

## ABSTRACT

Title of Dissertation: FUTURE CHORE DIVISION IDEALS AND EXPECTATIONS: VALIDATING A MEASURE WITH UNDERGRADUATE WOMEN

Ayelet Silberberg, Doctor of Philosophy, 2018

Dissertation directed by: Dr. Karen O'Brien  
Department of Psychology

College-aged women expect to disrupt their future careers, earn less, and be responsible for more household and childcare chores than their future spouses. This unequal division of labor has been linked to inequality in the workforce between women and men with women earning less and being concentrated in low pay, low prestige occupations. The current investigation sought to improve understanding of this phenomenon by exploring the factor structure and psychometric properties of a measure of chore division ideals and expectations in a sample of undergraduate women. Exploratory factor analyses suggested separate measures of ideal and expected chores, each comprised of two factors: traditionally feminine chores, and traditionally masculine chores. Confirmatory factor analyses did not reach

satisfactory cutoff levels, but the scores on the preliminary scales showed evidence for convergent validity, internal reliability, and test-retest reliability. Results also supported hypotheses regarding relationships between the subscales. Tentative implications of these findings, future directions for research, and clinical implications are discussed.

FUTURE CHORE DIVISION IDEALS AND EXPECTATIONS:  
VALIDATING A MEASURE WITH UNDERGRADUATE WOMEN

by

Ayelet Silberberg

Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2018

Advisory Committee:

Karen M. O'Brien, Ph.D., Chair  
Patricia Alexander, Ph.D., Dean's Representative  
Lea Dougherty, Ph.D.  
Mary Ann Hoffman, Ph.D.  
Matthew Miller, Ph.D.

© Copyright by  
Ayelet Silberberg  
2018

## Table of Contents

Table of Contents .....	ii
List of Tables .....	iii
List of Figures .....	iv
Chapter 1: Introduction .....	1
Chapter 2: Method and Results .....	12
Study 1 .....	12
Method .....	12
Results .....	18
Study 2 .....	23
Method .....	23
Results .....	24
Chapter 3: Discussion .....	25
Appendices .....	38
Appendix A: Literature Review .....	38
Appendix B: Ideal and Expected Chore Measure .....	58
Appendix C: Traditional Egalitarian Sex Role Ideology Scale .....	62
Appendix D: Benevolent Sexism Scale .....	63
Appendix E: Career Aspiration Scale Revised .....	64
Appendix F: Demographic Questionnaire .....	66
References .....	
86	

## List of Tables

Table 1. Demographic characteristics for total sample.....	77
Table 2. Descriptive Statistics and Correlations for Study 1 .....	78
Table 3. EFA Items and Factor Loadings .....	79
Table 4. Final Items and CFA Factor Loadings.....	82
Table 5. Descriptive Statistics and Correlations for Study 2 .....	85

## List of Figures

Figure 1. Four Factor Model .....	69
Figure 2. Two Factor Model .....	71
Figure 3. Participant Selection for Study 1 .....	73
Figure 4. Final Factor Structure of the Ideal Chore Measure .....	74
Figure 5. Final Factor Structure of the Expected Chore Measure .....	75
Figure 6. Participant Selection for Study 2 .....	76

## Chapter 1: Introduction

Despite dramatic increases in women's workforce participation, household labor division in heterosexual married couples has remained largely unchanged over the past decades (Claffey & Mickelson, 2009; Coltrane, 2010). Research has consistently shown that married women assume more family responsibilities than men and perform more household and childcare chores than their partners (Abele & Spurk, 2011; Lachance-Grzela & Bouchard, 2010a; U.S. Bureau of Labor Statistics, 2008) even when both partners are working full time, and when the wife is the primary bread winner (Davis & Greenstein, 2013; Lachance-Grzela & Bouchard, 2010b). This unequal division of labor has been linked to inequality in the workforce between women and men with women earning less and being concentrated in low pay, low prestige occupations (Coltrane, 2010).

It is important to note that these findings are not constrained to working adults. College-aged women expect to disrupt their future careers due to childcare responsibilities, earn less, and be responsible for more household and childcare chores than their future spouses (Askari, Liss, Erchull, Staebell, & Axelson, 2010; Fetterolf & Eagley, 2011). Researchers found that although young college-aged women desired egalitarian chore division in their future marriages, they did not expect an egalitarian division of household labor; rather they anticipated that they would participate in more chores than they ideally wanted and in more chores than their partner (Askari et al., 2010; Silberberg, 2015). The current study sought to advance understanding of young women's expectations for their future household



labor division by testing the validity and reliability of scores on a measure of chore division ideals and chore division expectations (i.e., the Ideal and Expected Chore Measure), including comparing differences between ideal and expected levels of participation in traditionally feminine and traditionally masculine chores.

### **Theoretical Foundation**

The division of housework falls along traditionally gendered lines, with women taking on most of the responsibility in the home sphere while their male partners feel more responsible for providing financial support for the family (Coltrane, 2010; van Hoof, 2011). This phenomenon can be understood through the lens of Gender Schema Theory (Bem, 1981), which views gender as a basic organizing principle in society. Children are treated differently depending on their gender, and are socialized into categories of gender by those around them from birth onwards. As a result of social learning, children form ideas, or schemas, of what it means to be a boy or a girl, a man or woman, and learn to associate gendered attributes with themselves to form a gendered self-concept. This is relevant in terms of chore division, because household labor is a gendered construct (Coltrane, 2010; Kroska, 2004). Most household and childcare chores are considered “women’s work” and the home sphere is traditionally the women’s responsibility (Erchull, Liss, Axelson, Staebell, & Askari, 2010; Kroska, 2003); thus, household labor is an aspect of a schema of femininity with which women associate themselves.

Some questions have been raised regarding the relevance of this distinction given social changes in perceptions of gender over the years, yet studies have

shown that college students' perceptions of gender role socialization have remained stable (Guastello & Guastello, 2003; Holt & Ellis, 1998).

The Expectancy-Value Model of Achievement-Related Choices (Eccles, 1987) provides a framework to understand how gendered self-concept can guide behavior and the decision-making processes in both the work and home spheres. According to the model, decision-making is influenced by the centrality of specific aspects of an individual's identity, or self-concept. In this model, individuals make behavioral choices by weighing their expectations of success and the value that they assign to each behavioral option (i.e., subjective task values). Gender impacts subjective task values associated with choices related to division of household labor and childcare because men and women view their role in the home differently according to gendered socialization. For example, even if men and women hold parenthood as an equally salient aspect of their self-concept, their family and career-related decisions would be different because performing childcare tasks would theoretically be tied into women's identity in a more salient way than career (Eccles, 2009).

### **Measurement of Household Labor Division**

Although household labor division is a widely studied construct (Claffey & Mickelson, 2009; Coltrane, 2010; Kroska, 2003, 2004; Lachance-Grzela & Bouchard, 2010a; Singleton & Maher, 2004), there is no agreed upon tool for measuring division of chores in couples. Researchers either create chore lists themselves that match the purpose of their studies (Barnett & Baruch, 1986 ; Biernat & Wortman, 1991; Claffey & Mickelson, 2009; Poeschl, Pinto, Murias,

Silva, & Ribeiro, 2006), or use lists of chores from government national surveys (Grunow, Schulz, & Blossfeld, 2012; Kroska, 2004). In research on future chore division expectations, there is even less consistency in methodology and measurement. Apart from chore lists (Askari et al., 2010; Erchull et al., 2010), researchers have used methods such as imagination of future-self exercises (Fetterolf & Eagly, 2011) and scenario rating (Swearingen-Hilker & Yoder, 2002). Though varied methods can add richness to the study of a given construct, the lack of an agreed upon measure with valid and reliable scores makes it difficult to compare results across studies and create a coherent understanding of the concept. The aim of the current study was to improve upon existing measures and examine the reliability and validity of a measure of future chore division that assesses both expectations and ideals.

In their 2010 study, Askari and colleagues found that women expected to take on more chores than their partners, and more chores than they ideally wanted. Moreover, participants who held liberal attitudes wanted and expected less traditional chore division than less liberal participants. The chore list used in their study consisted of seven household and seven childcare chores compiled by the researchers, and the participants were asked to provide a participation percentage for each chore. Participants completed the list twice, once for ideal chore participation and once for actual chore participation expectations (Askari et al., 2010).

Upon closer examination of the chore list, the chores selected (e.g. preparing meals/cooking, doing laundry, diapering children) represented chores traditionally

performed by women, but there were no chores traditionally performed by men included on the measure (e.g., taking out the trash). Because chore participation is a gendered construct within marriages, adding chores traditionally performed by men could offer a more complete picture of chore participation expectations. In fact, despite the gender differences that consistently emerge in household labor division research (Coltrane, 2010; Lachance-Grzela & Bouchard, 2010a), few studies have taken traditional gender division of chores into account when measuring household or childcare chores (Barnett & Baruch, 1987; Kroska, 2004). In 2004, Kroska examined chore division in married couples by dividing items from the National Survey of Families and Households into traditionally female, traditionally male, and gender neutral tasks according to previous research on labor division (South & Spitze, 1994; Walker, 1999). However, the psychometric properties of this measure were never examined.

Additionally, many forms of measurement require participants to estimate or predict hours that they will spend on each household or childcare task (Barnett & Baruch, 1986), or provide percentages of division (for example, indicating that they expect to complete 40% of a certain chore; Askari et al., 2010; Claffey & Mickelson, 2009). Estimating hours or providing an exact percentage for anticipated chore participation could be difficult, especially for participants who do not have experience sharing the chores with a partner on a daily basis. The current study created an Ideal and Expected Chore Measure, with subscales based on chores traditionally performed by each of the genders, and participants rated their responses in such a way that they were not required to estimate numbers or

percentages.

### **Purpose of the Study**

The purpose of the current study was two-fold. The first purpose was to study the factor structure of the newly developed Ideal and Expected Chore Measure. It was hypothesized that the chore measure will conform to a gendered four factor model of ideal chore division and expected chore division with subscales of traditionally feminine and traditionally masculine chores in each factor; see Figure 1). This is supported by theories of gender schema (Bem, 1981) and decision-making processes (Eccles, 1987), which posit that expectations of behavior, including those of household labor division, would be separated along gendered lines. This also was congruent with research regarding the gendered nature of work (Coltrane, 2010; Mannino & Deutsch, 2007) and chore divisions found in the literature (Barnett & Baruch, 1987; Kroska, 2004; South & Spitze, 1994; Walker, 1999). The proposed model was compared to a two factor model consisting of ideal and expected scales, with no gender differentiation (see Figure 2; Askari et al., 2010).

The second purpose of the proposed study was to examine the reliability and validity of scores on the Ideal and Expected Chore Measure. The test-retest reliability of scores on each of the subscales that emerged on the measure was calculated. Convergent validity was assessed by examining correlations of the subscales with measures of variables theoretically-related to chore division ideals and expectations. The constructs that the subscales were hypothesized to relate to were (a) gender role expectations, (b) ambivalent sexism, and (c) career aspirations.

Additional support for validity was assessed by examining whether scores on the measure replicated previous research findings in which women expected to take on more traditionally feminine chores and fewer traditionally masculine chores than they ideally wanted (Askari et al., 2010; Silberberg, 2015).

Gender role expectations are the schemas of gender categories that an individual holds, which are influenced by societal definitions of gender (Abele, 2000). For example, if someone believes that women are caring, they will expect women with whom they interact to display traits and behaviors that are in line with their expectation of caring behaviors. Gender and career-related research often define gender role expectations on scales of traditionality and egalitarianism, or non-traditional, progressive expectations (Askari et al., 2010; Kaufman, 2005; King & King, 1997). Gender role expectations have been shown to influence decisions and expectations related to household labor division in men and women (Askari et al., 2010; Erchull et al., 2010; Kaufman, 2005; Kaufman & Uhlenberg, 2000). For example, men with progressive gender role expectations worked fewer hours, were more willing to be homemakers, expressed less of a desire for their wives to be homemakers, and were willing to perform more household and childcare chores than men with traditional views (Erchull et al., 2010; Kaufman, 2005; Kaufman & Uhlenberg, 2000). Women with more progressive gender role expectations were less definitive in future plans to marry or have children, wanted to marry at a later age, were less willing to be homemakers, and desired to perform less household and childcare chores than their traditional counterparts (Askari et al., 2010; Erchull et al., 2010; Kaufman, 2005; Kaufman & Uhlenberg, 2000).

Polarized attitudes toward women can be seen in many cultural characterizations, such as the Madonna-whore dichotomy (Tavris & Wade, 1984). This led Glick and Fiske (1996) to theorize that sexism is essentially ambivalence toward women, and has within it opposite aspects of hostility and benevolence. Hostile sexism represents antipathy toward women, and is steeped in negativity and perceptions of women as trying to undermine and overtake men's power. Benevolent sexism, on the other hand is more subtle, and represents subjectively positive attitudes toward women and views of women as pure, precious and in need of protection and affection. Hostile and benevolent sexism are two sides of the same coin, as they engender different expressions of the idea that women differ from men, and create a social mechanism through which women are less likely to resist social inequality: women who conform to feminine norms and ideals are placed on a pedestal (benevolent sexism) but if they fall from grace in some way, or rebel against feminine expectations, they are met with contempt and hostility (hostile sexism; Glick & Fiske, 1996; Glick & Fiske, 2001). Though men are more likely than women to endorse hostile sexism, the benevolent form is often ascribed to by women, and societies with high levels of women's endorsement of benevolent sexism also have the greatest gender inequality (Glick & Fiske, 2001). In a sample of undergraduates, high levels of hostile and benevolent sexism were related positively to traditional housework and childcare attitudes (Ogletree, 2015), and in married couples, benevolent sexism was related to satisfaction with traditional division of household labor (Poeschl et al., 2006).

Career aspirations are defined as the extent to which individuals are motivated to attain leadership roles, achieve highly, and pursue higher education within their selected career field (O'Brien, 1996). Career aspirations relate to self-concept, so that women who have high aspirations towards leadership and educational attainment in their field are likely to regard career as an important aspect of their identity (Gregor & O'Brien, 2015). It makes sense that women who place high importance on career are motivated to achieve highly in their fields, however career achievement and domesticity or motherhood are perceived in our society as competing constructs (Eccles, 2009), and taking on significant portions of household labor and childcare impede women's success in the workplace (Coltrane, 2010). Therefore, women with high career aspirations would most likely benefit from desiring and expecting less participation in household chores than women who do not share their career focus.

### **Hypotheses**

Based on theory and prior research (Bem, 1981; Eccles, 1987; Kroska, 2004; Mannino & Deutsch, 2007; Silberberg 2015), it was first hypothesized that the Ideal and Expected Chore Measure would conform to a four-factor structure with subscales of (a) ideal traditionally feminine chores, (b) ideal traditionally masculine chores, (c) expected traditionally feminine chores, and (d) expected traditionally masculine chores (see Figure 1), and that scores on these subscales would have adequate test-retest reliability.

Next, it was hypothesized that both expected and ideal participation in chores traditionally performed by women would have negative relationships with



measures assessing non-traditional gender expectations and career aspirations, and a positive relationship with benevolent sexism. The rationale for these hypotheses was that more traditionally-feminine self-concept and ideas about gender roles would correspond with viewing traditional-female tasks in the household as their responsibility instead of their partners. Women who are geared towards career, are progressive in their gender expectations, and who do not express internalized ideas of benevolent sexism (i.e. do not expect to be taken care of by men or expect special treatment), are less likely to view traditionally feminine tasks as their responsibility.

Third, it was hypothesized that the expected and ideal division of chores traditionally performed by men subscales would show positive relationships with gender non-traditionality and career aspirations, and a negative relationship with benevolent sexism. The rationale for this hypothesis was that the less traditionally-feminine participants' gender schema and ideas about gender roles are, the more they would see traditional-male tasks in the household as a shared responsibility rather than as chores that are only appropriate for men. In other words, being less "traditionally-feminine" in terms of gender schema, career aspirations and gender role expectations, as well as internalizing less ideas corresponding with benevolent sexism, would suggest a lower likelihood that women would segregate chore participation—both in expectations and ideals—based on gender, and would desire equality in their future long-term partnerships. That is, they would ideally and actually expect to take a larger share of the chores traditionally performed by men than their "traditionally-feminine" counterparts.

The next hypotheses addressed the overall difference in ideal versus expected chore participation across the two subscales: chores traditionally performed by women and chores traditionally performed by men. The fourth hypothesis was that levels of expected participation in chores traditionally performed by women would be higher than levels of ideal participation in chores traditionally performed by women. This would be consistent with past research where women expect to participate in more chores than they ideally wanted (Askari et al., 2010). Existing literature regarding future chore division examined only traditionally feminine chores. This study extended beyond what had been previously studied by adding traditionally male chores to the measure, and proposing that undergraduate women would show a different pattern of ideal versus expected participation in chores traditionally performed by men.

Accordingly, the final hypothesis was that levels of expected participation in chores traditionally performed by men would be lower than levels of ideal participation in chores traditionally performed by men. The rationale for hypothesizing that participants would ideally want to do more “male-chores” than they actually expect is in line with past research demonstrating that even if women ideally wanted to participate equally with their partner in household chores, they expected that a more traditional division of chores will prevail (Corrigall & Konrad, 2007). In other words, chore participation expectations were more traditional than chore participation ideals (Askari et al., 2010; Silberberg 2015). Though this pattern has been empirically shown only in chores traditionally performed by women, it was hypothesized that it would hold for chores traditionally performed by men so

that women would ultimately expect to participate in fewer traditionally male chores than they ideally report.

### **Summary**

The division of household labor tends to fall along traditionally gendered lines in heterosexual couples, with women taking on most of the household and family tasks. This contributes to inequality between women and men in the workforce, and to the overrepresentation of women in low pay, low prestige occupations. Young women expect to earn less, assume more domestic responsibilities than their partners, and have more domestic responsibilities than they ideally want. To gain a better understanding of young women's perceptions of their expected and ideal chore division in their future long-term partnerships, the current study sought to advance knowledge by investigating a measure of household labor division ideals and expectations that took into account both traditionally feminine and traditionally masculine chores. The factor structure and psychometric properties of the Ideal and Expected Chore Measure were tested with a sample of undergraduate women, and differences between ideal and expected levels of chore participation were examined.

## Chapter 2: Method and Results

### STUDY 1

#### Method

##### Design

The purpose of the first study was to investigate the factor structure of the Ideal and Expected Chore Measure and analyze the psychometric properties of the instrument in a sample of undergraduate women. The model of a measure with ideal and expected traditionally feminine and traditionally masculine scales conforming to a four factor model (see Figure 1) was compared to a two factor model of ideal and expected scales (see Figure 2). Confirmatory factor analysis assessed the model of best fit, and reliability coefficients were calculated for each of the subscales of the final model. The convergent validity of scores on measure were studied by calculating correlations among scores on measures of gender and career variables, testing and comparing ideal and expected levels of chore participation for each of the subscales, and calculating test-retest reliability.

##### Procedure

The university registrar pool at a large Mid-Atlantic university sent an email to 9927 women between ages of 18 and 24. Other inclusion criteria required that the participants be heterosexual, interested in a long-term relationship in the future, unmarried, not cohabitating with a partner, and without children, but this information could not be obtained by the registrar, so it was not possible to calculate an accurate response rate. An email was sent to women students between the ages of 18 and 24 detailing all inclusion criteria and inviting those who met the

criteria to complete the measures online in exchange for a chance to win one of three \$20 Amazon gift cards, which were distributed electronically. To ensure that only participants meeting inclusion criteria were included in the data analyses, questions about each criterion were included in the demographic questionnaire and examined prior to analysis. Personal connections with instructors were also used in data collection; students in six classes in the Psychology department of the university were given the opportunity to participate in the study in exchange for class credit. The measures were placed in a single survey with the Ideal and Expected Chore measure presented first to avoid priming effects, and the demographic questionnaire last. The rest of the measures were in the middle in counterbalanced order.

## **Participants**

Participants were 1241 students at a large mid-Atlantic University who accessed the survey online and signed an online consent form. Out of those students, 261 participants exited the survey before completing the measures and did not enter the gift card raffle, and their responses were removed from data analysis. Next, responses that did not adhere to inclusion criteria were removed from the analysis (see Figure 3), which resulted in a final dataset of 820 heterosexual women between the ages of 18 and 24 ( $M=19.38$ ,  $SD=1.27$ ) who were interested in a long-term partnership in their future. Participants were unmarried, not cohabitating with a partner, and did not have children. The most common racial backgrounds represented were White (60.0%), Asian/Asian American (17.7%), Black/African American (8.8%), and Hispanic/Latina (6.7%). Participants were enrolled in a

variety of majors, with the most common being Biology/Chemistry (16.5%), Engineering (11.8%), and Psychology (9%). Additional demographic information for the sample can be found in Table 1.

