

GENDER ROLE ATTITUDES, GENDER ROLE BEHAVIORS, AND RELATIONSHIP
OUTCOMES: AN APPLICATION OF THE THEORY OF PLANNED BEHAVIOR

by

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(Under the Direction of David W. Wright)

ABSTRACT

This study applies the theory of planned behavior (Ajzen, 1985) to examine the determinants of household task behavior. To examine actor and partner effects simultaneously, the actor-partner interdependence model (Kenny & Cook, 1999) was employed using structural equation modeling with bootstrapping. Husbands' and wives' gender role attitudes and wives' perceptions of social norms were related to the amount of housework performed by wives, but neither actor nor partner effects were detected for the influence of attitudes or social norms on husbands' completion of housework. However, wives reporting high levels of behavioral control over their own housework behavior had husbands who performed more housework. Additional analyses were conducted to examine household task completion by each sex. Household task performance remained largely sex-segregated. Overall, husbands estimated that wives perform fewer tasks in an average month than wives reported performing, but wives estimated that husbands perform more traditionally masculine tasks than husbands reported performing. Suggestions are presented for future research.

INDEX WORDS: Gender roles, Gender role attitudes, Division of labor, Housework,
Relationship satisfaction, Actor-partner interdependence model, Theory of
planned behavior

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CHAPTER 1

INTRODUCTION

Since the resurgence of the feminist movement in the 1960s, the roles deemed acceptable for men and woman have continued to change greatly. Some aspects of gender roles that were considered egalitarian in 1970 may be judged as more traditional in today's society based on increasing acceptance of egalitarian roles and, therefore, shifting social norms for men and women (Larson & Long, 1988). Specifically, women today are much more likely to work a full-time job, and husbands are generally more involved in household tasks and childcare (Galinsky, Aumann, & Bond, 2008). During this time of change, a large amount of scholarly work, including research and theory, has addressed the impact of these changing gender role attitudes and behaviors. Many family scientists have theorized that more egalitarian gender role attitudes and behaviors would lead to more positive interpersonal relationships outcomes (Amato, Johnson, Booth, & Rogers, 2003; Blumstein & Schwartz, 1983; Goldscheider & Waite, 1991). However, it is problematic that existing research has not fully supported this conclusion. Thus, it is unclear how these concepts relate to relational outcomes.

In order to address the varied findings by previous studies regarding gender roles and relationship outcomes, the purpose of the present study is to explore how gender role attitudes, gender role behaviors, and relationship outcomes are related. Specifically, this study extends existing research by using the theory of planned behavior (Ajzen, 1985) and examining the relation of these constructs using the actor-partner interdependence model (Kenny & Cook,

1999). The theory of planned behavior argues that behaviors are determined by each individual's attitudes as well as social norms and their perceived behavioral control.

Meanwhile, the actor-partner interdependence model is a statistical model for analyzing the bi-directional nature of interpersonal relationships. This model is particularly useful with the current topic since marriage relationships are where gender role attitudes and behaviors are likely to be enacted. Although family scientists have emphasized the bidirectionality of marital relationships for decades, researchers have only recently begun exploring these effects using appropriate statistical models, such as the actor-partner interdependence model. This model emphasizes the influence of partner interactions and can be employed using a variety of statistical methods such as structural equation modeling and multi-level modeling.

The current study employs structural equation modeling to analyze the paths hypothesized by the theory of planned behavior and the actor-partner interdependence model (i.e., actor and partner effects). A sample of hetero-sexual, married couples in their early years of marriage completed an online survey addressing their gender role attitudes, gender role behaviors, and relationship outcomes. Results from this study provide insight about how these concepts are related to each other since previous work has shown that gender, and the related gender role attitudes and behaviors, "and family life are so intertwined that it is impossible to understand one without paying attention to the other" (Coltrane, 1998, p. xi). Moreover, the current study provides a model for how the theory of planned behavior can be applied to study dyadic processes occurring within the context of interpersonal relationships, such as marriage.

CHAPTER 2

LITERATURE REVIEW

“Gender is not merely something that happens in the nooks and crannies of interaction, fitted in here and there and not interfering with the serious business of life” (West & Zimmerman, 1987, p. 130).

As this quote explains, gender impacts individuals in every setting and environment they encounter (West & Zimmerman, 1987). In this sense, gender serves as an “umbrella” term that encompasses a variety of smaller, more specific components. For instance, biological sex, sex roles (masculinity and femininity), and gender role ideologies and behaviors, are all related to gender. Of these concepts, gender role attitudes and behaviors have been a popular topic within the family development field for several decades (Holmes, 2009). In addition to the centrality of gender, romantic relationships are also a sizeable part of individuals’ lives. These intimate relationships have been shown to impact individuals’ physical and mental well-being (Simon & Marcussen, 1999; Wickrama, Lorzen, Conger, & Elder, 1997). Moreover, because romantic relationships and gender are both central components of one’s self, this study considers these concepts in combination with each other.

Researchers have examined a variety of topics related to gender including gender role attitudes and gender role behaviors within romantic relationships, especially marriage. Many studies have examined predictors and outcomes of these attitudes and behaviors. For instance, predictors that have been examined include demographic factors, family of origin influences, personality characteristics, and social dynamics (Davis & Greenstein, 2009). Common outcomes of interest include personal psychological functioning, such as depression and anxiety, and

relationship functioning, such as satisfaction and abuse (Davis & Greenstein, 2009; Sugarman & Frankel, 1996). However, studies frequently limit their investigation to gender role attitudes or behaviors instead of exploring the two simultaneously. Furthermore, although researchers have begun to recognize and more accurately study potential partner interaction effects that occur in romantic relationships, researchers studying gender roles have been slow to adopt a systematic, interactive approach that explores both partners simultaneously.

This study addresses those limitations. The theory of planned behavior and the actor-partner interdependence model provide frameworks for this endeavor. Specifically, the theory of planned behavior proposes links between multiple constructs, including attitudes, and behavior, while the actor-partner interdependence model provides a framework for analyzing the interactive effects between partners.

The Theory of Planned Behavior

The value of the theory of reasoned action (Ajzen & Fishbein, 1977), and its successor, the theory of planned behavior (Ajzen, 1985) have been well-documented in existing studies across a variety of disciplines, especially within social psychology and health psychology. To date, over 1,000 empirical articles using these theories have been published (Fishbein & Ajzen, 2010). However, family researchers have been slow to adopt this theory in their own research, possibly because of its individual focus.

The theory of reasoned action proposes that behavioral intentions predict behavior and can be accurately explained by the individual's attitudes and perceived norms about the behavior of interest (see Figure 1). However, behavioral intentions will be excluded from the current research since this study addresses ongoing behaviors within a committed relationship rather than intentions to change a behavior. An attitude is defined as the "latent disposition or tendency

to respond with some degree of favorableness or unfavorableness to a psychological object” (Fishbein & Ajzen, 2010; p. 76). Similarly, an individual’s perceived norms are based on the beliefs they hold about what is acceptable or permissible behavior within their group or society (Fishbein & Ajzen, 2010). For instance, if an individual believes that their society, as a whole, views working mothers negatively, the individual may be more likely to work less hours for pay than if they perceive that working mothers are positively viewed within their society.

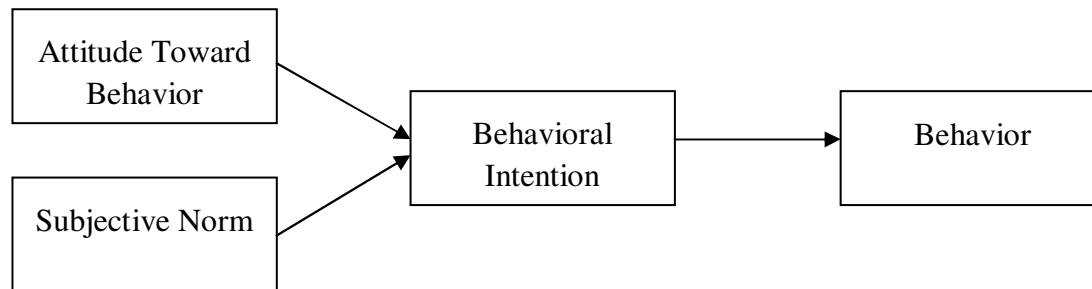


Figure 1. The theory of reasoned action.

More recently, the developers of the theory of reasoned action have added perceived behavioral control as an additional predictor of behavioral intention and, therefore, behavior (Armitage & Conner, 2001). Previous research has shown that one’s sense of control over their behavior, or their self-efficacy, plays an important role in the performance of behavior (Fiske & Taylor, 1991; Rodin, 1986; Thompson & Spacapan, 1991). In other words, an individual’s behavior is also determined by their perceived ability to control the behavior. A person is more likely to act on an attitude when they feel their effort will be productive. Ajzen (1985) named the revised theory, which includes all three predictors of behavior (attitudes, norms, and perceived behavioral control), the theory of planned behavior (see Figure 2).

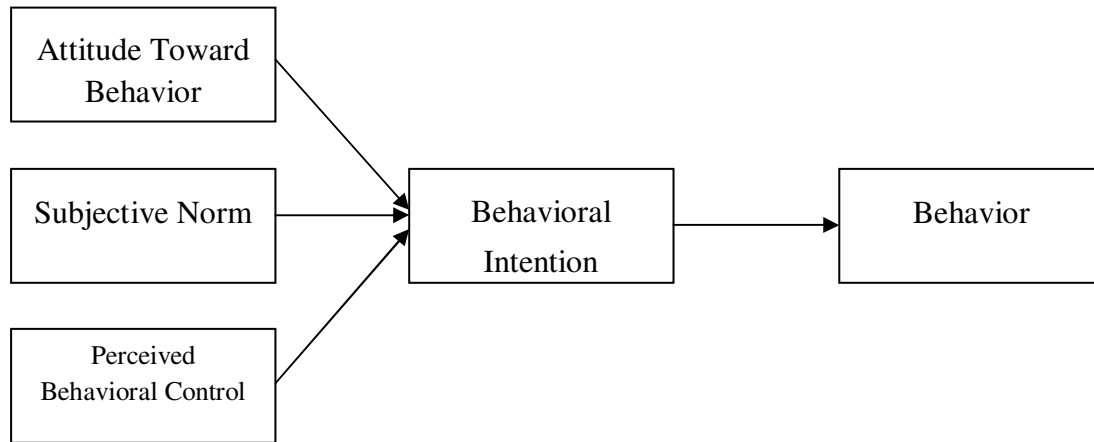


Figure 2. The theory of planned behavior.

While the theory of planned behavior proposes three essential predictors of intentions and behavior, it also recognizes the importance of other factors. These additional factors, referred to as background factors, include influences such as demographic variables or environmental components (Fishbein & Ajzen, 2010). The theory does not emphasize specific background factors because these are expected to vary depending on the behavior of interest. In other words, factors such as age, income, personality, and intelligence level, may be important factors to consider in the prediction of one behavior, but not another. Because the background factors examined vary by topic, it is difficult for studies to address the weight of this component of the theory of planned behavior. However, other aspects of this theory have been well-validated.

For instance, meta-analysis results by Armitage and Conner (2001) support all of the paths in the theory of planned behavior. When averaged across all studies examining the theory of planned behavior, statistically significant associations were found between behavioral intentions and each of the hypothesized predictors: attitudes ($r = .49$), subjective norms ($r = .34$), and perceived behavioral control ($r = .43$). Moreover, the exclusion of behavioral intention is supported by their conclusion of a strong association between actual behavior and behavioral intention ($r = .52$). Using Cohen's (1992) guidelines for interpreting the magnitude of effects,

Armitage and Conner (2001) found that all of the paths in the theory of planned behavior represent medium to large effects.

One common misperception about the theory of planned behavior is that all the variables of interest (attitudes, subjective norms, and perceived behavioral control) must explain a statistically significant amount of the variance in behavior in order to be consistent with the hypothesized model. The creators of the theories of reasoned action and planned behavior have argued that this is incorrect (Fishbein & Ajzen, 2010). They suggest that the statistical significance of each component will vary depending on the behavior of interest. For instance, all three variables predicted smoking behavior (Natan, Golubev, & Shamrai, 2010), whereas only attitudes and norms predicted weight gain (Wammes, Kremers, Breedveld, & Brug, 2005).

Some studies have examined the connection between gender role attitudes and behavior, but very little family science research has included other components of the theory of planned behavior. One potential reason why family science researchers have not used the theory of planned behavior in studying gender roles may be its predominant focus on individuals since interdependence is a key component of many topics within family science, including romantic relationships (Kelley, Berscheid, Christensen, Harvey, Huston, Levinger, et al., 1983; Neff & Karney, 2007; Thibaut & Kelley, 1959). Therefore, although the theory of planned behavior has been empirically validated, its ability to accurately explain behavior is unknown when studying behaviors that occur in the context of relationships. The theory of planned behavior, by itself, does not adequately capture the bi-directional nature of these relationships. However, the actor-partner interdependence model (Kenny & Cook, 1999) can be used in conjunction with the theory of planned behavior to focus on the effect each individual has on their partner and provide the strong dyadic focus necessary in research on romantic relationship behaviors.

