men felt motivated to act in accordance with gender norms, reflecting the continuous nature of gendered behavior. Additionally, all of our participants self-identified as heterosexual. Gay, lesbian, transgendered, and transsexual individuals may experience their gender differently than our sample, perhaps reporting more blending of masculinity and femininity. It is also possible that individuals in same-sex relationships, who already violate gender prescriptions of heterosexuality, may be less likely to internalize traditional gender stereotypes that govern male-female relationships and thus may feel less pressure to conform to other societally held gender stereotypes. Future research should utilize more sensitive measures of gender and assess whether individuals possessing a more blended gender identity experience these motivational processes differently than individuals with a more polarized gender identity.

The current research may also have important implications for practitioners. Our data suggest that interventions focused on improving women and men's health need not focus on gender conformity per se, but rather on identifying the motivations that underlie gender role consistent behavior. For example, gender normative behavior may only lead to negative mental health outcomes when such behaviors are driven by the desire to satisfy others' expectations. Within intimate relationships, couples may negotiate their own norms and gendered expectations, with pressure from a partner to fulfill these expectations, but not the norms themselves, resulting in conflict.

## **Conclusions**

The research presented here attempts to reconcile past conflicting findings regarding the positive or negative consequences of investment in gender ideals. We have shown that investment in gender ideals and private regard are related but distinct constructs, which differentially relate to gender motivation. Additionally, we add to the literature by applying motivation and self-determination theory to the psychological consequences of gender conforming behavior. Gender conformity may be detrimental to those who feel pressure to fulfill societal gender norms, while at the same time beneficial for those who have internalized societal norms and find personal value in living up to that gender ideal. Yet women's internalization of gender norms may be a double edged sword, promoting self-esteem if they experience autonomous motivation for their gender conforming behavior but lowering their status in masculine settings where communality may be devalued and therefore detrimental to women's achievement.

## References

- Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: Findings from a prospective study. *Journal of Personality and Social Psychology, 85*, 768-776.
- Bem, S. L. (1983). Gender schema theory and its implications for child development: Raising gender-aschematic children in a gender-schematic society. *Signs, 8*, 598-616.
- Bem, S. L. (1984). Androgyny and gender schema theory: A conceptual and empirical integration. In T. B. Sonderegger (Ed.), *Psychology and gender* (pp. 179-226). Lincoln, Nebraska: University of Nebraska Press.
- Bem, S. L., Martyna, W., & Watson, C. (1976). Sex typing and androgyny: Further explorations of the expressive domain. *Journal of Personality and Social Psychology, 34*, 1016-1023.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods and Research, 17*, 303-316.
- Bryant, A., & Check, E. (2000). How parents raise boys and girls. *Newsweek: Your Child, 136*, 64-65.
- Bussey, K., & Bandura, A. (1992). Self-regulatory mechanisms governing gender development. *Child Development, 63*, 1236-1250.
- Butler, J. (1999). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.
- Carver, P. R., Yunger, J. L., & Perry, D. G. (2003). Gender identity and adjustment in middle childhood. *Sex Roles, 49*, 95-109.
- Coffman, D. L., & MacCallum, R. C. (2005). Using parcels to convert path analysis models into latent variable models. *Multivariate Behavioral Research, 40*, 235-259.

- Conway, M., Pizzamiglio, M. T., & Mount, L. (1996). Status, communality, and agency: Implications for stereotypes of gender and other groups. *Journal of Personality and Social Psychology, 71*, 25-38.
- Crocker, J., Luhtanen, R. K., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among Black, White, and Asian college students. *Personality and Social Psychology Bulletin, 20*, 503-513.
- Deaux, K., & LaFrance, M. (1998). Gender. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 788-827). New York: McGraw-Hill.
- Deci, E. L., Nezlek, J., & Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology, 40*, 1-10.
- Deci, E. L., & Ryan, R. M. (1980). The empirical exploration of intrinsic motivational processes. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 39-80). New York: Academic Press.
- Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology, 53*, 1024-1037.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Deci, E. L., Schwartz, A. J., Sheinman, L., & Ryan, R. M. (1981). An instrument to assess adults' orientation toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence. *Journal of Educational Psychology, 73*, 642-650.
- Diekmann, A. B., & Eagly, A. H. (2000). Stereotypes as dynamic constructs: Women and men of the past, present, and future. *Personality & Social Psychology Bulletin, 26*, 1171-1188.