## **Measures**

**Chore division ideals and expectations.** Ideal and expected chore division were measured by the Ideal and Expected Chore Measure created for this study (see Appendix B). The principal investigator and a licensed psychologist first defined the construct of interest as household and childcare chores that need to be regularly performed by couples with children. They then reviewed the literature and compiled items from lists by Barnett and Baruch (1987), Askari et al. (2010), and Sweet and Bumpass (1996). New items were generated to address chores that were missing (for example; organizing the house, e.g., straightening up, putting things in place) to capture the entire domain of chores that partners in long-term partnerships perform on a regular basis, in both housework and childcare domains. Items were grouped to identify themes and duplicate items. Items were deleted if they referred to restricted age ranges of children (e.g., diapering). The revised list of items was presented to a research team consisting of seven doctoral students and five undergraduate research assistants who examined whether the items assessed all components of the construct and if the items were clear and understandable. The measure was revised based on feedback from the team and presented to another psychologist and eight doctoral students. Additional feedback was received from seven men with families and further modifications were made. Seven graduate students independently rated the 54 tasks into two subscales: chores traditionally performed by women, and chores

traditionally performed by men. Adequate interrater reliability agreement was obtained regarding which chores were traditionally female and male (*Fleiss's kappa* = 0.68,  $p < .00$ ).

To determine whether task specificity could be an organizing or differentiating factor among the chores in the measure, seven graduate students and a psychologist independently rated the 54 tasks based on whether they were specific (for example; purchasing small items for home, e.g., cookware, bedding, soap, cleaning supplies) or broad (for example, organizing social activities). Weak interrater reliability was obtained, indicating that there was little agreement between raters on specificity level of chores both generally (*Fleiss's kappa* = 0.37,  $p < .00$ ), and within the subscale of masculine chores (*Fleiss's kappa* = 0.38,  $p < .00$ ). After further consultation with a statistician, multilevel modeling analysis was utilized to predict specificity score generally and by individual, in each subscale, to ensure that there was no significant difference in specificity ratings of masculine and feminine chores ( $\beta = -0.14$ ,  $p = 0.58$ ).

Participants were presented with 42 household and childcare tasks that women historically have performed (e.g., grocery shopping, supervising child's morning routine) and 12 tasks related to household and childcare duties that men traditionally perform (e.g., yard work, paying bills). Participants rated the tasks on a 7-point Likert type scale with responses ranging from 1 (*my spouse will perform the chore alone*) to 7 (*I will perform the chore alone*), similar to scales used in previous research (Biernat & Wortman, 1991; Katz-Wise et al., 2010). Participants rated the list twice, first indicating their ideal chore division, and then indicating the chore

division that they actually expected to perform in their future relationship, consistent with the literature and previous research on the topic of ideals and expectations (Askari et. al., 2010). To score the measure, mean scores were calculated for each of the subscales, with high scores indicating high chore participation.

**Non-Traditional gender role expectations.** To measure gender role expectations, participants completed the Traditional Egalitarian Sex Role Ideology Scale (TESR; Larsen & Long, 1988; see Appendix C). The scale consists of 20 items that measure attitudes towards gender-role equality. Participants rated their agreement with a series of statements on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were summed to obtain a total score, with high scores indicating support of non-traditional gender role expectations. Sample items include: “having a job is just as important for a wife as it is for her husband” and “women should be more concerned with clothing and appearance than men” (reverse scored item).

Scores on the TESS have been shown to be reliable and valid in samples of college students (Bosson, Taylor, & Prewitt Freilino, 2006; Forry, Leslie, & Letiecq, 2007; Katz Wise et al., 2010; Larsen & Long, 1988; Livingston & Judge, 2008). Researchers examining internal consistency in different samples found a split half coefficient of .91 and Cronbach alphas ranging from .84 to .90 (Bosson et al., 2006; Forry et al., 2007; Larsen & Long, 1988). Support for concurrent validity was demonstrated through correlations with other measures of gender role traditionalism ( $r = .79$ ), as well as measures of authoritarianism ( $r = .36$ ),



conservatism ( $r = .47$ ), and attitudes towards divorce ( $r = .42$ ) in college students (TESR scores were reverse coded in these studies so that higher scores represented higher traditionalism). Furthermore, scores on the TERS performed in hypothesized ways in models relating to variables such as parenting status and work-family conflict in samples of married couples (Katz Wise et al., 2010; Larsen & Long, 1988; Livingston & Judge, 2008).

**Benevolent sexism.** The Benevolent Sexism subscale of The Ambivalent Sexism Inventory (ASI; Glick & Fiske, 2001; see Appendix D) was administered to participants to measure levels of benevolent sexism. The subscale consists of 11 items that participants rated on a 6-point Likert scale with response options ranging from 0 (*disagree strongly*) to 5 (*agree strongly*). Sample items included “in a disaster, women ought to be rescued before men” and “many women have a quality of purity that few men possess.” Responses on the scale were averaged to calculate a final subscale score with high scores indicating high endorsement of sexism.

The ASI has been widely used, and score reliability and validity has been established in multiple, large, and international samples (Glick & Fiske, 2001). Benevolent sexism correlates with national measures of gender inequality in multinational studies (Glick & Fiske, 2001), and benevolent sexism related with positive views of a female caregivers (Gaunt, 2013). Recent support for reliability for scores on the benevolent sexism subscale of the ASI in samples of college-aged participants has been shown with alphas ranging from .87 to .88 (Gaunt, 2013; Ogletree, 2015).

**Career aspirations.** Participants' career aspirations were measured using the Career Aspiration Scale - Revised (CAS-R; Gregor & O'Brien, 2015; see Appendix E), a 24-item measure in which items were rated on a 5-point Likert scale ranging from 0 (*not at all true of me*) to 4 (*very true of me*). The scale consists of three subscales: achievement aspiration ("I want to be among the very best in my field"), leadership aspiration ("I hope to become a leader in my career field"), and educational aspiration ("I plan to reach the highest level of education in my field"). All subscales correlated positively with achievement motivation, work role salience, and negatively with willingness to compromise career for partner (Gregor, 2014). Reliability coefficients of .81 to .82 (achievement), .87 to .89 (leadership), and .85 to .90 (education) were found in samples of college women (Gregor, 2015). Responses were summed on each of the subscales, so that high scores indicated high levels of achievement motivation.

**Demographic measures.** Participants completed a demographic questionnaire which included questions about age, major, career choice, education degree plans, socioeconomic status, relationship status, involvement in student activities, and parental occupation information (see Appendix F).

## **Results**

### **Initial Confirmatory Factor Analysis**

Participants were required to answer every question in each of the measures so no data were missing. Confirmatory factor analyses were conducted using M-Plus to test the hypothesized four-factor and the two-factor structure. This analysis was conducted to assess whether the structure of the proposed measure was

consistent with the theoretical understanding of the construct of future chore division. The hypothesized four-factor structure (ideal traditionally feminine chores, ideal traditionally masculine chores, expected traditionally feminine chores, expected traditionally feminine chores) was compared to a two-factor structure consisting of ideal chores and expected chores. A confirmatory factor analysis was selected rather than an exploratory factor analysis because of theoretical background suggesting the four factor model. The root-mean-square error of approximation (RMSEA), Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) cutoff were used for evaluating model fit. Hu and Bentler (1999) recommended RMSEA values less than .10 and CFI/TLI values greater than or equal to .90, as indicative of adequate model fit. However, opinions about acceptable fit indices differ, and cut off scores for the RMSEA, CFI, and TLI are not universally accepted. The models were compared using likelihood ratio testing to determine best fit. Items were selected for each factor based on loadings of at least .40, and not loading on more than one factor at .30. Because each chore was rated by participants twice, identical items were allowed to covary within the model. For example, the chore “planning meals” was rated for ideal division as item 3, and for expected division as item 57, and so items 3 and 57 were allowed to covary in the final model. Correlations among uniqueness terms were allowed in all analyses described below.

The four factor model showed an adequate RMSEA, but the CFI/TLI cutoffs were not met (RMSEA=0.068, CFI=0.52, TLI=0.51). To improve model fit, items loading less than .40 on any factor were deleted, which resulted in the deletion of

21 items (6, 11, 12, 23, 39, 9, 20, 28, 77, 92, 93, and 63). No items loaded on more than one factor at .30, and further model modifications were explored. Highly covarying items that were not representative of identical chores were examined, and 10 items were removed (3, 42, 57, 58, 61, 65, 66, 82, 96, and 101). Unfortunately, after these modifications, the CFI/TLI cutoffs remained inadequate (RMSEA=0.068, CFI=0.60, TLI=0.59).

Similarly, for the two-factor model, an initial analysis yielded results that did not meet CFI/TLI cutoffs (RMSEA=0.073, CFI=0.44, TLI=0.43). Once again, items with a factor loading of below .40 were removed (26 items; 6, 9, 10, 11, 12, 15, 20, 23, 25, 28, 38, 39, 47, 48, 54, 63, 64, 74, 77, 78, 79, 80, 82, 92, 93, and 108). Items 1 and 4 loaded on more than one factor and were removed, as well as 12 highly covarying non-matching items (2, 3, 8, 27, 56, 57, 59, 61, 62, 66, 81, and 101). After the modifications, the model still did not achieve adequate cutoffs (RMSEA=0.074, CFI=0.63, TLI=0.62).

A statistician was consulted (Dr. Jeffrey Chrabaszcz, who earned his doctorate from the Department of Psychology in Neuroscience and Cognitive Science at the University of Maryland and is now a data scientist in the Software Engineering Institute at Carnegie Mellon University), and recommended next steps were discussed. The statistician suggested that an exploratory factor analysis (EFA) should be conducted to identify a model with better fit. He also suggested running the analysis on ideal and expected items as different measures rather than two subscales within the same measure. It has been shown that instructions can affect factor structure and it is possible that the different instructions in each part of the

measure might have caused the items to fall into different ideal and expected factors.

The sample was randomly divided in half to conduct an exploratory factor analysis (n=410) and a confirmatory factor analysis (n=410) on the ideal and expected items separately.

### **Exploratory Factor Analysis**

Prior to running the factor analyses, the factorability of the data set was deemed appropriate using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity. The KMO score for the sample was .84 (ideal chores) and .93 (expected chores), and the Bartlett's test yielded significant results, (ideal =  $\chi^2$  (1431, N = 410) = 7846.71,  $p < .00$ ; expected =  $\chi^2$  (1431, N = 410) = 23911.41,  $p < .00$ ).

A principal factor analysis with promax rotation was computed on all 54 items for each measure, and the scree plots were examined. For the ideal chore measure, a two, three, four, or five factor solution was suggested accounting for 26.01%, 30.8%, 34.75%, or 38.03% of the variance, respectively. For the expected chore measure, a two, three, four, or five factor solution was suggested, accounting for 38.03%, 42.42%, 45.82%, and 48.982% of the variance, respectively.

Next, four principal axis factor analyses with promax rotations were computed with two, three, four, and five factors extracted for the ideal and expected measures. Each factor solution was considered to identify the solution with the highest loading items with fewest cross-loadings, robust variance explained, conceptual clarity, and each factor containing at least 4 items (to increase the

likelihood of factor reliability). Based upon these criteria, the researcher selected the two-factor solution for both of the measures (Factor 1: Traditionally Feminine Chores, Factor 2: Traditionally Masculine Chores).

Because each measure (ideal chores and expected chores) was analyzed separately, the items that were retained in each factor were not identical (for example, the item “preparing meals/cooking” loaded on Factor 1 in the expected chores measure, but did not load on any factors in the ideal chores measure). To maintain the equivalence of items on each scale, the researcher and her advisor independently decided upon a strategy to retain the items that loaded on the same factors in both measures. The resulting measures included a total of 33 items loading on two factors, 24 items on the first factor and nine items on the second factor. The factors were Traditionally Feminine Chores (ideal items 13, 18, 29, 30, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53; expected items 67, 72, 83, 84, 85, 86, 87, 88, 89, 90, 91, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 105, 106, 107), and Traditionally Masculine Chores (ideal items 2, 7, 8, 10, 16, 23, 24, 26, 54; expected items 56, 61, 62, 64, 70, 77, 78, 80, 108; see Table 3).

### **Second Confirmatory Factor Analysis**

Two confirmatory factor analyses were conducted to assess adequacy of model fit (one for ideal chores and one for expected chores). The initial CFA results indicated a lack of adequate fit ( $N=410$ , ideal RMSEA = .08, ideal CFI = .70, ideal TLI = .68; expected RMSEA = .08, expected CFI = .81, expected TLI = .80). The data were reviewed and the model was modified so that only items with a factor

loading of .40 or higher were retained on both measures. As opposed to the earlier CFAs, since the analyses of ideal and expected chores were run separately there were no identical chores within each CFA and high covariation among items was not allowed in the analysis. The items deleted in the modification process were 32, 40, 47, 53, and 54 in the ideal chore measure, and 86, 94, 101, 107, and 108 in the expected chore measure.

A confirmatory factor analysis was run on the final 28 items in each measure (ideal and expected). The results indicated that all items loaded on a factor at .40 or higher, there were no items that loaded greater than .40 on more than one factor, and there were no covarying items. The factor structure had improved compared to the initial CFA, but results did not indicate adequate fit ( $N=410$ , ideal RMSEA = .07, ideal CFI = .77, ideal TLI = .75; expected RMSEA = .08, expected CFI = .84, expected TLI = .83). A statistician was consulted and advised that there were no further model modifications that were likely to improve the fit of the models. The final items retained in each factor were 20 traditionally feminine chores in Factor 1 for each measure (ideal items 13, 18, 29, 30, 31, 33, 34, 35, 36, 37, 41, 42, 43, 45, 46, 48, 49, 50, 51, 52; expected items 67, 72, 83, 84, 85, 87, 88, 89, 90, 91, 95, 96, 97, 99, 100, 102, 103, 104, 105, 106), and eight traditionally masculine chores in Factor 2 for each measure (ideal items 2, 7, 8, 10, 16, 23, 24, 26; expected items 56, 61, 62, 64, 70, 77, 78, 80; Figure 4 and Figure 5 for final structures). The final items retained in the measure, along with the factor loadings for both the ideal and expected measures can be found in Table 4. Correlations

among the subscales and conceptually related variables, along with means, standard deviations, and reliabilities can be found in Table 2.

**Factor 1a: Traditionally feminine ideal chores.** The first factor on the first measure assessed ideal participation ratings in traditionally feminine chores ( $\alpha = .89$ ). Scores on the measure related negatively to scores on non-traditional gender role expectations and career aspirations, and positively to benevolent sexism.

**Factor 1b: Traditionally feminine expected chores.** The second factor on the first measure assessed expected participation ratings in traditionally feminine chores ( $\alpha = .94$ ). Scores were negatively correlated with non-traditional gender role expectations and with career aspirations, and positively correlated with benevolent sexism.

**Factor 2a: Traditionally masculine ideal chores.** The first factor on the second measure assessed ideal participation ratings in traditionally masculine chores ( $\alpha = .81$ ). Scores on the measure showed a positive correlation with non-traditional gender role expectations and a negative correlation with benevolent sexism. There was no relationship with career aspirations.

**Factor 2b: Traditionally masculine expected chores.** The second factor on the second measure assessed expected participation ratings in traditionally masculine chores ( $\alpha = .85$ ). Scores on the measure related positively with non-traditional gender role expectations and negatively with benevolent sexism. The factor did not relate to career aspirations.

### **T-test analysis**



Two t-tests were conducted to assess the difference between ideal and expected levels of participation in traditionally feminine and traditionally masculine chores. Results indicated that participants expected to take on more traditionally feminine chores ( $M = 4.66$ ,  $SD = 0.61$ ) than they ideally wanted ( $M = 4.30$ ,  $SD = 0.38$ ,  $t(409) = -15.41$ ,  $p < .000$ ). Additionally, participants expected to take on less responsibility for traditionally masculine chores ( $M = 2.82$ ,  $SD = 0.76$ ) than they ideally wanted ( $M = 3.03$ ,  $SD = 0.63$ ,  $t(410) = 7.92$ ,  $p < .000$ ).

## **STUDY 2**

### **Method**

To assess test-retest validity, participants in the prior study were given the option to complete another survey two weeks after their initial responses were collected for an additional chance to win one of three Amazon gifts cards in a raffle. Participants who volunteered were contacted via an automated email with an anonymous link to the test-retest survey, which included the initial 108 item ideal and expected chore measures from Study 1. Through this method, 508 responses were obtained; 261 responses met inclusion criteria and were used in this analysis (see Figure 6 for a flowchart of the inclusion process).

### **Results**

Descriptive statistics and reliability estimates for the test-retest portion of the study can be found in Table 5. For the purpose of this portion of the study, only the final items retained in Study 1 were included in the analysis (see Table 4).

On average, participants' chore participation ideals for traditionally feminine chores at Time 1 ( $M = 4.32$ ,  $SD = .33$ ; possible range 1-7) and Time 2

( $M=4.21$ ,  $SD=.31$ ; possible range 1-7) were lower than participation expectations for traditionally feminine chores at Time 1 ( $M=4.68$ ,  $SD=.59$ ; possible range 1-7) and Time 2 ( $M=4.62$ ,  $SD=.55$ ; possible range 1-7). Chore participation ideals for traditionally masculine chores at both Time 1 ( $M=3.04$ ,  $SD=.58$ ; possible range 1-7) and Time 2 ( $M=3.15$ ,  $SD=.66$ ; possible range 1-7) were higher than participation expectations for traditionally masculine chores at both Time 1 ( $M=2.85$ ,  $SD=.74$ ; possible range 1-7) and Time 2 ( $M=2.90$ ,  $SD=.72$ ; possible range 1-7).

The two subscales exhibited adequate internal consistency in each measure (Ideal Feminine Chores Time 1  $\alpha=.85$ , Time 2  $\alpha=.89$ ; Expected Feminine Chores 1  $\alpha=.93$ , Time 2  $\alpha=.93$ ; Ideal Masculine Chores Time 1  $\alpha=.78$  Time 2  $\alpha=.86$ ; Expected Masculine Chores Time 1  $\alpha=.83$ , Time 2  $\alpha=.85$ ). The two-week test-retest reliability estimates were as follows: Ideal Feminine Chores ( $r=.68$ ,  $p<.01$ ), Expected Feminine Chores ( $r=.75$ ,  $p<.01$ ), Ideal Masculine Chores ( $r=.71$ ,  $p<.01$ ), Expected Masculine Chores ( $r=.66$ ,  $p<.01$ ).

## Chapter 3: Discussion

The purpose of the current study was to create a psychometrically sound measure of chore division ideals and expectations for use with undergraduate women. The results indicated that the hypothesized two factor and four factor solutions did not adequately fit the data. An exploratory factor analysis suggested that the data best fit into two measures of chore division, one ideal and one expected, both with a matching two-factor structure of traditionally feminine and traditionally masculine subscales. This mode was partially supported by confirmatory factor analysis, though the fit indices did not meet established criteria for adequate fit. Generally, scores on the preliminary subscales exhibited support for reliability and validity, including test-retest reliability and convergent validity. The scores on these subscales also conformed to the hypothesized pattern in which women expected to participate in more chores than they ideally wanted, and fewer masculine chores than they ideally wanted. The results of the study are preliminary and appear promising for future measurement development research in the topic of labor division expectations in undergraduate populations. The preliminary subscales will be discussed in the following paragraphs, as well as possible reasons that might have contributed to difficulty achieving cutoffs.

The main contribution of the current study to the literature is providing the first steps in introducing a psychometrically sound tool for measuring chore division ideals and expectations in young women. The study also provides support for the idea that ideals and expectations of responsibility for household chores differ based on whether the chore is perceived as traditionally performed by women or by

men. This differs from the household/childcare division that is more commonly recognized in the literature (Askari et al., 2010), and a household/childcare division was not suggested in the EFAs in the current study. The finding is in line with Kroska (2004), who advised future researchers to take into account deeply engrained ideas about gender in division of chores, rather than the domain of the chore.