The Actor-Partner Interdependence Model

When studying processes and outcomes in romantic relationships the explanatory power of the theory of planned behavior may be increased by the inclusion of a dyadic perspective. The actor-partner interdependence model is a statistical model frequently used within the social sciences field to test the bidirectional effects of relationships (Kenny & Cook, 1999). Here this model is also considered from a conceptual perspective. Essentially, the actor-partner interdependence model proposes that within dyadic relationships, such as marriage, the wife's predictor variable(s) may influence her own outcome as well as the outcome of her husband (see Figure 3). The same pattern is hypothesized for the husband's predictor variable(s), which may influence his own outcome as well as his wife's outcome (Kenny, Kashy, & Cook, 2006). The effect of either spouse on his/her own outcome is referred to as an actor effect, whereas the effect that a spouse has on his/her partner is referred to as a partner effect. This model also assumes that the partners' predictor variable(s) values may be correlated with each other. Moreover, the actor-partner interdependence model is appropriate for analyzing gender roles in marital relationships since some have theorized that romantic relationships are often defined in part by the individual's gender and the attached gender expectations and ideologies (Anderson, 2005; Cobb, Walsh, & Priest, 2009; Thompson, 1993).

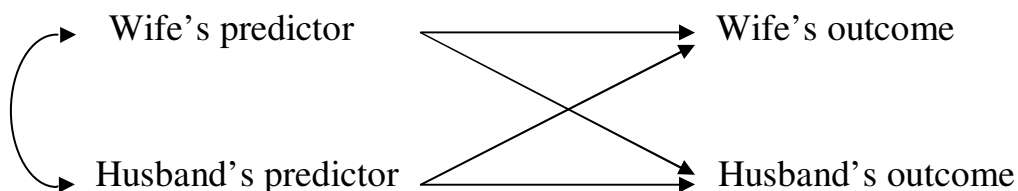


Figure 3. The actor-partner interdependence model.

Interestingly, although the primary components of the theory of planned behavior do not account for partner interdependence, some researchers using the theory of planned behavior have

included partner norms, a concept similar to the partner effects proposed by the actor-partner interdependence model (Corby, Jamner, & Wilitski, 1996). Fishbein and Ajzen (2010) agree that including partner norms may be useful when predicting certain behaviors with a dyadic influence. For instance, Corby et al. (1996) argued that when studying behaviors involving a partner, the normative expectations of one's partner should be included as a fourth predictor of behavioral intentions. In predicting condom use, these authors hypothesized that, in addition to the standard three predictors (attitude, norms, and perceived behavioral control), intention to use condoms and, therefore, actual condom use would also be predicted by the perceived expectations of the partner. Thus, one's intention to use condoms depends on how the individual thinks their partner feels about condom use. Although individuals may hold a certain attitude, they often act in a way that also takes their partner's attitude into consideration. This concept is very similar to the concept of a partner effect from the actor-partner interdependence model. Both hypothesize that an individual's behavior, or outcome, depends on his/her own attitudes, or predictor, as well as the partner's attitudes.

Connecting Theories to Existing Literature

The remainder of this chapter will be organized around the elements presented in the theory of planned behavior and the actor-partner interdependence model. Specifically, the theory of planned behavior addresses the links between attitudes, norms, and perceived behavioral control and behaviors, and actor-partner interdependence model addresses the bi-directional nature of romantic relationships. Fields that commonly employ the theory of planned behavior, such as health psychology, are interested in behaviors as the final outcome, whereas family scientists are also interested in the association between behavior and relationship outcomes.

Therefore, the connection between behavior and relationship outcomes is also examined in the current study.

Evidence that gender role attitudes predict behaviors and behaviors predict relationship outcomes is presented first. Within this section, the relationship between gender role attitudes, behaviors, and relationship outcomes is examined. Next, existing research on elements that relate specifically to the theory of planned behavior (i.e., social norms and perceived behavioral control) is discussed. Next, background factors, or control variables, that have been found to relate to gender role attitudes and behavior are reviewed. Finally, the chapter concludes with a summary of the current state of research examining gender role attitudes, gender role behavior, and relationship outcomes and a discussion of its limitations, gaps, and future directions.

Do Gender Role Attitudes Predict Relationship Outcomes?

Defining gender role attitudes. Researchers often define gender role attitudes within marriage in a variety of ways. For example, Amato and Booth (1995) define them based on an individual's acceptance of specialized roles for husbands and wives. Those who emphasize women serving as the homemaker and men serving as the breadwinner are said to have traditional gender role attitudes, whereas those with egalitarian attitudes emphasize shared roles between men and women. This is one of the most common conceptualizations, and many researchers use similar definitions of gender role attitudes that emphasize attitudes toward shared versus specialized roles for males and females (Baker, Kiger, & Riley, 1996; Bartley, Blanton, & Gilliard, 2005; Rogers & Amato, 2000). Meanwhile, others have used gender role attitudes to refer to sex-role traits such as dominance, aggression, submission, and dependence (Cobb et al., 2009), or have focused primarily on individuals' beliefs about the appropriateness of gender role attitudes, such that the emphasis seems to be more about perceived social norms rather than

one's own attitude (Deaux & LaFrance, 1998; Marshall, 2008; Shechory & Ziv, 2007). Still, others prefer the term gender role ideology instead of gender role attitudes when discussing separate or shared spheres (Davis & Greenstein, 2009; Kulik, 1999). Thus, as Davis and Greenstein (2009) note, "researchers use a variety of phrases to describe individuals' levels of support for the division of paid work and family responsibilities...including gender ideology, gender role attitudes, attitudes about gender, gender-related attitudes, gender egalitarianism, and others" (p. 88). For the purpose of this paper, gender role attitudes are defined as individuals' attitudes towards sex-specialized or shared roles for men and women within marriage.

Evidence of a connection between gender role attitudes and relationship outcomes.

Of the existing research on gender roles, the largest portion has addressed the relationship between gender role attitudes (attitudes favoring shared or specialized roles) and relationship outcomes such as marital satisfaction. A number of cross-sectional studies have found women's egalitarian attitudes associated with lower levels of happiness and marital quality (Huber & Spitze, 1980; Lueptow, Guss, & Hyden, 1989; Vannoy-Hiller & Philliber, 1989). These studies assumed attitudes would influence outcomes rather than outcomes influencing attitudes.

However, the cross-sectional nature of these studies did not allow this direction of effect to be confirmed. On the other hand, the longitudinal nature of the National Survey of Families and Households (Sweet, Bumpass, & Call, 1988; NSFH) allowed Amato and Booth (1995) to test both possibilities. Using data from 1980 to 1988, Amato and Booth (1995) found that as wives' attitudes became more egalitarian, their reports of negative marital quality increased (including disagreement, problems, and divorce proneness). In contrast, as men's attitudes became more egalitarian, reports of negative marital quality decreased. These findings confirmed the direction of effect assumed by previous researchers. Gender role attitudes partially explained changes in

marital quality, but marital quality did not predict gender role attitudes. As can be seen, this study also found gender role attitudes impact relationship outcomes differently for males and females.

Many of the studies examining gender role attitudes and relationship outcomes have utilized the same NSFH dataset (Amato & Booth, 1995; Frisco & Williams, 2003; Rogers & Amato, 2000). The repeated use of a single dataset to address the impact of gender role attitudes on relationship outcomes is somewhat disconcerting. Although it is a national sample of randomly selected married persons who were followed over eight years, the data were collected over twenty years ago and were not collected from both partners. Moreover, other findings from the NSFH dataset have not been consistent with Amato and Booth's (1995) conclusion that egalitarian attitudes increase men's perceived relationship quality but decrease the perceived relationship quality of women. For instance, Rogers and Amato (2000) found egalitarian gender role attitudes predicted greater marital discord for both males and females. When examining a sample from the NSFH dataset limited to dual-earner couples, Frisco and Williams (2003) found traditional gender role attitudes to be only a marginal statistically significant predictor of higher levels of marital happiness for women and there was no effect of gender role attitudes on men's happiness.

On the other hand, although results from studies using the NSFH dataset are somewhat varied, these studies consistently found a negative relationship between women's egalitarian attitudes and their own relationship outcomes. Similarly, using a different sample, Wilcox and Nock (2006) found that wives with egalitarian gender role attitudes were less happy and husbands' reported gender role attitudes were not related to wives' happiness. However, these results are somewhat surprising since a good amount of existing literature, mostly theoretical

pieces, has assumed that egalitarian gender role attitudes are preferable for men and women (Amato et al., 2003; Blumstein & Schwartz, 1983; Goldscheider & Waite, 1991).

Because these studies provide evidence that gender role attitudes do predict relationship outcomes in longitudinal studies and are associated with current outcomes in cross-sectional studies, gender roles are an important topic for researchers to continue exploring. However, these studies fail to provide clear evidence explaining the pathway connecting gender role attitudes and outcomes. Few of these studies have adequately addressed *why* attitudes have an impact on relationship outcomes. Instead, researchers discuss a variety of possible links without much evidence for one idea over another. For example, Amato and Booth (1995) simply stated that egalitarian attitudes in women may increase tension in the marriage, which could lead to decreased marital quality. This explanation implies tension is the mediator between gender role attitudes and marital quality, but this is simply speculation, since the amount of tension within the relationship was not examined.

Another hypothesis connecting gender role attitudes and relationship outcomes comes from Heyman, Hunt-Martorano, Malik, & Slep (2009) who based their explanation on the tendency for women to have more egalitarian attitudes than men (Bolzendahl & Myers, 2004; Fan & Marini, 2000; Franco, Sabattini, & Crosby, 2004; Hochschild, 1989; Marshall, 2008). They hypothesized that egalitarian attitudes change one's behavioral expectations for themselves and their partner. Because women are more likely to hold egalitarian beliefs, their expectations may change, but actual behavioral change, such as the redistribution of household tasks, may be less likely since men's attitudes are often traditional and they generally hold more power (Heyman, et al., 2009). Again, this justification seems plausible, but it has yet to be comprehensively evaluated.

To varying degrees, most research examining attitudes and relationship outcomes is based on the idea that attitudes impact behavior (Amato & Booth, 1995; Araj, 1977; Calder & Ross, 1976; Davis & Greenstein, 2009). This connection is also supported in theory. Drawing from role theory, attitudes guide behavior because “actors attempt to present themselves in ways that will reinforce their self-conceptions” or self-attitudes (Turner, 2002, p. 387). Similarly, cognitive consistency theories, such as the theory of reasoned action, also hypothesize that individuals strive to create and maintain congruence between their attitudes and behaviors (Abelson & Rosenberg, 1958; Festinger, 1975). In fact, Franco et al. (2004) cite Ajzen and Fishbein’s (1977) expectancy-value model from the theory of reasoned action when discussing the link between attitudes and behavior.

Some have also theorized that it is also important to consider how each spouse’s attitudes may influence their partner’s outcomes. Theoretical writings have suggested that when couples have conflicting gender role expectations, conflict and tension may develop (Cobb et al., 2009; Pasley, Kerpelman, & Guilbert, 2001). Clearly, this relates to the actor-partner interdependence model since it hypothesizes that partners’ agreement about gender role attitudes may impact their relationship outcomes. However, only one study examined the effect of male partners’ attitudes on females’ relationship outcomes (Wilcox & Nock, 2006), and found men’s attitudes did not influence women’s relationship outcomes. This hypothesis should receive more attention in future research and should include both partners’ outcomes to determine if men’s relationship outcomes are influenced by women’s attitudes.

Do Gender Role Attitudes predict Behavior?

Although some researchers make the argument that gender role attitudes are important for understanding relationship outcomes because these attitudes are likely to impact behavior, others

have focused specifically on the connection between gender role attitudes and gender role behaviors. However, because researchers often define gender role behaviors differently, it is important to clearly define them before discussing their relationship with gender role attitudes.

Defining gender role behaviors. In this paper, gender role behaviors are defined as the behavioral tasks performed by men and women, rather than their attitudes about who should perform tasks. Researchers also commonly use the phrase “division of labor” when referring to the performance of activities associated with sex-specialized gender role attitudes (Bartley et al., 2005; Katz-Wise, Priess, & Hyde, 2010). Because “gender is a characteristic of interactive situations and social structures” (Anderson, 2005, p. 586), gender role behavior has been examined in a variety of domains since differences across contexts are likely. For example, Kluwer, Heesink, and Van de Vliert (1996) examined the division of household labor and paid work, whereas others have examined childcare tasks, emotion work, management, and decision-making patterns (Dorfman & Heckert, 1988; Franco et al., 2004; Mederer, 1993; Stevens, Kiger, & Mannon, 2005). The current study focuses specifically on the division of household labor since existing research has found this to be an important area to consider when studying gender role attitudes. Specific research examining the relationship between gender role attitudes and behaviors is now reviewed.

Evidence for a connection between gender role attitudes and behaviors. Existing qualitative and quantitative studies on the relationship between gender role attitudes and behavior provide evidence that gender role attitudes do impact behavior. For instance, Hochschild (1989) concluded that gender role attitudes directly impact the division of household labor among the couple members. Araj (1977) reached a similar conclusion when examining the similarity between gender role attitudes and behavior across provider, housekeeper, and

childcare roles. She concluded that the majority of couples' attitudes about who should perform certain tasks are congruent with the behavior each partner performs. However, when discrepancies did exist, attitudes towards the provider and housekeeper roles were typically more egalitarian than actual behaviors. This supported her hypothesis that attitude change occurs more quickly than behavior change.

Gender differences in the relationship between gender role attitudes and behaviors.

Although Araj (1977) provides a basis for the association between gender role attitudes and behavior, questions remain. Some evidence has led to questions about whether the same relationship exists between gender role attitudes and behaviors for men and women. For instance, in examining the ability to predict behaviors across a variety of domains (cooking, cleaning, and childcare) based on both partner's gender role attitudes, Poortman and Van der Lippe (2009) found women's egalitarian attitudes, but not men's, predicted men's and women's increased contribution to childcare. Additionally, women's egalitarian gender role attitudes were associated with men spending more time cooking, but gender role attitudes were not associated with the number of hours per week devoted to cleaning for men or women. From their study, it appears that there is an actor and partner effect between women's attitudes and behaviors since women's attitudes influenced their behavior as well as their partner's behavior. However, neither of these effects was present for men, suggesting that men's attitudes do not influence behaviors.