- Doorn, C. D., Poortinga, J. M., & Verschoor, A. M. (1994). Cross-gender identity in transvestites and male transsexuals. *Archives of Sexual Behavior, 23*, 185-201.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111*, 3-22.
- Eagly, A. H., & Wood, W. (1991). Explaining sex differences in social behavior: A meta-analytic perspective. *Personality and Social Psychology Bulletin, 17*, 306-315.
- Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology, 37*, 451-463.
- Elkins, R., & King, D. (1995). *Blending genders: Social aspects of cross-dressing and sex-changing*. London: Routledge.
- Enzle, M. E., & Ross, J. M. (1978). Increasing and decreasing intrinsic interest with contingent rewards: A test of cognitive evaluation theory. *Journal of Experimental Social Psychology, 14*, 588-597.
- Eyler, A. E., & Wright, K. (1997). Gender identification and sexual orientation among genetic females with gender-blended self perception in childhood and adolescence. *International Journal of Transgenderism, 1*. Retrieved December 11, 2009, from <http://www.iiav.nl/eazines/web/IJT/97-03/numbers/symposium/ijtc0102.htm>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878-902.
- Guerrero-Witt, M., & Wood, W. (2009). Self-regulation of gendered behavior in everyday life.

Manuscript submitted for publication.

Halberstam, J. (1998). *Female masculinity*. Durham: Duke University Press.

Hau, K., & Marsh, H. W. (2004). The use of item parcels in structural equation modeling: Non-normal data and small sample sizes. *British Journal of Mathematical and Statistical Psychology, 57*, 327-351.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.

Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement, 54*, 757-765.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.

Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*, 151-173.

Lott, B. E. (1987). *Women's lives themes and variations in gender learning*. Pacific Grove, CA: Brooks/Cole.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality & Social Psychology Bulletin, 18*, 302-318.

Munt, S. R. (1997). *Butch/femme: Inside lesbian gender*. London: Cassell.

Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly, 26*, 269-281.

- Raag, T., & Rackliff, C. L. (1998). Preschoolers' awareness of social expectations of gender: Relationships to toy choices. *Sex Roles, 38*, 685-700.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin, 26*, 419-435.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rowley, S. J., Sellers, R. M., Chavous, T. M., & Smith, M. A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 74*, 715-724.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology, 74*, 629-645.
- Rudman, L. A., & Fairchild, K. (2004). Reactions to counterstereotypic behavior: The role of backlash in cultural stereotype maintenance. *Journal of Personality and Social Psychology, 87*, 157-176.
- Rudman, L. A., & Glick, P. (1999). Feminized management and backlash toward agentic women: The hidden costs to women of a kinder, gentler image of middle managers. *Journal of Personality and Social Psychology, 77*, 1004-1010.
- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues, 57*, 743-762.
- Rudman, L. A., & Glick, P. (2008). *The social psychology of gender: How power and intimacy shape gender relations*. New York: Guilford

- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology, 57*, 749-761.
- Ryan, R. M., & Grolnick, W. S. (1986). Origins and pawns in the classroom: Self-report and projective assessments of individual differences in children's perceptions. *Journal of Personality and Social Psychology, 50*, 550-558.
- Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to intrinsic motivation: A review and test using cognitive evaluation theory. *Journal of Personality and Social Psychology, 45*, 736-750.
- Sanchez, D. T., & Crocker, J. (2005). How investment in gender ideals affects well-being: The role of external contingencies of self-worth. *Psychology of Women Quarterly, 29*, 63-77.
- Sanchez, D. T., Crocker, J., & Boike, K. R. (2005). Doing gender in the bedroom: Investing in gender norms and the sexual experience. *Personality and Social Psychology Bulletin, 31*, 1445-1455.
- Sandnabba, N. K., & Ahlberg, C. (1999). Parents' attitudes and expectations about children's cross-gender behavior. *Sex Roles, 40*, 249-263.
- Steinberg, L., Elmen, J. D., & Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60*, 1424-1436.
- Suitner, C., & Maass, A. (2008). The role of valence in the perception of agency and communion. *European Journal of Social Psychology, 38*, 1073-1082.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology, 33*, 1-39.

- Tajfel, H., & Turner, C. (1979). An integrative theory of intergroup conflict. In W. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-48). Pacific Grove, CA: Brooks/Cole.
- Turner, R. A., Irwin, C. E., Tschann, J. M., & Millstein, S. G. (1993). Autonomy, relatedness, and the initiation of health risk behaviors in early adolescence. *Health Psychology, 12*, 200-208.
- Twenge, J. M. (1997). Changes in masculine and feminine traits over time: A meta-analysis. *Sex Roles, 36*, 305-325.
- Twenge, J. M. (2001). Changes in women's assertiveness in response to status and roles: A cross-temporal meta-analysis, 1931-1993. *Journal of Personality and Social Psychology, 81*, 133-145.
- Vallerand, R. J., & Bissonnette, R. (1992). Intrinsic, extrinsic, and amotivational styles as predictors of behavior: A prospective study. *Journal of Personality, 60*, 599-620.
- Wood, W., Christensen, P. N., Hebl, M. R., & Rothgerber, H. (1997). Conformity to sex-typed norms, affect, and the self-concept. *Journal of Personality and Social Psychology, 73*, 523-535.