The study also replicated and expanded upon the findings from Askari and colleagues' 2010 study, in which they found that women expect to participate in more chores than they ideally want. The current study, however, showed that pattern only holds true in the case of traditionally feminine chores, and young women showed an opposite trend when the chores were traditionally performed by men. This is in line with a previous study (Silberberg, 2013), and can be explained through gender schema theory. Bem (1981) posited that gender roles are internalized by women and men due to socialization processes starting at infancy. According to gender schema theory, children learn what it means to be a woman or a man, which behaviors are socially associated with each gender, and how they should construct their identity. Research has shown that despite voicing support for gender equality, married couples still divide housework along traditionally gendered lines (Abele & Spurk, 2011; Lachance-Grzela & Bouchard, 2010a; U.S. Bureau of Labor Statistics, 2008), and the current study offers a glimpse into early origins of this gap. In the current study, the differences between ideals and expectations, though significant, were small. This might indicate that the gap

between ideal and expected chore participation is shrinking as awareness around gender equality grows.

Interestingly, it seems that even in the feminized home sphere, there are some tasks that are associated more strongly with masculinity, and women expect to fall into traditionally gendered patterns and perform fewer of those chores than they would ideally like. This is important because it suggests that moving towards equal division of household labor is complicated and involves negotiating both “feminine” and “masculine” chores. Additionally, traditionally masculine chores are fewer and further between than traditionally feminine chores, and tend to be performed less regularly. The reality of women being responsible for a larger portion of the household labor is further evidenced by the sheer number of feminine chores tested (42) and retained (20 chores) compared to the number of masculine chores tested (12 chores) and retained (8 chores). In the item development process special effort was put forth to develop items representing chores performed by each of the genders, and yet it was difficult to create an equal number of masculine and feminine chores because men are not perceived as responsible for the home sphere. Therefore, a man and a woman in a marriage may feel like they are taking on a large number of their “appropriately gendered” chores, but the woman would still be participating in more chores in general.

Despite the subscales on the measure not reaching adequate cutoffs for the hypothesized model fit in the confirmatory factor analyses, it was interesting to closely examine which items were retained in each subscale. In the traditionally feminine subscale, 20 items were retained; 18 of those items were childcare chores

which related to taking care of other people. The only two housework chores that were retained within the feminine subscale were “Laundry (e.g. washing, folding, ironing)” and “Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies).” This was notable because it suggested that housework might be losing some the gendered associations that it held for many years, but that childcare is not becoming “de-gendered” at the same rate. This is supported by the fact that the “traditionally masculine” subscale did not retain childcare items (though it did include one housework item that was hypothesized to be traditionally feminine, as further discussed in the next paragraph). During the item development process, it was challenging to identify childcare chore items that were traditionally performed by men, and after consulting numerous individuals including parents of both genders, the one item that was hypothesized to be in the traditionally masculine subscale was “Teaching children outdoor activities (e.g. biking, sports, skating)” but the item was not retained on the final subscales.

The pattern of childcare chores being associated with women, while household chores become more easily associated with both genders, makes sense when considering the literature on parenting and gender, specifically motherhood and femininity. These constructs are strongly linked, as has been shown by multiple researchers (Christopher, 2012; Johnston & Swanson, 2006). Many women internalize the idea that being a mother is an important piece of their feminine identity, and being a “good mother” means taking on the majority of childcare at the expense of other aspects of their life. For example, undergraduates tended to judge women who returned to school or work after the birth of a baby more harshly

than women who chose to quit other responsibilities, and more harshly than men who made the same choices (Goldberg & Lucas-Thompson, 2014; Gorman & Fritzsche, 2002; Mottarella et al, 2009). Women also are more likely to take time off from work to take care of their children or aging parents, while men are not expected to perform the same caretaking responsibilities (Hewlett, 2002). The findings also align with Eccles's (1987) theory of gendered career decision making, which posits that motherhood and career are conflicting constructs, while fatherhood and career go hand in hand.

Another interesting finding was that one of the items hypothesized to be on the feminine subscale was correlated with the traditionally masculine items ("Arranging for and interacting with service providers; e.g., calling and negotiating with repairmen).” This may have occurred because the item asks about arranging for *and* interacting with service providers. It is likely that separating the item into two items, one that asked about arranging for, and one that asked about interacting with, service providers would have led to different results. Planning and arranging for household and childcare necessities often is a task associated with women (Harnack et al., 1998; Lee & Waite, 2005; Silberberg, 2013). Additionally, the examples of service providers used in the item are inherently gendered (repairmen) and might have been priming for participants to consider it a traditionally masculine chore. Masculinity also is associated with household repairs, and it is possible that selecting a different example of service providers, such as cleaning services, would have created an association with feminine responsibilities.

In terms of convergent validity, the results indicated that the measures correlated in the expected directions with scales of non-traditional gender role expectations, benevolent sexism, and career aspirations. However, the subscales of ideal and expected traditionally masculine chores were not correlated with the career aspirations scale as hypothesized. In other words, women who ideally wanted and actually expected to participate in more masculine chores than their counterparts were not more likely to have higher career aspirations. One reason for the lack of relationship might be a simple explanation of time management and resources. If someone is spending more time doing chores, whether traditionally masculine or traditionally feminine, that individual will have less time to dedicate to her or his career. It is important to note, though, that higher participation ideals and expectations in feminine chores related negatively with career aspirations while higher participation ideals and expectations in masculine chores did not have a relationship with career aspirations. Therefore, it is possible that time as a resource is a mediator of the relationship between career aspirations and chore ideals and expectations, rather than a full explanation of the relationship.

There also are interesting findings in the descriptive data of study 1 (Table 2) that should be discussed. It is notable that the sample in the study was comprised of high achieving, highly motivated young women in a variety of majors including many participants in STEM majors. A vast of the women who participated indicated that they expected to work full time outside of the home and held high GPAs. Therefore, it was surprising that scores on the measures of gender role ideology and benevolent sexism showed high variability and were not restricted in range. These



findings suggested that some high achieving, highly motivated women in competitive science oriented fields still hold relatively traditional views on gender roles and have internalized the construct of benevolent sexism. This serves as evidence for the insidious nature of benevolent sexism and the ease at which our society conditions women to accept certain gendered beliefs. It is likely that these beliefs would impact participants' sense of self as women and as future mothers. Holding traditional and potentially harmful and limiting views about women (for example, that women possess unique qualities of pureness and need to be protected) might shape choices they make in their lives, especially around motherhood and partnership.

Another important descriptive finding is that high correlations were found between the ideal and expected chore measures, with a correlation of .63 for the feminine subscales and a correlation of .73 for the masculine subscales. Such high correlations may raise the question of whether ideal and expected chores are separate constructs or one construct of "future chores." Shared variance was not surprising since the items in each subscale are identical, and theory supports the idea of ideal and expected chores are separate constructs (Askari, 2011). However, the high correlations in the current study suggested that there might have been factors that limited the unique variance of each subscale (discussed in detail below in the limitations section). It is possible that in future studies, the correlation between the constructs would be lower if changes and suggestions below are implemented.

### **Limitations of the Current Study and Avenues for Future Research**

The current study was a first step in creating a tool for measuring ideal and expected future chore division, and several limitations should be addressed. Future research is needed to improve the measures of chore division ideals and expectations to create a psychometrically sound tool to be used across populations.

One important limitation might explain the inability of the data to correspond with the hypothesized models. The items were developed using input from women and men who were currently married and had children. However, the population of interest in the study was undergraduate women, and the items might not have reflected their expectations of future chores. Therefore, it is recommended that future research involve undergraduates in the item development process. This might improve the likelihood of a psychometrically sound measure, given that the items would better reflect the college students' perception of future household and childcare chores. Another avenue for future research is to examine the factor structure and validity of the current items in the measure using a sample of heterosexual, married mothers. It would be interesting to see if their experience of dealing with work-family management and division of housework would result in a different factor structure than the college-aged population.

As seen in Figure 3, 261 participants did not complete the entire survey in Study 1 and their responses were not included in the final analysis. Upon closer examination, it became apparent that there were two main points in which participants were likely to drop out of the study: 124 participants exited the survey immediately after giving consent, and 78 exited the survey during the “expected chores” portion. It is possible that the length of the chore measures was

discouraging to some participants. It also is possible that some participants did not read the instructions carefully and were not aware of the difference between the instructions for the ideal and expected chore measures. Supporting this idea is an email that the primary investigator received from a participant. In the email, the participant alerted the investigator that there was an error in the survey; she thought that the same chore measure was included twice because she had not noticed the difference in instruction. It is likely that other participants might have also misread the instructions and dropped out when they encountered the second survey. Even if participants continued with the study, it is possible that they did not carefully attend to the instructions until the expected chore portion of the study (which to them would seem like a second set of identical questions). Therefore, it is uncertain whether the ideal chore measure responses accurately reflect chore division ideals.

An important descriptive finding (Table 2) might also be related to the possibility that participants did not read carefully and had difficulty distinguishing between the different instructions for ideal and expected chores. High correlations were found between the ideal and expected chore measures, with a correlation of .63 for the feminine subscales and a correlation of .73 for the masculine subscales. Such high correlations may raise the question of whether ideal and expected chores are separate constructs or one construct of “future chores.” Shared variance was not surprising since the items in each subscale were identical, and theory supports the idea of ideal and expected chores are separate constructs (Askari, 2011). However, the high correlations in the current study suggested that there might have been factors that limited the unique variance of each subscale.

To improve upon measurement, it would be helpful to reconsider the design of the measures to minimize participant error. For example, the measures might be formatted so that each item appears beside two columns consisting of “ideal” and “expected” response scales. That way, participants could clearly see the difference in instruction, and also could weigh the difference between their ideals and expectations in a more direct visual way. Another important area for consideration is the possible terminology effect of the word “chore.” Participants might have negative connotations to the word and might be resistant to imagining themselves partaking in future chores, or might be confused to see some of the items (such as “buying gifts for birthday parties/social events”) labeled as chores. In future studies, it would be useful to examine participant reactions to the word “chore” in comparison to other possible terms such as “tasks”, “responsibilities”, or “duties.”

The measure also was limited in terms of diversity of chores and applicability to different social groups. Development of the current measure relied largely on feedback from White, educated, middle-class individuals. This likely limited the scope of the chores that were added to the measure. The participants were undergraduates in a large university, most of them were White, and they were very high achieving as indicated by their high GPA ( $M=3.54$ ) and self-reports of their career aspirations. Future research should focus on developing and exploring the measure with diverse samples.

Additionally, because women are disproportionately affected by unequal division of labor in partnerships and their expectations often impact their career development and trajectory, the psychometric properties of the proposed measure

first were examined with a sample of undergraduate women. Men's chore division expectations have been shown to differ from those of women (Askari et al., 2011), and no research has been conducted regarding this difference while taking into account traditionally masculine chores in addition to traditionally feminine chores. Future research, therefore, should explore the properties of the measure with young men to examine the factor structure and possible differences between the populations. This would open the door to create a measure that could be used with both genders, and offer a full picture of future chore division ideals and expectations within heterosexual partnerships.

A recommendation for a next step to improve upon the current work is to refine the item pool to test fewer items, which would reduce error variance and increase the likelihood of good model fit. One path for item pool refinement could be grouping items according to themes (such as all items related to cooking or all items related to purchasing items or gifts), and selecting one item to represent the theme. This also could be helpful in ensuring that items are similar in terms of level of specificity (yard work might be a broad task, while taking out the trash might be perceived as specific). Making these changes could reduce the likelihood that items will hang together because of content area (e.g., food preparation) or specificity of task. Once the item pool is refined, the factor structure could be tested with a sample of heterosexual married parents (women and men). Instead of "ideal" and "expected", the instructions should use the words "ideal" and "actual" to test the gap between what the women and men want within their partnerships, and what they actually experience. This would be important because married parents were

involved in the item development process and the items would closely reflect their lived experiences. Additionally, it would improve upon the current examination of gender roles in chore division because it would shed light on whether women and men would show a similar pattern in terms of factor structure and construct validity. Testing and validating the measure with both genders would be important because it would examine both sides of the partnership, offering a full picture and a better understanding of how chore division is experienced within marriages.

### **Counseling Implications**

Clinically, should future support for the proposed measure be obtained, the measure could be used to foster awareness in young women about possible discrepancies between their ideals and expectations for future chore participation. These discrepancies could be discussed in therapy to help clients explore ways that their expectations might be influenced by gender socialization. The measure also could be used in career counseling to help young women recognize factors that might play into their career trajectories and decision making. Possible interventions are outlined in the paragraphs below.

First, the current study suggests that young women seem to understand that chore participation ideals that they hold for their future will probably not be met. Equal division of household labor has been shown to be a large factor in women's career success, and women perform more chores than their partners, even when they work full time (Hewlett, 2002). Chore division is rarely addressed directly in career counseling, but considering the implications that chore division can have on women's career trajectories, this issue should be addressed in counseling as early as

possible. It is unclear to what degree undergraduate women are aware of the gap between their ideals and expectations, and so career counselors might first administer the ideal and expected chore measures to start a conversation. Women should be encouraged to discuss their beliefs about gender, their ideals for chore division, and then explore the mismatch between that and their expectations. Explicitly discussing and raising the issue to awareness would bring to light an often overlooked problem, and addressing it with young, undergraduate women who are making career and family related decisions could lead to positive outcomes in both spheres. Therapists also could encourage young women to keep these thoughts in mind when selecting a partner, and find someone who is compatible with their views on equality within relationships. This could result in future home environments for women that enable more flexibility in traditional labor division and gender role expectations, and have positive impacts on their careers.

Another finding of the current study that could be helpful in therapy and career counseling is that young women internalize gendered constructs about their role in the home, and especially their responsibility for the family sphere. Career counselors should encourage young, undergraduate women to explore the meaning that gender and femininity have in their lives and how it might relate to motherhood. It is important to address the ways that motherhood and femininity might be linked, and to explore the client's expectations of herself as a mother if she is planning to have children in the future. It is possible that undergraduate women have not yet thought about these issues, but the results of the current study and previous research show that career and family-related decisions might be made

even at this early stage (Fetterolf & Eagley, 2011). Group counseling could be a helpful intervention to encourage young women to explore their self-concept as women with future careers, partners, and children. A group setting would allow members to learn from each other while providing a safe environment for exploration.

Couples counseling is another setting in which the implications of this study could inform interventions and focus of treatment. Young couples could explore these issues together, in couples therapy or premarital counseling, and discover and address differences in views and expectations of domestic labor division in their partnership. Because labor division is often a topic that goes without discussion, and roles seem to “fall in to place” for many couples, this could be an especially important and illuminating issue. For young couples, it could inform decision making regarding family and career for both partners. For more established couples, with the help of a therapist, couples could talk about ways they feel their partnership is equal or unequal, and become aware of the gendered beliefs that might underlie these issues.

## **Conclusion**

This study examined young women’s ideals and expectations regarding division of household and childcare chores between themselves and their future partners. The goal of the study was to create a psychometrically sound instrument to measure these ideals and expectations that takes into account the different patterns that emerge between chores traditionally performed by women and chores traditionally performed by men. The results did not provide sufficient validity and



reliability evidence for the measure and these tools should not be used until further research is conducted and the tools are improved. Preliminary results indicated that young, undergraduate women expected to take on more traditionally feminine household and childcare chores than they ideally wanted, and fewer traditionally masculine chores than they ideally wanted. Results also suggested partial support for psychometric validity for the measure. Though factor analysis results did not meet satisfactory cutoff levels, the preliminary subscales confirmed the hypothesized directionality of the results, as well as construct validity and test-retest reliability. Future research should explore ways to improve the psychometric properties of the measure. The results reflect a reality in which, despite women making gains in the workplace, household and childcare chores are still perceived as women's responsibility. Household labor conforms to traditionally gendered expectations and women are expected to assume most of the responsibilities in the home sphere, especially the childcare duties. To inspire change, interventions should be aimed at raising young women's awareness of inconsistencies between their ideals and expectations, and exploring their beliefs surrounding gender, parenting, and partnerships.

# Appendices

## **Appendix A**

### Literature review

The literature review will be divided into four sections. First, it will review the theoretical background of the current study and link theories of gender to the study of future household labor division. Next, it will focus on the existing literature in the field of household labor division, future household labor division, and the measurement of these constructs. Variables relating to future household labor division will then be reviewed, and the literature review will conclude by presenting the hypotheses of the current study.

### **Theoretical Foundation**

The current study was grounded in two theories of gender, identity development, and decision-making: Gender Socialization Theory (Bem, 1981), and the Model of Achievement-Related Choices (Eccles, 1987).

#### **Gender Socialization Theory**

Gender Socialization Theory (Bem, 1981) is based on the concept of social learning, and posits that children are socialized into gender roles from the time they are born. Individuals hold schemas of gender which contain information about what it means to be a man or a woman, and they form these schemas based on feedback and input from their environment (Bem, 1981). According to Bem (1981) personality traits are divided into feminine and masculine categories (also known as instrumentality and expressivity). Traits such as “sympathetic” and “warm” are perceived as related to femininity, and known as expressive traits. On the other

hand, traits such as “assertive” and “competitive” are perceived as related to masculinity, and known as instrumental traits. As individuals form a concept of themselves, they incorporate these traits into their sense of self and identify with those traits that align with their gender (Bem, 1981). Although questions have been raised regarding the relevance of this distinction given social changes in perceptions of gender over the years, studies have shown that college students’ perceptions of gender roles have remained stable (Holt & Ellis, 1998; Street, Kimmel, & Kromrey, 1995), so that expressive and instrumental traits continue to be associated with femininity and masculinity respectively.

Of course, gender role self-concept is flexible and has been changing in young adults over the past few decades. For example, social roles have been shown to influence gendered self-concept. Individuals exhibited more instrumental traits when they were in dominant position, such as with a supervisee, and more expressive traits when they were in a submissive position, such as with a boss (Moskowitz, Suh, & Desaulniers, 1994). Instrumentality has been shown to be more susceptible to change than expressivity (Abele, 2003), and has been rising consistently in both women and men (Twenge, 2009). A similar trend has not been observed in expressive traits, which are still higher in women than in men (Spence & Buckner, 2000; Twenge, 2009). Traditionally, housework and childcare are socially perceived as associated with femininity (Coltrane, 2010), and expressive traits are congruent with caregiving and kindness. Therefore, women continue to associate themselves more strongly with housework and household responsibilities than men (Eccles, 2009; Poortman & van der Lippe, 2009).

## **The Model of Achievement Related Choices**

The Model of Achievement Related Choices was developed by Eccles (1987), and is based on Atkinson's (1964) Expectancy-Value Theory. According to Eccles, an individual's self-concept is made up of many different characteristics, with some being more central to identity than others. Individuals make decisions by weighing their expectations to fail or succeed in each specific outcome, and by taking into account aspects of their self-concept. Each possible behavioral outcome is assigned a value, also known as a subjective task value. Aspects of identity that are more central in a person's self-concept will be more salient to them, and will have a larger impact on subjective task values (Eccles, 1994).

Subjective task values vary between individuals, but also are influenced by social constructs such as gender. For example, someone who holds parenthood as a central part of her or his self-concept will have different subjective task values than someone who holds career as a central part of her or his self-concept. However, holding parenthood as a central part of self-concept will have a different impact on women's and men's subjective task values (Eccles, 2009). Women tend to perceive career and parenthood as competing constructs, and men tend to perceive career and parenthood as compatible constructs. Therefore, women who view parenthood as central to their identity might place lower subjective task value on career-related tasks than men who view parenthood as central to their identity, and thus, will make different career-related decisions (Eccles, 2009).

According to Eccles, women will rank the importance of parenting and spouse support roles higher than professional career roles due to social

constructions of gender roles. Men will rate both equally highly because these roles are not in competition for them. For men, success as parents can be defined as an extension of their professional career role because being a good father could mean providing for a family through having a successful career. For women, valuing the parental role highly will lead to a decrease in her commitment to career goals because society views motherhood as incompatible with having a successful career (Eccles, 2009).

In this model, self-concept and behavioral choices in this model of career development are reciprocal (Eccles, 1987). Individuals make behavioral choices by taking into account parts of their self that are especially salient to them and form their self-concept. However, a person's self-concept is not static, but dynamic, and can change over time or contexts (Eccles, 2009). The implications of an individual's behavioral choices will inform further development of their self-concept and of social roles (Eccles, 1987).

### **Linking Theory to Future Expectations of Chore Division**

Coltrane (2010) argued that literature in the field of household labor division too often ignored the gendered nature of the work, and that future research should be grounded in theories of gender to provide substantial contributions to the field. In both theories of gender described above, individuals develop gendered self-concept that inform the way they make decisions related to career and family, including decisions regarding the division of household labor responsibilities. Household and childcare tasks are inherently gendered, and are traditionally associated with women and perceived as "woman's work" (Coltrane, 2010). The

home sphere is associated with femininity and is tied into the feminine gender schema (Eccles, 1987). Therefore, holding a feminine gender schema or self-concept makes women more likely to associate themselves with household labor and take on more responsibilities than their male partners (Eccles, 2009). Furthermore, participating more or less frequently in housework and childcare tasks can reaffirm individual's self-concept as either a feminine or masculine person (Davis & Greenstein, 2013).