A similar trend emerged in an analysis of longitudinal data from the NSFH except the authors hypothesized involvement in feminine household tasks would predict gender role attitudes, rather than behaviors being predicted by attitudes. Kroska and Elman (2009) found that the household labor behavior of women was a statistically significant predictor of their own egalitarian attitudes as well as the egalitarian attitudes of their husbands. On average, wives who

did a higher proportion of feminine household tasks at time 1, such as washing dishes and grocery shopping, held less egalitarian beliefs and had partners with less egalitarian beliefs at time 2. While these two studies suggest women's gender role attitudes are associated with the behaviors of both partners, other studies have reached the opposite conclusion. For example, Pittman and Blanchard (1996) hypothesized women's and men's contribution to housework could be predicted from a number of influences including gender role attitudes. Even when controlling for other predictors, men's traditional attitudes predicted less contribution to housework, but women's attitudes did not predict their own contribution. In other words, women did the majority of the household labor even when they reported egalitarian attitudes.

Numerous studies (Bianchi, Milkie, Sayer, & Robinson, 2000; Coltrane & Ishii-Kuntz, 1992; Cunningham, 2005; Greenstein, 1996) and published literature reviews (Coltrane, 2000) have also found congruency between men's gender role attitudes and behaviors leading Davis and Greenstein (2009) to conclude that men with more traditional gender role attitudes perform less household labor. Kroska (2004) also reviewed existing research and concluded that, concerning household labor distribution, men's gender role attitudes may be a stronger behavior determinant than the attitudes of women. In other words, men's gender role attitudes are more likely than the gender role attitudes of women to generate actor and partner effects on behavioral outcomes. This suggests that because those with traditional gender role attitudes presume housework is women's work, behavioral equality may be dependent upon men's increased involvement, which is more likely when men hold more egalitarian gender role attitudes. In other words, because women already do more of the household labor, the only path to behavioral equality is men's increased involvement. However, it is important to note the existence of some

studies that found no relationship between gender role attitudes and behavior (Coverman, 1985; Deutsch, 1999; Pesquera, 1993).

Although some studies found women's attitudes to be more influential on behavior and other studies found men's attitude more influential, the presence of partner effects is evident. However, despite the existence of these partner effects, there is a surprising shortage of research systematically addressing this influence by simultaneously evaluating the attitudes and behaviors of husbands and wives. This shortage of research could explain the large variation in results, and perhaps the results would be more consistent if future studies employed models, such as the actor-partner interdependence model, that more fully explore actor and partner effects.

In addition to determining the existence of a relationship between gender role attitudes and division of household labor, it is also important to address the possible explanations for this relationship. Extrapolating from Kroska's (2004) conclusion that within a couple the male's gender role attitudes are a more central determinant of both partner's behavior, it may be that women with egalitarian attitudes do the majority of the household labor because of their husbands' refusal to help (Coltrane, 2000). Because of the tendency for men to hold more power within the relationship and have lesser interest in equal division of labor, men's gender role attitudes are more likely to determine couple behavior (Greenstein, 1996; McHale & Crouter, 1992).

Several hypotheses relating to the theory of planned behavior and its concepts of social norms and perceived behavioral control have been suggested to explain instances when gender role attitudes do not predict behavior. For example, some researchers have argued that gender socialization causes individuals to internalize the social norms of their culture (Blaisure & Allen, 1995; Deutsch, 1999). Individuals may avoid acting on gender role attitudes that are not

consistent with these internalized norms. For instance, if an individual perceives that their society prefers traditional gender roles, they may conform their behavior to these perceived expectations, even if their personal attitudes are more egalitarian.

Regarding perceived behavioral control, factors such as income or socioeconomic status may limit the behavioral control of individuals or couples. Deutsch (1999) argued that although studies commonly control for SES, researchers often do not consider how the relationship between gender role attitudes and behaviors may vary by societal privilege. In other words, privileged families, or those with high socioeconomic statuses, have more resources to use, and, thus, more control over their behavior, when attempting to match gender role attitudes and behavior. For example, working class women with traditional attitudes may work for pay because two jobs are an economic necessity for the family, even though they feel that a woman belongs in the home. Clearly, more studies examining the influence of gender role attitudes on division of labor behaviors in conjunction with social norms and perceived behavioral control are needed.

Does Behavior Predict Relationship Outcomes?

Gender role behaviors, such as the household division of labor, are particularly important since researchers and theorists have hypothesized behavior is the construct that connects gender role attitudes and relationship outcomes. Studies supporting the first part of this hypothesis (gender role attitudes are linked to behavior) have already been discussed, but studies should also find evidence that gender role behaviors influence relationship outcomes, such as marital satisfaction. Overall, most of the studies examining these constructs have found that the time both partners spend on housework is positively associated with the female's perception of marital conflict and/or couple disagreement (Shelton & John, 1996; Stohs, 2000; Walker, 1999).

For instance, Orbach and Eyster (1997) examined women's marital outcomes and found actor and partner effects. Women reported higher well-being when they did less housework and childcare, and when their husbands were more involved in traditionally feminine household tasks. This conclusion was also supported by a study including both genders (Kluwer et al., 1996). The time spent on household labor by either partner was not associated with husbands' dissatisfaction. Meanwhile, when women did large amounts of household labor and their husbands' did small amounts of household labor, wives were less satisfied with the division of labor, and this satisfaction was related to women reporting more conflict within the relationship.

Based on results, such as those reported by Kluwer et al. (1996), it appears that the existence of a relationship between men's gender role behaviors and relationship outcomes is questionable. Therefore, household division of labor is more likely to influence women's relationship outcomes than their spouses' outcomes. This conclusion is supported by Coltrane's (2000) literature review on household labor which concluded "more balanced divisions of housework are associated with women perceiving fairness, experiencing less depression, and enjoying higher marital satisfaction" (Coltrane, 2000; p. 1208). However, Coltrane (2000) concluded that division of labor and perceptions of fairness were not related to relationship outcomes of men.

Conclusions about existing literature on behavior and relationship outcomes. In examining the studies on household division of labor behaviors and relationship outcomes, it appears that more egalitarian behaviors lead to healthier relationship outcomes, at least for women. The majority of studies reviewed found that, in traditionally feminine tasks, when women did less work and men did more work, women reported better relationship outcomes including satisfaction with the division of labor (Benin & Agostinelli, 1988; Blair & Johnson,

1992) and marital quality (Ozer, Barnett, Brennan, & Sperling, 1998). It is important to point out the presence of a partner effect in this conclusion, since women's outcomes depended on their behavior as well as their partner's behavior. Because women typically do the majority of these tasks (Hochschild, 1989; Mickelson, Claffey, & Williams, 2006; Robinson & Godbey, 1997; Rogers & Amato, 2000; Stevens, Kiger, & Riley, 2001; Thompson & Walker, 1989), it seems reasonable that a reduction in women's workload, and hence, an increase in men's workload, improves women's outcomes. However, only one study (Marshall, 2008) was found that used an analysis method that appropriately accounts for actor and partner effects simultaneously (e.g. multi-level modeling or pooled regression), and it examined cultural differences in the relationship between gender role attitudes and emotional intimacy. Therefore, it seems premature to draw conclusions about the lack of statistically significant findings for men's relationship outcomes.

Gender Role Attitudes, Behavior, and Relationship Outcomes Considered Together

Although studies show gender role attitudes do affect the outcomes of romantic relationships, this relationship is thought to exist because of individuals' gender role behaviors. Most studies presume gender role attitudes are influential because they impact behavior. However, most of the research reviewed above has addressed only two concepts simultaneously. Fewer studies have examined all three concepts concurrently (McGovern & Meyers, 2002; Mickelson et al., 2006; Rogers & Amato, 2000; Wilcox & Nock, 2006; Stevens et al., 2005; Stevens et al., 2001).

Of the studies that have addressed all three concepts together, researchers have proposed varying models. For instance, some researchers have considered gender role attitudes and division of labor behaviors as independent predictors of relationship outcomes (McGovern &

Meyers, 2002). Behavior has also been examined as the manifestation of one's gender role attitudes and, therefore, the connector between these attitudes and relationship outcomes (Stevens et al., 2001).

The types of research methods used in this area of research also make drawing general conclusions difficult. The most common issue appears to be the overuse of separate analyses for men and women. As previously argued, romantic relationships represent a bi-directional experience that is not fully shown by employing separate models for men and women, even when these models do include partner variables.

However, this literature does provide some important insights about the current topic of interest. Using a sample of married couples, McGovern and Meyers (2002) examined whether each spouse's gender role attitudes and proportion of housework predicted marital adjustment for husbands and wives. Neither spouse's attitudes nor behavior explained a statistically significant amount of variance in wives' adjustment. For husbands, more egalitarian attitudes, but not behaviors, were associated with higher levels of marital adjustment. The authors also examined behavior as a moderator, but found no statistically significant effect. This led the authors to conclude that gender role attitudes and behaviors affect marital outcomes independently.

Stevens et al. (2001) used path analysis to evaluate the connections between a large number of concepts including gender role attitudes, household tasks, and marital satisfaction. This study provides evidence that gender role behavior determines marital satisfaction and is influenced by gender role attitudes. Women's traditional gender ideology was a statistically significant predictor of their household labor behavior. In turn, women's household labor behavior was a statistically significant predictor of marital satisfaction. On average, more egalitarian women performed less household behavior tasks, and women who spent fewer hours

on housework were more satisfied with their relationship. These paths were not statistically significant in a path analysis examining men's gender role attitudes, hours of housework, and marital satisfaction (Stevens et al., 2001).

More evidence suggesting links between gender role attitudes, housework behavior, and marital outcomes comes from Mickelson et al. (2006) who found that gender role attitudes and behaviors were related to men and women's relationship satisfaction and conflict. More specifically, women with more egalitarian attitudes felt that they received less help on emotion tasks from their husbands and perceived the relationship as being more conflictual and less satisfactory. Moreover, compared to men with traditional beliefs, those with egalitarian beliefs reported higher marital satisfaction even though they felt that they received less help with housework than men with more traditional attitudes.

Mickelson et al. (2006) concluded that the impact of the amount of housework completed by one's partner depends on the individual's gender and gender role attitudes. As expected, traditional men and egalitarian women were more satisfied when their partners performed more housework. Overall, the authors concluded that egalitarian men have more positive outcomes than traditional men, but the opposite was found for women. Egalitarian women experience less positive outcomes because women's expectations for their husband's involvement in traditionally female tasks are generally not met. Because Mickelson et al. (2006) only assessed partner effects between gender role attitudes and behaviors, and not actor effects, this study does not provide evidence about the effect of one's own gender role attitudes on their behavior.

Conclusions about existing literature on gender role attitudes, behavior, and outcomes. Clearly, the relationship between gender role attitudes, behaviors, and relationship outcomes is complicated. Therefore, more studies should examine the connections between these

concepts including studies conceptualizing behavior simultaneously as an outcome from attitudes and a determinant of relationship outcomes to determine if this model accurately depicts the relationship between these constructs.

Moreover, all of these studies employed separate analyses for men and women. Even though this analysis method does show potential differences between men and women, it assumes there are gender differences without actually testing for these differences (Kenny & Cook, 1999). Additionally, using separate models limits researchers' ability to examine the statistical significance of gender differences that do emerge. Research within this field may be advanced by the use of methodology that can account for non-independent, dyadic data and compare gender differences.

Evidence for the Influence of Social Norms

Partner effects are important to consider based on the actor-partner interdependence model, but the theory of planned behavior proposes that behavioral control, or perceived behavioral control, and social norms are also important to consider when predicting behavior. To date, the theory of planned behavior has not been empirically applied to research on gender roles. Therefore, no studies simultaneously testing the impact of the three primary predictors from the theory of planned behavior (attitudes, norms, and perceived behavioral control) exist. However, within the existing research, some evidence is available to support these links and provide hypotheses for studies utilizing the theory of planned behavior when researching gender roles.

Social norms for heterosexual couples are likely to play a role in shaping one's behavior (Shekory & Ziv, 2007). Drawing from identity theory, individuals have multiple identities, such as parent, worker, and partner, and the salience of these identities varies based on their commitment to each identity. Identity commitment can vary for a number of reasons,

depending on which roles are supported by society (Stryker & Serpe, 1982). Roles that are considered culturally appropriate, or normative, may be more salient and, therefore, more likely to influence an individual's behavior (Thoits, 1983). In other words, social norms may be associated with gender role behaviors because these norms serve as a source of comparison. People often base their own behavior on society's expectations about what is appropriate behavior.

In addition to theoretical evidence linking social norms to gender role behaviors, previous studies support the link. Researchers have concluded that social norms emphasize the need for women, more than men, to provide support (Barbee et al., 1993) and to take primary responsibility in caring for children or elderly family members (Bianchi et al., 2000; Braithwaite, 1990). Strazdins and Broom (2004) found that women perform more emotion work within families and hypothesized that the gender imbalance is related to perceived social norms. Moreover, others have explained that gender roles at the macro-level (e.g., employment opportunities) have changed quickly, but gender norms at the family-level (e.g., housework) have remained traditional. This may lead to confusion and tends to reduce positive relationship outcomes (Baker et al., 1996). Thus, not only are social norms related to gender role behaviors, but regardless of whether these behaviors are formed from one's gender role attitudes or social norms, they exert a similar influence on romantic relationships.

As researchers have begun to recognize the importance of social norms in relationships, men's conformity to masculine norms has become a popular area of research. These studies examine the traditional male gender norms for behavior and suggest that men who strongly identify with these norms are more likely to exhibit traditional masculine behavior (Thompson & Pleck, 1986). Men's conformity to masculine norms was associated with decreased relationship

satisfaction of both partners, but this effect was larger for the outcomes of women (Burn & Ward, 2005). This finding provides more evidence for the link between social norms and behavior, as well as the relational effect of these norm-based behaviors.