## Footnote

<sup>1</sup> It should be noted that although we used the same items and instructions as Wood et al. (1997) in our measure of investment in gender ideals, we did not compute the scores in exactly the same manner. In Wood et al.'s paper, the researchers measured endorsement of the same sex ideal as well as rejection of the opposite sex ideal. They then identified participants who scored in the upper quartile on both items and classified those individuals as highly invested in gender ideals. Analyses compared the highly invested individuals to the other  $\frac{3}{4}$  of the sample. Because the authors were conducting experimental work, this artificial dichotomization was necessary in order to use analysis of variance. However, because the present study is correlational and uses structural equation modeling, it was not necessary to dichotomize investment in gender ideals. Moreover, it is always preferable to maintain the integrity of the scale rather than to dichotomize artificially. Therefore, we treated the variable as continuous, in the manner in which it was originally measured. Thus, in the present study, we are not claiming that highly invested individuals experience more pressured gender motivation than low invested individuals. Instead, our analyses show that greater investment in gender ideals is associated with greater reported experience of pressured gender motivation. This method is consistent with more recent research utilizing the investment in gender ideals scale (Sanchez & Crocker, 2005; Sanchez, Crocker, & Boike, 2005).

<sup>2</sup> Although parceling is somewhat controversial (Hau & Marsh, 2004; Little, Cunningham, Shahar, & Widaman, 2002), it is a common and effective method of accounting for measurement error (Coffman & MacCullum, 2005).

<sup>3</sup> This model is recursive and identified because the number of observations is greater than the number of free parameters ( $df > 0$ ), and unit loading identification constraints were set

to 1.0 (Kline, 2005). Although disturbances of the motivation variables were allowed to covary, they are not specified to be structurally related and therefore the model remains recursive.

Table 1

*Means and Standard Deviations for all Variables by Gender*

	Women		Men		<i>t</i>	Cohen's <i>d</i>	Total	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>M</i>	<i>SD</i>
Investment in Gender Ideals	5.83	1.84	5.88	1.89	-.30	-.03	5.85	1.86
Private Regard for Gender Identity	6.03	.85	6.11	.91	-.92	.09	6.06	.87
Autonomous Motivation	5.84	.82	4.50	1.06	14.32**	1.41	5.25	1.15
Pressured Motivation	4.29	1.22	3.49	1.31	6.29**	.63	3.94	1.32
Self-Esteem	5.40	1.01	5.49	1.07	-.91	.09	5.44	1.04

*Note.* The Investment in Gender Ideals measure was scored on a 9-point scale; all other measures were scored on a 7-point scale.

\*  $p < .05$ , \*\*  $p < .01$ .

Table 2

*Zero-order Correlations Among All Variables for the Entire Sample.*

	1	2	3	4	5
1. Investment in Gender Ideals	—				
2. Private Regard for Gender Identity	.21**	—			
3. Autonomous Motivation	.09	.16**	—		
4. Pressured Motivation	.21**	.05	.35**	—	
5. Self-Esteem	.03	.36**	.12*	-.11*	—

\*  $p < .05$ , \*\*  $p < .01$ .