Women's tendency to associate themselves with expressive traits conducive to successfully managing the home and family (Bem, 1981), and to assign high subjective task values to household and childcare tasks (Eccles, 1987) creates a reality in which women expect to take on more responsibility in the home sphere than their male partners. This is problematic because chores traditionally performed by women hold the lowest social value, take the most time, and need to be completed more frequently compared to chores traditionally performed by men (Erchull et al., 2011).

## **Research and Measurement of Household Labor Division**

### **Chore Division in Couples**

Research in married couples has found consistently that women assume primary responsibility for more household and childcare tasks than men, and spend more time on family-related chores (Abele & Spurk, 2011; Hewlett, 2002; Lachance-Grzela & Bouchard, 2010a; U. S. Bureau of Labor Statistics, 2008). For example, in 2008, 89% of American married mothers reported participating in daily household chores, compared to only 64% of married fathers. Similarly, 71% of

married mothers reported partaking in daily childcare, in contrast to 54% of married fathers (U. S. Bureau of Labor Statistics, 2008). Other research has found that despite the fact that women's participation in chores has decreased and men's participation has increased over the past few decades, women still perform nearly twice as much household labor as their husbands (Claffey & Mickelson, 2009).

Surprisingly, women continue assuming these responsibilities even in couples in which both partners work full time, and when the woman earns a higher salary than her husband (Grunow et al., 2012; Hewlett, 2002; Tichenor, 2005). In a large survey conducted in 2001, high achieving men and women were asked who takes primary responsibility in their household for various chores related to housework and childcare, such as preparing meals and taking time off work when a child is sick. While between 3% and 9% of men assumed primary responsibility for the chores, the percentage of women assuming primary responsibility was much higher - 45% to 61%. The results indicated that women overwhelmingly assumed primary responsibility for the chores, even when they worked longer hours and earned a higher salary than their husbands (Hewlett, 2002). In a study of marriages in which women earned substantially more than their husbands, Tichenor (2005) found that traditional gender roles still existed within the relationship. In fact, she concluded that women gave up power within their marriage in order to maintain men's sense of dominance and to prevent them from feeling emasculated (Tichenor, 2005). In these relationships, women tended to perform more household labor than their partners but still felt like they were not doing enough.

Hewlett (2002) found that 37% of married, high achieving women between the ages of 28 and 40 felt like their husband created more household work than he ultimately contributed. When the same question was posed to older married, high achieving women (ages 41 to 55), the percentage who reported feeling as if their husband created more work than he contributed grew to 43% (Hewlett, 2002). This finding is in line with other studies that have shown that chore division in cohabitating couples becomes more uneven over time, with women taking responsibility for more and more chores as the years go by, even if chore division was egalitarian earlier in the marriage (Grunow et al., 2012; Miller & Sassler, 2010). In a large, longitudinal study spanning 14 years, researchers found that chore distribution in German married couples displayed a similar pattern of change. Egalitarian chore distribution gave way to unequal chore participation, relying on traditional gender role expectations. Men's participation in household labor decreased over time, while women's participation increased, regardless of whether or not the woman worked longer hours, or earned a higher salary than her husband (Grunow et al., 2012).

Researchers also have found that women and men hold different attitudes toward household and childcare tasks (Poortman & van der Lippe, 2009). For example, women had more favorable attitudes than men towards traditionally feminine tasks such as cooking, cleaning, and taking care of children. Researchers found that women not only felt more responsible for these tasks than men, but they also held higher standards for the tasks, and reported enjoying them more. Women's positive attitudes, and men's negative attitudes towards chores were



associated with women's higher participation in chores compared to their partners (Poortman & van der Lippe, 2009). In another study, researchers found that couples justified traditional division of household labor through rationales that women were better at housework and had higher standards than their partners (van Hoof, 2011).

Although it is reported that women rarely perceive household labor division as unfair, (Braun, Lewin-Epstein, Stier, & Baumgartner, 2008), other findings suggest that women are not satisfied with unequal household labor division, and are less satisfied with their marriages than their spouses (Claffey & Mickelson, 2009; Walters & Witehouse, 2012). Additionally, perceived fairness of labor division is an important predictor of women's marital satisfaction (Claffey & Mickelson, 2009) Interviews conducted with a sample of highly skilled women who returned to work following the birth of a child revealed that they were aware and unhappy with the unequal chore division in their households (Walters & Witehouse, 2012). However, they also justified the traditional division because they perceived themselves as more competent at these tasks than their husbands. This is in line with other research showing that women are perceived as naturally good at housework and childcare while men are seen as incompetent in the home sphere (Poortman & van der Lippe, 2009; Tichenor, 2005; van Hoof, 2011; Walters & Witehouse, 2012).

Another factor that negatively impacts the likelihood of egalitarian chore distribution within marriages is the lack of explicit discussion surrounding the division of chores (Davis & Greenstein, 2013; Mannino & Deutsch, 2007; Singleton & Maher, 2004; Wiesmann, Boeije, Doorne-Huiskes, & den Dulk, 2008).

A qualitative study with Dutch couples that found that the division of paid and domestic labor was usually not discussed, and was implicitly assumed. This perpetuated a traditionally oriented gendered division of household labor. Explicit discussions occurred within couples that had very strong feelings about egalitarian division, or if there were large differences between expectations of each of the partners (Wiesmann, Boeije, Doorne-Huiskes, & den Dulk, 2008). Maninno and Deutsch (2007) found that assertive women were closer to their ideal division of childcare than non-assertive women, supporting the idea that willingness to explicitly address chore division is important in achieving more equality. However, raising the issue in marriages is not always simple. Singleton and Maher (2004) interviewed middle class men and found that they were not interested in renegotiating their housework participation or engaging in discourse about equity and fairness surrounding their role in the house.

### **Young Women's Expectations of Future Chore Division**

In an earlier study examining young people's general expectations from their future, researchers found that women seem to consider their future in greater detail and with greater psychological complexity than men (Segal, DeMeis, Wood, & Smith, 2001). Young adults between the ages of 18 and 19 completed a measure of anticipated life history (The Anticipated Life History Measure; ALH) in which they were asked to describe the course of their future life from their 21<sup>st</sup> birthday until their death. Women were more likely to include key events in their lives, such as career choice, marriage, children, divorce, or death of a spouse, while men's narratives often lacked these details (Segal et al., 2001).

When young individuals were specifically instructed to consider details such as career choice and family life in imagining their future selves, gender differences also emerged (Askari et al., 2010; Eagly, Eastwick & Johannesen-Schmidt, 2009; Erchull et al., 2010; Ferber & Young, 1997). For example, though both women and men reported a high desire for marriage and children, men predicted women's desire as higher than it actually was, and women predicted men's desire as lower than it actually was (Erchull et al., 2010), reflecting the pervasive gendered stereotype of women being focused on family while men focus on career. These stereotypes also extend to mate preferences and expectations (Eagly et al., 2009). When undergraduate women were asked to imagine their future marriage, they had more traditional mate preferences the less they anticipated provider responsibilities for themselves (Eagly et al., 2009).

Studies also have consistently found that the reality in which women take on more domestic responsibility than their partners despite endorsement of egalitarian gender roles is echoed in the expectations of young, unmarried college-aged women and men (Askari et al., 2010; Erchull et al., 2010; Ferber & Young, 1997; Fetterolf & Eagly, 2011). For example, liberal attitudes predicted higher chore participation for both genders, but for women having a high desire for children and marriage predicted high chore participation beyond their egalitarian attitudes (Erchull, et al., 2010). Additionally, Askari et al. (2010) found that undergraduate women expected to participate in more household and childcare chores than their future partners, and to participate in more chores than ideally desired. In another study, in which college-aged women were instructed to imagine different versions of their future

selves, they expected to earn less, and perform more household chores than their future male partners, even when anticipating to work full time (Fetterolf & Eagley, 2011). Additionally, the women expected their future work lives to interfere with their relationship and their future responsibilities toward their children (Fetterolf & Eagly, 2011).

### **Measurement of Household Labor Division**

Although household labor division is a widely studied construct (Claffey & Mickelson, 2009; Coltrane, 2010; Kroska, 2003, 2004; Lachance-Grzela & Bouchard, 2010a; Singleton & Maher, 2004), the field does not have a standardized form of measurement that used across studies. Upon examination of the plethora of literature in this area across the disciplines of psychology and sociology, it becomes apparent that researchers use a variety of methodologies in order to measure chore division. Though some studies involve in depth interviews with one or both sides of the couple (Miller & Sassler, 2010; Singleton & Maher, 2004; van Hoof, 2011; Walters & Whitehouse, 2012) or daily diary information (Bianchi, Milkie, Sayer, & Robinson, 2000), the most common method by far is by collecting data through questionnaires or chore lists (Barnett & Baruch, 1986 ; Biernat & Wortman, 1991; Claffey & Mickelson, 2009; Grunow, Schulz, & Blossfeld, 2012; Krosksa, 2004; Poeschl, Pinto, Murias, Silva, & Ribeiro, 2006).

Most commonly, researchers create chore lists themselves that match the purpose of their studies (Barnett & Baruch, 1986 ; Biernat & Wortman, 1991; Claffey & Mickelson, 2009; Poeschl et al., 2006), however there is rarely consistency between them and they vary not only in terms of types of tasks listed,

but also in level of detail. For example, a 2006 study compiled 30 activities “that take place within the framework of the family” (Peoschl et al., 2006, p. 114). The activities were selected from a word association task from a previous study, and included tasks such as cleaning the windows, watching TV with the family, and caring for pets (Peoschl et al., 2006). Other researchers opted for shorter lists (Barnett & Baruch, 1986; Biernat & Wortman, 1991; Claffey & Mickelson, 2009), asking participants to rate chores such as meal preparation, cleaning the house, and taking children to birthday parties (Barnett & Baruch, 1986), or general task areas such as food, cleaning, and household management (Claffey & Mickelson, 2009). Another common method is to use lists of chores from government national surveys (Grunow et al., 2012; Kroska, 2004). However, even in these cases there is little overlap between the chores lists used in each study because researchers used national surveys conducted in different countries (USA and Germany; Grunow et al., 2012; Kroska, 2004).

In research of future chore division expectations, there is even less consistency in methodology and measurement. In this type of measurement, there is an added challenge of creating a method that will allow participants to imagine what their lives might be like in the future rather than reporting upon an existing situation or behavior. To capture the complexity of this construct, researchers have used methods such as imagination of future-self (Fetterolf & Eagly, 2011) in which participants were asked to imagine their future lives in a variety of possible scenarios (i.e. married mother of a preschool child with varying levels of employment) and then to indicate their actual future expectations (Fetterolf &

Eagly, 2011). Other studies have employed scenario rating (Swearingen-Hilker & Yoder, 2002) where participants rate the fairness of different scenarios involving egalitarian or non-egalitarian division of household labor.

Similarly to chore division research, future expectations research also employs chore lists created by the researchers (Askari et al., 2010; Erchull et al., 2010). Both lists used in these studies were identical and consisted of seven household and seven childcare chores compiled by the researchers and based on previous chore lists used in the literature (Askari et al., 2010; Erchull et al., 2010), and the participants were asked to provide a participation percentage for each chore. Only traditionally feminine chores were included in the lists (e.g. preparing meals/cooking, doing laundry, diapering children), however the researchers did not include a rationale for excluding traditionally masculine chores (e.g. taking out the trash; Erchull et al., 2010). In Erchull et al.'s study (2010) participants were asked to indicate the percentage of the chore that they expected to take on in their future marriage, however in the Askari and colleagues' study (2010), participants completed the list twice, once for ideal chore participation and once for actual chore participation expectations (Askari et al., 2010).

### **Improving Measurement of Chore Division Expectations**

Though varied methods can add richness to the study of a given construct, lack of an agreed upon measure with valid and reliable scores makes it difficult to compare results across studies and create a coherent understanding of the concept. In reading the chore division literature, a few limitations of measurement emerge, that were taken into account in the design of the current study, which aimed to

create a form of measurement for future chore division and ideals.

First, it is interesting to note that despite the gender differences that consistently emerge in household labor division research (Bianchi, Milkie, Sayer, & Robinson, 2000; Coltrane, 2010; Lachance-Grzela & Bouchard, 2010a), few studies have taken traditional gender division of chores into account when measuring household labor division in couples or future expectations of that division (Barnett & Baruch, 1987; Kroska, 2004). In fact, many studies do not even address the gendered nature of the chores they study (Askari et al., 2010), while others intentionally select traditionally feminine chores but do not provide rationale for their choice (Mannino & Deutsch, 2007).

In 2004, Kroska examined chore division in married couples by dividing items from the National Survey of Families and Households into traditionally female, traditionally male, and gender neutral tasks according to previous research on labor division (South & Spitze, 1994; Walker, 1999). She was one of the only researchers to intentionally include traditionally masculine tasks in her chore list (Greenstein, 1996; Kroska, 2004) and called for other researchers to follow suite, warning that effects could be getting lost with studies focusing only on feminine chores (Kroska, 2004). This was echoed in an article by Coltrane (2010), in which he stressed the importance of directly addressing traditional gender division in household labor research to provide a more accurate and complex understanding of the phenomenon.

Another limitation of existing measurement is not only lack of standardization in the items lists used in studies, but the scales used to assess

participation. While there some studies provide participants with likert scales (for example, ranging from 1 “*my spouse will perform the chore alone*”) to 7 “*I will perform the chore alone*”; Biernat & Wortman, 1991; Katz-Wise et al., 2010), some studies require participants to estimate the number of hours that they spend on each chore per week (Barnett & Baruch, 1986). Other measures ask participants to provide the percentage of the task they either complete, or expect to complete in the future, in comparison with their partners or hired help (for example, indicating that they expect to complete 40% of a certain chore; Askari et al., 2010; Claffey & Mickelson, 2009). These methods of estimation could prove problematic since they require a high level of accuracy on the participants’ part. This would be especially difficult for participants who are providing future participation estimates because they would not have experience performing the chores on a daily or weekly basis.

Finally, Davis and Greenstein (2013) point out that childcare is often approached using a different theoretical framework than household chores, despite the fact that both childcare and household chores can provide a window into the division of power within couples. This division can be seen in many studies in the field (Askari et al., 2010; Erchull et al., 2010), but the article calls for more researchers to examine the concepts jointly to provide a fuller picture of labor division in couples (Davis & Greenstein, 2013).

The current study created and examined the psychometric properties of the Ideal and Expected Chore Measure, with subscales divided by chores traditionally performed by men or by women. Household and childcare chores were examined jointly, as recommended by Davis and Greenstein (2013), and participants rated



their responses in such a way that they were not required to estimate numbers or percentages.

### **Variables Related to Chore Division**

To explore the validity of the measure developed in the current study, scores on the subscales were examined in relation to measures assessing variables expected to relate to the construct of chore division expectations. The following section will provide a brief overview of each variable and how it relates to the construct studied.

#### **Gender Role Expectations**

Gender role expectations are the schemas of gender categories that an individual holds of other people, which are influenced by societal definitions of gender (Abele, 2000). An individual's definition or understanding of what it means to be a man or a woman contains within itself many expectations that come into play when they interact with men or women in their environment. Individuals will expect people around them to display traits that are in line with ideas of gender that they hold. For example, if someone holds the gendered expectation that women are nice, he or she will expect women with which they interact to display this trait. Gender and career related research often defines gender role expectations on scales of traditionality or egalitarianism, or non-traditionalism (Askari, Liss, Erchull, Staebell, & Axelson, 2010, 2010; Kaufman, 2005; King & King, 1997).

Family- and career-related decisions and behaviors in men and women have been shown to be influenced by gender roles (Askari et al., 2010; Erchull et al., 2010; Kaufman, 2005; Kaufman & Uhlenberg, 2000). For example, men who held

non-traditional gender role expectations differed from men with more traditional views in that they worked fewer hours, were more willing to be homemakers, expressed less of a desire for their wives to be homemakers, and were willing to perform more household and childcare chores (Askari et al., 2010; Erchull et al., 2010; Kaufman, 2005; Kaufman and Uhlenberg, 2000; Kroska, 2004). Similarly, women who held non-traditional gender role expectations were less definitive in future plans to marry or have children, wanted to marry at a later age, were less willing to be homemakers, and desired to perform less household and childcare chores than their traditional counterparts (Askari et al., 2010; Erchull et al., 2010; Kaufman, 2005; Kaufman & Uhlenberg, 2000). It seems, therefore, that women with non-traditional gender role expectations are more likely to reject traditional gendered division of household and childcare labor and expect more equality in their future long-term partnerships than their traditional counterparts. It was hypothesized that endorsement of non-traditional gender role expectations would relate negatively with high participation ideals and expectations in traditionally feminine chores, and positively with high participation ideals and expectations in traditionally masculine chores.

### **Benevolent Sexism**

According to Glick and Fiske, who coined the term “ambivalent sexism” (1996), sexism is a combination of hostile and benevolent attitudes toward women. These beliefs and attitudes are held by both genders across countries and cultures, and are the products of power difference between men and women in patriarchal societies (Glick & Fiske, 2001). Hostile sexism is aggressive, and views women as

seeking to control men or take over their power through using sexuality or feminist ideology. Benevolent sexism is more subtle and is not explicitly aggressive toward women. Rather, women are viewed as delicate beings who should be cherished and protected by men. This ideology also promotes women as having special pure qualities that men do not possess, which make them best suited for maintaining the home and taking care of children in the private sphere, and for traditional, low-status roles outside of the home (Glick & Fiske, 2001).

A large study revealed that men consistently score significantly higher than women on scales of hostile sexism in the United States and in other countries. Men also score higher than women on scales of benevolent sexism, but these differences are smaller than the difference between the genders on hostile sexism, showing that women are likely to ascribe to beliefs of benevolent sexism (Glick & Fiske, 2001). To understand why women would endorse benevolent sexism, Cikara and colleagues (2009) turned to system justification theory (Jost & Banaji, 1994), which posits that individuals are driven to perceive the society they live in as fair and just even if they can see inequality. They are willing to ascribe to beliefs that justify this inequality and view it as legitimate in order to reinforce the social status quo. Additionally, benevolent sexism also is seductive to both genders because it portrays both of them in a flattering light, women as pure and morally superior, and men as protecting and providing (Cikara, Lee, Fiske, & Glick, 2009).

Benevolent sexism maintains gender imbalance in the public and private spheres because it prescribes expectations for men's and women's interactions in the private sphere (i.e. home, close relationships) in a way that gives men a role of

power and protection, while women are perceived as adorable and sweet. This justification of prescribed roles also extends to the public sphere and makes it difficult for women to progress in the workplace (Cikara et al., 2009). It is unsurprising, therefore, that societies with high levels of women's endorsement of benevolent sexism also have the greatest gender inequality (Glick & Fiske, 2001). It has been found that women who endorse benevolent sexism are more content in valuing their domestic roles, and benevolent sexism relates negatively to women pursuing high-status or high-paying careers (Cikara et al., 2009). Additionally, benevolent sexism predicted traditional mate selection in both women and men, with men preferring wives who would be responsible for the home, and women preferring partners who would provide for them (Chen, Fiske, & Lee, 2009), and benevolent sexism was found to be related to paternalistic chivalry in dating expectations (Viki, Abrams, & Hutchinson, 2003).

Endorsement of benevolent sexism has also been found to relate with traditional household labor division and expectations of division (Ogletree, 2015; Poeschl et al., 2006). In a sample of undergraduates, high levels of hostile and benevolent sexism were related positively to traditional housework and childcare attitudes (Ogletree, 2015), and in married couples benevolent sexism was related to satisfaction with traditional division of household labor (Poeschl et al., 2006). In a study of high school students it was found that girls contributed more than boys to household labor, and girls who endorsed benevolent sexism were more likely to perform more traditionally feminine chores than gender neutral chores (del Prado Silvan-Ferrero & Lopez, 2007). In the current study, it was hypothesized that

endorsement of benevolent sexism would have a positive relationship with high participation ideals and expectations in traditionally feminine chores, and a negative relationship with high participation ideals and expectations in traditionally masculine chores.