Evidence for the Influence of Perceived Behavioral Control

Despite the fact that norms, by definition, occur at the societal level, there are multiple ways that perceived behavioral control can influence behavior. One explanation for the influence of perceived behavioral control on gender role behaviors relates to the principle of least interest in the relationship (Waller, 1938) from the social exchange perspective (Thibaut & Kelley, 1959). Researchers have found that the partner with fewer economic resources has more interest in the relationship, and, therefore, they have less influence on outcomes and decision-making within the relationship (Lennon & Rosenfield, 1994). Because women typically work less hours for pay and earn less than men per hour (U.S. Census Bureau, 2008), they generally have fewer economic resources. Therefore, based on the principle of least interest in the relationship, women typically have less influence, or control, over behavioral outcomes. To relate this to the area of gender role attitudes, discrepancies in women's gender role attitudes and behavior may be due to the lack of influence they have over their partner's behavior. An individual's own behavior is clearly connected to the behaviors of their partner because, typically, one partner must perform the labor.

Hochschild (1989) reached a similar conclusion. She found that women with egalitarian attitudes are often "forced to choose between equality and marriage" (p. 60). When these women attempted to enforce their egalitarian attitudes, continued conflict with their spouse and no behavioral change ensued. On the other hand, they could adopt traditional gender role behaviors at home and reduce the amount of overt conflict. To summarize, individuals, specifically women,

may feel that they have less perceived behavioral control within their romantic relationship because they lack the power to change their partner's behavior.

Perceived behavioral control may also be limited by practical constraints, such as one's finances or societal privilege, and there is some evidence to support this relationship. For instance, Deutsch (1999) suggested that these constraints may explain instances when attitudes are not congruent with behavior. Hochschild (1989) discussed a wife who preferred to stay at home with the children, but financially, the family needed two incomes. Similarly, Smith and Reid (1986) argued that it is difficult for men and women to put their egalitarian attitudes into action because of societal constraints that limit their control. Although existing literature emphasizes financial constraints, couples may also be constrained by other factors, such as childcare availability and gender differences in income and parental leave (Katz-Wise et al., 2010).

Although studies have yet to apply the theory of planned behavior directly to studies of gender role attitudes and behaviors, the previous research does support the hypothesized pathways from social norms and perceived behavioral control to gender role behaviors. However, research that addresses how gender role attitudes, perceived behavioral control, and social norms impact each other and behavior simultaneously is needed since most of the existing research has failed to consider these concepts in conjunction with each other.

The Influence of Background Factors

Although there are few gender role studies addressing perceived behavioral control and social norms, this is certainly not the issue with the final component of the theory of planned behavior. Researchers typically include a large number of background factors, or control variables, in their analyses when examining gender role attitudes or behaviors. For example,

Barber and Axinn (1998) controlled for mothers' age at marriage, premarital pregnancy status, experiences with divorce and remarriage, parents' educational levels, and religious affiliation. Wilcox and Nock (2006) controlled for age of each partner, education attainment of each partner, length of marriage, presence of young children, number of children, previous marital history, income, ethnicity, and region when examining the association gender role attitudes, behaviors, and marital happiness. Unfortunately, researchers rarely explain why they chose the background factors they used. Instead, it appears that any demographic variables that are available and may be related are added to models. As suggested by the theorists who created the theory of planned behavior, the inclusion of background factors should be made thoughtfully and based on the conclusions of existing literature. In sorting through the numerous background factors that have received attention within the gender roles literature, the consistently strong effect of some background factors makes them of central importance for future studies exploring gender roles.

Vespa (2009) discussed four of the most consistent effects when reviewing findings about family structure, work experience, parenthood, and race. He concluded that marriage is associated with more traditional gender role attitudes for women across a variety of topics including women's employment and the division of household labor, whereas being single or divorced is associated with more egalitarian attitudes. Marriage appears to have a similar effect on men, with married and cohabiting men displaying more traditional behavior (Gupta, 1999), and divorced or separated men displaying more egalitarian attitudes (Moore & Vanneman, 2003).

Studies consistently found more hours of paid work to be associated with more egalitarian attitudes for women, but not for men (Bolzendahl & Myers, 2004; Cunningham, Beutel, Barber, & Thornton, 2005; Fan & Marini, 2000; Moore and Vanneman, 2003). In

explaining the link between women's labor force participation and egalitarian attitudes, Klein (1984) concluded that paid work increased women's economic confidence and provided models for how work and family roles can be effectively balanced when both partners work for pay. Because paid work is commonly associated with power, working women may see themselves, and be seen by others, as more powerful and, hence, more egalitarian than non-working women. However, men's work experiences appear unrelated to their gender role attitudes (Fan & Marini, 2000).

The third background factor that has consistently been shown to influence gender role attitudes and behaviors is parenthood. Vespa (2009) and Davis and Greenstein (2009) found that parenthood is associated with more traditional attitudes. Parents of young children, or those with large families, tend to have more traditional attitudes than parents with older children or only one child (Bolzendahl & Myers, 2004; Fan & Marini, 2000; Katz-Wise et al., 2010; Moors, 2003; Sanchez & Thompson, 1997). In addition to gender role attitudes, parenthood also impacts the amount of time devoted to gender role behaviors. Time-diary research by Craig (2007) has shown the mean hours of paid and unpaid work per week including secondary activities is highest for men and women with children. Because those with traditional attitudes typically believe childcare is the female's responsibility, the averages in Craig's (2007) study suggest that the division of labor is in line with traditional attitudes. Having children increased men's workload by approximately 12 hours, whereas women's workload increased by almost thirty hours. It is also important to note that this traditionalizing effect occurs even in couples who desire a more egalitarian division of childcare (Belsky & Kelly, 1994; Cowan & Cowan, 1992; Hackel & Ruble, 1992).

Within the social science field, numerous studies include race, or ethnicity, as a background factor even when evidence of an effect is minimal. Although Vespa (2009) does highlight race as an important factor to consider, studies examining racial differences in gender role attitudes or behavior have found mixed results. Therefore, general conclusions about race should be interpreted with caution. Hispanics typically hold more traditional attitudes than non-Hispanics (Ciabattari, 2001; Fan & Marini, 2000), whereas African-Americans, especially women, tend to have more egalitarian attitudes (Burgess, 1994; Davis & Greenstein, 2009). Some have argued that apparent racial and ethnic differences are actually a function of social class. Factors such as the unequal distribution of wealth across racial groups and varying levels of female labor force participation may explain the differences in gender role attitudes across races (Davis & Greenstein, 2009; Dugger, 1988).

In conclusion, a large number of background factors have been included in various studies on gender role attitudes or behaviors, but it is important for researchers to carefully consider which factors are necessary for inclusion. Drawing from the theory of planned behavior, even though the inclusion of background factors is necessary and certainly strengthens gender roles research, they should only be included when there is a specific rationale. Based on the existing research it appears that the four factors discussed here are background factors that may influence the relationships between gender role attitudes, behaviors, and relationship outcomes, and, therefore, should be included in future research addressing this constructs.

Final Conclusions about Existing Literature

This literature review has used the theory of planned behavior and the actor-partner interdependence model to explore gender role attitudes, gender role behaviors, and relationship outcomes. Overall, many studies have examined concepts related to gender roles. However,

contradictory findings are common. Nonetheless, some general conclusions are in order. These will be reviewed in the order they were presented: attitudes and satisfaction, attitudes and behavior, behavior and relationship outcomes, partner effects, social norms, perceived behavioral control, and background factors.

Traditional gender role attitudes appear to positively impact women's relationship satisfaction, although the impact of attitudes on satisfaction is more diverse for men. The majority of studies have found egalitarian gender role attitudes to be associated with higher satisfaction. Gender role attitudes appear related to behaviors such as the household division of labor. However, some researchers have argued that the gender role attitudes of males, compared to females, are more influential to the behaviors of both couple members (Kroska, 2004). Regarding the relationship between behaviors and outcomes, more egalitarian behaviors are typically associated with better relationship outcomes. In other words, when women do less traditionally feminine tasks and men do more of these tasks, women report increased satisfaction.

Drawing from the theory of planned behavior social norms, perceived behavioral control, and background factors are also important concepts to consider. Identity theory and previous research elucidate how social norms impact the formation of individuals' attitudes and translate into behaviors. Perceived behavioral control may come from outside or within the relationship. For instance, previous research has pointed out the importance of considering societal issues, such as finances, and relational issues, such as restrictions due to one's partner (Deutsch, 1999; Hochschild, 1989). Both of these occurrences may impact the individual's perceived, and actual, behavioral control over their gender role behaviors. Finally, existing gender role research has often included a great and varied number of background variables, but several factors have been consistently found to exhibit a strong effect on gender role attitudes and behaviors. Specifically,

family composition is important since married individuals and parents typically exhibit more traditional attitudes and behaviors than singles and non-parents, whereas employed individuals, especially women, were found to have more egalitarian attitudes and behaviors than those who do not work for pay.

Throughout the existing research on gender role attitudes and behaviors, findings supporting the presence of partner effects were noted. However, none of the studies examined actor and partner effects in the manner proposed by Kenny and Cook's (1999) actor-partner interdependence model. For instance, Orbuch and Eyster (1997) examined actor and partner effects for women only without examining outcomes for husbands. Others have examined both partners in separate analyses (Mickelson et al., 2006; Stevens et al., 2001; Wilcox & Nock, 2006), which does not allow researchers to assess gender differences. Moreover, most studies have failed to address the potential presence of partner effects. For example, many studies analyzed males and females in separate models without the inclusion of any partner variables. Therefore, although the evidence suggests partner effects are present between husbands' and wives' gender role attitudes, behaviors, and relationship outcomes, it is difficult to draw conclusions about the nature of these effects.

Filling the gap. Clearly, a substantial amount of research about gender roles has already been conducted. However, a number of questions remain. Specifically, future research that fully addresses the theory of planned behavior and the actor-partner interdependence model are needed. Even though existing evidence supports the validity of this theory and model, research has yet to test all of the necessary components simultaneously. Related to testing the actor-partner interdependence model, the statistical methods of many existing studies lack sophistication. Researchers have predominantly examined husbands and wives using separate

regression models. This method fails to accurately examine potential partner effects and limits the comparability of results between models. More studies using statistical methods such as multi-level modeling or structural equation modeling that can appropriately account for dyadic data are needed. Finally, studies have typically limited their focus to how attitudes or behavior separately impact relationships instead of simultaneously recognizing behavior as an outcome of attitudes and determinant of relationship outcomes. Research adopting these suggestions will greatly contribute to the existing knowledge regarding the impact of gender role attitudes and behaviors in romantic relationships.

Based on the limitations in existing research, the current study examined the relationship between gender role attitudes, gender role behaviors, and relationship outcomes by addressing the following research questions. Based on the theory of planned behavior, questions 1-6 examined the relationship between the gender role attitudes, perception of social norms, and perceived behavioral control of each gender and that gender's housework behavior. Questions 7 and 8 examined the impact of each sex's housework behaviors on their own global relationship satisfaction. Questions 9-16 essentially duplicate the previous four questions for husbands and wives (8 questions total) focusing on partner effects rather than actor affects. For example, question 9 examines if wives' and husbands' gender role attitudes influence each others' housework behavior.

Actor effects.

1. Do husbands' gender role attitudes predict their own household division of labor behavior?
2. Do wives' gender role attitudes predict their own household division of labor behavior?

3. Do husbands' perceptions of social norms predict their own household division of labor behavior?
4. Do wives' perceptions of social norms predict their own household division of labor behavior?
5. Does husbands' perceived behavioral control predict their own household division of labor behavior?
6. Does wives' perceived behavioral control predict their own household division of labor behavior?
7. Does husbands' household division of labor behavior predict their own global relationship satisfaction?
8. Does wives' household division of labor behavior predict their own global relationship satisfaction?

Partner effects.

9. Do husbands' gender role attitudes predict their wives' household division of labor behavior?
10. Do wives' gender role attitudes predict their husbands' household division of labor behavior?
11. Do husbands' perceptions of social norms predict their wives' household division of labor behavior?
12. Do wives' perceptions of social norms predict their husbands' household division of labor behavior?
13. Does husbands' perceived behavioral control predict their wives' household division of labor behavior?

14. Does wives' perceived behavioral control predict their husbands' household division of labor behavior?
15. Does husbands' household division of labor behavior predict their wives' global relationship satisfaction?
16. Does wives' household division of labor predict their husbands' global relationship satisfaction?

CHAPTER 3

DESIGN AND METHODS

Based on the existing research, it appears that gender role attitudes and gender role behaviors are related and potentially influence relationship outcomes. However, research has yet to fully explore these connections. Specifically, this study hypothesized that gender role attitudes effect relationship outcomes because of their influence on gender role behaviors, such as housework. Also, the presence of partner effects has received limited attention and constructs from the theory of planned behavior, including social norms and perceived behavioral control, have not been investigated in relation to gender roles. Therefore, the current study collected dyadic data from married couples using an online survey to address their gender role attitudes, perceptions of social norms, perceived behavioral control, and household division of labor behavior. Employing structural equation modeling, the current study explores how these constructs are connected to relationship satisfaction. In this section, details about the sample and how they were recruited will be discussed. Next, the measures that were collected from participants will be explained. Finally, the statistical analyses employed will be reviewed.