Table 3

Maximum Likelihood Parameter Estimates for Full Sample Measurement Model

Parameter	Unstandardized	SE	Standardized	Parameter	Unstandardized	SE	Standardized
<u>Factor Loadings</u>				<u>Factor Variances and Covariances</u>			
Investment in Gender Ideals → IGI1	1.00 <sup>a</sup>	---	.88	Investment in Gender Ideals (IGI)	2.81	.53	1.000
Investment in Gender Ideals → IGI2	1.06	.18	.87	Private Regard (PR)	.74	.12	1.000
Private Regard → PR1	1.00 <sup>a</sup>	---	.86	Autonomous Motivation (A)	1.14	.19	1.000
Private Regard → PR2	.82	.11	.76	Pressured Motivation (P)	1.37	.17	1.000
Autonomous Motivation → A1	1.00 <sup>a</sup>	---	.86	Self Esteem (SE)	.78	.08	1.000
Autonomous Motivation → A2	.93	.13	.77	IGI ↗ PR	.37	.11	.26
Pressured Motivation → P1	1.00 <sup>a</sup>	---	.81	IGI ↗ A	.19 <sup>b</sup>	.13	.11
Pressured Motivation → P2	.98	.10	.77	IGI ↗ P	.50	.15	.26
Self-Esteem → SE1	1.00 <sup>a</sup>	---	.91	IGI ↗ SE	.05 <sup>b</sup>	.09	.03
Self-Esteem → SE2	1.23	.08	.90	PR ↗ A	.15	.07	.17
<u>Measurement Error Variances</u>				PR ↗ P	.05 <sup>b</sup>	.07	.05
<i>E</i> <sub>IGI1</sub>	.86	.43	.48	PR ↗ SE	.32	.06	.42
<i>E</i> <sub>IGI2</sub>	1.05	.54	.50	A ↗ P	.56	.09	.45
<i>E</i> <sub>PR1</sub>	.25	.09	.50	A ↗ SE	.14	.07	.15
<i>E</i> <sub>PR2</sub>	.36	.08	.65	P ↗ SE	-.13	.07	-.13
<i>E</i> <sub>A1</sub>	.40	.15	.51				
<i>E</i> <sub>A2</sub>	.66	.15	.64				
<i>E</i> <sub>P1</sub>	.72	.15	.59				
<i>E</i> <sub>P2</sub>	.89	.16	.64				
<i>E</i> <sub>SE1</sub>	.16	.05	.41				
<i>E</i> <sub>SE2</sub>	.28	.08	.44				

Note. Standardized estimates for measurement errors are proportions of unexplained variance. Robust standard error values are presented. <sup>a</sup>Not tested for statistical significance, <sup>b</sup>*p* > .05, all other unstandardized estimates *p* < .05.

Table 4

*Fit Statistics for All Models Tested*

	$\chi^2$	<i>df</i>	<i>CFI</i>	<i>NNFI</i>	<i>IFI</i>	<i>RMSEA</i>	<i>AIC</i>
<i>Models Tested on Full Sample</i>							
Measurement Model	24.37	25	1.0	1.0	1.0	.00	-25.63
Hypothesized Model	73.83	29	.97	.96	.97	.06	15.83
Full Path Model	72.83	27	.97	.95	.97	.06	18.83
Modified Hypothesized Model	25.98	28	1.0	1.0	1.0	.00	-30.02
Alternative Model A	88.59	28	.96	.94	.96	.07	32.59
Alternative Model B	94.93	30	.96	.94	.96	.07	34.93
<i>Models Nested Within Gender</i>							
Measurement Model	66.46	65	1.0	1.0	1.0	.01	-63.54
Modified Hypothesized Model	61.95	66	1.0	1.0	1.0	.00	-70.05

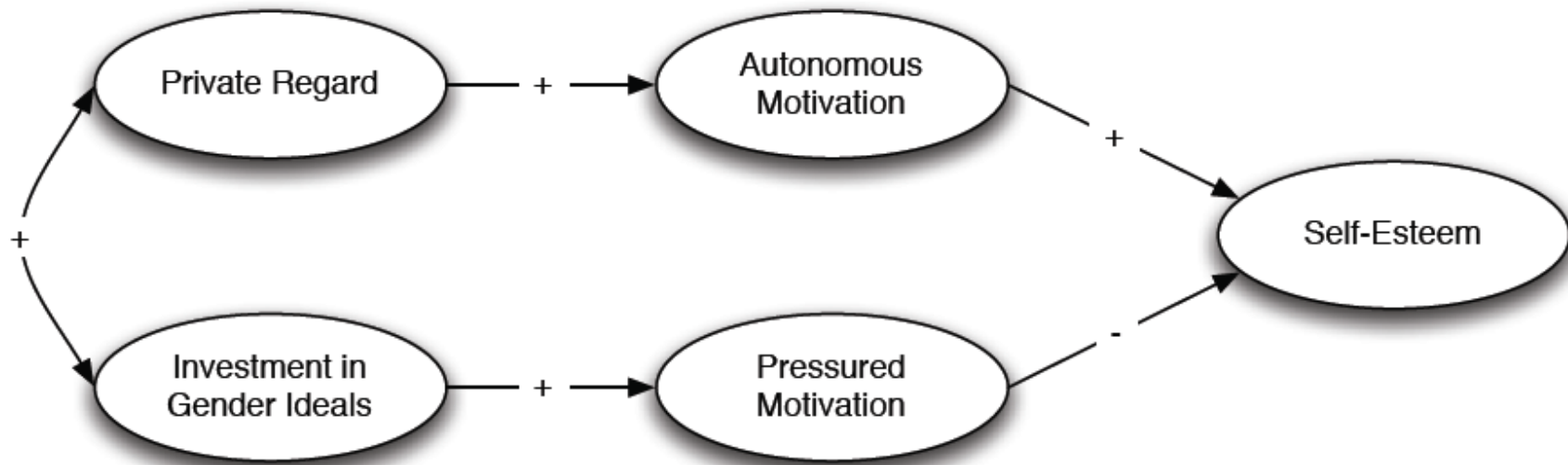


Figure 1. Hypothesized model for Gender Conforming Behavior.

