This research employed a social role perspective to examine gender differences in life goals and career preferences, how life goals are informed by gender beliefs, and the causal relationship between life goals and career preferences. Men endorsed status goals and male-stereotypical careers more than women, women endorsed family goals and female-stereotypical careers more than men, and mediational analysis demonstrated that life goals mediated the relationship between sex and career interest. Structural equation modeling indicated that as gendered self-concept and prescriptive gender stereotypes became more agentic than communal, life goals became more status-centered than family-centered, and career interest became more male-stereotypical than female-stereotypical. In an experimental priming study, participants primed with family goals trended toward increased endorsement of female-stereotypical careers, and participants primed with status goals decreased endorsement of female-stereotypical careers.
LIFE GOALS: ANTECEDENTS IN GENDER BELIEFS AND EFFECTS ON GENDER-STEREOTYPICAL CAREER INTEREST

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Life Goals: Antecedents in Gender Beliefs and Effects on Gender-Stereotypical Career Interest

Conventional wisdom in Western culture suggests that anyone can be whatever they want to be, regardless of gender. However, men and women continue to exhibit distinct differences in career choice. Despite increasing participation in the paid labor force (Fullerton, 1999), women are still more likely than men to stay in the home and engage in domestic work (Bianchi, Milkie, Sayer, & Robinson, 2000), and men are still more likely than women to serve as the primary source of household income (U.S. Census Bureau, 2004a). Men constitute a majority in careers such as mathematics and engineering, as well as in chief executive and general management positions across career domains. Women constitute a majority in careers such as social services and education, as well as in secretarial and support positions across career domains (U.S. Census Bureau, 2004b). This division may be explained generally by differences in men and women’s goals, and life goals in particular.

Broadly, goals are a set of motivations which serve to guide activities and assist in the interpretation of daily events (Cantor, Norem, Langston, Zirkel, Fleeson, & Cook-Flannagan, 1991). Goals guide the selection of behavior (Abraham & Sheeran, 2003), and serve as a means by which basic psychological needs are met (Deci & Ryan, 2000). Goal attainment accounts for changes in well-being, moderated by commitment to the goal and contingent on goal progress over time (Brunstein, 1993). Generally, goals provide a framework for people to determine priorities, act on values, and select appropriate behaviors to maximize well-being.

Life goals are, more specifically, aspirations for the establishment of life structures such as career, family, and lifestyle. They are broad and long term, spanning years, and entail the creation of specific social contexts, such as getting married, being affluent, or having a large family (Roberts & Robins, 2000). Prior research has shown that progress on smaller daily goals that are related to broader, long-term life goals is more closely related to subjective well-being than progress on other daily goals (King, Richards, & Stemmerich, 1998).

Differences in life goals may lead to differences in career preferences, to the extent that certain careers afford progress on some life goals more than others. Women report valuing job attributes related to interpersonal relationships and helping others more than men, and men report valuing job attributes related to leadership, power, and income more than women (Gati, Osipow, & Givon, 1995; Konrad, Ritchie, Lieb, & Corrigall, 2000). Emphasis on interpersonal goals predicts preference for careers in education and social service, and emphasis on status goals predicts preference for careers in math and science (Morgan, Isaac, & Sansone, 2001).

Factors Contributing to Gendered Goal Pursuit

Social roles. One explanation for gender differences in goal pursuit is offered by social role theory (Eagly, 1987; Eagly, Wood, & Diekman, 2000), which posits that sex differences in behavior result from the distribution of men and women into social roles. Men primarily acquire agentic or instrumental characteristics (e.g., independence, aggression), which facilitate behavior necessary to secure power and status, such as attaining high-reward employment. Women primarily acquire communal or expressive characteristics (e.g., interdependence, caring), which facilitate behavior necessary for caring for others or raising children. This division of labor leads to a stereotypic link of sex to role-relevant characteristics, where women are expected to be more communal than men and men are expected to be more agentic than women.

Sex differences in life goals are reflected in the characteristics men and women are expected to possess, consistent with the expectations of broader gender roles. Qualities like
warmth, kindness, and sensitivity are perceived as being significantly more important for women than men, and qualities like drive, assertiveness and self-reliance are perceived as being significantly more important for men than women (Prentice & Carranza, 2002). These gender-normative characteristics are also reflected in how men and women perceive themselves. Across cultures, women rate themselves more highly on such personality traits as agreeableness, warmth and openess to feelings than men, and men rate themselves more highly than women on assertiveness and openness to ideas (Costa, Terracciano, & McCrae, 2001). These findings are further supported by a meta-analysis by Feingold (1994) in which men displayed higher levels of assertiveness than women, and women displayed higher levels of nurturance than men.

Role congruity. The more closely role-relevant characteristics are associated with one sex, the more those characteristics are perceived to be inherent and appropriate to that sex (Hall & Carter, 1999). Men are valued when they display agentic traits, and women are valued when they display communal traits, suggesting to men and women that social approval is gained by behaving in accordance with their gender role (Eagly, Wood, & Diekman, 2000). In turn, the content of men and women’s self-concepts may inform the content of their life goals.

Role congruity theory (Eagly & Karau, 2002; Eagly & Diekman, 2005) states that perceived incongruity between the attributes of a group member and attributes that facilitate success in a social role will elicit prejudice and negative evaluations. People for whom gender norms are personally relevant select situations and interactions that allow them to express those norms and experience greater well-being as a result of progress on goals congruent to those norms (Diekman & Eagly, in press). Men and women who personally endorse gender norms report greater consistency between the self and personal standards when they engage in role-congruent behaviors, as well as greater well-being (Wood, Christensen, Hebl, & Rothgerber, 1997).

When men and women display gender-typical characteristics, they are likely to be rewarded or valued more highly for behavior congruent to their gender role. Conversely, men and women are likely to be penalized or evaluated negatively when they display gender-atypical characteristics or behave in ways which violate gender norms. Women are perceived to be less fit for leadership roles than men, and are evaluated negatively compared to men when engaging in leadership behavior (Eagly & Karau, 2002). Successful women in primarily male occupations are less liked, receive more derogation and are less likely to be given promotions or salary increases than comparably successful men (Heilman, Wallen, Fuchs, & Tamkins, 2004), and men in the role of househusband are perceived negatively by both men and women (Wentworth & Chell, 2001). The traits and characteristics men and women perceive as appropriate for themselves and others inform the types of goals they are likely to pursue, as well as the means by which the goals are pursued.

As certain occupations are more closely associated with one gender over another, those occupations may appear less attractive to members of the opposite gender. To the extent that men and women dominate different types of occupation, characteristics stereotypical of the dominant gender are perceived as necessary for that type of occupation (Cejka & Eagly, 1999). When both agentic and communal traits are required for a position, women who display agency are viewed more negatively than men who do so, and men and women who display communion are less likely to be hired (Rudman & Glick, 1999, 2001, but see also Glick, 1991 and Judd & Oswald, 1997). These penalties may make careers in which one’s gender is underrepresented appear less efficient as a way of fulfilling life goals.
Careers provide means and opportunities for the fulfillment of life goals. High-status careers help to fulfill agentic goals by providing greater income, influence, and visibility in a chosen field. Other careers help to fulfill communal goals by providing greater opportunity to engage in interpersonal relationships, help others, and devote more time to family than is usually possible in a high-status career. Gender may influence both life goals and career interest directly, but previous research has demonstrated that men and women possess both agentic and communal goals (Kerpelmen & Schvaneveldt, 1999). Insofar as life goals are broad, overarching aspirations, endorsement of a specific life goal domain will direct interest to the types of careers which provide the greatest means and opportunities to fulfill those goals.

If gender moderated the relationship between life goals and career interest, it would suggest that goals influenced career interest for one gender more than another, or that goals influenced career interest for one gender but not another. Because men and women alike possess both agentic and communal goals, and both pursue careers, the relationship of goals to careers is expected to function in the same manner for both men and women. Given evidence for goal and career pursuit for both men and women, the primary difference between them is hypothesized to be one of the type of goal emphasized, and how that emphasis directs career interest. Thus, this research will seek to establish that life goals mediate the relationship between gender and gender-stereotypical career interest.

**Antecedents of Life Goals**

The formation of life goals can be explained in terms of multiple factors, including personality traits (Roberts & Robins, 2000; Roberts, O’Donnell, & Robins, 2004), gender roles, self-concept, and gender stereotypes, among others (Eccles, 1987, 1994). In reviews of gender research, Koestner and Aube (1995) and Kite (2001) concluded that perceptions and beliefs about men and women vary across settings, and gender may be incorporated into ideas about the self in multiple, loosely connected ways, rather than as a single, unitary construct. Gender-related behavior can be influenced by situational cues and the expectations of social perceivers, as well as the gender beliefs of both target and perceiver (Deaux & Major, 1987).