Participants

The sample included 86 heterosexual, married couples with both spouses between the ages of 20 and 35 ($M = 27.69$, $SD = 2.92$ and $M = 26.65$, $SD = 3.04$ for husbands and wives, respectively). This age range was chosen to reduce potential cohort effects. Additionally, this age range includes individuals marrying within seven years of the current average age of first-marriage for men and women (Cherlin, 2010), and research has suggested that these early years

of marriage are key to relationship success (Huston, 2009). The sample was predominantly Caucasian (82.6% of husbands, $n = 71$, and 84.9% of wives, $n = 73$). Participants' educational attainment ranged from a high school diploma or equivalent to a graduate or professional degree, but overall, the sample was highly educated. The majority of husbands held at least a four-year college degree (75.6%, $n = 66$) and the majority of wives held a professional degree (58.1%, $n = 50$). The mean annual household income range was from \$45,000 to \$59,999 with couples' responses varying from less than \$10,000 (2.3%, $n = 2$) to over \$100,000 (20.9%, $n = 18$). Participants' length of marriage varied from two months to over 10 years ($M = 33.79$ months, $SD = 26.74$). The majority of couples had been married for less than two years. Twenty-one couples (24.7%) reported a marriage length of less than one year, and another 24 couples (28.2%) had been married between one and two years. Twenty-six couples (30.6%) reported a length of marriage between two and five years, and 14 couples (16.5%) had been married for more than five years. Most participating couples had no children ($n = 70$, 81.4%). Nine couples (10.5%) reported having one child, four couples had two children (4.7%), two couples had three children (2.3%), and one couple had four children (1.2%).

Recruitment. Information about the project was distributed using internet sources such as local and national online discussion boards, electronic mailing list servers, and online blog posts. The current study also employed snowball sampling by encouraging participants to tell others about the online survey. Announcements informed individuals that by visiting the website they could also enter into a drawing to receive one of four \$25 gift cards. Originally, a sample size of 100 couples (i.e. 200 individuals) was desired. This sample size was chosen based on Kline's (1998) recommendation that to achieve an estimated power level of .80 and the ability to detect medium effect sizes ($f^2 = .15$), a sample should include at least 10 participants for every

parameter included in the model. However, after four months of recruitment and online data collection, analyses proceeded with slightly fewer couples ($n = 86$ couples). Statistical power to detect significant differences was a primary concern due to the sample size. Bootstrapping analyses were employed to diminish this concern because bootstrapping draws multiple samples with replacement from the original sample allowing increased confidence in the results (Hoyle, 1999).

Procedure

Participants completed an online survey about a variety of topics, including: (a) their gender role attitudes, (b) their perception of social norms, (c) their perceived behavioral control over the amount of housework they perform, (d) their household division of labor behavior and the behavior of their partner, and (e) their global relationship satisfaction. Participants also supplied their birthdate and their partner's birthdate to allow couples to be matched. Upon completion of the survey, participants were asked to inform their spouse of the survey and/or provide their spouse's email address in order to notify the spouse of the survey. If the spouse's email address was supplied, the spouse was sent an email encouraging his/her participation. Spouse's were sent a follow-up email if they did not complete the survey within two weeks of the original email. Husbands and wives were given the same questionnaire to complete individually and partners were asked to refrain from discussing their answers until both partners completed the survey.

Measures

Gender role attitudes. Gender role attitudes were measured using the Traditional-Egalitarian Sex Role Scale (Larson & Long, 1988; TESR). This measure is a 20-item, self-report scale (see Appendix A) examining individuals' attitudes toward egalitarian and traditional

gender roles on a 5-point scale ranging from “disagree strongly” to “agree strongly.” This measure was developed as an improvement to existing measures that had not changed in several decades. It is thought to more adequately describe the current state of the population’s gender role attitudes (Larson & Long, 1988). The TESR contains 8 items that are worded to reflect an egalitarian view and 12 items that are worded to reflect a traditional view. These 20 items are reverse scored so that higher scores indicate more egalitarian attitudes, and an overall mean score was computed. These 20 items were chosen based on the correlation item-analyses ($r > .47$) from 75 potential questions that were completed by a sample of 104 college undergraduates (Larson & Long, 1988). Larson and Long (1988) found that the measure’s construct validity was supported by its strong correlation with Brogan and Kutner’s (1976) Sex Role Orientation scale. For the current sample, the measure had high internal consistency ($\alpha = .90$). Moreover this reliability value is similar to the original corrected split-half reliability value of .91 reported by Larson and Long (1988).

Social norms. The TESR (Larson & Long, 1988) was adapted to measure perceived social norms (see Appendix B). Instructions were reworded so that participants marked responses based on their perception of how society would answer. Although the TESR has not been used in this manner, this method of adapting an existing attitudinal measure is relatively common in research on the theory of reasoned action and planned behavior (Fishbein & Ajzen, 2010). Additionally, items were analyzed by at least three experts to establish face validity for using the measure in this manner, and in the current study its internal consistency was high ($\alpha = .92$).

Perceived behavioral control. Following previous studies examining perceived behavioral control over specific behaviors (Conner, Lawton, Parker, Chorlton, Manstead, &

Stradling, 2007; Natan et al., 2010), perceived behavioral control was assessed using a single item, “How much control do you have over the amount of housework that you complete each week?” Participants responded on a seven-point scale ranging from “complete control” to “no control.”

Household division of labor behavior. Housework was measured by participants’ responses regarding the frequency of completing thirteen tasks using an adapted version of the household labor measure from the National Survey of Families and Households (Sweet et al., 1988). Although previous research has asked participants to estimate the number of hours spent on each task, the current study collected task counts by asking participants if they performed each task in the last month. If participants stated that they did perform the task, follow-up questions were asked to assess how often they performed the behavior in the last day, week, and month. Because it is difficult to determine if the scaling of task counts is equivalent across categories (i.e. is performing a laundry task “equal” to performing a vehicle maintenance task?), standardized z-scores for the frequency that each task occurred within the past month were computed and summed to assess the number of household tasks performed by each partner within the last month. Information on the measure’s validity was unavailable. Therefore, to establish the appropriateness of using this measure to evaluate household division of labor behavior, experts evaluated the original eight item measure for face validity. Five additional items were then added to the original eight items to make the measure more inclusive (see Appendix C). Because this measure is a summation of standardized task counts, it is not possible to examine its internal consistency. Participants were asked to report on their behaviors as well as their partner’s behaviors in order to compare partners’ reports and determine the amount of consensus.

Relationship satisfaction. Global relationship satisfaction was assessed using the Relationship Assessment Scale (Hendrick, 1988; RAS). The measure includes seven items rated on a 3-point scale in the current study. Two of these items are reverse scored so that higher scores signify greater satisfaction within the relationship (see Appendix D). The RAS was chosen because it measures global relationship satisfaction and, therefore, captures each participant's affective reaction to the marriage without referencing the specific events that occur within the marriage since these events may be captured by the behavioral measures included in this study. Hendrick (1988) found this scale to be highly correlated with Spanier's (1976) Dyadic Adjustment Scale ($r = .80$), which supports the construct validity of the measure. For the current sample, the measure had adequate internal consistency ($\alpha = .86$). This reliability value is comparable to that found in previous studies using this measure (Hendrick, 1988; Vaughn & Baier, 1999).

Statistical Analyses

Based on the theory of planned behavior and the actor-partner interdependence model, pathways were hypothesized between gender role attitudes, social norms, perceived behavioral control, gender role behaviors, and relationship satisfaction were created (see Figure 4). Structural equation modeling (SEM) using the Amos statistical program (Arbuckle, 2006) was used to obtain maximum likelihood estimates and conduct bootstrapping analyses for the tested model.

The actor-partner interdependence model emphasizes the importance of interdependence within relationships such as marriage (Kenny & Cook, 1999). Although there are various ways to statistically examine this model, path analysis was used in the current study because it allows the dyad to be the unit of analysis by examining actor and partner effects within the same model

(Cook & Kenny, 2006). To distinguish between actor and partner hypothesized effects, partner paths are shown with a dashed line.

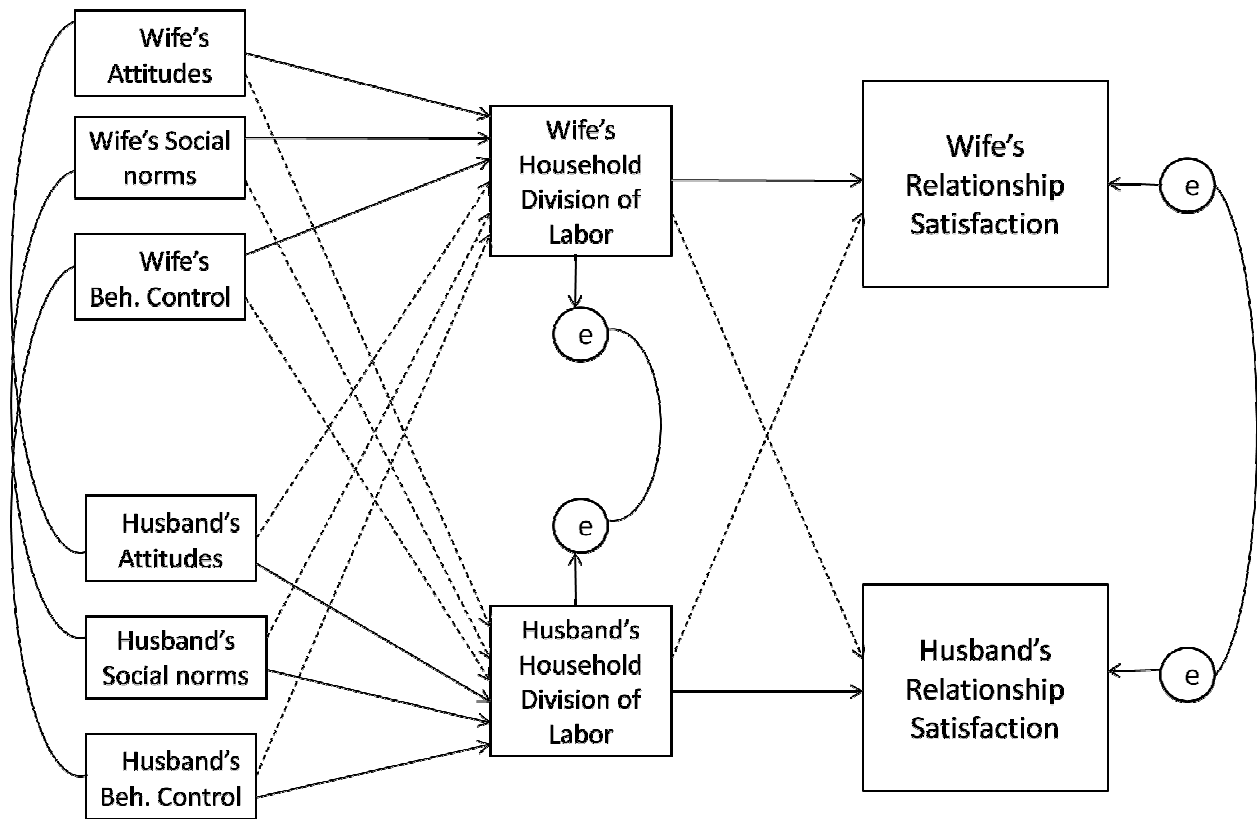


Figure 4. Model to be tested.

Goodness-of-fit was assessed based on multiple fit indices, including the chi-square statistic, comparative fit index (CFI), and root mean square error of approximation (RMSEA). RMSEA values less than .08 (Browne & Cudeck, 1993) and CFI values greater than .93 (Byrne, 1993) are thought to indicate a reasonable model fit. Additionally, the chi-square statistic divided by the model's degrees of freedom was examined as an estimate of the overall model fit. Values less than 3.0 suggest a good model fit (Carmines & McIver, 1981).

CHAPTER 4

RESULTS

The current study of married couples within the first 10 years of marriage included two main components. First, the study applied the theory of planned behavior to gender role behaviors, specifically household tasks, within marital relationships and determined the influence of these factors on relationship satisfaction within the current sample. Secondly, interdependence between romantic partners was examined by analyzing actor and partner effects simultaneously. In the following section, the univariate and correlation analyses are presented. Particular attention is then given to examining the types and amount of housework performed by both spouses and the amount of consensus between husbands' and wives' reports. Subsequently, the findings from the path analysis, as they relate to the study's research questions, are examined.

Univariate Analyses

Univariate statistics were analyzed for all continuous variables included in the study. For ease of interpretation, univariates are reported for the nonstandardized household task scores, although standardized scores were used for the path analysis. The means, standard deviations, skewness coefficients, and kurtosis coefficients for each measure are reported for both husbands and wives in Table 1. Univariates are also shown for the number of children with the household because it was included as a control variable in the path analysis. Paired-samples t-tests were used to determine if the differences between husbands' and wives' mean values were statistically significant (see Table 2).

Recall from the previous description of the measures used in the current study that mean scores were computed for gender role attitudes and each spouse's perceptions of social norms. After reverse coding items, potential mean scores can range from 1-5 signifying strongly traditional attitudes to strongly egalitarian attitudes, respectively. The average mean score for husbands' and wives' gender role attitudes was 3.73 ($SD = .63$) and 4.12 ($SD = .61$), respectively. Husbands' and wives' average mean score for their perceptions of gender role social norms was 3.04 ($SD = .65$) and 3.15 ($SD = .73$), respectively. The paired-samples t-tests revealed the difference between husbands' and wives' mean gender role attitudes ($t = -6.99$, $df = 85$, $p < .01$) was statistically significant, but husbands' and wives' perceptions of social norms were similar ($t = -1.34$, $df = 85$, $p = .18$).

In general, both sexes perceived that they had high behavioral control over the amount of housework they performed ($M = 5.40$, $SD = 1.31$ and $M = 5.63$, $SD = 1.49$ for husbands and wives, respectively). Husbands and wives reported performing an average of 110.02 ($SD = 62.42$) and 191.45 ($SD = 355.73$), respectively, behavioral tasks in an average month. Because of the large variation in housework scores, this difference was not statistically significant ($t = -.86$, $df = 85$, $p = .39$).