### **Career Aspirations**

Career aspirations are defined as an individual's motivation to succeed in leadership roles, achieve highly, and pursue higher education within a career field of their choice (O'Brien 1996). According to the gender theories of Bem (1981) and Eccles (1987), women are likely to associate themselves with feminine traits and hold motherhood and domesticity as central to their self-concepts. However, holding these stereotypically feminine values puts women at a disadvantage in the workforce because motherhood and career achievement are perceived in society as competing constructs that are incompatible (Eccles, 2009). This is supported by data that show that taking on significant portions of household labor and childcare responsibilities can impede women's success in the workplace (Coltrane, 2010; Hewlett, 2002), and that college-aged women expect their family responsibilities to interfere with their future careers (Fetterolf & Eagly, 2011). Women with high career aspirations would likely benefit from non-traditional chore division as it would allow them to allocate more resources to their careers than if they took on the majority of the household responsibilities.

Additionally, women who place a high importance on succeeding in their career hold less traditionally feminine self-concepts, and it was found that women with high leadership aspirations indeed had higher levels of instrumental

(stereotypically masculine) traits than their less motivated peers (Savelle & O'Brien, 2015). Therefore, it was hypothesized that women with high levels of career aspirations would ideally and actually expect to participate in fewer traditionally feminine chores, more traditionally masculine chores than women with low levels of career aspirations.

### **Summary**

The gendered division of household labor impedes women in succeeding in their careers and is a contributing factor to inequality in the workforce (Coltrane, 2010; Hewlett, 2005). Women take on the majority of the household and childcare tasks even while working full time (Hewlett, 2002; Tichenor, 2005), and college-aged women expect to assume most of the responsibility for household labor in their future long-term partnerships (Askari et al., 2010; Erchull et al., 2010). Despite growing interest in the area of labor division expectations, a standard form of measurement does not exist, which makes it difficult to compare results across studies and advance knowledge in the field. This study focused on developing and testing the psychometric properties of a new tool of measurement of future chore division ideals and expectations. The Ideal and Expected Chore Measure was divided into two subscales of traditionally feminine and traditionally masculine chores containing both household and childcare tasks, as recommended in the literature (Davis & Greenstein, 2013; Kroska, 2004). A CFA compared the expected factor structure with a competing model, and validity of the new measure was studied by testing the relationship of the subscales with related gender and career variables. Test-retest reliability of the measure was assessed, and construct

validity was examined by looking at the differences between ideal and expected chore division on each of the gender subscales.

### **Hypotheses**

1. The Ideal and Expected Chore Measure would have a four-factor structure with subscales of (a) ideal traditionally feminine chores, (b) ideal traditionally masculine chores, (c) expected traditionally feminine chores, and (d) expected traditionally masculine chores.
2. The Ideal and Expected Chore Measure subscales would exhibit moderate internal consistency ( $>.70$ ).
3. The Ideal and Expected Chore Measure traditionally feminine subscale participation scores would be correlated negatively with scores on measures of non-traditional gender role expectations and career aspirations, and correlated positively with scores on a measure of benevolent sexism.
4. The Ideal and Expected Chore Measure traditionally masculine subscale participation scores would be correlated positively with scores on measures of gender role non-traditionalism and career aspirations, and correlated negatively with scores on a measure of benevolent sexism.
5. Ideal participation in traditionally feminine chores would be lower than expected participation in traditionally feminine chores.
6. Ideal participation in traditionally masculine chores would be higher than expected participation in traditionally masculine chores.





## Appendix B

### Ideal and Expected Chore Measure

Imagine that in the future you are married and have children. **Ideally**, how would you want to divide chores between you and your future partner?

1	2	3	4	5	6	7
<b>My spouse will perform the chore alone</b>	<b>My spouse will do much more than me</b>	<b>My spouse will do a little more than me</b>	<b>We will both contribute equally</b>	<b>I will do a little more than my spouse</b>	<b>I will do much more than my spouse</b>	<b>I will perform the chore alone</b>

1.	1	2	3	4	5	6	7	Cleaning the house (e.g., sweeping, vacuuming, cleaning bathrooms)
*2.	1	2	3	4	5	6	7	Yard work (e.g., lawn upkeep, snow removal)
3.	1	2	3	4	5	6	7	Planning meals
4.	1	2	3	4	5	6	7	Grocery shopping
5.	1	2	3	4	5	6	7	Preparing meals/cooking
6.	1	2	3	4	5	6	7	Meal cleanup/washing dishes
*7.	1	2	3	4	5	6	7	General home repairs and maintenance in the home
*8.	1	2	3	4	5	6	7	Car repairs and car maintenance
*9.	1	2	3	4	5	6	7	Paying bills
*10.	1	2	3	4	5	6	7	Taking out trash/recycling
11.	1	2	3	4	5	6	7	Organizing social activities
12.	1	2	3	4	5	6	7	Keeping in touch with family and friends
13.	1	2	3	4	5	6	7	Laundry (e.g., washing, folding, ironing)
14.	1	2	3	4	5	6	7	Maintaining family calendar/schedule
15.	1	2	3	4	5	6	7	Responsibility for family traditions (e.g., holidays, religious and cultural practices)
*16.	1	2	3	4	5	6	7	Grilling or barbequing outdoors
17.	1	2	3	4	5	6	7	General errands (e.g., bank, dry cleaning)
18.	1	2	3	4	5	6	7	Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)
19.	1	2	3	4	5	6	7	Organizing the house (e.g., straightening up, putting things in place)
*20.	1	2	3	4	5	6	7	Managing finances (e.g., investments, insurance)
21.	1	2	3	4	5	6	7	Decorating the home (including decorating for holidays)
22.	1	2	3	4	5	6	7	Planning vacations (including packing)
23.	1	2	3	4	5	6	7	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)

*24.	1	2	3	4	5	6	7	Pest control (e.g., dealing with bugs, spiders, mice)
*25.	1	2	3	4	5	6	7	Purchasing electronics and major appliances (e.g., televisions, washer/dryer, computers)
*26.	1	2	3	4	5	6	7	Physical labor tasks (e.g., lifting heavy boxes, carrying groceries, moving furniture)
27.	1	2	3	4	5	6	7	Buying gifts for family (e.g., for birthdays, holidays)
*28.	1	2	3	4	5	6	7	Responsible for family technology (e.g. updating and maintaining computers, cell phones)
29.	1	2	3	4	5	6	7	Helping child with homework
30.	1	2	3	4	5	6	7	Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)
31.	1	2	3	4	5	6	7	Supervising child's morning routine
32.	1	2	3	4	5	6	7	Spending time with child at bedtime (e.g., getting ready for bed, reading a story)
33.	1	2	3	4	5	6	7	Staying home or making arrangements for childcare when child is sick
34.	1	2	3	4	5	6	7	Arranging for childcare or babysitting when needed
35.	1	2	3	4	5	6	7	Taking to and from bus stop/school
36.	1	2	3	4	5	6	7	Taking to doctor/dentist
37.	1	2	3	4	5	6	7	Supervising child's personal hygiene (including bathing young children)
38.	1	2	3	4	5	6	7	Spending time outside of the house with child (e.g., playground, park)
39.	1	2	3	4	5	6	7	Disciplining child (e.g., setting appropriate limits, giving consequences, correcting behavior)
40.	1	2	3	4	5	6	7	Attending teacher conferences/communicating with teachers
41.	1	2	3	4	5	6	7	Taking child to or from lessons/activities
42.	1	2	3	4	5	6	7	Buying gifts for birthday parties/social events
43.	1	2	3	4	5	6	7	Preparing lunches for children to bring to school
44.	1	2	3	4	5	6	7	Monitoring child's technology use (e.g., cell phone, internet, tv)
45.	1	2	3	4	5	6	7	Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)
46.	1	2	3	4	5	6	7	Monitoring child's progress in school
47.	1	2	3	4	5	6	7	Attending child's activities/recitals/games
48.	1	2	3	4	5	6	7	Helping with developmental steps (e.g., potty training, driving)
49.	1	2	3	4	5	6	7	Taking care of a sick child
50.	1	2	3	4	5	6	7	Responsible for playdates (e.g. arranging, driving, supervising)
51.	1	2	3	4	5	6	7	Shopping for child (clothes, school supplies, toys)

52.	1	2	3	4	5	6	7	Assigning and monitoring chores for child
53.	1	2	3	4	5	6	7	Spending quality time with child in the home
*54.	1	2	3	4	5	6	7	Teaching children outdoor activities (e.g., biking, sports, skating)

Imagine that in the future you are married and have children. How do you **actually expect** that chores will be divided between you and your future partner?

1	2	3	4	5	6	7
<b>My spouse will perform the chore alone</b>	<b>My spouse will do much more than me</b>	<b>My spouse will do a little more than me</b>	<b>We will both contribute equally</b>	<b>I will do a little more than my spouse</b>	<b>I will do much more than my spouse</b>	<b>I will perform the chore alone</b>

55.	1	2	3	4	5	6	7	Cleaning the house (e.g., sweeping, vacuuming, cleaning bathrooms)
*56.	1	2	3	4	5	6	7	Yard work (e.g., lawn upkeep, snow removal)
57.	1	2	3	4	5	6	7	Planning meals
58.	1	2	3	4	5	6	7	Grocery shopping
59.	1	2	3	4	5	6	7	Preparing meals/cooking
60.	1	2	3	4	5	6	7	Meal cleanup/washing dishes
*61.	1	2	3	4	5	6	7	General home repairs and maintenance in the home
*62.	1	2	3	4	5	6	7	Car repairs and car maintenance
*63.	1	2	3	4	5	6	7	Paying bills
*64.	1	2	3	4	5	6	7	Taking out trash/recycling
65.	1	2	3	4	5	6	7	Organizing social activities
66.	1	2	3	4	5	6	7	Keeping in touch with family and friends
67.	1	2	3	4	5	6	7	Laundry (e.g., washing, folding, ironing)
68.	1	2	3	4	5	6	7	Maintaining family calendar/schedule
69.	1	2	3	4	5	6	7	Responsibility for family traditions (e.g., holidays, religious and cultural practices)
*70.	1	2	3	4	5	6	7	Grilling or barbequing outdoors
71.	1	2	3	4	5	6	7	General errands (e.g., bank, dry cleaning)
72.	1	2	3	4	5	6	7	Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)
73.	1	2	3	4	5	6	7	Organizing the house (e.g., straightening up, putting things in place)
*74.	1	2	3	4	5	6	7	Managing finances (e.g., investments, insurance)

75.	1	2	3	4	5	6	7	Decorating the home (including decorating for holidays)
76.	1	2	3	4	5	6	7	Planning vacations (including packing)
77.	1	2	3	4	5	6	7	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)
*78.	1	2	3	4	5	6	7	Pest control (e.g. dealing with bugs, spiders, mice)
*79.	1	2	3	4	5	6	7	Purchasing electronics and major appliances (e.g. televisions, washer/dryer, computer)
*80.	1	2	3	4	5	6	7	Physical labor tasks (e.g. lifting heavy boxes, carrying groceries, moving furniture)
81.	1	2	3	4	5	6	7	Buying gifts for family (e.g., for birthdays, holidays)
*82.	1	2	3	4	5	6	7	Responsible for family technology (e.g. updating and maintaining computers, cell phones)
83.	1	2	3	4	5	6	7	Helping child with homework
84.	1	2	3	4	5	6	7	Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)
85.	1	2	3	4	5	6	7	Supervising child's morning routine
86.	1	2	3	4	5	6	7	Spending time with child at bedtime (e.g., getting ready for bed, reading a story)
87.	1	2	3	4	5	6	7	Staying home or making arrangements for childcare when child is sick
88.	1	2	3	4	5	6	7	Arranging for childcare or babysitting when needed
89.	1	2	3	4	5	6	7	Taking to and from bus stop/school
90.	1	2	3	4	5	6	7	Taking to doctor/dentist
91.	1	2	3	4	5	6	7	Supervising child's personal hygiene (including bathing young children)
92.	1	2	3	4	5	6	7	Spending time outside of the house with child (e.g., playground, park)
93.	1	2	3	4	5	6	7	Disciplining child (e.g., setting appropriate limits, giving consequences, correcting behavior)
94.	1	2	3	4	5	6	7	Attending teacher conferences/communicating with teachers
95.	1	2	3	4	5	6	7	Taking child to or from lessons/activities
96.	1	2	3	4	5	6	7	Buying gifts for birthday parties/social events
97.	1	2	3	4	5	6	7	Preparing lunches for children to bring to school
98.	1	2	3	4	5	6	7	Monitoring child's technology use (e.g., cell phone, internet, tv)
99.	1	2	3	4	5	6	7	Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)
100.	1	2	3	4	5	6	7	Monitoring child's progress in school
101.	1	2	3	4	5	6	7	Attending child's activities/recitals/games
102.	1	2	3	4	5	6	7	Helping with developmental steps (e.g., potty training, driving)

103.	1	2	3	4	5	6	7	Taking care of a sick child
104.	1	2	3	4	5	6	7	Responsible for playdates (e.g. arranging, driving, supervising)
105.	1	2	3	4	5	6	7	Shopping for child (clothes, school supplies, toys)
106.	1	2	3	4	5	6	7	Assigning and monitoring chores for child
107.	1	2	3	4	5	6	7	Spending quality time with child in the home
*108.	1	2	3	4	5	6	7	Teaching children outdoor activities (e.g. biking, sports, skating)

\* Starred items represent the masculine chore subscales.

## Appendix C

### Traditional Egalitarian Sex Role Ideology Scale (Larsen & Long, 1988)

Please provide your responses to the items below on a scale from 1 to 5, with (1) Strongly disagree. (2) Disagree. (3) Neither agree nor disagree. (4) Agree. (5) Strongly Agree. There are no right or wrong answers. If you are unsure how to respond to an item, select the response closest to the way you feel.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>

- \_\_\_1. It is just as important to educate daughters as it is to educate sons.
- \_\_\_2. Women should be more concerned with clothing and appearance than men.
- \_\_\_3. Women should have as much sexual freedom as men.
- \_\_\_4. The man should be more responsible for the economic support of the family than the woman.
- \_\_\_5. The belief that women cannot make as good supervisors or executives as men is a myth.
- \_\_\_6. The word "obey" should be removed from wedding vows.
- \_\_\_7. Ultimately a woman should submit to her husband's decision.
- \_\_\_8. Some equality in marriage is good, but by and large the husband ought to have the main say-so in family matters.
- \_\_\_9. Having a job is just as important for a wife as it is for her husband.
- \_\_\_10. In groups that have both male and female members, it is more appropriate that leadership positions be held by males.
- \_\_\_11. I would not allow my son to play with dolls.
- \_\_\_12. Having a challenging job or career is as important as being a wife and mother.
- \_\_\_13. Men make better leaders.
- \_\_\_14. Almost any woman is better off in her home than in a job or profession.
- \_\_\_15. A woman's place is in the home.
- \_\_\_16. The role of teaching in the elementary schools belongs to women.
- \_\_\_17. The changing of diapers is the responsibility of both parents.
- \_\_\_18. Men who cry have weak character.
- \_\_\_19. A man who has chosen to stay at home and be a house-husband is not less masculine.
- \_\_\_20. As head of the household, the father should have the final authority over the children.



## Appendix D

The Benevolent Sexism subscale from The 22-Item Ambivalent Sexism Inventory

(Glick & Fiske, 2001)

Below is a series of statements concerning men and women and their relationships in contemporary society. Please indicate the degree to which you agree or disagree with each statement using the scale below.

<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Disagree strongly</b>	<b>Disagree somewhat</b>	<b>Disagree slightly</b>	<b>Agree slightly</b>	<b>Agree somewhat</b>	<b>Agree strongly</b>

B\_\_1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman.

B\_\_3. In a disaster, women ought to be rescued before men.

B\_\_6. People are not truly happy in life without being romantically involved with a member of the other sex.

B\_\_8. Many women have a quality of purity that few men possess.

B\_\_9. Women should be cherished and protected by men.

B\_\_12. Every man ought to have a woman whom he adores.

B\_\_13. Men are incomplete without women.

B\_\_17. A good woman should be set on a pedestal by her man.

B\_\_19. Women, compared to men, tend to have superior moral sensibility.

B\_\_20. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives.

B\_\_22. Women, as compared to men, tend to have a more refined sense of culture and good taste.



## Appendix E

### Career Aspiration Scale – Revised (Gregor & O'Brien, 2015)

In the space next to the statements below please circle a number from “0” (not at all true of me) to “4” (very true of me). If the statement does not apply, circle “0”. Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

**0 = Not at all true of me**

**1 = Slightly true of me**

**2 = Moderately true of me**

**3 = Quite a bit true of me**

**4 = Very true of me**

1. I hope to become a leader in my career field. \_\_\_\_
2. I do not plan to devote energy to getting promoted to a leadership position in the organization or business in which I am working. \_\_\_\_
3. I want to be among the very best in my field. \_\_\_\_
4. Becoming a leader in my job is not at all important to me. \_\_\_\_
5. When I am established in my career, I would like to manage other employees. \_\_\_\_
6. I plan to reach the highest level of education in my field. \_\_\_\_
7. I want to have responsibility for the future direction of my organization or business. \_\_\_\_
8. I want my work to have a lasting impact on my field. \_\_\_\_
9. I aspire to have my contributions at work recognized by my employer. \_\_\_\_
10. I will pursue additional training in my occupational area of interest. \_\_\_\_
11. I will always be knowledgeable about recent advances in my field. \_\_\_\_
12. Attaining leadership status in my career is not that important to me. \_\_\_\_
13. Being outstanding at what I do at work is very important to me. \_\_\_\_
14. I know I will work to remain current regarding knowledge in my field. \_\_\_\_
15. I hope to move up to a leadership position in my organization or business. \_\_\_\_
16. I will attend conferences annually to advance my knowledge. \_\_\_\_
17. I know that I will be recognized for my accomplishments in my field \_\_\_\_
18. Even if not required, I would take continuing education courses to become more knowledgeable. \_\_\_\_
19. I would pursue an advanced education program to gain specialized knowledge in my field. \_\_\_\_

20. Achieving in my career is not at all important to me. \_\_\_\_
21. I plan to obtain many promotions in my organization or business. \_\_\_\_
22. Being one of the best in my field is not important to me. \_\_\_\_
23. Every year, I will prioritize involvement in continuing education to advance my career. \_\_\_\_
24. I plan to rise to the top leadership position of my organization or business. \_\_\_\_

**Scoring Instructions:**

Reverse score items 2, 4, 12, 20, 22 so the responses are changed in the following way: 0=4, 1=3, 2=2, 3=1, 4=0. Please place the new scores in the spaces below that correspond with the item. Place all remaining scores in the spaces with their corresponding item number below. Sum responses to each item for each scale. Higher scores indicate higher aspirations in each domain (achievement, leadership, education).

Below are the numbers corresponding to each scale. The reverse scored items have an asterisk.

**Achievement Aspiration items:** 3, 8, 9, 13, 17, 20\*, 21, 22\*

**Leadership Aspiration items:** 1, 2\*, 4\*, 5, 7, 12\*, 15, 24

**Educational Aspiration items:** 6, 10, 11, 14, 16, 18, 19, 23

## Appendix F

### Demographic Questionnaire:

**Age:** \_\_\_\_\_

**Gender:**

\_\_\_\_\_ Female

\_\_\_\_\_ Male

\_\_\_\_\_ Other

**Status in School:**

\_\_\_\_\_ First year

\_\_\_\_\_ Sophomore

\_\_\_\_\_ Junior

\_\_\_\_\_ Senior

**Relationship Status:**

\_\_\_\_\_ Single (never-married)

\_\_\_\_\_ Single (divorced)

\_\_\_\_\_ Single (widowed)

\_\_\_\_\_ In a relationship (not living with partner)

\_\_\_\_\_ In a relationship (living with partner)

\_\_\_\_\_ Married

\_\_\_\_\_ Married (separated)

**Race/Ethnicity:**

\_\_\_\_\_ African American

\_\_\_\_\_ Asian/Asian American

\_\_\_\_\_ American Indian

\_\_\_\_\_ Biracial/Multiracial

\_\_\_\_\_ Hispanic, Latina

\_\_\_\_\_ White, non-Hispanic

\_\_\_\_\_ Other (Please Specify)

**Sexual Identity:**

\_\_\_\_\_ Bisexual

\_\_\_\_\_ Gay/Lesbian

\_\_\_\_\_ Queer

\_\_\_\_\_ Straight

**If Single: Do you plan to get married/be in a committed relationship?**

\_\_\_\_\_ Yes      \_\_\_\_\_ No

**Do you plan on having children?**      \_\_\_\_\_ Yes      \_\_\_\_\_ No

**If you were to be married/in a committed relationship and have children, how do you foresee the occupational status of you and your partner:**

You:

\_\_\_\_\_ Full-time work (outside the home)

\_\_\_\_\_ Full time work (within the home)

\_\_\_\_\_ Part-time work (outside the home)

\_\_\_\_\_ Part-time work (within the home)

\_\_\_\_\_ Homemaker

\_\_\_\_\_ Unemployed

Your partner:

\_\_\_\_\_ Full-time work (outside the home)

\_\_\_\_\_ Full time work (within the home)

\_\_\_\_\_ Part-time work (outside the home)

\_\_\_\_\_ Part-time work (within the home)

\_\_\_\_\_ Homemaker

\_\_\_\_\_ Unemployed

**Have you chosen a major?**      \_\_\_\_\_ Yes      \_\_\_\_\_ No

If **YES**, what major have you chosen? \_\_\_\_\_

If **NO**, what majors are you considering?