This constellation of personally endorsed expectations, or gender belief system (Deaux & Major, 1987), serves a regulatory function, guiding one’s own behavioral choices and interpretation of the behaviors of others. Gender beliefs have also been theorized to influence the nature of men and women’s goals (Eagly et al., 2000), but little research has explored the possible links between gender beliefs, goals, and career interest. The gender belief system informs rewards for gender-typical behavior and punishment for gender-atypical behavior, and contributes to what goals men and women perceive as appropriate and desirable. A model of achievement choices developed by Eccles and colleagues (Eccles et al., 1983), demonstrated that gender socialization, self-efficacy, perceived task value, and penalties for attempting to enter gender-atypical professions predicted gender differences in interest in math and science-based careers, as well as willingness to sacrifice career goals to take care of the home and children (Eccles, 1994). Through these mechanisms, gender roles help shape ideas of what constitute gender-appropriate goals. Three key components of the gender belief system investigated here are gendered self-concept, prescriptive gender stereotypes, and sexism. These components were chosen because beliefs about the self, others in relation to the self, and men and women in general are fundamental to the formation of gender beliefs, and thus serve as a parsimonious starting point for a model which may then be expanded to include secondary factors like perceived efficacy, social cost, and socialization.
Gendered self-concept. Men and women rated high in self-reported agency showed greater preference for demanding tasks such as academic science and business management than same-sex peers (Spence & Helmreich, 1980), and self-reported agentic and communal traits correlate strongly with agentic and communal behaviors across multiple studies (Saragovi, Koestner, Di Dio, & Aube, 1997). To the extent that self-concept is more gender-typical, life goals should be more gender-stereotypical.

Prescriptive gender stereotypes. Approval of gender-typical traits in ideal others reflects the degree to which the perceiver endorses injunctive gender norms. Injunctive gender norms are a motivational factor, because norm-congruent experiences result in greater well-being when norms are highly relevant to the perceiver (Wood et al., 1997). To the extent that prescriptive gender stereotypes are more strongly endorsed, life goals should be more gender-stereotypical.

Sexism. Ambivalent sexism (Glick & Fiske, 1996) distinguishes between hostile sexism, which supports traditional gender roles and male power by derogating and objectifying women, and benevolent sexism, which in contrast idealizes and romanticizes women in the service of traditional gender roles. Previous research has found good evidence of relationships between sexist beliefs and gender role-related evaluations and preferences. Hostile sexism is significantly associated with more negative evaluations of and lower recommendations for female candidates for managerial positions and higher recommendations for male candidates for the same positions (Masser & Abrams, 2004). Benevolent sexism is significantly correlated with women’s endorsement of the traditional female gender role and a preference for older, high-earning mates (Johannesen-Schmidt & Eagly, 2002). To the extent that sexist beliefs are more strongly endorsed, life goals should be more gender-stereotypical.

Overview of Current Research

This research seeks to assess the ways in which men and women differ in their life goals and career preferences, how life goals are informed by gender beliefs, and what causal relationship exists between life goals and career preferences. A preliminary study will outline life goal domains in which significant gender differences exist, confirm gender differences in goals and career interest, and explore the relationship between gender, career interest, and the content of life goals. Study 1 will replicate the preliminary study, extend it by outlining antecedents of life goals, and offer a model that describes the relationship of antecedents to goals and goals to career interest. Finally, Study 2 will employ an experimental priming design to provide support for the causal link between goals and career interest.

Preliminary Study

The purpose of the preliminary study was to describe the content of life goals, establish the presence of gender differences in life goals, and extend those gender differences to careers stereotypically associated with either men or women. Prior research has demonstrated that distribution of men and women into social roles leads to men and women being rewarded for enacting behaviors congruent with their particular role (see Diekman & Eagly, in press, for a review). Men and women should thus exhibit differences in the types of goals they emphasize. In turn, this emphasis on role-congruent goals should lead to interest in careers which differentially afford the achievement of those goals. It was hypothesized that men and women would exhibit preferences for different types of life goals and interest in different types of careers. Emphasis on goals preferred by men would predict interest in male-stereotypical careers, emphasis on goals...
preferred by women would predict interest in female-stereotypical careers, and these goals would mediate the relationship between sex and career interest.

**Method**

**Participants and Procedures**

65 participants (43% male, 91% Caucasian, age $M = 19$) at a Midwestern university were recruited from a participant pool in exchange for partial class credit. Participants provided demographic information and completed a series of measures via computer workstations, using Medialab (Jarvis, 2000) survey software. Upon completion of these measures, participants were debriefed and thanked.

**Measures**

*Life goals.* Participants were asked to consider what they wanted their life to be like at age 35. This age was selected because it was both distant from the mean age of the participants, but not so distant as to be meaningless, as well as being a point at which concerns about balancing family and career become salient. With this age in mind, participants rated the importance of 133 items representing elements of future success on a 7-point Likert scale, from *not important at all* to *very important* (see Appendix B for the full list of items). Items were based on possible elements of a successful life (e.g., material comfort, quality of time spent with family, friendships) generated through discussion about the types of things to which people would aspire (e.g., wealth), or things which would be important to adult life (e.g., daily domestic tasks). Items were grouped by appropriate achievement factor and redundant items omitted.

The collected items were subjected to exploratory factor analysis, following the recommendations of Fabrigar and colleagues (Fabrigar, Wegener, MacCallum, & Strahan, 1999). The number of factors retained was determined by eigenvalues greater than one, and confirmed by an examination of the scree plot. Use of promax rotation to interpret the factor pattern allowed for the possibility of either correlated or orthogonal factors, and .40 was set as a minimum factor loading for item inclusion. Initial factor analysis (principal factors, promax rotation) of the 133 life goals items yielded a 3 factor solution, in which life goal items were grouped into Work and Status (Cronbach’s $\alpha = .93$), Home and Family (Cronbach’s $\alpha = .96$), and Community (Cronbach’s $\alpha = .95$) categories. No items loaded negatively at or above criterion, and items with multiple loadings at or above criterion were retained only for the factor with the highest loading. Because this solution retained 128 of the original 133 items with factor loadings of .40 or higher, further factor analyses (principal factors, promax rotation) were performed within each of the three original factors separately to determine if any further refinement was possible within the three conceptually coherent factors retained by the original analysis. These analyses yielded four subfactors for the Work and Status factor, five subfactors for the Home and Family factor, and six subfactors for the Community factor (see Appendix A).

Of the 15 subfactors derived from the life goal items in factor analysis, two theoretically relevant subfactors showed significant sex differences. Sixteen items (e.g., “having a six-figure salary”, “being in a high-responsibility position at work”) made up the Status scale (Cronbach’s $\alpha = .91$), and six items (e.g., “attending field trips with your children”, “having an open and honest relationship with your children”) made up the Family scale (Cronbach’s $\alpha = .85$). Other subfactors described conceptually related constructs (e.g., wealth, image, relationship with
extended family, community involvement) but the Status and Family scales yielded the strongest sex differences of all the subfactors.

Career interest. Participants rated their interest in 7 male-stereotypical (e.g., corporate lawyer, politician) and 7 female-stereotypical (e.g., flight attendant, homemaker) careers on scales designed for the experiment, using 7-point Likert scale, from not at all interested to very interested (see Appendix C for the full list of items). Averages within male and female-stereotypical careers served as indices of stereotypical career interest (male-stereotypical career Cronbach’s α = .80, female-stereotypical career Cronbach’s α = .83).

Results

Life Goals

The life goals measures were entered in a 2 (goal: status, family) × 2 (participant sex) mixed analysis of variance with goal as a within-subjects factor. There was a significant effect of goal, F (1, 63) = 21.60, p < .001, Cohen’s d = .77, where family goals (M = 5.31, SD = 1.19) were rated more highly than status goals (M = 4.49, SD = .93). This effect was subsumed in a significant Sex × Goal interaction, F (1, 63) = 33.53, p < .001, in which men rated status more highly (M = 4.82, SD = 1.00) than women (M = 4.25, SD = .80), F (1, 63) = 6.60, p = .01, Cohen’s d = .63, and women rated family more highly (M = 5.81, SD = .98) than men (M = 4.65, SD = 1.12), F (1, 63) = 21.60, p < .001, Cohen’s d = 1.10.