As explained in the previous chapter, mean scores ranging from 1-3 were used to measure marital satisfaction, and on average, both husbands and wives in the current sample were very satisfied with their marriage ($M = 2.76$, $SD = .24$ and $M = 2.68$, $SD = .37$, respectively). However, the difference between husbands' and wives' marital satisfaction was statistically significant ($t = 2.13$, $df = 85$, $p < .05$) with husbands reporting higher satisfaction levels, on average, than wives.

Table 1

Univariate Statistics for Variables in the Path Model

	Mean	Std. Dev.	Skewness	Kurtosis
^a H gender role attitudes	3.73	.63	-.19	-.36
^b W gender role attitudes	4.12	.61	-.70	.02
H social norms	3.04	.65	.16	-.21
W social norms	3.15	.73	.01	-.74
H perceived behavioral control	5.40	1.31	-.58	-.35
W perceived behavioral control	5.63	1.49	-1.13	.76
H housework (nonstandardized)	110.02	62.52	1.60	3.25
W housework (nonstandardized)	191.45	355.73	5.86	37.36
H housework (standardized)	-.71	1.85	2.66	8.39
W housework (standardized)	-.23	4.69	5.69	35.34
H relationship satisfaction	2.76	.24	-2.14	5.20
W relationship satisfaction	2.68	.37	-2.69	8.11
Number of Children	.31	.77	2.86	8.46

Note. ^aH = Husband. ^bW = Wife.

Table 2

Paired-Samples T-Test Analyses Examining Differences between Husbands and Wives

	Mean Difference	SD	t(df)	p-value
Gender role attitudes	-.38	.51	-6.99 (85)	< .01
Social norms	-.11	.78	-1.34 (85)	.18
Perceived behavioral control	-.23	2.00	-1.08 (85)	.28
Housework (standardized)	-.48	5.12	-.86 (85)	.39
Relationship satisfaction	.07	.32	2.13 (85)	.04

One variable, wives' housework, had a skewness value larger than normally deemed acceptable, and several variables (i.e., husbands' and wives' housework, and husbands' and wives' satisfaction) had kurtosis values that were larger than anticipated. High skewness and kurtosis values violate the assumption of normality associated with most statistical tests, including those used in the current study. Researchers have suggested multiple ways to remedy these issues including nonparametric statistical analyses such as bootstrapping. Because these tests do not make assumptions about the distribution of the data, violations to the assumption of normality are not a major threat to the results of the analyses (Efron & Tibshirani, 1993). Thus,

the bootstrapping method can be employed to address large skewness and kurtosis values. This supports the previously made decision to use the bootstrapping method in the current study.

Correlation Analyses

The correlation matrix for all variables analyzed in the path analysis are presented in Table 3. Gender role attitudes, perceptions of social norms, and relationship satisfaction were positively correlated for husbands and wives reports ($r = .66, .36, \text{ and } .53$, respectively, $p < .01$). Thus, overall, husbands and wives had similar attitudes about the roles of men and women, perceptions of social norms, and their levels of relationship satisfaction. The correlation analyses also supported several pathways identified in the research questions. These relate to actor and partner effects, respectively.

Table 3

Pearson Correlation Coefficients of Path Model Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. ^a H gender role Attitudes	1.00										
2. H social norms	-.10	1.00									
3. H perceived behavioral control	.03	-.07	1.00								
4. H housework (standardized)	-.27**	.06	.03	1.00							
5. H satisfaction	.12	.20	.25*	-.02	1.00						
6. ^b W gender role Attitudes	.66**	-.16	-.17	-.23*	-.04	1.00					
7. W social norms	.08	.36**	.09	-.06	.07	-.17	1.00				
8. W perceived behavioral control	-.03	.06	-.01	.15	.11	-.03	.09	1.00			
9. W housework (standardized)	-.14	.07	-.10	-.05	-.16	.09	-.25*	.07	1.00		
10. W satisfaction	.06	.20	.03	-.01	.53**	-.03	.08	.12	-.15	1.00	
11. Num. of children	-.03	.14	-.09	.12	-.25*	-.01	.05	-.04	.48**	-.33**	1.00

Note. ^aH = Husbands. ^bW = Wives.

* $p < .05$. ** $p < .01$.

Husbands' gender role attitudes were negatively associated with the amount of housework husbands performed ($r = -.27, p < .01$ and $r = -.23, p < .05$). Thus, husbands with more egalitarian attitudes reported performing fewer household tasks. This negative association is in the opposite direction hypothesized by the theory of planned behavior, which assumes that more egalitarian gender role attitudes would be associated with husbands performing more household tasks. However, wives' perceptions of egalitarian social norms was associated with wives' performing fewer household tasks ($r = -.25, p < .05$). A statistically significant effect was also seen in the correlations for variables from the theory of planned behavior and husbands' relationship satisfaction. On average, husbands were more satisfied with their marital relationship when they perceived themselves as having high levels of control over the amount of housework they perform ($r = .25, p < .05$). Only one statistically significant correlation supported the presence of a partner effect. Similar to the statistically significant correlation suggesting an actor effect between husbands' gender role attitudes and housework, husbands reported performing more household tasks when their wives held more traditional gender role attitudes ($r = -.23, p < .05$).

Correlational analysis was also conducted to determine the association between all of the constructs included in the model and the number of children living with the couple since this variable was used as a control in the path analysis model. This variable was negatively associated with husbands' and wives' marital satisfaction, such that men and women with children reported lower levels of satisfaction than those without children ($r = -.25, p < .05$ and $r = -.33, p < .01$, respectively). The association between the number of children and the number of household tasks wives reported was also statistically significant. Women with more children reported performing more housework ($r = .48, p < .01$).

An Examination of Housework

Because few studies have examined household tasks as behavioral counts and collected actor and partner reports from both spouses, the current study uniquely provides detailed information about the occurrence of these tasks. Thus, this section details housework performed by both spouses and the agreement between spouses.

Performance of behavioral task categories. As shown in Table 4, the majority of husbands reported performing all thirteen behavioral tasks at least once in an average month. In fact, over 80% of husbands responded affirmatively for all of the tasks except cleaning bathrooms (55.8%, $n = 48$) and performing yard work (65.1%, $n = 56$). For most tasks, wives consistently perceived their husbands did fewer task categories than husbands reported. However, for many behaviors, this discrepancy was fairly small. The divergence was largest for cleaning and straightening up the house (discrepancy percentages of 22.1% and 24.4%, respectively). Chi-square analysis was planned to determine if these associations between husbands' and wives' reports were statistically significant, but many cells contained values that were too small to permit proper interpretation of the analyses (Green & Salkind, 2008).

Table 4

Percentage and Number of Spouses Reporting Behavior Occurrence in an Average Month

Behavioral task	Husbands' behavior		Wives' behavior	
	Self report	Partner report	Self report	Partner report
Meals	80.2 (69)	73.3 (63)	91.9 (79)	90.7 (78)
Dishes	86.0 (74)	80.2 (69)	95.3 (82)	94.2 (81)
Bathroom cleaning	55.8 (48)	44.2 (38)	88.4 (76)	91.9 (79)
House cleaning	87.2 (75)	65.1 (56)	96.5 (83)	95.3 (82)
Straightening up	89.5 (77)	65.1 (56)	97.7 (84)	91.9 (79)
Yard work	65.1 (56)	59.3 (51)	23.3 (20)	23.3 (20)
Shopping	81.4 (70)	77.9 (67)	98.8 (85)	93.0 (80)
Laundry	82.6 (71)	74.4 (64)	93.0 (80)	90.7 (78)
Money management	83.7 (72)	77.9 (67)	72.1 (62)	65.1 (56)
Vehicle maintenance	87.2 (75)	82.6 (71)	41.9 (36)	36.0 (31)
House maintenance	84.9 (73)	73.3 (63)	39.4 (34)	38.4 (33)
Errands	93.0 (80)	76.7 (66)	95.3 (82)	90.7 (78)
Trash	97.7 (84)	93.0 (80)	62.8 (54)	57.0 (49)

A different trend was found for wives' performance of household tasks. Whereas the majority of males reported performing all tasks at least once within the average month (smallest percentage was 55.8% for bathroom cleaning), wives' reports of their own behavior were more divided into behaviors performed at least once a month by a very high rate of women and behaviors performed by less than half of the women. For instance, eight of the thirteen behaviors were reportedly performed by over 88% of women respondents, but three behaviors were performed by a minority of the women: yard work (23.3%), vehicle maintenance (41.9%), and house maintenance (39.4%), respectively). Similar to husbands' and wives' agreement on which tasks husbands performed, overall, differences between husbands' and wives' reports of wives' behaviors were fairly small. When differences did emerge, husbands typically reported their wives performed a smaller number of behavioral task categories than wives felt they performed. However, self and partner reports were closer for wives' behavior than husbands' behavior. The largest discrepancy for wives' behavior was found for money management tasks where the

percentage of husbands who thought their wife engaged in these tasks at least once in an average month was 7% less than wives' reported.

Based on these results, it appears that in the current sample husbands perform a broader range of household task behaviors in an average month since, overall, the percentages for men are fairly high, whereas the percentages for women are very high for certain categories, but notably low for other categories. Although this analysis provides insight into which tasks both partners perceived each other engages in at least once in the average month, it does not shed light on the number of times each task is performed.

Occurrence of behavioral tasks by category. Some questions allowed an examination of how often each task was performed (see Table 5). Overall, husbands and wives, on average, both reported that they perform tasks related to meal preparation most often followed by cleaning up after meals, and straightening up around the house. Bathroom cleaning, vehicle maintenance, and yard work were the tasks that husbands performed the least in an average month according to their self-report. In a slightly different order, results for wives' self-reported behaviors were similar to husbands' self-reports. Wives also described performing these three behaviors the least often.

Table 5

Mean and Standard Deviation for Frequency Behavior Performance in an Average Month

Behavioral task	Husbands' behavior		Wives' behavior	
	Self report	Partner report	Self report	Partner report
Meals	22.76 (21.38) ^a	22.09 (45.49)	33.29 (25.13) ^a	29.68 (44.26)
Dishes	20.62 (14.78)	17.91 (19.19)	24.91 (20.32) ^k	20.02 (12.46) ^k
Bathroom cleaning	2.37 (3.84) ^{bh}	1.35 (2.17) ^h	4.28 (5.99) ^b	4.41 (5.84)
House cleaning	6.73 (10.96) ^{ci}	3.97 (6.86) ⁱ	10.04 (10.19) ^{cl}	7.25 (7.58) ^l
Straightening up	13.15 (11.52) ^{dj}	9.82 (11.17) ^j	21.37 (11.31) ^{dm}	16.52 (13.22) ^m
Yard work	3.54 (5.36) ^e	6.88(26.38)	1.05 (2.29) ^e	.73 (1.76)
Shopping	5.59 (8.46)	7.56 (27.61)	12.47 (36.78)	6.40 (8.06)
Laundry	6.33 (7.63)	11.92 (33.40)	16.07 (47.19)	7.13 (6.73)
Money management	8.13 (10.17)	7.28 (9.30)	9.57 (28.09)	4.40 (6.58)
Vehicle maintenance	2.58 (4.51) ^f	2.69 (5.44)	.63 (1.09) ^f	.43 (1.36)
House maintenance	3.66 (10.57)	2.92 (7.45)	4.79 (39.00)	.67 (1.52)
Errands	5.67 (5.72)	5.48 (8.85)	15.77 (77.36)	5.98 (6.46)
Trash	9.81 (7.95) ^g	10.61 (10.77)	5.70 (12.50) ^g	3.24 (5.26)

Note. Differences that were statistically significant at the $p < .05$ are indicated with matching superscript letters.

These findings show that when husbands' and wives' reports of their own behavior are ranked, both sexes perform the same behaviors most and least often. However, when examining the mean values between husbands' and wives' reports, sex differences did emerge. For example, although both sexes reported cleaning bathroom(s) less often than many of the other tasks they completed, on average, wives reported cleaning the bathroom(s) almost twice as often as men ($M = 4.28$, $SD = 5.99$ and $M = 2.37$, $SD = 3.84$, respectively). Paired-samples t-tests were conducted to determine if the differences between husbands' and wives' self-reported task counts for each category were statistically significant. Seven differences were statistically significant. Four of these task categories are considered traditionally female tasks, and, in the current sample, women performed these tasks, on average, more often than men in an average month (meal preparation, $t = -2.84$, $df = 84$, $p < .01$; bathroom cleaning, $t = -2.31$, $df = 81$, $p < .05$; house cleaning, $t = -2.06$, $df = 85$, $p < .05$; and straightening up, $t = -4.56$, $df = 85$, $p < .01$). The other three task categories,

yard work, vehicle maintenance, and taking out the trash, are considered traditionally male tasks, and they were performed more frequently by husbands (yard work, $t = 4.08$, $df = 82$, $p < .01$; vehicle maintenance, $t = 4.03$, $df = 84$, $p < .01$; and taking out the trash $t = 2.48$, $df = 82$, $p < .05$).

In addition to comparing husbands' and wives' means for their own behavior, across the sample self and partner reports were also examined for congruency. As noted above regarding partners' assessments of whether the other spouse performed each task category at least once in the past month, overall, partners typically underestimated, at least slightly, the number of tasks their spouse reported performing. There were several exceptions to this pattern, especially for wives' reports of husbands' behavior. On average, compared to husbands' reports of their own household task completion, wives actually estimated that husbands perform a larger number of several tasks including yard work, grocery shopping, laundry, and trash removal. Husbands, on the other hand, did not estimate a higher completion rate for wives' tasks than wives' reported for themselves in any category.