1. \_\_\_\_\_

2. \_\_\_\_\_

**What is your overall GPA?** \_\_\_\_\_

**Have you chosen a career?**      \_\_\_\_\_ Yes      \_\_\_\_\_ No

If **YES**, what career have you chosen? \_\_\_\_\_

If **NO**, what careers are you considering?

1. \_\_\_\_\_

2. \_\_\_\_\_

**What are your educational plans?**

- ☐ Undergraduate degree
- ☐ M.S./M.A. degree
- ☐ Ph.D. degree
- ☐ Medical degree
- ☐ Law degree
- ☐ Other (please specify)

**What student activities are you involved in?**

- ☐ Athletics (please specify)
- ☐ Clubs (please specify)
- ☐ Fraternity or Sorority (please specify)
- ☐ Student organization (please specify)
- ☐ Other (please specify)

**What are the occupations of your parents?**

Mother: \_\_\_\_\_

Father: \_\_\_\_\_

**Please indicate the occupational status of your parents:**

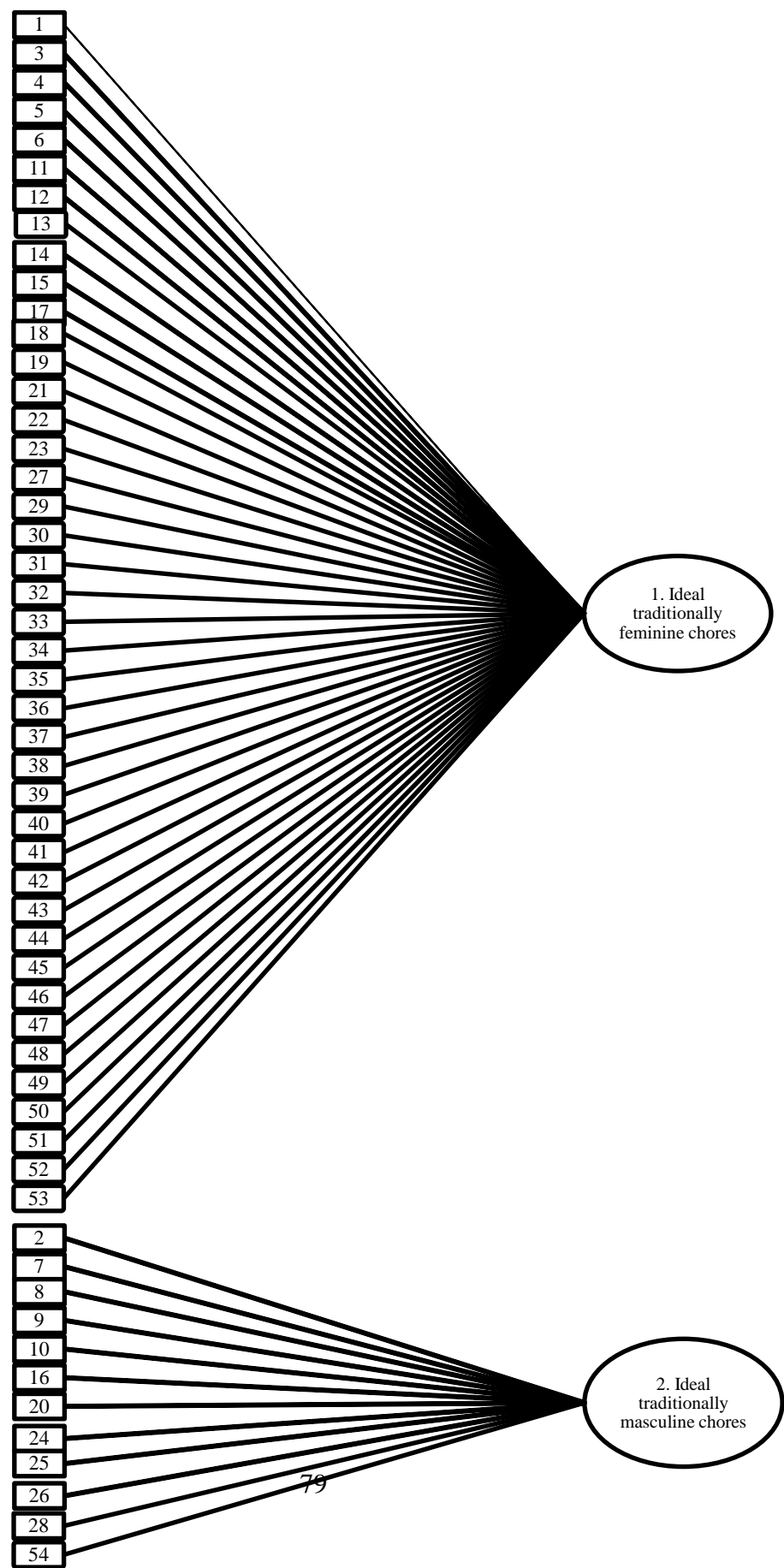
Mother:

- ☐ Full-time work (outside the home)
- ☐ Full time work (within the home)
- ☐ Part-time work (outside the home)
- ☐ Part-time work (within the home)
- ☐ Homemaker
- ☐ Unemployed

Father:

- ☐ Full-time work (outside the home)
- ☐ Full time work (within the home)
- ☐ Part-time work (outside the home)
- ☐ Part-time work (within the home)
- ☐ Homemaker
- ☐ Unemployed

Figure 1. Four Factor Model



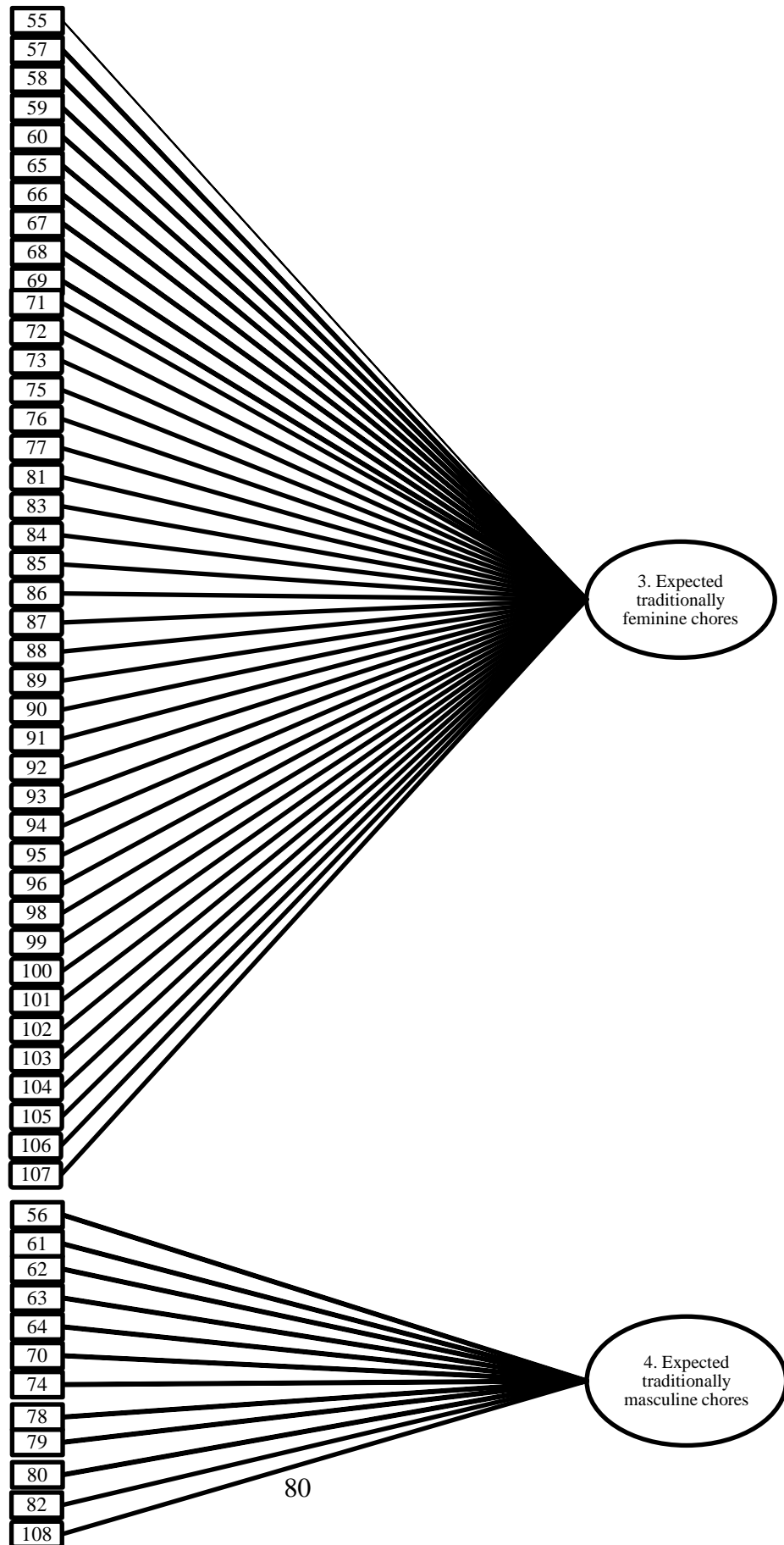
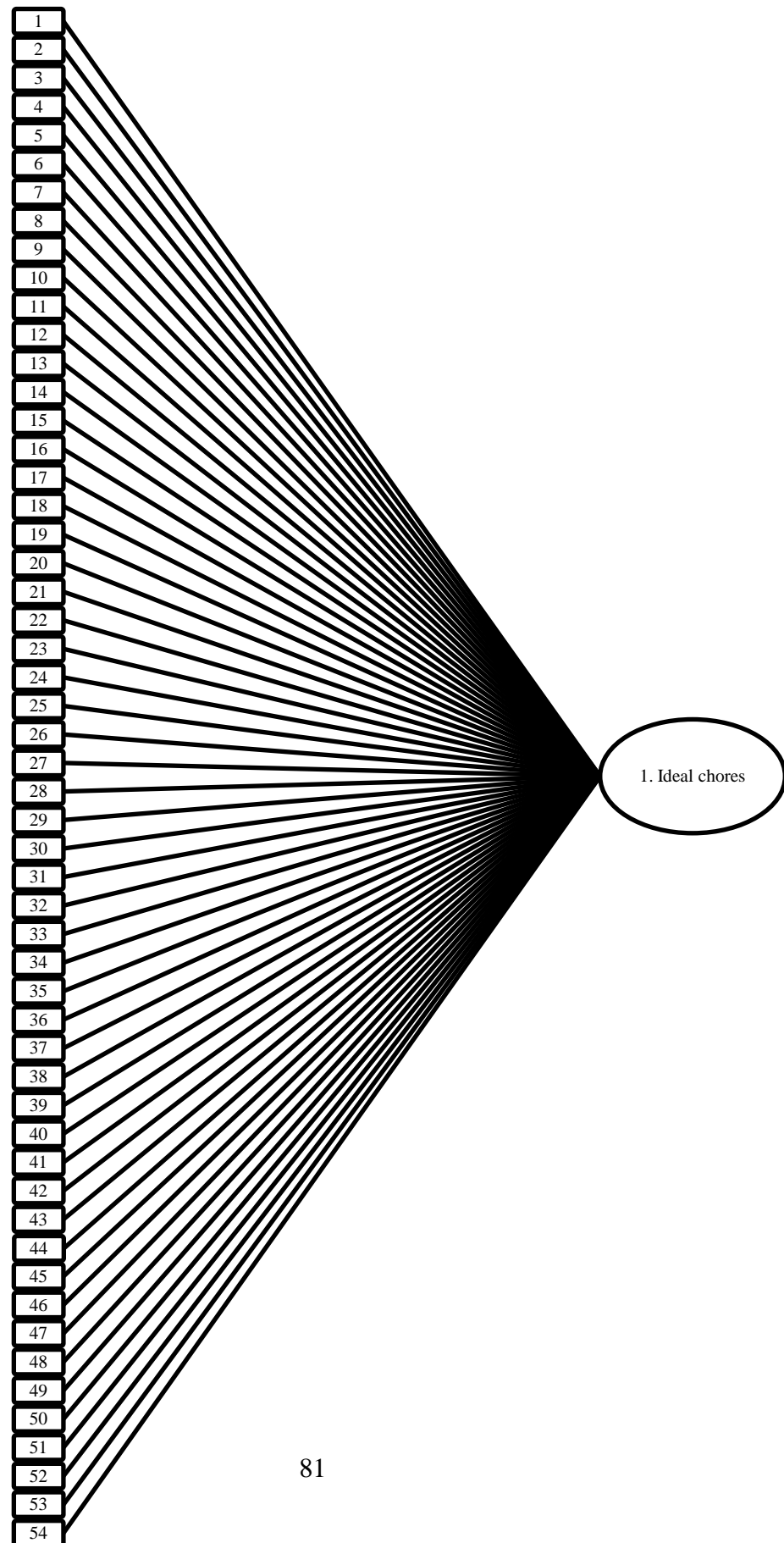
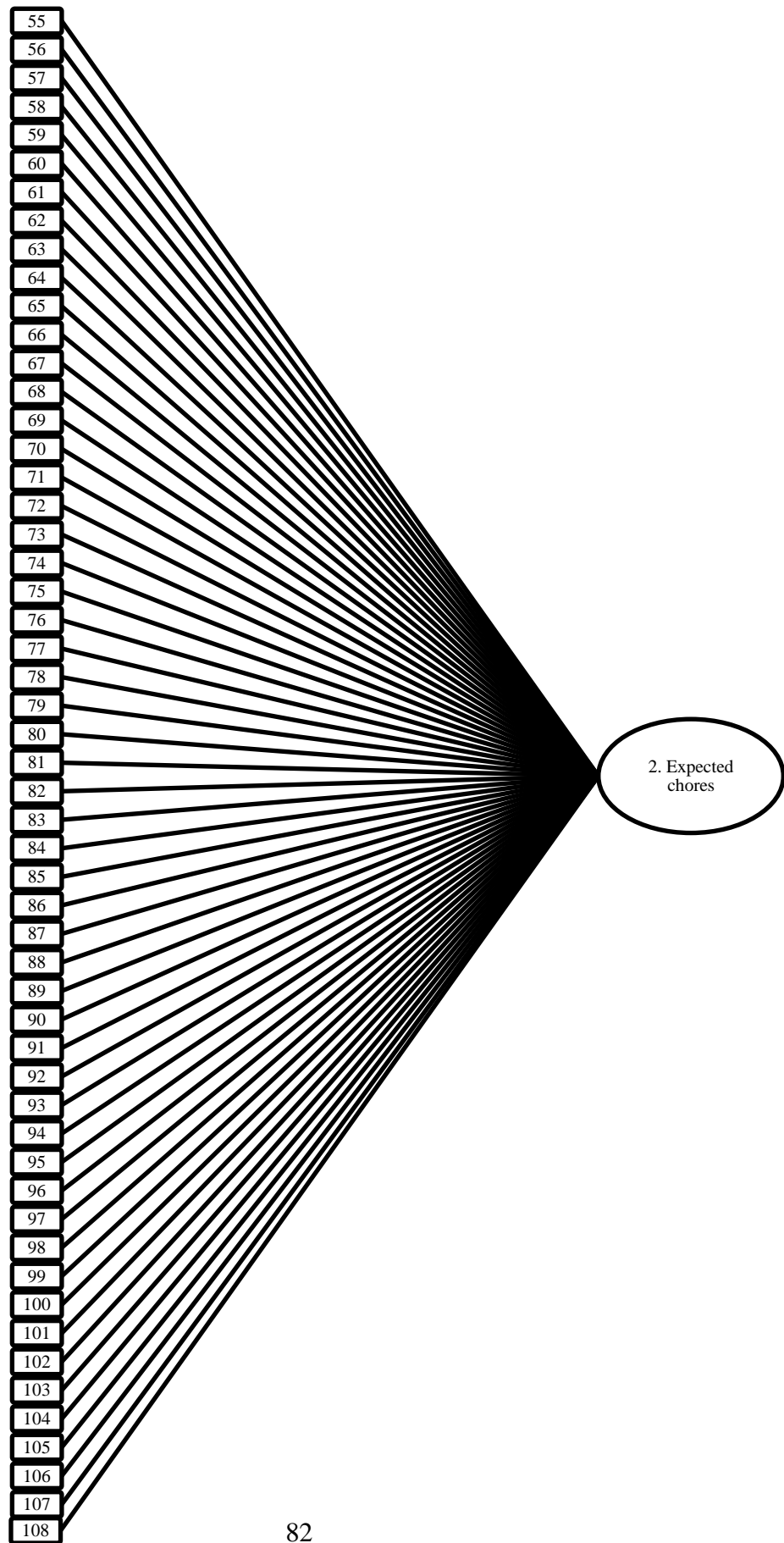