Career Interest

The career interest measures were entered in a 2 (career type: male-stereotypical; female-stereotypical) × 2 (participant sex) mixed analysis of variance, with career interest as a within-subjects factor. This resulted in a significant Sex × Career interaction, F (1, 63) = 16.26, p = .002. Men expressed more interest in male-stereotypical careers (M = 3.85, SD = 1.52) than women (M = 2.65, SD = 1.28), F (1, 64) = 11.86, p = .001, Cohen’s d = .85, and women expressed more interest in female-stereotypical careers (M = 3.19, SD = 1.28) than men (M = 2.63, SD = .90), F (1, 64) = 3.91, p = .05, Cohen’s d = .51. No other effects were significant.

Mediation of Sex and Career Interest by Life Goals

Evidence for significant sex differences between men and women in career interest suggested that differences in men and women’s career interest could be explained by gender. However, significant sex differences were present also in life goal emphasis. To the extent that careers help fulfill life goals, these life goals may serve as a mechanism through which gender influences career interest. This possibility was explored using mediational analysis (Baron & Kenny, 1986). Multiple regression analyses (in which male participants were dummy-coded as 1) indicated that male participant sex predicted endorsement of status goals, which in turn predicted interest in male-stereotypical careers and mediated the relationship of sex and male-stereotypical career interest (Sobel z = 2.31, p = .02, see Figure 1). Female participant sex predicted family goals, which in turn predicted interest in female-stereotypical careers and mediated the relationship of sex and female-stereotypical career interest (Sobel z = -2.04, p = .04, see Figure 2). Status goals did not meet mediational criteria for female-stereotypical careers, nor did family goals meet mediational criteria for male-stereotypical careers1.
Discussion

Preliminary research supported the hypotheses. Men endorsed status goals more than women, and women endorsed family goals more than men, demonstrating that there are gender differences in the content of life goals. Men expressed more interest in male-stereotypical careers than women, and women expressed more interest in female-stereotypical careers than men, demonstrating that there are gender differences in career interest. Finally, the relationship of sex to male-stereotypical career interest was mediated only by status goals, and the relationship of sex to female-stereotypical career interest was mediated only by family goals. These findings demonstrate that sex differences in career interest are due at least in part to the content of life goals.

Study 1

The preliminary study established a relationship between gender and career interest, mediated by life goals. Study 1 explored possible antecedents to life goals. Beliefs about what constitute gender-typical behaviors and traits, as well as concomitant rewards and penalties for behaving in a gender-typical or atypical fashion, guide behavior (Wood et al., 1997). Increasingly gender-typical self-concept, greater endorsement of prescriptive gender stereotypes, and sexist beliefs should predict more gender-typical goals and career interests. Gender beliefs should act as antecedents to life goals and, along with gender, predict gender-stereotypical career interest.

For SEM analyses, the gender belief, goal, and career interest constructs were conceptualized as relative measures (e.g., greater interest in male-stereotypical than female-stereotypical careers). Prior research has demonstrated that both men and women engage in agentic and communal behaviors according to situational demands (Moskowitz, Suh, & Desaulniers, 1994) and possess both family and career-oriented goals (Kerpmen & Schvaneveldt, 1999). Use of a relative score permitted examination of the difference in participants’ endorsement of one domain over another.

Method

Hypothesis 1

Participant sex alone will predict gender-typical life goals and career interest. Male participants will place greater emphasis on status goals relative to family goals, and male-stereotypical careers relative to female stereotypical careers. Female participants will place greater emphasis on family goals relative to status goals, and female-stereotypical careers relative to male-stereotypical careers. Goals will in turn predict career interest.

Model 1. The preliminary study provided evidence that gender predicts both life goals and career interest, and it is possible that gender alone predicts goal emphasis and career interest. To test this proposition, the first model posited a three-factor relationship in which gender alone predicted both life goals and gender-stereotypical career interest, and life goals in turn also predicted career interest (see Figure 3a). Participant gender was dummy-coded for inclusion as an exogenous variable, the relative life goals measure indicated the goals construct, and the relative career interest measure indicated the career interest construct.
Hypothesis 2

Increasingly gender-typical gender beliefs will predict gender-typical life goals and career interest. Greater agency relative to communion in self-concept and greater endorsement of agentic versus communal prescriptive gender stereotypes will positively predict greater emphasis on status life goals versus family life goals, which will predict more interest in male-stereotypical versus female-stereotypical careers. Participant sex will predict gender-typical gender beliefs.

Model 2a. Gender beliefs - how an individual construes their gender role - may play a role in shaping the content of life goals and career interest separately from gender. In the second model (see Figure 3b), gender beliefs (gendered self-concept and prescriptive gender stereotypes), were predicted by sex, and in turn predicted goals and career interest. As in Model 1, life goals also predicted career interest. Relative self-concept and relative prescriptive stereotype measures indicated the gender beliefs construct.

Model 2b. The previous models posit a causal direction from life goals to career interest, but it is also highly plausible that a reciprocal relationship exists between life goals and career interests. As goals help determine the types of careers one chooses, career-related decisions may affect the nature of an individual’s long-term goals. The third model was structurally identical to Model 2, with the addition of reciprocal causal paths for life goals and career interest (see Figure 4).

Model 2c. In addition to a reciprocal relationship between goals and careers, another possibility is that goal emphasis and career interest are correlated, with changes in either goal emphasis or career interest occurring simultaneously. This model was structurally identical to Model 3, with the addition of correlation between life goals and career interest.

Hypothesis 3

Greater ambivalent sexism will positively predict greater emphasis on status goals versus family goals and more relative interest in male-stereotypical careers in men, and negatively predict them in women.

Models 3a and 3b. Sexist beliefs represent an endorsement of traditional gender roles, and as such, would be expected to yield different patterns of goal emphasis and career interest contingent on participant sex. For male participants, sexism would predict relatively greater emphasis on status goals compared to family goals, and relatively greater emphasis on male-stereotypical career interests compared to female-stereotypical career interests (see Figure 5a). The converse would obtain for female participants (see Figure 5b). A three-factor variation on Model 2 was tested separately for men and women, in which gender was removed as a predictor and hostile and benevolent sexism were added to the gender beliefs factor. Indicators of gender beliefs, goals, and career interest were identical to Model 2, and hostile and ambivalent sexism scores were added as indicators of the gender beliefs construct.

Participants and Procedures

249 undergraduates (34% male, 94% Caucasian, age \( M = 19 \)) at a Midwestern university were recruited in exchange for partial class credit. Participants completed measures of beliefs about men and women, personal life goals, attitudes about careers, and demographic information.

Design

In order to examine the simultaneous contributions of multiple predictors to a single gender beliefs construct, all measures were tested using structural equation model (SEM)
analysis. Gender beliefs, life goals, and gender-stereotypical career interest served as outcome variables, predicted by gender. Life goals also served as a predictor of gender-stereotypical career interest.

Measures

Gender-typical self-concept. Participants rated themselves on descriptors of stereotypically masculine/agentic and feminine/communal traits (e.g., not at all competitive – extremely competitive, not at all sympathetic – extremely sympathetic), using 7-point Likert scales, with their self-ratings serving as measures of agentic (Cronbach’s α = .67) and communal (Cronbach’s α = .80) self-concept (see Appendix D for the full list of items). A measure of relative gendered self-concept was constructed by subtracting each participant’s average score on items measuring communion (e.g., how affectionate are you, how sensitive are you) from their average score on items measuring agency (e.g., how competitive are you, how adventurous are you). Positive scores represented a relatively more agentic self-concept, and negative scores represented a relatively more communal self-concept.

Prescriptive gender stereotypes. Participant ratings of ideal same-sex others on the same items used to assess gendered self-concept served as a measure of the participant’s endorsement of prescriptive gender stereotypes, and these scales demonstrated decent reliability in this sample (Cronbach’s α for male target agency = .66; Cronbach’s α for male target communion = .85; Cronbach’s α for female target agency = .69; Cronbach’s α female target communion for = .81, see Appendix E for the full list of items). A measure of relative prescriptive gender stereotypes was constructed by subtracting each participant’s average score on items measuring their rating of communion in same-sex others (e.g., how sympathetic should the ideal man/woman be, how gentle should the ideal man/woman be) from their average score on items measuring their rating of agency in same-sex others (e.g., how daring should the ideal man/woman be, how aggressive should the ideal man/woman be). Positive scores represented a relatively more agentic prescriptive stereotype for the participant’s own sex, and negative scores represented a relatively more communal prescriptive stereotype.

Ambivalent sexism. Participants completed the hostile and benevolent sexism scales of Glick and Fiske’s (1996) Ambivalent Sexism Inventory (Cronbach’s α for hostile sexism = .87, Cronbach’s α for benevolent sexism = .75). Scores on the hostile sexism and benevolent sexism subscales of the Ambivalent Sexism Inventory served as two indicators of the gender beliefs latent construct.