To determine which differences between self and partner reports were statistically significant, paired-samples t-tests were conducted. Only a few differences were statistically significant. Regarding husbands' behavior, wives' estimates were lower for three tasks (bathroom cleaning, $t = 2.64$, $df = 82$, $p < .01$; house cleaning, $t = 2.22$, $df = 85$, $p < .05$; and straightening up, $t = 2.63$, $df = 84$, $p < .01$). Regarding wives' behavior, husbands estimated that wives performed fewer tasks than wives believed they performed for three tasks (dishes/cleaning after meals, $t = 2.20$, $df = 84$, $p < .05$; house cleaning, $t = 2.28$, $df = 84$, $p < .05$; and straightening up, $t = 2.84$, $df = 84$, $p < .01$).

Path Analysis

Structural equation modeling with Amos software (Arbuckle, 2006) was used to obtain maximum likelihood estimates in order to test the research questions after controlling for the number of children within the household. Following Stevens et al. (2005), the current study controlled for the number of children within the family because existing research has shown that gender role behaviors generally become more traditional (Goldberg & Perry-Jenkins, 2004) and relationship satisfaction decreases (Belsky & Kelley, 1994; Belsky & Pensky, 1988) after the birth of the first child.

Annual household income was also included as a control predictor, but it was trimmed from the results presented because none of the paths are statistically significant, which resulted in a poorer model fit. Although a considerable amount of research has examined racial and ethnic differences in gender role attitudes and behaviors, the findings are varied with no clear differences emerging. Additionally, the current sample was rather homogenous in regards to ethnicity since over 80% of the current sample was Caucasian. Therefore, there was no compelling reason to control for race in this study.

Figure 5 shows the standardized path coefficients for the model predicting husbands' and wives' relationship satisfaction. Although not shown in the figure, paths were estimated for the effect of number of children on husbands' and wives' division of household labor and relationship satisfaction. Bold lines are used to indicate significant paths at the $p < .05$ level. As found in the correlation analysis, husbands' and wives' gender role attitudes ($r = .66, p < .01$) and their perceptions of social norms ($r = .36, p < .01$) were positively correlated with each other. Husbands' and wives' perceived behavioral control were not correlated ($r = -.01, p = .90$). Significant actor and partner effects were found for wives' household labor. There was a

statistically significant association between husbands' and wives' gender role attitudes and the amount of household labor performed by wives ($\beta = -.26, p < .05$ and $\beta = .25, p < .05$, respectively). As expected, wives performed fewer household tasks when their husbands reported more egalitarian gender role attitudes. Interestingly, the opposite effect was found for wives' gender role attitudes. When wives held more egalitarian attitudes, they reported performing more household tasks. However, wives' perceptions of social norms were negatively associated with their housework behavior ($\beta = -.26, p < .01$). Wives performed fewer household tasks when they perceived societal norms to be more egalitarian. Conversely, neither actor nor partner effects were statistically significant between husbands' and wives' perceived behavioral control and the amount of household tasks completed by either partner. Furthermore, husbands' and wives' housework was not associated with either partner's relationship satisfaction.

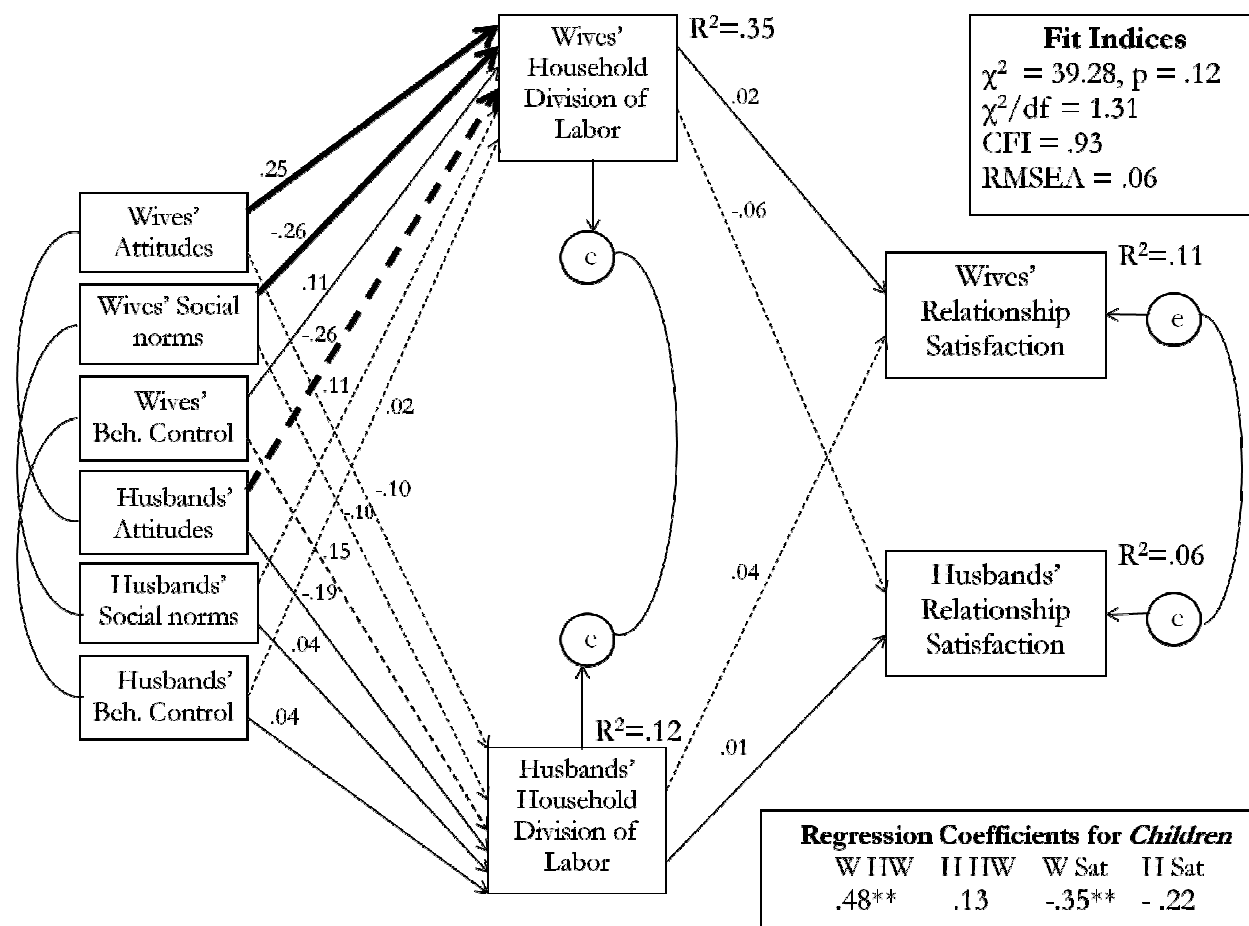


Figure 5. Results from the path analysis with standardized coefficients.

Number of children, the control variable included in the path analysis, was positively associated with the amount of housework performed by wives ($\beta = .48, p < .01$) and negatively associated with wives' marital satisfaction ($\beta = -.35, p < .01$). Thus, wives were less satisfied and reported performing more housework when there were more children within the household. Interestingly, the number of children within the household was not associated with husbands' housework behavior or marital satisfaction.

The squared multiple correlations for division of household labor were .12 and .35 for husbands and wives, respectively. The squared multiple correlations were notably smaller for husbands' and wives' marital satisfaction, .11 and .06, respectively. Concerning the model fit,

the model has a chi-square statistic of 39.28 ($df = 30$, $p = .12$), χ^2/df ratio of 1.31, CFI of .93, and RMSEA of .06. All goodness-of-fit statistics were within the acceptable range. Therefore, it appears that, overall, the model fits the data reasonably well.

Next, a bootstrapping analysis was employed because of the sample size and the high skewness and kurtosis values of several variables. Generally, more confidence can be placed in results from the bootstrapping analysis as bootstrapping indicates the model is stable and reliable (Miles, Shevlin, & McGhee, 1999). The bootstrap method essentially uses the sample to represent the population (Hoyle, 1999). Two thousand samples were drawn, with replacement, from this pseudo-population. The path analysis was then conducted for each sample. The results from each sample are then averaged, standard errors are calculated, and confidence intervals are created (Hoyle, 1999). Thus, instead of providing an estimated regression coefficient, the statistic program, AMOS, provides a 90% confidence interval and related p-value evaluating the regression coefficients from the path analysis based on the calculated confidence interval. This probability level is commonly employed for the bootstrapping analyses (Arbuckle, 2006).

For the bootstrap method, goodness-of-fit was assessed using the Bollen-Stine bootstrap statistic. The statistic was not significant ($p = .43$), indicating the current model fit the data well. Bias-corrected confidence intervals were computed to determine the approximate range of the regression coefficients. Figure 6 shows the paths supported by the bootstrapping analysis. As found in the original path analysis, both husbands' and wives' gender role attitudes and wives' perceptions of social norms were associated with the housework performed by wives. The direction of these associations was also supported by the bootstrapping analysis. Wives with more egalitarian gender role attitudes actually reported performing more household tasks (90% CI [.25, 4.31], $p < .05$), but when wives viewed societal norms to be more egalitarian, they

reported performing less housework (90% CI [-3.21, -.63], $p < .01$). The partner effect between husbands' gender role attitudes and wives' housework was also statistically significant. Wives performed less housework when husbands held more egalitarian gender role attitudes (90% CI [-4.43, -.16], $p < .05$).

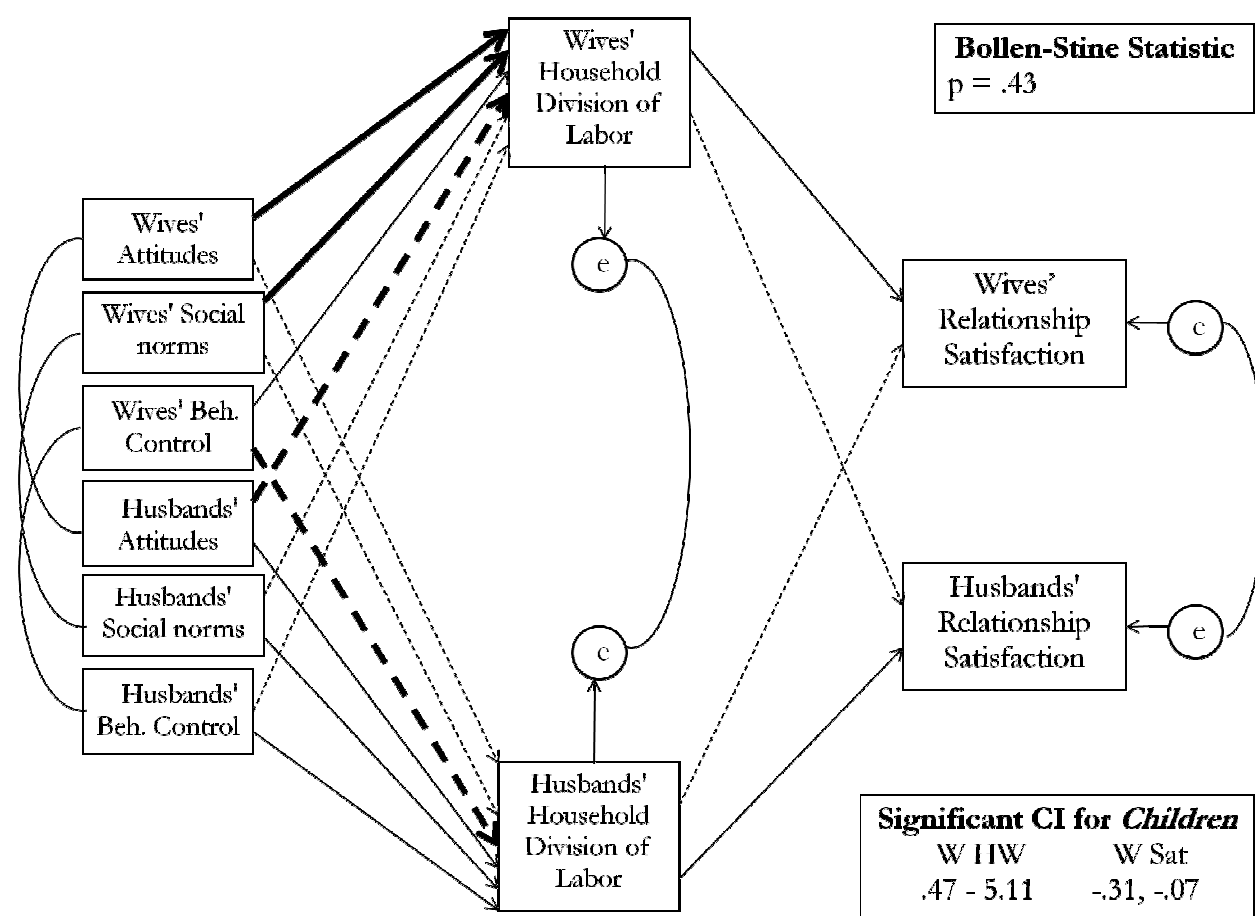


Figure 6. Results from the bootstrapping analysis.

The results also suggest the presence of a statistically significant path that was not found in the path analysis employing maximum likelihood estimation. A partner effect was identified for wives' perceived behavioral control on the amount of housework performed by husbands (90% CI [.03, .35], $p < .05$). On average, when women felt a high level of behavioral control regarding the number of household tasks they complete in an average month, their husbands

reported performing a larger number of household tasks. The bootstrapping method also supported the statistically significant paths found in the path analysis related to the number of children within the household. In families with more children, wives reported performing more household tasks (90% CI [.47, 5.11], $p < .01$). Moreover, these wives were also less satisfied with their marital relationship (90% CI [-.31, -.07], $p < .01$).