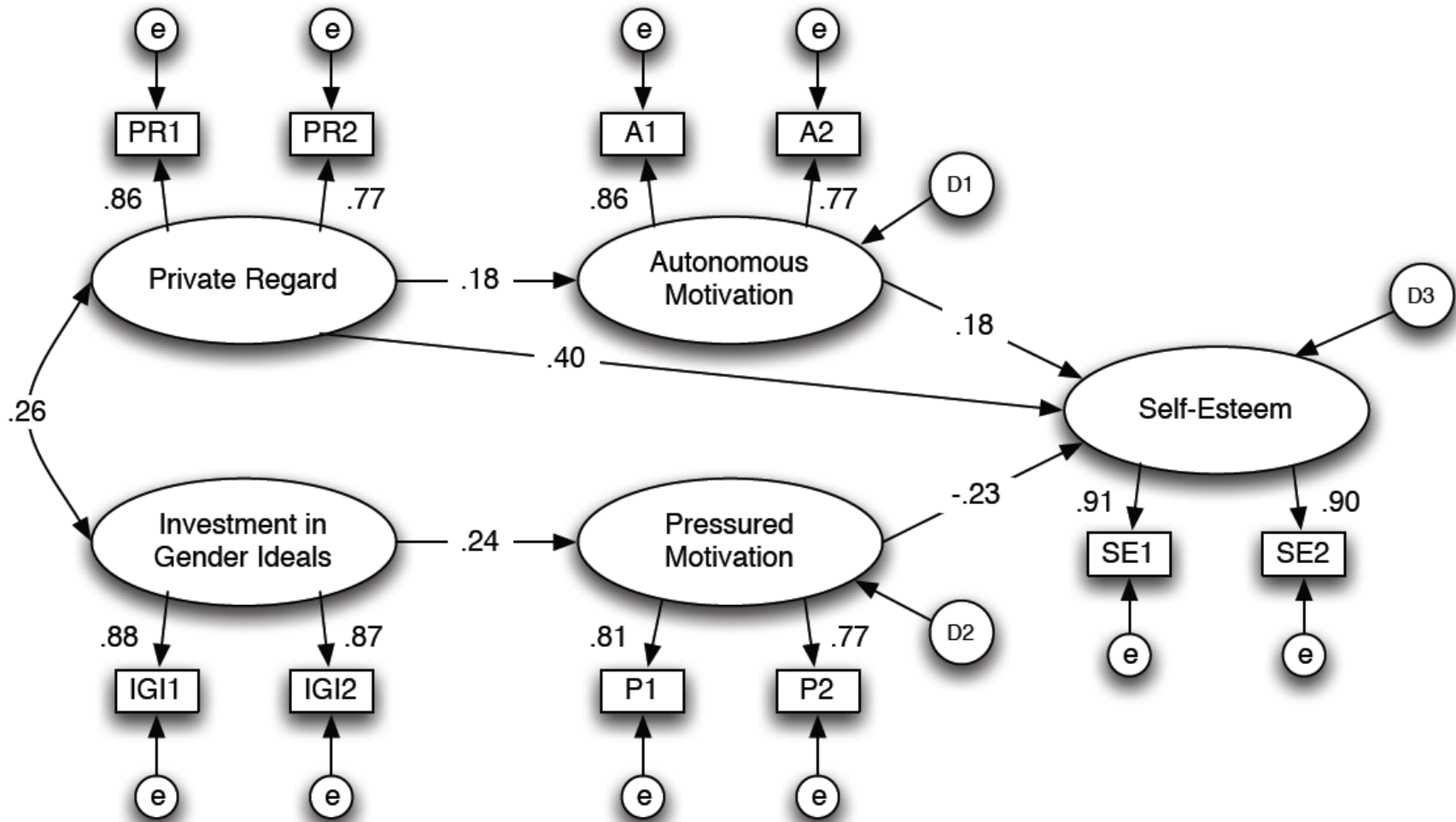


Figure 2. Modified hypothesized model tested on full sample.  $\beta$  values are significant at  $p < .05$  unless noted otherwise. Disturbances of the motivation variables (D1 and D2) were significantly positively correlated.