Life goals. Participants completed a 17-item status goals scale (Cronbach’s α = .90) and a 3-item family goals scale (Cronbach’s α = .85), based on the measures used in the preliminary study. Exploratory factor analysis (principal factors, promax rotation) indicated that life goals were best represented by a three-factor solution in this sample, where status goals separated into an achievement-centered factor (e.g., making an important discovery or achieving an important goal, being in a high-responsibility position at work, running a company or organization) and a wealth-centered factor (e.g., others are impressed by your possessions, receiving a large bonus or stock options, getting the newest model of a car or the newest gadget). In this two-factor configuration, these items provided good reliability (Cronbach’s α for achievement = .88, Cronbach’s α for wealth = .82). Omission of one item from the family goals factor (helping with cooking or laundry) improved its reliability, and was removed from the measure for Studies 1 and 2.
A measure of relative life goal emphasis was constructed by subtracting participants’ family goal scores from the composite of their two status goal scores. Positive scores represented a relatively greater emphasis on status goals, and negative scores represented a relatively greater emphasis on family goals.

Career interest. Participants completed the male-stereotypical (Cronbach’s $\alpha = .79$) and female-stereotypical (Cronbach’s $\alpha = .84$) career interest scales used in the preliminary study. A measure of relative gender-stereotypical career interest was constructed by subtracting participants’ female-stereotypical career interest scores from their male-stereotypical career interest scores. Positive scores represented a relatively greater emphasis on male-stereotypical careers, and negative scores represented a relatively greater emphasis on female-stereotypical careers.

Results

Analyses from the preliminary studies were replicated to confirm that the hypothesized relationships between participant sex, goals and career interest obtained in the current sample. Upon confirmation of the basic mediatational relationship, SEM tested a series of structural models to ascertain the relationship of gender beliefs and sexism to goals and career interest.

Sex Differences in Gender Beliefs, Goals, and Careers

Gender beliefs. Participant’s ratings of gender-typical self concept were analyzed in a 2 (traits: agentic, communal) $\times$ 2 (participant sex) mixed analysis of variance with trait type as the within-subjects factor. A significant Sex $\times$ Trait interaction, $F(1, 243) = 31.32, p < .001$, was decomposed by participant sex within trait type. Men reported higher agentic self-concepts than women, $F(1, 243) = 29.97, p < .001$, Cohen’s $d = .75$, and women reported higher communal self-concepts than men, $F(1, 243) = 8.74, p = .003$, Cohen’s $d = .40$. Replication of the above analysis for prescriptive gender stereotypes, with participant’s ratings of levels of agency and communion in ideal same-sex others replacing traits, revealed a significant Sex $\times$ Stereotype interaction, $F(1, 244) = 136.66, p < .001$. Decomposition of the interaction by participant sex within stereotype content indicated that men endorsed higher agentic stereotypes for ideal same-sex others than women, $F(1, 244) = 123.33, p < .001$, Cohen’s $d = 1.53$, and women endorsed higher communal stereotypes for ideal same-sex others than men, $F(1, 244) = 23.36, p < .001$, Cohen’s $d = .63$.

Participant ratings of ambivalent sexism were analyzed in a 2 (sexism: hostile, benevolent) $\times$ 2 (participant sex) mixed analysis of variance, with sexism type entered as the within-subjects factor. There was a significant effect of sex for both hostile and benevolent sexism, $F(1, 247) = 34.22, p < .001$, Cohen’s $d = .79$, where men expressed more hostile and benevolent sexism than women. The Sex $\times$ Sexism interaction was not significant, $F(1, 247) = 3.10, p = .08$.

Goal and career interest. A 2 (goal: status, family) $\times$ 2 (participant sex) mixed analysis of variance with goal type as the within-subjects factor yielded a significant Sex $\times$ Goal interaction, $F(1, 247) = 30.17, p < .001$. Men rated status more highly than women, $F(1, 247) = 10.24, p = .002$, Cohen’s $d = .43$, and women rated family more highly than men, $F(1, 247) = 22.86, p < .001$, Cohen’s $d = .65$ (see Table 1). This pattern replicated for career interest, where a 2 (career: male-stereotypical, female-stereotypical) $\times$ 2 (participant sex) mixed ANOVA with career type as the within-subjects factor resulted in a significant Sex $\times$ Career interaction, $F$
Men expressed more interest in male-stereotypical careers than women, \( F(1,246) = 40.66, p < .001, \) Cohen’s \( d = .83, \) and women expressed more interest in female-stereotypical careers than men, \( F(1,246) = 56.68, p < .001, \) Cohen’s \( d = 1.05 \) (see Table 2).

Mediation of Sex and Career Interest by Life Goals

Mediational analysis using Baron and Kenny’s (1986) regression approach was performed to confirm that life goal content mediated the relationship between sex and gender-stereotypical career interest, as in the previous results.

Multiple regression analyses (in which male participants were dummy-coded as 1) indicated that male participant sex predicted endorsement of status goals, \( B = .37, \beta = .20, p = .001, \) and status goals predicted interest in male-stereotypical careers, \( B = .35, \beta = .25, p < .001. \) Status goals significantly mediated the relationship of sex and male-stereotypical career interest (Sobel \( z = 2.57, p = .01, \) see Figure 6). Female participant sex predicted endorsement of family goals, \( B = -.67, \beta = -.29, p < .001, \) and family goals predicted interest in female-stereotypical careers, \( B = .32, \beta = .29, p < .001. \) Family goals significantly mediated the relationship of sex and female-stereotypical career interest (Sobel \( z = 3.47, p < .001, \) see Figure 7).

Structural Relation of Gender Beliefs to Goals and Career Interest

Having replicated the mediational effect of goals on gender and career interest from the preliminary study, the relationship between gender, gender beliefs, life goals, and career interest was examined through testing of six structural models using SEM analysis.

Models

All SEM analyses used LISREL 8.54 (Jöreskog & Sörbom, 2005). Covariance matrices served as input (see Appendix F), using maximum-likelihood estimation. Scaling metrics for the latent variables were fixed by setting factor variances to 1.0. Goodness of fit was evaluated using the comparative fit index (CFI), nonnormed fit index (NNFI), and root mean square error of approximation (RMSEA). Correlation of endogenous variables was assessed by freeing the correlated error matrix of the goals and career interest structures, using significant correlated error to infer correlation of the latent constructs. All models were tested using relative measures of goal emphasis and career interest as indicators of the goal and career interest constructs.

Model 1: Gender, Goals, and Careers

The hypothesized three-factor model (see Figure 8) yielded a model with perfect fit. Gender positively predicted life goals and career interest, such that men expressed more interest in status goals and male-stereotypical careers, and women expressed more interest in family goals and female-stereotypical careers. Life goals in turn predicted career interest.

These results provided support for the first hypothesis, as male participants expressed more interest in status goals relative to family goals, and male-stereotypical careers relative to female-stereotypical careers. Women expressed more interest in family goals relative to status goals, and female-stereotypical careers relative to male-stereotypical careers. Life goal emphasis predicted career interest.

Model 2a: Gender, Gender Beliefs, Goals, and Careers

The hypothesized four-factor model (see Figure 9) demonstrated good fit, CFI > .99, NNFI > .99, RMSEA < .001. Sex predicted gender beliefs and career interest, but did not directly
predict life goals. Gender beliefs predicted goals, which in turn predicted career interest. As gender beliefs became more agentic than communal, emphasis was placed on more status-centered goals than family-centered goals. As goals became more status-centered, career interest became more male-stereotypical, and as goals became more family-centered, career interest became more female-stereotypical.

These results provided support for the second hypothesis, where both gender and gender beliefs predicted life goals, and life goals, along with gender, predicted career interest. Gender alone did not predict life goals in the presence of gender beliefs. Instead, gender predicted gender beliefs, which predicted goals. Goals successfully predicted career interest alongside gender.

Models 2b and 2c: Reciprocity and Correlation between Goals and Career Interest
The hypothesized models positing either a reciprocal or correlational relationship between goals and career interest yielded good fit, CFIs >.99, NNFIs>.99, RMSEAs<.001, but did not differ structurally from Model 2a. The reciprocal causal path from career interest to goals did not attain significance in either model, nor did the matrix of correlated error between goals and career interest attain significance in the correlational model.

Model 3: Gender Beliefs with Sexism, Goals, and Careers by Sex
The effect of sexism on relative goal emphasis and gender-stereotypical career interest was hypothesized to function differently for men and women. Increasing sexism was hypothesized to positively predict relative goal emphasis and gender-stereotypical career interest for men, and negatively predict them for women. To test these predictions, a version of Model 2a including hostile and benevolent sexism as indicators of gender beliefs was tested separately for men and for women.