Figure 2. Two Factor Model







*Figure 3. Participant Selection for Study 1*

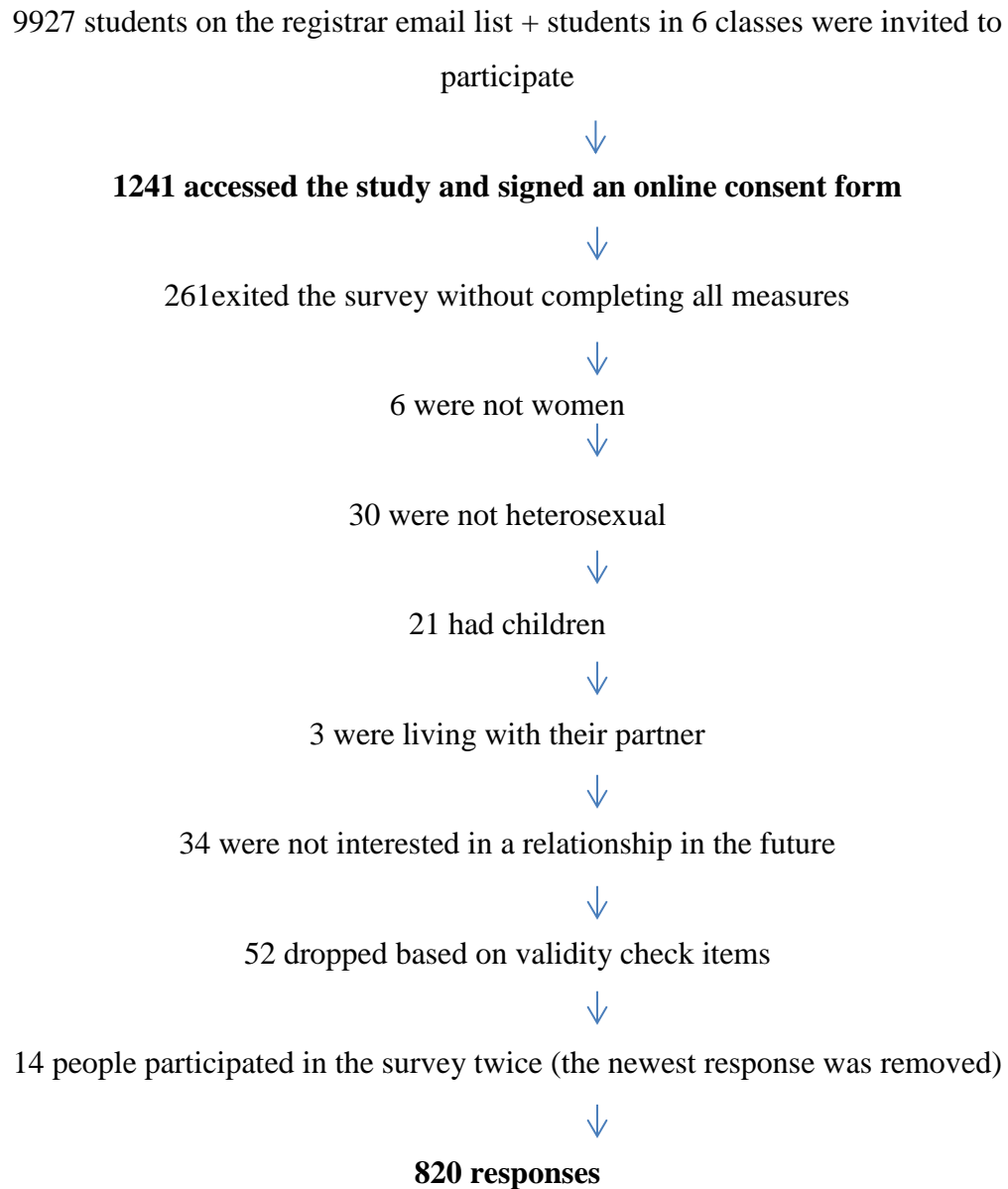


Figure 4. Final Factor Structure of the Ideal Chore Measure

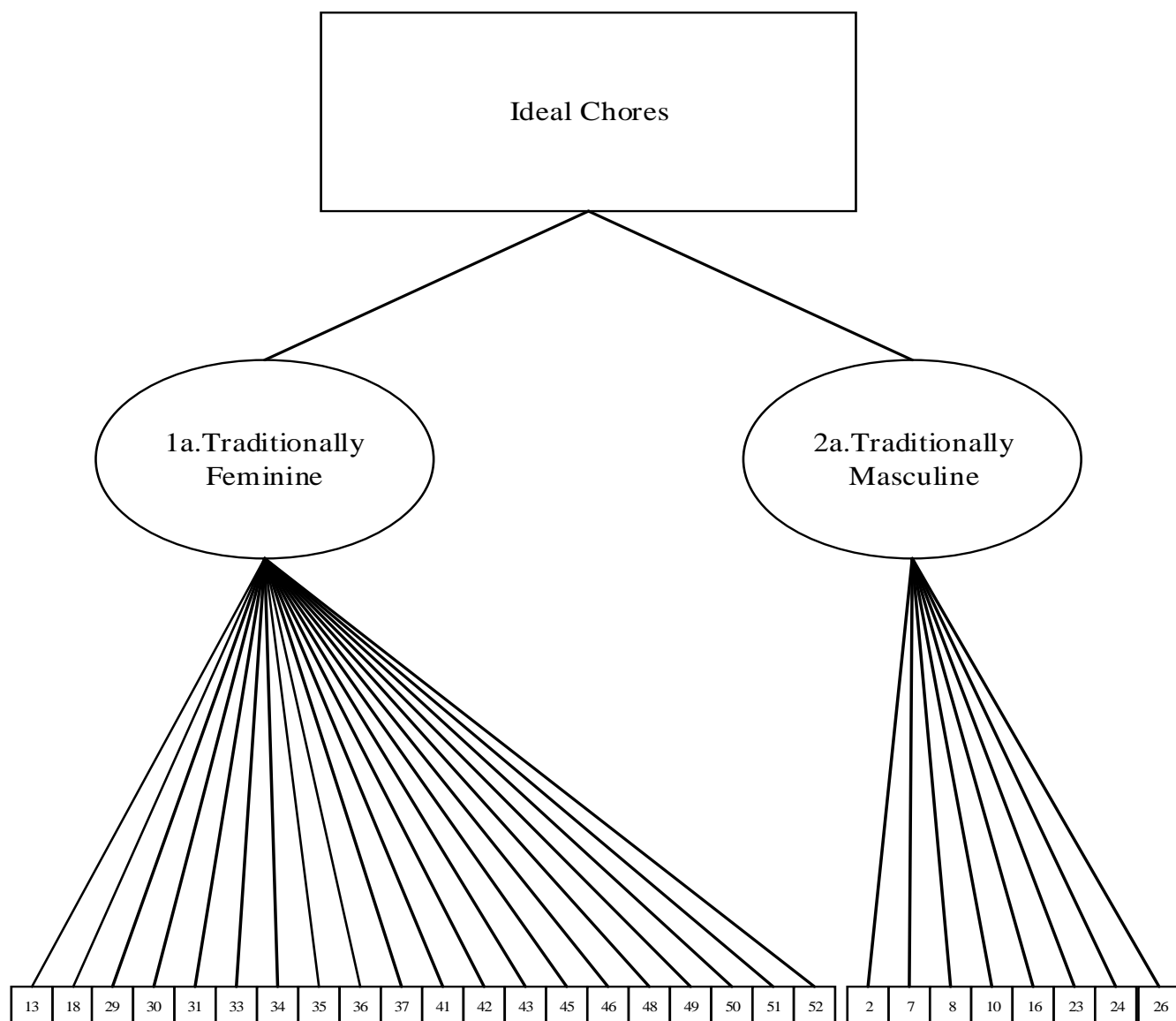
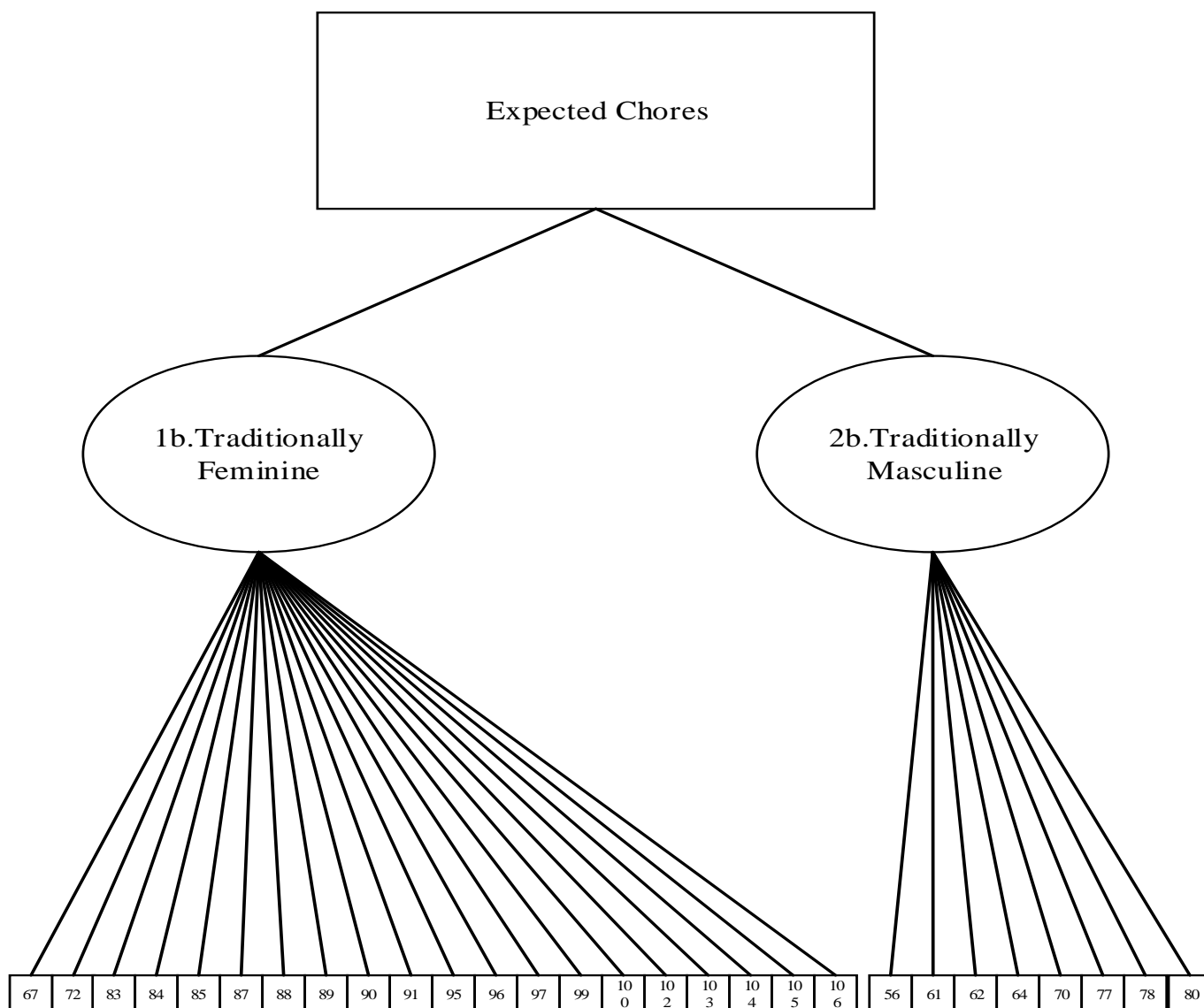


Figure 5. Final Factor Structure of the Expected Chore Measure



*Figure 6.* Participant Selection for Study 2

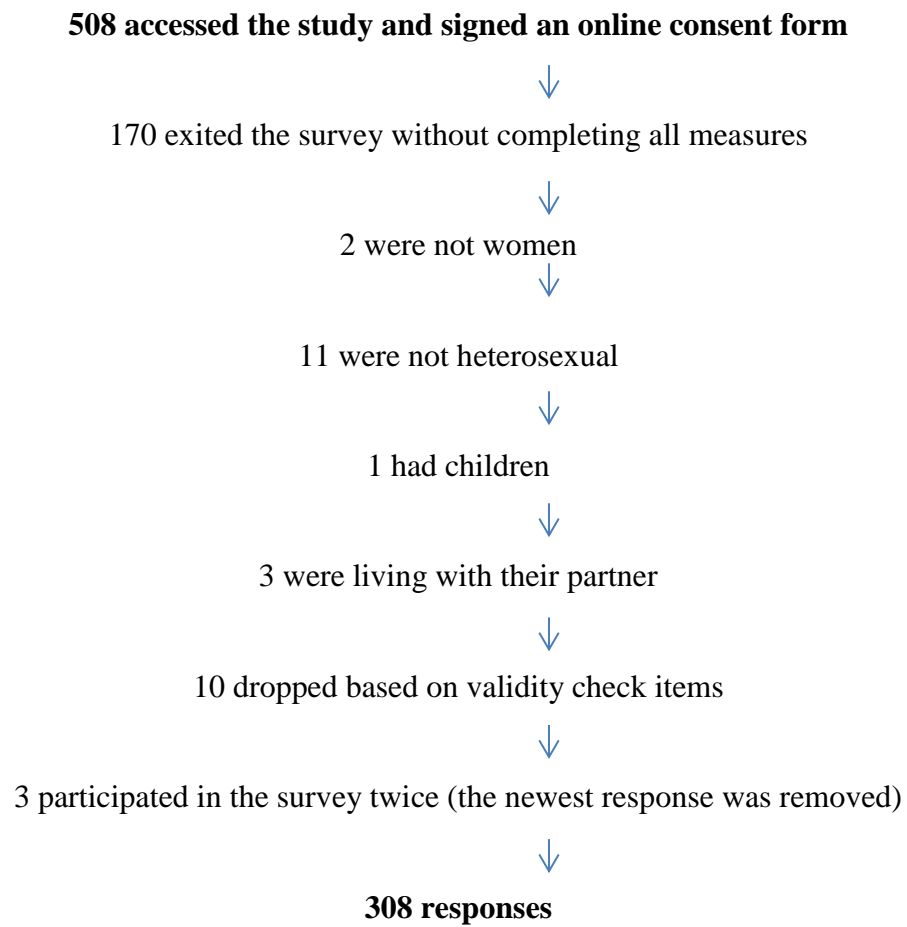


Table 1. *Demographic characteristics for total sample (N=820)*

<b>Variable</b>	<b>%</b>	<b>Variable</b>	<b>%</b>
Year in school		Mother's occupational status	
First year	27.8	Full time work (outside home)	50.1
Sophomore	26.8	Full time work (from home)	5.1
Junior	24.8	Part time work (outside home)	16.6
Senior	20.6	Part time work (from home)	2.7
Race		Homemaker	23.3
African American	8.8	Unemployed	2.1
Asian/Asian American	17.7	Father's occupational status	
Biracial/Multiracial	4.9	Full time work (outside home)	88.9
Hispanic/Latina	6.7	Full time work (from home)	4.7
White	60.6	Part time work (outside home)	2.2
Other	1.3	Part time work (from home)	0.9
Relationship Status		Homemaker	1.4
Single (never married)	64.0	Unemployed	2.0
In a relationship	36.0	Major	
Plan to have children	89.4	Biology/Chemistry	16.5
Education plans		Engineering	11.8
Bachelor's	26.0	Psychology	9.0
Master's	34.9	Criminology	7.9
Ph.D.	14.1	Accounting/Finance/Econ	6.3
M.D.	16.6	Education	6.3
J.D.	5.7	Public Health	6.1
Other graduate degree	2.7	Business/Marketing	5.7
Future career status		Government/Politics/Policy	5.6
Full time work (outside home)	78.9	Communications/Journalism	5.4
Full time work (from home)	3.0	Computer/Information Science	4.6
Part time work (outside home)	15.0	Kinesiology	3.7
Part time work (from home)	2.1	Environmental/Earth Science	3.0
Homemaker	1.0	Theater/Dance/Film/Music/Art	2.8
Future partner career status		Physics/Mathematics	2.5
Full time work (outside home)	90.4	Agriculture/Animal Science	2.4
Full time work (from home)	3.9	English	2.1
Part time work (outside home)	4.3	Languages	1.9
Part time work (from home)	1.0	Anthropology/Sociology	1.4
Homemaker	0.1	Family science	1.3
Unemployed	0.4	Architecture	1.2
		Other	4.3

<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Actual Range</b>	<b>Possible Range</b>
Age	19.38	1.27	18-24	18-24
GPA	3.54	.40	2.0-5.0	0.0-5.0

Table 2. *Descriptive Statistics and Correlations for Study 1 (n=410)*

	1	2	3	4	5	6	7
1. Ideal Chores – Feminine	1						
2. Ideal Chores – Masculine	-.44**	1					
3. Expected Chores – Feminine	.63**	-.31**	1				
4. Expected Chores – Masculine	-.33**	.73**	-.36**	1			
5. TESR	-.32**	.26**	-.16**	.14**	1		
6. Benevolent Sexism	.31**	-.43**	.12*	-.25**	-.43**	1	
7. Career Aspiration Scale	-.14**	.07	-.12*	.01	.27**	-.04	1
Mean	4.30	3.03	4.66	2.82	88.71	1.63	72.07
Standard Deviation	.38	.63	.61	.76	9.67	.99	15.8
Actual Range	1.9-6	1-4.38	3.6-7	1-6.13	24-100	0-4.18	24-96
Possible Range	1-7	1-7	1-7	1-7	20-100	0-5	0-100
Cronbach's Alpha	.89	.81	.94	.85	.86	.88	.93

*Note.* TESR= Traditional Egalitarian Sex Role Inventory

\*  $p < .05$

\*\*  $p < .01$

Table 3. *EFA Items and Factor Loadings*

<b>Item</b>		<b>Factor 1</b>	<b>Factor 2</b>
<i>Factor 1a: Ideal Traditionally Feminine Chores</i>			
41	Taking child to or from lessons/activities	<b>0.65</b>	0.13
49	Taking care of a sick child	<b>0.65</b>	0.08
30	Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)	<b>0.62</b>	0.14
31	Supervising child's morning routine	<b>0.62</b>	0.00
34	Arranging for childcare or babysitting when needed	<b>0.62</b>	-0.13
53	Spending quality time with child in the home	<b>0.62</b>	0.28
50	Responsible for playdates (e.g. arranging, driving, supervising)	<b>0.60</b>	-0.05
36	Taking to doctor/dentist	<b>0.59</b>	-0.01
33	Staying home or making arrangements for childcare when child is sick	<b>0.58</b>	-0.08
29	Helping child with homework	<b>0.56</b>	0.18
37	Supervising child's personal hygiene (including bathing young children)	<b>0.55</b>	-0.09
32	Spending time with child at bedtime (e.g., getting ready for bed, reading a story)	<b>0.54</b>	0.11
52	Assigning and monitoring chores for child	<b>0.48</b>	0.11
45	Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)	<b>0.47</b>	-0.13
47	Attending child's activities/recitals/games	<b>0.46</b>	0.11
46	Monitoring child's progress in school	<b>0.44</b>	0.03
48	Helping with developmental steps (e.g., potty training, driving)	<b>0.44</b>	0.24
40	Attending teacher conferences/communicating with teachers	<b>0.43</b>	-0.03
35	Taking to and from bus stop/school	<b>0.43</b>	0.13
18	Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)	<b>0.43</b>	-0.24
51	Shopping for child (clothes, school supplies, toys)	<b>0.42</b>	-0.27
42	Buying gifts for birthday parties/social events	<b>0.42</b>	-0.25



43	Preparing lunches for children to bring to school	<b>0.42</b>	-0.28
13	Laundry (e.g., washing, folding, ironing)	<b>0.41</b>	-0.28

*Factor 2a: Ideal Traditionally Masculine Chores*

8	Car repairs and car maintenance	0.01	<b>0.65</b>
7	General home repairs and maintenance in the home	-0.07	<b>0.64</b>
2	Yard work (e.g., lawn upkeep, snow removal)	0.06	<b>0.63</b>
26	Physical labor tasks (e.g., lifting heavy boxes, carrying groceries, moving furniture)	0.03	<b>0.57</b>
23	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)	0.21	<b>0.54</b>
54	Teaching children outdoor activities (e.g., biking, sports, skating)	0.26	<b>0.54</b>
24	Pest control (e.g., dealing with bugs, spiders, mice)	-0.03	<b>0.51</b>
16	Grilling or barbecuing outdoors	-0.05	<b>0.49</b>
10	Taking out trash/recycling	0.09	<b>0.44</b>

*Factor 1b: Expected Traditionally Feminine Chores*

88	Arranging for childcare or babysitting when needed	<b>0.77</b>	-0.06
87	Staying home or making arrangements for childcare when child is sick	<b>0.76</b>	-0.06
95	Taking child to or from lessons/activities	<b>0.76</b>	0.14
104	Responsible for playdates (e.g. arranging, driving, supervising)	<b>0.74</b>	-0.06
85	Supervising child's morning routine	<b>0.74</b>	-0.02
90	Taking to doctor/dentist	<b>0.73</b>	0.11
103	Taking care of a sick child	<b>0.71</b>	-0.06
89	Taking to and from bus stop/school	<b>0.71</b>	0.17
91	Supervising child's personal hygiene (including bathing young children)	<b>0.71</b>	0.00
84	Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)	<b>0.70</b>	0.01
86	Spending time with child at bedtime (e.g., getting ready for bed, reading a story)	<b>0.69</b>	0.12
107	Spending quality time with child in the home	<b>0.67</b>	0.24

94	Attending teacher conferences/communicating with teachers	<b>0.67</b>	0.05
83	Helping child with homework	<b>0.65</b>	0.13
106	Assigning and monitoring chores for child	<b>0.65</b>	0.08
101	Attending child's activities/recitals/games	<b>0.64</b>	0.24
96	Buying gifts for birthday parties/social events	<b>0.63</b>	-0.09
97	Preparing lunches for children to bring to school	<b>0.63</b>	-0.14
102	Helping with developmental steps (e.g., potty training, driving)	<b>0.62</b>	0.23
105	Shopping for child (clothes, school supplies, toys)	<b>0.62</b>	-0.19
99	Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)	<b>0.59</b>	-0.04
67	Laundry (e.g., washing, folding, ironing)	<b>0.58</b>	-0.26
100	Monitoring child's progress in school	<b>0.56</b>	0.10
72	Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)	<b>0.56</b>	-0.12

*Factor 2b: Expected Traditionally Masculine Chores*

62	Car repairs and car maintenance	-0.08	<b>0.71</b>
61	General home repairs and maintenance in the home	-0.05	<b>0.71</b>
78	Pest control (e.g., dealing with bugs, spiders, mice)	-0.01	<b>0.61</b>
56	Yard work (e.g., lawn upkeep, snow removal)	0.00	<b>0.61</b>
70	Grilling or barbecuing outdoors	-0.19	<b>0.53</b>
77	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)	0.18	<b>0.53</b>
80	Physical labor tasks (e.g., lifting heavy boxes, carrying groceries, moving furniture)	-0.11	<b>0.49</b>
64	Taking out trash/recycling	0.15	<b>0.45</b>
108	Teaching children outdoor activities (e.g., biking, sports, skating)	0.15	<b>0.45</b>