Men. The hypothesized three-factor model (see Figure 10) demonstrated good fit, CFI >.99, NNFI >.99, RMSEA <.001. Relative gender-typical self-concept, relative prescriptive gender stereotype, and hostile sexism contributed significantly to the gender beliefs construct, but benevolent sexism did not. Gender beliefs predicted goals, and goals predicted career interest, but gender beliefs did not directly predict career interest. As gender beliefs became more agentic than communal and hostile sexism increased, men placed more emphasis on more status-centered goals than family-centered goals. As emphasis on status-centered goals increased, more interest was expressed in male-stereotypical than female-stereotypic careers. For male participants, endorsement of traditional gender roles through the derogation of women contributed to an emphasis on status goals relative to family goals, and interest in male-stereotypical careers relative to female-stereotypical careers.

Women. The hypothesized three-factor model (see Figure 11) failed to provide good fit for the data, CFI =.81, NNFI =.65, RMSEA =.15. An alternative model, in which hostile and benevolent sexism indicated a separate sexism construct (see Figure 12), yielded better fit, CFI=.96, NNFI=.88, RMSEA=.09. However, in this model sexism predicted neither goals nor career interest. Gender beliefs predicted goals, but not career interest, and goals predicted career interest. Although this model provides significantly better fit than the hypothesized model, chi-square difference \( p = .01 \), the indices of fit for this model suggest barely-adequate fit, suggesting that endorsement of traditional gender roles is not a factor in goal emphasis or career interest for women.

Comparison of all models using a chi-square difference test revealed no significant differences in fit between each pair of models. However, Model 2a appeared to best describe the
data, as it both yielded very good fit and replicated the predicted relationship between gender, goals, and career interest from the preliminary study with gender beliefs included as an additional predictive factor. Decomposition of this model by sex suggests that endorsement of traditional gender roles may contribute to goal emphasis and career interest for men, but not for women.

Discussion

Replication of preliminary results supported the hypothesized relationship between sex, life goals, and career interest. Men expressed more interest in status goals and male-stereotypical careers than women, and women expressed more interest in family goals and female-stereotypical careers than men. Status goals alone mediated the relationship between sex and male-stereotypical career interest, and family goals alone mediated the relationship between sex and female-stereotypical career interest.

Although a model using gender as the sole predictor of goals and career interest provided good fit, it was not significantly better fit than models including gender beliefs separate from gender. More notably, the direct causal path from sex to life goals failed to attain significance in the presence of the gender beliefs construct, as did the direct path from gender beliefs to career interest. Models testing a bidirectional relationship between goals and career interest failed to demonstrate reciprocal causation in any model tested. Although alternative mediational analysis using career interest as a mediator of the relationship between sex and life goals indicated that career interest was a significant mediator, the lack of reciprocity in the SEM analysis did not replicate this. Decomposition of the model by sex to examine the effects of sexism demonstrated that hostile sexism contributed to status goal emphasis and male-stereotypical career interest in men, but did not influence goal emphasis or career interest in women.

These findings suggest that beliefs about the gender role, apart from gender itself, influence the content of life goals, which in turn influences the types of careers in which people are likely to express interest. In effect, life goals serve as the mechanism through which beliefs about the gender role contribute to gender-stereotypical career interest.

Where the first study demonstrated that goal content was predictive of career interest, the second study attempted to establish a causal link between the salience of status or family goals and interest in male or female-stereotypical careers.

Study 2

The content of life goals and the means by which they are pursued may be influenced in ways unaffected by conscious choice or motivated processing. Because goals exist as mental representations, they may be cued and operate outside of awareness (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001; Chartrand & Bargh, 1996). Goals associated with different relationship partners are capable of being activated and influencing behavior outside of awareness, even in the partner’s physical absence (Fitzsimons & Bargh, 2003). Goals are activated unknowingly and automatically through social perception (Ferguson & Bargh, 2004a), and once activated, people in the process of goal pursuit evaluate goal-relevant objects more positively than goal-irrelevant objects (Ferguson & Bargh, 2004b). Given the demonstrated relationship between life goal content and career interest, it was hypothesized that gender-stereotypical career interest could be influenced by life goal-related primes.
Where the first study provided evidence for the mediational relationship between gender beliefs, life goals and career interest, the second extended those findings by examining the causal relationship between life goals and career interest through the experimental manipulation of life goal salience. If status and family goals are both chronically accessible, then salience of either goal domain could be increased through an experimental manipulation (e.g., Bargh et. al., 2001; Chartrand & Bargh, 1996). To the extent that the relationship between sex and gendered career interest is mediated by life goals, priming participants with semantic content associated with status or family life goals should make that semantic content more accessible. Assimilation to the prime should in turn lead to greater endorsement of goal-consistent career interests. It was hypothesized that participants primed with status goals would show greater interest in male-stereotypical careers than participants primed with family goals, and participants primed with family goals would show greater interest in female-stereotypical careers than participants primed with status goals.

Method

Participants and Procedures
Participants were 104 undergraduates (49% male, 96% Caucasian, age $M = 19$) at a Midwestern university, recruited from a participant pool as partial fulfillment of a class requirement.

All participants were randomly assigned to complete either the status or family goal component of a life goals scale similar to the scale from Study 1, followed by the career interest measure and demographic survey. Upon completing all measures, participants were debriefed and thanked for their time. Due to experimenter error, 7 participants did not receive the career interest measures, and their data were dropped from subsequent analysis.

A subsample of 38 participants provided data at two timepoints in a pretest-posttest design. At Time 1, participants completed the career interest measures administered in Study 1 as part of a larger group of measures administered during a departmental mass testing session. At least two weeks later, returning participants completed the priming process described above.

Dependent Measures

The career interest measures were identical to the measures used in Study 1 (male-stereotypical career Cronbach’s $\alpha = .80$, female-stereotypical career Cronbach’s $\alpha = .87$). For participants in the pretest-posttest subsample (Time 1 male-stereotypical career Cronbach’s $\alpha = .76$, female-stereotypical career Cronbach’s $\alpha = .83$, Time 2 male-stereotypical career Cronbach’s $\alpha = .77$, female-stereotypical career Cronbach’s $\alpha = .86$), an index of change for male-stereotypical and female-stereotypical career interest was computed by subtracting Time 2 scores on each career interest measure from the appropriate Time 1 score.

Goal Prime
Participants completed the status or family goal items, responding either to 17 items concerning wealth, influence, and achievement (e.g., “having a six-figure salary”, “being in a high-responsibility position at work”) for status goals, or to 17 items concerning the care of a home and family (e.g., “attending field trips with your children”, “feeding and bathing your children”) for family goals. As in Study 1, participants were asked to imagine how important each of these items would be to contributing to their success at age 35.
Results

Effect of Goal Prime on Career Interest

Scores on the career interest measure were entered into a 2 (career type: male-stereotypical, female-stereotypical) × 2 (goal prime: status, family) × 2 (participant sex) mixed analysis of variance, with career interest as the within-subjects factor. These analyses yielded a significant Career Type × Sex interaction, \( F(1, 93) = 54.78, p < .001 \) (see Figure 13). Decomposition of simple sex effects with career interest showed significant effects of participant sex within each type of career interest. Men expressed more interest \( (M = 3.32, SD = 1.28) \) in male-stereotypical careers than women \( (M = 2.45, SD = 1.10) \), \( F(1, 93) = 11.27, p = .001 \), Cohen’s \( d = .73 \). In turn, women expressed more interest \( (M = 3.73, SD = 1.15) \) in female-stereotypical careers than men \( (M = 2.07, SD = 1.37) \), \( F(1, 93) = 58.60, p < .001 \), Cohen’s \( d = 1.66 \).

The hypothesized Career Type × Goal Prime interaction did not attain significance, \( F(1, 93) = 2.71, p = .10 \). Participants primed with family goals had slightly higher female-stereotypical career interest scores \( (M = 3.08, SD = 1.37) \) than participants primed with status goals \( (M = 2.67, SD = 1.21) \), and participants primed with status goals overall expressed similar interest in male-stereotypical careers \( (M = 2.99, SD = 1.30) \) as participants primed with family goals \( (M = 2.69, SD = 1.26) \).

Effect of Goal Prime on Change in Career Interest

The difference scores were entered into a 2 (career type: male-stereotypical, female-stereotypical) × 2 (goal prime: status, family) × 2 (participant sex) mixed analysis of variance, with career interest as the within-subjects factor. The hypothesized Career Type × Goal Prime interaction failed to attain significance, \( F(1, 34) = 3.39, p = .07 \), with no significant effect of goal prime for male stereotypical career interest \( (status M = -.21, SD = .61; family M = -.25, SD = .86, p = .52) \) or female-stereotypical career interest \( (status M = -.32, SD = .80; family M = .08, SD = .47) \). No other effects were significant.

Discussion

It was hypothesized that endorsed interest in either male or female-stereotypical careers would be influenced by the introduction of a prime relating to status or family goals, and an overall pattern of interaction between goal primes and career interest supported this hypothesis across two different sets of analyses, albeit more strongly for female-stereotypical career interest. Priming participants with family goals increased endorsement of female-stereotypical careers, and priming participants with status goals decreased endorsement of female-stereotypical careers. The overall pattern of response suggests that priming the semantic content of status and family goals influences interest in female-stereotypical careers, but a more robust test is needed before a strong conclusion can be made about the influence of goal-related content on career interest. The pretest-posttest sample in the second study was small enough that insufficient power to detect a significant change in career interest was a concern. It is also possible that the male-stereotypical careers, being higher in status and reward than the female-stereotypical careers, were generally perceived as highly desirable, resulting in a ceiling effect for interest in male-stereotypical careers. A larger sample and broader range of gender-stereotypical careers could possibly alleviate these concerns.
General Discussion

This research examined gender differences in life goals and career interest, the antecedents of life goals, and the causal relationship between life goals and career interest. The preliminary study described gender differences in life goals and career interest and demonstrated that the relationship between sex and career interest was mediated by life goals. Men placed greater emphasis on status-based goals than women, and women placed greater emphasis on family-based goals than men. Men expressed greater preference for male-stereotypical careers than women, and women expressed greater preference for female-stereotypical careers than men. Greater interest in status goals mediated interest in male-stereotypical careers and greater interest in family goals mediated interest in female-stereotypical careers.

Study 1 replicated the results of the preliminary study, whereby status goals mediated gender and interest in male-stereotypical careers, and family goals mediated gender and interest in female-stereotypical careers. SEM analysis demonstrated a global relationship between gender, gender beliefs, life goals, and gender-stereotypical career interest. As gendered self-concept and prescriptive gender stereotypes became more agentic than communal, life goals became more status-centered than family-centered, and career interest became more male-stereotypical than female-stereotypical. Consistent with the results of the preliminary study, gender predicted goals and career interest. However, when gender beliefs were entered as a separate structure in the model, the path between gender and goals failed to attain significance, and gender beliefs did not direct predict career interest. In the resulting model, gender predicted both gender beliefs and career interest, but gender beliefs alone predicted goals, which in turn also predicted career interest. This provides evidence that goals, as influenced by gender beliefs, serve as a mechanism for influencing career interest separate from gender alone.

Study 2 offered partial support for a causal link between life goals and career interest. Participants primed with family goals showed increased endorsement of female-stereotypical careers, and participants primed with status goals decreased endorsement of female-stereotypical careers.

Implications

These findings suggest that gender differences in career interest are due not only to gender alone, but also to gender differences in the types of goals one attempts to fulfill via career selection. To the extent that people think of themselves and their gendered ideal as communal, they are more likely to place an emphasis on family-based goals, and are more likely to choose careers which afford the fulfillment of those goals. To the extent that people think of themselves and their gendered ideal as agentic, they are more likely to place an emphasis on status-based goals, and are more likely to choose careers which afford the fulfillment of those goals. It is possible that men and women who possess gender-stereotypical conceptions of themselves are more likely to emphasize life goals congruent with that gender stereotype and choose gender-stereotypical careers.

The current research demonstrated the causal primacy of life goals, which suggests that life goals serve as a mechanism by which self-endorsed gendered expectations influence career interest. Efforts to make male-stereotypical careers more welcoming to women are important and necessary, but it may not be sufficient to ameliorate hostile workplace conditions when the life goals that lead men and women to choose different careers have already been influenced by gendered expectations. The current findings suggest that portraying male-stereotypical careers as
compatible with family goals could increase interest in those careers among women and thus reduce occupational sex segregation.

The influence of gendered expectations on career interest may also have implications for psychological well-being. Male-stereotypical careers are typically higher in status and offer greater financial compensation, and female-stereotypical careers, although lower in status and compensation, offer greater opportunities for communal behavior. Making a broader range of careers more appealing to men and women may facilitate greater opportunities for role congruence and the achievement of both intrinsic (e.g., emotional intimacy) and extrinsic (e.g., financial success) goals. Fulfillment of both goal types has implications for the improvement of psychological well-being, which depends in part on a balance of intrinsic and extrinsic goals (Kasser & Ryan, 1993; Sheldon, Ryan, Deci, & Kasser, 2004).

One obstacle to fulfillment of both goal types for men and women is occupational sex segregation. As a means by which life goals are fulfilled, the inability to move into a particular career domain may hamper attempts to fulfill certain life goals. One possible step to take in reducing occupational sex segregation is to decouple the content of life goals from gender expectations. To this end, a social role perspective is valuable for its conception of social roles as malleable (Diekman & Eagly, 2000; Eagly & Wood, 1999). Malleability in roles is reflected in the increase in women’s participation in the paid labor force over time (Fullerton, 1999), and women’s greater interest over time in male-stereotypical job attributes like leadership and power (Konrad et al., 2000). As social roles change, the gender belief system - and thus the content of life goals - may also change.

These initial results are compelling, but the current research does possess some limitations. Because presentation of the life goals and career interest measures was not counterbalanced, it is possible that responding to the life goals items may have primed status and family goals, subsequently inflating the correlation between goal and career endorsement. Operationalization of gender beliefs in these studies was limited to beliefs about and in relation to the self, in the form of gendered self-concept and prescriptive gender stereotypes. Prior research has shown that gender beliefs extend beyond beliefs concerning the self, incorporating situational context, self-presentation concerns and certainty, among other factors (Deaux & Major, 1987). Likewise, prior research on achievement-related choice has demonstrated that factors other than goals also predict career interest, including cultural stereotypes, values, efficacy beliefs and perceived cost (Eccles, 1994). Broadening the existing model to include aspects of the gender belief system dealing with gender role traditionalism and efficacy beliefs could offer further insight into how these predictors interact with life goals.

In addition, this research examined prospective career interest by asking college undergraduates what they imagined would be important to viewing themselves as successful in approximately 17 years. Adults who have started families and entered the workforce have made concrete, rather than prospective, career choices, as well as other decisions related to progress on relevant life goals. Gender differences in goal emphasis may become less distinct over time, and career choice may influence goals, as well as goals influencing career choice. Collection of more demographically diverse samples would allow examination of how the relationship between gender beliefs, life goals, and career change both when career choices are concrete, rather than prospective, and goals change over time. The causal link of goals to career interest in this research relied on use of a semantic prime to influence career interest, but a strong case for life goals being activated nonconsciously would require the goal state itself to be primed outside of awareness. Because life goals are chronic, long-term, overarching goals which encompass many
smaller motivational units, it may be difficult to prime them in the same fashion as an accuracy or memorization goal. Life goals may possess a definable end state (e.g., marriage) or may not (e.g., wealth). As chronically accessible long-term goals, life goals may be primed by frustrating the possibility of achieving that goal and observing an increase in endorsement of the motivational tasks associated with the particular goal.

These findings suggest that the types of goals men and women possess are an important factor in understanding continued occupational sex segregation. SEM analysis indicated that although life goals were directly influenced by gender, that direct influence became nonsignificant upon introduction of gender beliefs into the model. Gender did play an important role in shaping the types of overarching, long-term life goals men and women possess, but beliefs about the gender role also influenced life goals separately from gender. Mediation of the relationship between gender and career interest by goals indicated that goals serve as a mechanism through which beliefs about the gender role influence career interest. Until the nature of gender roles change, certain career domains are likely to remain segregated by sex.
References


Prentice & Carranza (2002). What women 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.