Table 4. *Final Items and CFA Factor Loadings*

<i>Item</i>	<i>Factor Loading</i>
<i>Factor 1a: Ideal Traditionally Feminine Chores</i>	
50 Responsible for playdates (e.g. arranging, driving, supervising)	0.80
31 Supervising child's morning routine	0.79
34 Arranging for childcare or babysitting when needed	0.79
13 Laundry (e.g., washing, folding, ironing)	0.77
37 Supervising child's personal hygiene (including bathing young children)	0.77
42 Buying gifts for birthday parties/social events	0.76
43 Preparing lunches for children to bring to school	0.76
33 Staying home or making arrangements for childcare when child is sick	0.73
49 Taking care of a sick child	0.73
51 Shopping for child (clothes, school supplies, toys)	0.73
41 Taking child to or from lessons/activities	0.72
36 Taking to doctor/dentist	0.71
45 Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)	0.67
35 Taking to and from bus stop/school	0.63
30 Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)	0.59
52 Assigning and monitoring chores for child	0.57
18 Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)	0.52
29 Helping child with homework	0.51
48 Helping with developmental steps (e.g., potty training, driving)	0.44
46 Monitoring child's progress in school	0.40
<i>Factor 1b: Expected Traditionally Feminine Chores</i>	
85 Supervising child's morning routine	0.87
104 Responsible for playdates (e.g. arranging, driving, supervising)	0.86
88 Arranging for childcare or babysitting when needed	0.86

96	Buying gifts for birthday parties/social events	0.81
87	Staying home or making arrangements for childcare when child is sick	0.81
103	Taking care of a sick child	0.81
105	Shopping for child (clothes, school supplies, toys)	0.80
91	Supervising child's personal hygiene (including bathing young children)	0.79
97	Preparing lunches for children to bring to school	0.79
90	Taking to doctor/dentist	0.78
99	Being involved in school activities/organizations (e.g., PTA, field trips, volunteering)	0.78
67	Laundry (e.g., washing, folding, ironing)	0.76
95	Taking child to or from lessons/activities	0.75
84	Responding to child in the middle of the night (e.g., difficulty sleeping, nightmare, crying)	0.71
83	Helping child with homework	0.71
89	Taking to and from bus stop/school	0.68
72	Purchasing small items for home (e.g., cookware, bedding, soap, cleaning supplies)	0.62
106	Assigning and monitoring chores for child	0.61
100	Monitoring child's progress in school	0.61
102	Helping with developmental steps (e.g., potty training, driving)	0.55

*Factor 2a: Ideal Traditionally Masculine Chores*

2	Yard work (e.g., lawn upkeep, snow removal)	0.83
7	General home repairs and maintenance in the home	0.83
8	Car repairs and car maintenance	0.8
24	Pest control (e.g., dealing with bugs, spiders, mice)	0.68
26	Physical labor tasks (e.g., lifting heavy boxes, carrying groceries, moving furniture)	0.68
16	Grilling or barbequing outdoors	0.62
23	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)	0.51
10	Taking out trash/recycling	0.46

*Factor 2b: Expected Traditionally Masculine Chores*

61	General home repairs and maintenance in the home	0.89
62	Car repairs and car maintenance	0.87
56	Yard work (e.g., lawn upkeep, snow removal)	0.80
78	Pest control (e.g., dealing with bugs, spiders, mice)	0.71
80	Physical labor tasks (e.g., lifting heavy boxes, carrying groceries, moving furniture)	0.71
70	Grilling or barbequing outdoors	0.68
77	Arranging for and interacting with service providers (e.g., calling and negotiating with repairmen)	0.58
64	Taking out trash/recycling	0.44

Table 5. *Descriptive Statistics and Correlations for Study 2 (N=261)*

	1	2	3	4	5	6	7	8
1. Ideal Chores - Feminine T1	1		.					
2. Ideal Chores – Masculine T1	--	1						
3. Expected Chores – Feminine T1	--	--	1					
4. Expected Chores – Masculine T1	--	--	--	1				
5. Ideal Chores - Feminine T2	.68*	--	--	--	1			
6. Ideal Chores – Masculine. T2	--	.71*	--	--	--	1		
7. Expected Chores – Feminine T2	--	--	.75*	--	--	--	1	
8. Expected Chores – Masculine T2	--	--	--	.66*	--	--	--	1
Mean	4.32	3.04	4.68	2.85	4.21	3.15	4.62	2.90
Standard Deviation	.33	.58	.59	.74	.31	.66	.55	.72
Actual Range	3.8-5.6	1-4.2	3.8-6.8	1-6.1	3.6-6	1-4.1	3.6-7	1-6.5
Possible Range	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-7
Cronbach's Alpha	.85	.78	.93	.83	.89	.86	.93	.85

*Note.* T1=Time 1, T2=Time 2 (two weeks after Time 1)

\*  $p < .01$

## References

- Abele, A. E. (2000). A dual impact model of gender and career related processes. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 361-388). Mahwah, NJ: Lawrence Erlbaum.
- Abele, A. E. & Spurk, D. (2011) The dual impact of gender and the influence of timing of parenthood on men's and women's career development: Longitudinal findings. *International Journal of Behavioral Development*, 35, 225-232.  
doi:10.1177/0165025411398181
- Askari, S. F., Liss, M., Erchull, M. J., Staebell, S. E., & Axelson, S. J. (2010). Men want equality, but women don't expect it: Young adults' expectations for participation in household and child care chores. *Psychology of Women Quarterly*, 34, 243-252. doi: 0361-6843/10
- Barnett, R. C. & Baruch, G. K. (1987). Determinants of fathers' participation in family work. *Journal of Marriage and Family*, 49(1), 29-40.  
doi:10.2307/352667
- Bem, S. L. (1981). Gender Schema Theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364.
- Biernat, M. & Wortman, C. B. (1991). Sharing of home responsibilities between professionally employed women and their husbands. *Journal of Personality and Social Psychology*, 60(6), 844-860. doi: 0022-3514/91/53.00

- Bosson, J. K., Taylor, J. N., Prewitt-Frelino, J. L. (2006). Gender role violations and identity misclassification: The roles of audience and actor variables. *Sex Roles*, 55, 13-24. doi: 10.1007/s11199-006-9056-5
- Braun, M., Lewin-Epstein, N., Stier, H., & Baumgartner, M. K. (2008). Perceived equity in the gendered division of household labor. *Journal of Marriage and Family*, 70, 1145-1156. doi: 10.1111/j.1741-3737.2008.00556.x
- Cikara, M., Lee, T. L., Fiske, S. T., & Glick, P. (2009). Ambivalent sexism at home and at work: How attitudes toward women in relationships foster exclusion in the public sphere In J. T. Jost, A. C. Kay, & H Thorisdottir (Eds.), *Social and psychological bases of ideology and system justification* (444-462). NY: Oxford University Press Inc.
- Chen, Z., Fiske, S. T., & Lee, T. L. (2009). Ambivalent sexism and power-related gender-role ideology in marriage. *Sex Roles*, 60(11-12), 765-778. doi: 10.1007/s11199-009-9585-9
- Christopher, K. (2012). Extensive mothering: Employed mothers' constructions of the good mother. *Gender & Society*, 26, 73-96. doi: 10.1177/0891243211427700
- Claffey, S. T. & Mickelson, K. D. (2009). Division of household labor and distress: The role of perceived fairness for employed mothers. *Sex Roles*, 60, 819-831. doi: 10.1007/s11199-008-9578-0
- Coltrane, S. (2010). Gender theory and household labor. *Sex Roles*, 63, 791-800. doi: 10.1007/s11199-010-9863-6



- Corrigall, E. A. & Konrad, A. M. (2007). Gender role attitudes and careers: A longitudinal study. *Sex Roles*, 56(11-12), 847-855. doi: 10.1007/s11199-007-9242-0
- Davis, S. N. & Greenstein, T. N. (2013). Why study housework? Cleaning as a window into power in couples. *Journal of Family Theory & Review*, 5, 63-71. doi: 10.1111/jftr.12004
- del Prado Silván-Ferrero, M., & López, A. B. (2007). Benevolent sexism toward men and women: Justification of the traditional system and conventional gender roles in Spain. *Sex Roles*, 57(7-8), 607-614. doi: 10.1007/s11199-007-9271-8
- Eagly, A. H., Eastwick, P. W., & Johannesen-Schmidt, M. (2009). Possible selves in marital roles: The impact of the anticipated division of labor on the mate preferences of women and men. *Personality and Social Psychology Bulletin*, 35(4), 403-414. doi: 10.1177/0146167208329696
- Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, 11, 135-172. doi: 10.1111/j.1471-6402.1987.tb00781.x
- Eccles, J. (2009). Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist*, 44(2), 78-89. doi: 10.1080/00461520902832368
- Erchull, M. J., Liss, M., Axelson, S. J., Staebell, S. E., & Askari, S. F. (2010). Well... She wants it more: Perceptions of social norms about desires for

- marriage and children and anticipated chore participation. *Psychology of Women Quarterly*, 34, 253-260. doi: 10.1111/j.1471-6402.2010.01566.x
- Fassinger, R. E. (1990). Causal models of career choice in two samples of college women. *Journal of Vocational Behavior*, 36, 225-248. doi:10.1016/0001-8791(90)90029-2
- Ferber, M. A. & Young, L. (1997). Student attitudes toward roles of women and men: Is the egalitarian household imminent?. *Feminist Economics*, 3(1), 65-83. doi: 10.1080/135457097338816
- Fetterolf, J. C., & Eagly, A. H. (2011). Do young women expect gender equality in their future lives? An answer from a possible selves experiment. *Sex Roles*, 65, 83-93. doi: 10.1007/s11199-011-9981-9
- Forry, N. D., Leslie, L. A., & Leteicq, B. L. (2007). Marital quality in interracial relationships: The role of sex role ideology and perceived fairness. *Journal of Family Issues*, 28, 1538-1552. doi: 10.1177/0192513X07304466
- Gaunt, R. (2013). Ambivalent sexism and perceptions of men and women who violate gendered family roles. *Community, Work & Family*, 16(4), 401-416. doi: 10.1080/13668803.2013.779231
- Glick, P. & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complimentary justifications for gender inequality. *American Psychologist*, 56(2), 109-118. doi: 10.1037//0003-066X.56.2.109
- Glick P. & Fiske, S. T. (1996). The ambivalence sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512. doi: 0022-3514/96

- Goldberg, W. A., & Lucas-Thompson, R. G. (2014). College women miss the mark when estimating the impact of full-time maternal employment on children's achievement and behavior. *Psychology of Women Quarterly*, 38, 490-502. doi: 10.1177/0361684314529738
- Gorman, K. A., & Fritzsche, B. A. (2002). The good-mother stereotype: Stay at home (or wish that you did) *Journal of Applied Social Psychology*, 32, 2190-2201. doi: 10.1111/j.1559-1816.2002.tb02069.x
- Greenstein, T. N. (1996). Husbands' participation in domestic labor: Interactive effects of wives' and husbands' gender ideologies. *Journal of Marriage and the Family*, 58(3), 585-595. doi: 10.2307/353719
- Gregor, M., & O'Brien, K. M. (2015). Understanding career aspirations among young women: Improving instrumentation. *Journal of Career Assessment*. doi: 10.1177/1069072715599537
- Grunow, D., Schulz, F., & Blossfeld, H. (2012). What determines change in the division of housework over the course of marriage?. *International Sociology*, 27(3), 289-307. doi: 10.1177/0268580911423056
- Guastello, D. D. & Guastello, S. J. (2003). Androgyny, gender role behavior, and emotional intelligence among college students and their parents. *Sex Roles*, 49(11/12), 663-673. doi: 10.1023/B:SERS.00000003136.67714.04
- Harnack, L., Story, M., Martinson, B., Neumark-Sztainer, D., & Stang, J. (1998). Guess who's cooking? The role of men in meal planning, shopping, and preparation in US families. *Journal of the American Dietetic Association*, 98(9), 995-1000. doi: 10.1016/S0002-8223(98)00228-4

- Hays, S. (1996). *The Cultural Contradictions of Motherhood*. New Haven, CT: Yale University Press.
- Hewlett, S. A. (2002, April). Executive women and the myth of having it all. *Harvard Business Review*. Retrieved from <http://www.getinsidehealth.com/PageFiles/1861/Executive%20Women%20and%20the%20Myth%20of%20Having%20It%20All.pdf>
- Holt, C. L. & Ellis, J. B. (1998). Assessing the current validity of the Bem Sex-Role Inventory. *Sex Roles*, 39, 929-941. doi: 10.1023/A:1018836923919
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. doi: 10.1080/10705519909540118
- Johnston, D. D., & Swanson, D. H. (2006). Constructing the “good mother”: The experience of mothering ideologies by work status. *Sex Roles*, 54, 509-519. doi: 10.1007/s11199-006-9021-3
- Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, 33, 1-27.
- Katz-Wise, S. L., Priess, H. A., & Hyde, J. S. (2010). Gender-role attitudes and behavior across the transition to parenthood. *Developmental Psychology*, 46(1), 18-28. doi: 10.1037/a0017820

- Kaufman, G. (2005). Gender role attitudes and college students' work and family expectations. *Gender Issues*, 22(2), 58-71. doi: 10.1007/s12147-005-0015-1
- Kaufman, G. & Uhlenberg, P. (2000). The influence of parenthood on the work effort of married men and women. *Social Forces*, 78(3), 931-947. doi: 10.1093/sf/78.3.931
- King, L. A. & King, W. K., (1997). Sex Role Egalitarianism Scale: Development, psychometric properties, and recommendations for future research. *Psychology of Women Quarterly*, 21, 71-87. doi: 0360-0025/88/0700-0001506.00/0
- Kroska, A. (2003). Investigating gender differences in the meaning of household chores and child care. *Journal of Marriage and Family*, 65(2), 456-473. doi: 10.1111/j.1741-3737.2003.00456.x
- Kroska, A. (2004). Division of domestic work. *Journal of Family Issues*, 25(7), 900-932. doi: 10.1177/0192513X04267149
- Lachance- Grzela, M. & Bouchard, G. (2010a). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, 63, 767-780. doi: 10.1007/s11199-010-9797-z
- Lachance- Grzela, M. & Bouchard, G. (2010b). More on the gendered division of household labor : A response to commentators. *Sex Roles*, 63(11/12), 801-806. doi: 10.1007/s11199-010-9885-0
- Larsen, K. S. & Long, E. (1988). Attitudes toward sex-roles: Traditional or egalitarian? *Sex Roles*, 19(1/2), 1-12. doi: 10.1007/BF00292459

- Lee, Y.S. & Waite, L.J. (2005). Husbands' and wives' time spent on housework: A comparison of measures. *Journal of Marriage and Family*, 67(2), 328-336. doi: 10.1111/j.0022-2445.2005.00119.x
- Livingston, B. A. & Judge, T. A. (2008). Emotional responses to work-family conflict: An examination of gender role orientation among working men and women. *Journal of Applied Psychology*, 93(1), 207-216. doi: 10.1037/0021-9010.93.1.207
- Mannino, C. A. & Deutsch, F. M. (2007). Changing the division of household labor: A negotiated process between partners. *Sex Roles*, 56, 309-324. doi: 10.1007/s11199-006-9181-1
- Martens, M. P. (2005). The use of structural equation modeling in counseling psychology research. *The Counseling Psychologist*, 33(3), 269-298. doi: 10.1177/0011000004272260
- Moskowitz, D. S., Suh, E. J., & Desaulniers, J. (1994). Situational influences on gender differences in agency and communion. *Journal of Personality and Social Psychology*, 66(4), 753-761. doi: 0022-3514/94/\$3.00
- Mottarella, K. E., Fritzsche, B. A., Whitten, S. N., & Bedsole, D. (2009). Exploration of "good mother" stereotypes in the college environment. *Sex Roles*, 60, 223-231. doi: 10.1007/s1199-008-9519-y
- O'Brien, K. M., & Fassinger, R. E. (1993). A causal model of the career orientation and career choice of adolescent women. *Journal of Counseling Psychology*, 40, 456-469. doi:10.1037/0022-0167.40.4.456

- Ogletree, S. M. (2015). Gender role attitudes and expectations for marriage. *Journal of Research on Women and Gender*, 5, 71-82.
- Poeschl, G., Pinto, I. R., Murias, C., Silva, A., & Riberio, R.(2006). Representations of family practices, belief in sex differences, and sexism. *Sex Roles*, 55, 111-121. doi: 10.1007/s11199-006-9062-7
- Poortman, A. R. & Van Der Lippe, T. (2009). Attitudes toward housework and child care and the gendered division of labor. *Journal of Marriage and Family*, 71(3), 526-541. doi: 10.1111/j.1741-3737.2009.00617.x
- Savelle, A. E., & O'Brien, K. M. (2015). Predicting College Women's Career Plans Instrumentality, Work, and Family. *Journal of Career Development*. doi: 10.1177/0894845315602118
- Schroeder, K. A., Blood, L. L., & Maluso, D. (1992). An intergenerational analysis of expectations for women's career and family roles. *Sex Roles*, 26(7-8), 273-291. doi: 10.1007/BF00289912
- Segal, H. G., DeMeis, D. K., Wood, G. A., & Smith, H. L. (2001). Assessing future possible selves by gender and socioeconomic status using the anticipated life history measure. *Journal of Personality*, 69(1), 57-87. doi: 10.1111/1467-6494.00136
- Silberberg, A. (2015). *The role of implicit self-concept in planning for career and family in undergraduate women* (Unpublished master's thesis). University of Maryland, College Park, MD.

- Singleton A. & Maher J. (2004). The “new man” is in the house: Young men, social change, and housework. *The Journal of Men’s Studies*, 12(3), 227-240. doi: 10.3149/jms.1203.227
- South, S. J., & Spitze, G. (1994). Housework in marital and nonmarital households. *American Sociological Review*, 59, 327-347. doi: 10.2307/2095937
- Spence, J. T. & Buckner, C. E. (2000). Instrumental and expressive traits, trait stereotypes, and sexist attitudes: What do they signify? *Psychology of Women Quarterly*, 24(1), 44-53. doi: 10.1111/j.1471-6402.2000.tb01021.x
- Street, S., Kimmel, E. B., & Kromrey, J. D. (1995). Revisiting university student gender role perceptions. *Sex Roles*, 33, 183-201. doi: 0360-0025/98/1200-0929
- Swearingen-Hilker, N. & Yoder, J. D. (2002). Understanding the context of unbalanced domestic contributions: The influence of perceiver’s attitudes, target’s gender, and presentational format. *Sex Roles*, 46(3/4), 91-98. doi: 0360-0025/02/0200-0091/0
- Sweet, J. A. & Bumpass, L. L (1996). SE-1 household tasks (E1STAT-E1I4). In *The National Survey of Families and Households - Waves 1 and 2: Data Description and Documentation*. Center for Demography and Ecology, University of Wisconsin, Madison. Retrieved from: [http://www.ssc.wisc.edu/nsfh/mod1/SE1\\_1.txt](http://www.ssc.wisc.edu/nsfh/mod1/SE1_1.txt)
- Tavris, C., & Wade, C. (1984). *The longest war*(2nd ed.). San Diego, CA: Harcourt Brace Jovanovich.



- Tichenor, V. (2005). Maintaining men's dominance: Negotiating identity and power when she earns more. *Sex Roles*, 53(3), 191-205. doi: 10.1007/s11199-005-5678-2
- Twenge, J. M. (2009). Status and gender: The paradox of progress in an age of narcissism. *Sex Roles*, 61(5-6), 338-340. doi: 10.1007/s11199-009-9617-5
- U.S Department of Labor Bureau of Labor Statistics (2008, May). *Married parents' use of time, 2003-06*. Retrieved March 20, 2013, from <http://www.bls.gov/news.release/pdf/atus2.pdf>
- van Hoof, J. H. (2011). Rationalising inequality: Heterosexual couples' explanations and justifications for the division of housework along traditionally gendered lines. *Journal of Gender Studies*, 20(1), 19-30. doi: 10.1080/09589236.2011.542016
- Viki, G. T., Abrams, D., & Hutchison, P. (2003). The "true" romantic: Benevolent sexism and paternalistic chivalry. *Sex Roles*, 49(9-10), 533-537. doi: 10.1007/s11199-003-0533-0
- Walker, A. (1999). Gender and family relationships. In M. Sussman, S. K. Steinmetz, & G.W. Peterson (Eds.), *Handbook of marriage and the family* (2nd ed., pp. 439-474). New York: Plenum.
- Walters, P. & Whitehouse, G. (2012). A limit to reflexivity: The challenge for working women negotiating sharing of household labor. *Journal of Family Issues*, 33(8), 1117-1139. doi: 10.1177/0192513X11431566
- Wiesmann, S., Boeije, H., van Doorne-Huiskes, A., & Den Dulk, L. (2008). Not worth mentioning: The implicit and explicit nature of decision-making

about the division of paid and domestic work. *Community, Work & Family*,  
11(4), 341-363. doi: 10.1080/13668800802361781