Attachments

Appendix A: Preliminary Study Life Goals Factor Loadings
Appendix B: Life Goals Measure
Appendix C: Career Interest Measure
Appendix D: Gender-Typical Self-Concept Measure
Appendix E: Prescriptive Gender Stereotype Measure
Appendix F: Covariance Matrices for SEM Analyses
Appendix A
Preliminary Study Life Goals Factor Loadings

Work & Status Factors

Power & Status

…getting the newest model of a car or the newest gadget? (.52)
…others being impressed by your possessions? (.49)
…being well-known in your field? (.60)
…getting a good raise every year? (.52)
…making an important discovery or achieving an important goal? (.42)
…winning a prize or medal for your work? (.49)
…receiving a large bonus or stock options? (.55)
…running a company or organization? (.66)
…being the head of your department or division? (.66)
…having a great deal of power or influence? (.67)
…being the person in charge? (.59)
…having others report to you? (.60)
…being the main source of income for your family? (.64)
…putting in a lot of overtime at work? (.42)
…doing a lot of business travel? (.41)
…being in a high-responsibility position at work? (.59)
…going into a high-risk, high-reward business? (.60)
…being the protector figure for your family? (.54)

Wealth

…having a six-figure salary? (.54)
…being able to afford nice things? (.67)
…being able to buy something without worrying about cost? (.62)
…being able to buy what you want, when you want? (.69)
…making lots of money? (.53)
…not worrying about bills and mortgages? (.47)
…being able to own your own house? (.50)
…being able to afford vacations? (.64)

Strength

…working out for health reasons? (.67)
…continuing to be strong? (.62)
…improving your strength? (.58)
…staying in good health? (.57)
…being in peak physical condition? (.58)
…making a significant contribution to your field? (.46)
…being passionate about your work? (.60)
… having the respect of your employees? (.49)

Image

...staying physically attractive? (.54)
...what others think about your appearance? (.70)
...looking better than your co-workers/friends? (.68)
…having nicer things than your neighbors or friends? (.51)
…having people to take care of things for you (ie- yard work and house cleaning)? (.51)

Home & Family Factors

Relationship with Children

…being able to set up a college fund for your children? (.78)
…being able to talk to your partner and children? (.76)
…being involved in your children’s lives? (.87)
…having a close relationship with your partner and children? (.66)
…participating in your children’s academics? (.75)
…attending your children’s extracurricular programs? (.81)
…having children who feel they can trust you? (.81)
…attending your child's extracurricular functions? (.78)
…helping your kids with their homework? (.74)
... having an open and honest relationship with your children? (.83)
...taking an active role in raising your children? (.82)
...sharing responsibility for disciplining your children? (.75)
...making sure your children obey the rules of the house? (.69)
...looking out for your children? (.87)
...instilling your values and morals in your kids? (.76)
...feeding and bathing your children? (.67)
...taking and/or picking your children up from school or daycare? (.58)
...taking your children to the park, Little League, or other activities? (.71)

Relationship with Family

…setting up a retirement fund? (.42)
…spending a lot of time with your partner and children? (.53)
…getting to see your family a lot? (.53)
…not being too busy for your family? (.73)
…having plenty of time to spend at home? (.60)
…spending time with your family on the weekends? (.73)
…spending time with your family during the week? (.71)
…having “quality time” with your family? (.84)
Involvement with Children

…attending field trips with your children? (.61)
…cleaning up around the house? (.61)
…helping with cooking or laundry? (.62)
…arranging playdates for your children? (.56)
… attending field trips? (.65)
… packing school lunches? (.69)

Time Flexibility

…taking time off when you want to? (.66)
…setting your own schedule? (.63)
…not having to put in long hours at the office? (.52)
…having flexibility in your work week? (.66)
… being able to work out of your home? (.47)
… not working on the weekends? (.53)

Involvement with Home

…taking out the garbage and doing the yardwork? (.62)
…paying bills and managing the family finances? (.46)
…doing minor household repairs? (.61)
…being relied on to fix/create things around the house? (.61)
…coaching sports? (.50)

Community Factors

Friendship & Recreation

…having close friends outside your marriage or immediate family? (.64)
…having a group of good friends you see regularly? (.70)
…staying in touch with old friends? (.56)
…getting together with your friends occasionally? (.61)
…having mutual friends with your partner? (being friends with other couples) (.48)
…having friends outside of your relationship? (having friends you don’t “share” with your partner) (.52)
…staying in touch with your friends via phone, email, instant messaging, etc? (.55)
…having hobbies and interests outside of work and family? (.51)
…doing something just for fun on a regular basis? (.71)
…making time to do something you enjoy? (.65)
…traveling for fun? (Vacations, camping trips, etc.) (.56)

Involvement with Community

…investing time to help the community? (.66)
…actively working to solve/fix problems in your community? (.55)
…making your children volunteer? (.61)
…volunteering as a family? (.55)
…making financial contributions to charitable organizations? (.63)
…investing time versus money to charitable organizations? (.68)
…participating in fundraisers for your favorite charities? (.68)
…donating time to a favorite charity or charities? (.69)
…donating goods or service to a favorite charity? (.71)

Involvement with Extended Family

…staying in contact with family outside your immediate family? (Cousins, aunts and uncles, etc.) (.65)
…having a close extended family? (.62)
…getting together with other branches of your family for reunions, picnics, etc? (.53)
…having a good relationship with your in-laws? (.55)
…living near your extended family? (.62)
…living in close proximity to extended family? (.59)
…staying in contact with your parents as they age? (.63)

Involvement with Religion

…participation in religious organizations? (.81)
…attending church/temple/whatever else, weekly? (.88)
…attending church/temple/whatever else, on religious holidays? (.82)
…raising your children with a religious affiliation? (.81)
…becoming an actual member of a particular religion? (.80)

Relationship with Community

…making sure your neighbor’s house and yard are well maintained? (.52)
…having a relationship with your neighbors? (.44)
…participating in a neighborhood or community association? (.48)
…serving on the board of a co-op or condominium? (.51)
…watching your neighbor’s home while they’re away? (.43)
…hosting or attending block parties or other neighborhood get-togethers? (.55)
…having your neighbors like you? (.47)

Involvement with Parents

…looking after your parents in their old age? (.49)
…managing your parents’ medical care if they become incapable? (.42)
…providing for your parents’ welfare? (.61)
…bringing your parents or in-laws into your home if they cannot take care of themselves? (.52)
Appendix B

Life Goals Measure

The next 34 items concern your hopes and aspirations for the future. Please answer them by thinking about what you would like for your life to be like at age 35, and selecting the appropriate number for how important you think each item will be. If you do not picture yourself as being in a committed relationship or as a parent at age 35, please select “not important at all” for those items.

At age 35, how important will be…

(Status goals)
1. ...winning a prize or medal for your work?
2. ...being the protector figure for your family?
3. ...making an important discovery or achieving an important goal?
4. ...being the main source of income for your family?
5. ...that others are impressed by your possessions?
6. ...being in a high-responsibility position at work?
7. ...having others report to you?
8. ...running a company or organization?
9. ...being the person in charge?
10. ...putting in a lot of overtime at work?
11. ...going into a high-risk, high-reward business?
12. ...receiving a large bonus or stock options?
13. ...getting the newest model of a car or the newest gadget?
14. ...being the head of your department or division?
15. ...doing a lot of business travel?
16. ...having a great deal of power or influence?
17. ...being well-known in your field?

(Family goals)
18. ...packing school lunches?
19. ...arranging playdates for your children?
20. ...having a satisfying and fulfilling home life?
21. ...helping your kids with their homework?
22. ...attending field trips with your children?
23. ...attending your child's extracurricular functions?
24. ...helping with cooking or laundry?
25. ...having children who feel loved?
26. ...taking and/or picking your children up from school or daycare?
27. ...feeding and bathing your children?
28. ...being an involved, attentive parent?
29. ...having a close extended family?
30. ...having children who feel they can trust you?
31. ...taking your children to the park, Little League, or other activities?
32. ... having an open and honest relationship with your children?
33. ...being actively involved in your children’s education?
34. ...being a good parent?
Appendix C

Career Interest Measure

Below is a list of occupations. Use the 7-point scale below to indicate how interested you are in each of these occupations. You may not have considered the occupation before, or you may feel that you are unqualified for a particular occupation, but just rate your general level of interest in holding that job.

(Male-stereotypical)

1. Corporate lawyer
2. Finance
3. Politician
4. Government negotiator
5. Tax accountant

(Female-stereotypical)

6. Nurse
7. Social worker
8. Public defender
9. Teacher
10. Kindergarten teacher
11. Career counselor
12. Secretary
13. Daycare worker
14. Crisis counselor
Appendix D

Gender-Typical Self-Concept Measure

We are interested in the kind of person you feel yourself to be. Please indicate to what extent you possess the following characteristics by making a mark closer to the side that best expresses your opinion. Please mark in between the lines.

1. How competitive are you?
2. How affectionate are you?
3. How daring are you?
4. How sympathetic are you?
5. How gentle are you?
6. How sensitive are you?
7. How adventurous are you?
8. How aggressive are you?
Appendix E

Prescriptive Gender Stereotype Measure

We are interested in the characteristics you think the ideal man and the ideal woman should possess. First, what do you think the ideal woman should be like? Please indicate to what extent the ideal woman would possess the following characteristics by making a mark closer to the side that best expresses your opinion. Please mark in between the lines.

1. How competitive should the ideal woman be?
2. How affectionate should the ideal woman be?
3. How daring should the ideal woman be?
4. How sympathetic should the ideal woman be?
5. How gentle should the ideal woman be?
6. How sensitive should the ideal woman be?
7. How adventurous should the ideal woman be?
8. How aggressive should the ideal woman be?

Now consider what you think the ideal man should be like. Please indicate to what extent the ideal man would possess the following characteristics.

9. How competitive should the ideal man be?
10. How affectionate should the ideal man be?
11. How daring should the ideal man be?
12. How sympathetic should the ideal man be?
13. How gentle should the ideal man be?
14. How sensitive should the ideal man be?
15. How adventurous should the ideal man be?
16. How aggressive should the ideal man be?
Appendix F.

Covariance Matrices for SEM Analyses

**Covariance Matrix for Gender, Goals, and Career Interest**

<table>
<thead>
<tr>
<th></th>
<th>Goal difference</th>
<th>Career difference</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal difference</td>
<td>6.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career difference</td>
<td>2.22</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.28</td>
<td>0.48</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**Covariance Matrix for Relative Gender Beliefs, Goals, and Career Interest**

<table>
<thead>
<tr>
<th></th>
<th>Goal difference</th>
<th>Career difference</th>
<th>Self-concept difference</th>
<th>Prescriptive stereotype difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal difference</td>
<td>6.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career difference</td>
<td>2.22</td>
<td>3.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept difference</td>
<td>1.04</td>
<td>0.70</td>
<td>1.81</td>
<td></td>
</tr>
<tr>
<td>Prescriptive stereotype difference</td>
<td>1.30</td>
<td>1.04</td>
<td>0.91</td>
<td>1.67</td>
</tr>
</tbody>
</table>
### Covariance Matrix for Relative Gender Beliefs, Goals, Sexism and Career Interest, Men Only

<table>
<thead>
<tr>
<th></th>
<th>Goal difference</th>
<th>Career difference</th>
<th>Self-concept difference</th>
<th>Prescriptive stereotype difference</th>
<th>Hostile sexism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal difference</td>
<td>5.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career difference</td>
<td>1.21</td>
<td>2.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept difference</td>
<td>0.50</td>
<td>0.06</td>
<td>1.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prescriptive stereotype difference</td>
<td>0.55</td>
<td>0.13</td>
<td>0.30</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Hostile sexism</td>
<td>0.46</td>
<td>0.16</td>
<td>0.16</td>
<td>0.16</td>
<td>0.36</td>
</tr>
</tbody>
</table>

### Covariance Matrix for Relative Gender Beliefs, Goals, and Career Interest, Women Only

<table>
<thead>
<tr>
<th></th>
<th>Goal difference</th>
<th>Career difference</th>
<th>Self-concept difference</th>
<th>Prescriptive stereotype difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal difference</td>
<td>5.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career difference</td>
<td>1.87</td>
<td>2.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept difference</td>
<td>0.94</td>
<td>0.34</td>
<td>1.79</td>
<td></td>
</tr>
<tr>
<td>Prescriptive stereotype difference</td>
<td>0.97</td>
<td>0.32</td>
<td>0.70</td>
<td>1.10</td>
</tr>
</tbody>
</table>
Footnotes

1. Alternate mediational analysis, in which career interest was tested as a mediator for the relationship between sex and life goals indicated that male-stereotypical career mediated the relationship between sex and status goals, Sobel $z = 2.62, p = .01$, but female-stereotypical career interest did not mediate the relationship between sex and family goals, Sobel $z = -1.50, p = .13$.

2. Alternate mediational analysis to test mediation of sex and life goals by career interest indicated significant mediation of sex and status goals by male-stereotypical career interest, Sobel $z = 3.57, p < .001$, and significant mediation of sex and family goals by female-stereotypical career interest, Sobel $z = -4.03, p < .001$. 


Table 1
*Study 1 Life Goal Endorsement by Sex*

<table>
<thead>
<tr>
<th>Status</th>
<th>$M$</th>
<th>$SD$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>4.66</td>
<td>0.91</td>
<td>4.66</td>
<td>0.95</td>
</tr>
<tr>
<td>Women</td>
<td>4.28</td>
<td>0.86</td>
<td>5.32</td>
<td>1.09</td>
</tr>
</tbody>
</table>

*Note:* Means with differing subscripts are significantly different at $p \leq .05$
Table 2
Study 2 Gender-Stereotypical Career Endorsement by Sex

<table>
<thead>
<tr>
<th></th>
<th>Male-Stereotypical</th>
<th>Female-Stereotypical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>Men</td>
<td>3.35( _a )</td>
<td>1.29</td>
</tr>
<tr>
<td>Women</td>
<td>2.35( _b )</td>
<td>1.10</td>
</tr>
</tbody>
</table>

*Note:* Means with differing subscripts are significantly different at \( p \leq .05 \)
Figure 1. Preliminary Study Mediation of the Effect of Gender on Male-Stereotypical Career Interest by Status Goals.

Figure 2. Preliminary Study Mediation of the Effect of Gender on Female-Stereotypical Career Interest by Family Goals.

Figure 3. Hypothetical Models Describing the Relationship Between Gender, Gender Beliefs, Goals, and Career Interest.

Figure 4. Hypothetical Model - Goal and Career Reciprocity & Correlation.

Figure 5. Hypothetical Models Including Sexism, Decomposed by Participant Sex.

Figure 6. Mediation of the Effect of Gender on Male-Stereotypical Career Interest by Status Goals.

Figure 7. Mediation of the Effect of Gender on Female-Stereotypical Career Interest by Family Goals.

Figure 8. Structural Model of the Relationship between Sex and Relative Goals and Career Interest (Model 1).

Figure 9. Structural Model of the Relationship between Sex, Relative Gender Beliefs, and Relative Goals and Career Interest (Model 2a).

Figure 10. Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Male Participants Only (Model 3a).

Figure 11. Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Female Participants Only (Model 3b).

Figure 12. Alternate Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Female Participants Only (Model 3b alternate).
Figure 1. Preliminary Study Mediation of the Effect of Gender on Male-Stereotypical Career Interest by Status Goals.

Note: Regression coefficients are shown, with standardized coefficients in parentheses (** \( p < .01 \), *** \( p < .001 \)).
Figure 2. Preliminary Study Mediation of the Effect of Gender on Female-Stereotypical Career Interest by Family Goals.

Note: Regression coefficients are shown, with standardized coefficients in parentheses (* $p < .05$, ** $p < .01$).
Figure 3. Hypothetical Models Describing the Relationship Between Gender, Gender Beliefs, Goals, and Career Interest.

3a.

3b.
Figure 4. Hypothetical Model - Goal and Career Reciprocity & Correlation.
Figure 5. Hypothetical Models Including Sexism, Decomposed by Participant Sex.

5a

[Diagram showing the relationships between Gender beliefs, Goals, Career interest, Self-concept difference, Stereotype difference, Hostile sexism, Benevolent sexism, Goal difference, and Career difference.]

5b

[Diagram showing the relationships between Gender beliefs, Goals, Career interest, Self-concept difference, Stereotype difference, Hostile sexism, Benevolent sexism, Goal difference, and Career difference.]
Figure 6. Mediation of the Effect of Gender on Male-Stereotypical Career Interest by Status Goals.

Note: Regression coefficients are shown, with standardized coefficients in parentheses (* \( p < .05 \), *** \( p < .001 \)).
Figure 7. Mediation of the Effect of Gender on Female-Stereotypical Career Interest by Family Goals.

Note: Regression coefficients are shown, with standardized coefficients in parentheses (*** p < .001).
Figure 8. Structural Model of the Relationship between Sex and Relative Goals and Career Interest (Model 1).

Fit: Model saturated.
Figure 9. Structural Model of the Relationship between Sex, Relative Gender Beliefs, and Relative Goals and Career Interest (Model 2a).

CFI > .99
NNFI > .99
RMSEA < .001
Figure 10. Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Male Participants Only (Model 3a).
Figure 11. Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Female Participants Only (Model 3b).

CFI = .81
NNFI = .65
RMSEA = .15
Figure 12. Alternate Structural Model of the Relationship between Sex, Relative Gender Beliefs (Including Sexism), and Relative Goals and Career Interest - Female Participants Only (Model 3b alternate).

CFI = .96  
NNFI = .88  
RMSEA = .09