CHAPTER 5

DISCUSSION

As seen in the previous chapter, analyses included a structural equation model and an examination of each gender's self and partner reports for housework completion. In this chapter, these results, and their meaning, are discussed in more detail. The study's strengths and limitations are then examined and, concurrently, implications for future research are provided.

Summary of Path Analysis Results

Results from the structural equation model provide limited support for the proposed model. Only four paths reached statistical significance. Actor effects between wives' gender role attitudes and social norms and the number of household tasks they perform were present. Partner effects with husbands' gender role attitudes influencing wives' housework behavior were also present in the model. The parameter estimates for these three effects were almost identical. This suggests that wives' gender role attitudes, wives' perceptions of social norms, and husbands' gender role attitudes exert a similar magnitude of effect on wives' performance of household tasks. The influence of the number of the children was also a statistically significant determinant of wives' division of labor behavior and marital satisfaction. Given that all of the statistically significant paths relate to wives' outcomes, it is not surprising that the structural equation model accounted for more variance in the division of labor behavior and marital satisfaction for wives (35% and 11%, respectively) than for husbands (12% and 6%, respectively). Additionally, the multiple squared correlations were particularly low for both sex's marital satisfaction because none of the paths were statistically significant for husbands' satisfaction and only one variable,

number of children, was statistically significant for wives' satisfaction. The results from the bootstrapping analysis supported these statistically significant paths and revealed a partner effect between wives' perceived behavioral control and the amount of household tasks completed by husbands.

Furthermore, the univariate statistics were examined and compared for husbands and wives across the sample in order to provide a more detailed description of the household tasks completed by both spouses and each gender's perception of the other gender's behavior. Overall, husbands and wives mostly agreed on which behaviors were performed by each partner at least once in an average month. However, a comparison of the frequency estimates of these tasks revealed differences between husbands' and wives' self and partner reports. These results will now be explored in detail.

The influence of attitudes. Much existing research has focused on the direct impact of gender role attitudes on relationship outcomes, but many researchers have assumed this link exists because attitudes influence behaviors (Amato & Booth, 1995; Araj, 1977; Calder & Ross, 1976; Davis & Greenstein, 2009). However, research in the social psychology literature often does not support this connection between attitudes and behaviors (Wicker, 1969), but this discrepancy is thought to be due to methodological issues such as measuring attitudes and behaviors too broadly rather than using a high degree of specificity (Davidson & Jaccard, 1979). Thus, a primary aim of this study was to examine specific attitudes and behaviors.

The findings provide partial support for dated research regarding the connection between attitudes and housework. For example, Araj (1977) concluded that, for most couples, there is agreement between attitudes about who should perform certain tasks and the behavior of each partner. Consistent with this idea, correlational analyses from the current study show that men

with more egalitarian attitudes performed more housework and men performed less housework when their wives reported more traditional gender role attitudes. However, bivariate results did not support the agreement between attitudes and behaviors for wives, and husbands' and wives' gender role attitudes were not correlated with the amount of household tasks performed by wives.

Interestingly, when considered in the structural equation model with other variables, somewhat different findings for the effect of attitudes emerged. Neither husbands' nor wives' attitudes influenced the amount of housework performed by husbands. But husbands' gender role attitude and wives' housework were associated with each other; such that, when husbands held more egalitarian attitudes wives completed fewer household tasks. Finally, although wives' gender role attitudes were not associated with husbands' or wives' behavior in the correlational analysis, the structural equation results showed that wives with more egalitarian attitudes actually performed more housework.

This finding was not in the direction one would likely expect since egalitarian individuals, by definition, do not favor separate spheres of work for men and women. Thus, it seems reasonable to expect that women with egalitarian attitudes would perform less housework compared to women with more traditional attitudes. However, the results revealed a statistically significant association in the opposite direction. Women performed more household tasks when they held more egalitarian attitudes favoring shared spheres of work. This also appears to contradict previous research by Bianchi et al. (2000) that concluded the amount of housework completed in modern households is decreasing for several reasons including shifting gender roles.

The finding that wives performed more housework than other women when they held egalitarian attitudes may be attributed to selective attention, the idea that individuals' beliefs and goals determine what behavior is noticed and remembered (Srull, & Wyer, 1986). Perhaps wives with egalitarian attitudes are more sensitive to the amount of housework they perform. Division of labor research has shown that individuals are likely to over report the amount of housework they perform if the behavior is particularly salient to them (Press & Townsley, 1998). The performance of housework may be a more relevant and indelible activity for egalitarian women than traditional women. Thus, women with egalitarian attitudes may report performing more housework because they may estimate it more precisely or even over-estimate.

Regardless of the direction of the effect, in summarizing the impact of gender role attitudes on household task behaviors, both spouses' attitudes influenced wives' housework performance. When husbands held egalitarian attitudes, wives performed less housework compared to other wives, and when wives held egalitarian attitudes they performed more housework than other wives. Yet, neither spouses' attitudes influenced husbands' completion of household tasks. Previously, researchers have concluded that males' gender role attitudes may be a stronger behavior determinant of household labor than the attitudes of females (Kroska, 2004; Shelton & John, 1996). This suggests that husbands' attitudes, more than wives' attitudes, are likely to generate actor and partner effects on behavioral outcomes. There is mixed evidence for this conclusion in the current data.

First, the presence of one statistically significant effect for husbands' gender role attitudes and one for wives' gender role attitudes suggests that husbands' and wives' attitudes are equally influential. To confirm this, a post-hoc equality constraint test was conducted (Wickrama, Conger, Lorenz, & Matthews, 1995). The paths between husbands' and wives'

gender role attitudes and wives' household task behavior were constrained to be equal to determine if this constraint reduced the overall model fit. The difference in model fit was not statistically significant, indicating that the influence of husbands' and wives' gender role attitudes on wives' housework was essentially equal, although in opposite directions.

Second, although the strength of the two effects was similar, both of these paths apply to wives' behavior. And, although husbands' attitudes influence wives' behavior, wives' attitudes do not influence husbands' behavior. If Kroska's (2004) conclusion that males' attitudes are a more central determinant of behavior is interpreted as men exhibiting more power within the relationship, clearly this study's results do support this since power is often defined as the ability an individual holds to resist the influence of others and simultaneously alter the behavior of others (Keltner, Gruenfeld, & Anderson, 2003).

However, it is important to note that the current study examines husbands' and wives' housework performance separately and, thus, does not address the distribution of tasks between partners. For example, the statistically significant path between wives' gender role attitudes and the number of household tasks they perform indicates that women with egalitarian attitudes perceive that they perform more tasks than other women. This information does not indicate if these women with egalitarian attitudes perform more or less tasks than their spouse.

The influence of social norms and perceived behavioral control. The influence of gender role attitudes on the division of household tasks has been examined frequently in existing literature (e.g., Araj, 1977; Hochschild, 1989; Pittman & Blanchard, 1996), especially for actor effects, and attitudes are also a component of the theory of planned behavior. However, the theory of planned behavior includes two other predictors of behavior, social norms and perceived behavioral control. These two constructs have received less attention in regards to gender roles,

and no studies found have included all three constructs simultaneously. Therefore, this study sought to determine if the constructs of social norms and perceived behavioral control could be successfully applied to determining gender role behaviors.

Researchers have argued that social norms shape individuals' behavior and people often base their own behavior on society's expectations about what is appropriate behavior (Blaisure & Allen, 1995; Deutsch, 1999; Shekory & Ziv, 2007). For instance, if an individual perceives that their society prefers traditional gender roles, they may alter their behavior to meet these perceived expectations. In the current study, bivariate and multivariate analyses revealed that wives' perceptions of social norms influenced their own behavior such that when wives perceived that society endorsed egalitarian attitudes they performed fewer household tasks. On the contrary, the results provide no evidence that wives' perceptions of social norms influenced husbands' behavior or that either spouse's behavior was affected by husbands' perceptions of social norms.

Cherlin (2004) concluded that changes in the last century have caused individuals to use social norms to guide their actions less frequently than in the past. Instead, people rely on "personal choice and self-development" (p. 853) to construct their marital roles and task allocation. This decreasing influence of social norms may explain why husbands' perceptions of social norms did not influence either husbands' or wives' behavior, and wives' perceptions of social norms did not affect their husbands' behavior. But this does not explain why wives' perceptions of social norms were associated with the amount of household tasks they completed. Social-comparison theory (Festinger, 1954) provides some insight on this gender difference.

Drawing from social-comparison theory (Festinger, 1954), existing research has shown that although both genders typically engage in social comparisons, measuring themselves against

others or society, women are more likely to develop an interdependent self-construal (Cross & Madson, 1997). Interdependent self-construal means defining oneself as connected with others. Therefore, since women are more likely to make positive attributions about themselves when they perceive that they are similar to others, wives may feel more pressure than husbands to conform to social norms (Basow, 1986; Williams & Best, 1990).

Regarding the third and final predictor of behavior according to the theory of planned behavior, women's perceived behavioral control appears to serve as a determinant of husbands' housework. Although evidence of this effect was not found in the structural equation model, the bootstrap analysis revealed a statistically significant effect with husbands performing more housework when wives reported having more control over the amount of housework they perform. As previously discussed, the issue of power arises again. Husbands only performed more household tasks when their wives explicitly stated that they had a high degree of control over their own housework behavior. In other words, when wives felt that they had more control, or power, over their own completion of household tasks, husbands performed more housework.

Accounting for background factors. The theory of planned behavior acknowledges that, depending on the behavior of interest, a variety of background factors, typically conceptualized as control variables, may influence the behavior. In consideration of potential background factors that may influence the associations between gender role attitudes, perceptions of social norms, and perceived behavior control and the amount of housework spouses perform, the current study was limited to married individuals between the ages of 20-35. These restrictions were used to reduce variations due to relationship status, length of marriage, and cohort effects.

However, recognizing that these couples were likely to be parents, the multivariate analyses were conducted while controlling for the number of children. This was important because existing research has shown that husbands' and wives' gender role behaviors generally become more traditional (Goldberg & Perry-Jenkins, 2004) and relationship satisfaction decreases (Belsky & Kelley, 1994; Belsky & Pensky, 1988) after becoming a parent. In the current study, wives performed more housework and reported being less satisfied with their marriage when there were children present in the household. Interestingly, the presence of children did not affect household task behaviors or relationship satisfaction for men. It is somewhat surprising that husbands do not perform more housework or report lower levels of satisfaction in families with more children. However, this is consistent with literature that has revealed that children typically affect the housework performance and satisfaction of women more than men (Shelton & John, 1996).

The influence of household division of labor behavior. The current study elaborated upon the constructs included in the theory of planned behavior by examining the influence of gender role behaviors (i.e., household task counts) on husbands' and wives' marital satisfaction. Because existing research has assumed that gender role attitudes influence relationship satisfaction through their influence on behavior (Amato & Booth, 1995; Araj, 1977; Calder & Ross, 1976; Davis & Greenstein, 2009), it seems logical that gender role behaviors should be related to relationship outcomes. However, in the current analyses housework was not associated with husbands' or wives' marital satisfaction. The lack of statistically significant paths between household tasks and marital outcomes was unanticipated since several existing studies have shown that the time both partners spend on housework is positively associated with the female's perception of marital conflict (Shelton & John, 1996; Stohs, 2000; Walker, 1999) and marital

satisfaction (Stevens, 2001). This could be due to how the data were analyzed in the current study since previous studies have not used dyadic data to consider interdependence between partners. However, this finding is consistent with a published review of literature in this area that concluded previous research had not revealed a “consistent relationship between the division of household labor and marital satisfaction” (Shelton & Johns, 1996, p. 316). It seems there is a lack of strong evidence for the presence of this behavior-outcome effect.

As a background factor, marital status was taken into consideration in the current study by limiting the sample to only married couples. This is different from many previous studies that have not distinguished between married and cohabiting couples even though relationship status has been shown to influence aspects of relationships (e.g., Denmark, Shaw, & Ciali, 1985). Additionally, the current study was limited to the early years of marriage (the average length of marriage was slightly less than three years and the median marriage length was slightly less than two years), whereas many studies have incorporated a broader range of marriage lengths. Furthermore, this relates to the lack of statistically significant findings explaining marital satisfaction because Christensen and Heavey (1999) have argued that it is important to consider that high rates of satisfaction are common in the early years of marriage regardless of the circumstances within the marriage. Thus, this “honeymoon effect” could make it difficult to discern determinants of marital satisfaction since there is little variance in participants’ satisfaction.

An Examination of Housework

Some interesting conclusions can be drawn from the analyses conducted examining husbands’ and wives’ reports of their completion of household tasks as well as their perception of their partners’ completed tasks. However, inferences from this descriptive data should be

interpreted with caution because the sample contains extremely large amounts of variation and only simple analyses were conducted. In examining husbands' reports of their own behavior and husbands' perceptions of their wives' behavior, overall, husbands viewed the division of traditionally feminine tasks (e.g. bathroom cleaning, house cleaning, etc) as fairly equal between partners. When self-reports are considered more accurate than partner reports, this equal division of feminine household tasks is because husbands underestimated the number of tasks wives performed. Husbands reported that they do more traditionally masculine tasks (e.g. yard work and vehicle maintenance) in an average month.

On the other hand, when comparing wives' own reported behavior with their perception of their husbands' behavior, wives believed they perform more traditionally feminine tasks than their husbands. Wives appear to agree with their husbands' perception concerning the performance of traditionally masculine tasks such that husbands performed more of these tasks than wives. However, for many of these traditionally masculine tasks, it appears that wives actually overestimated how many tasks their husbands completed compared to husbands' reports. Individual's self-reports were used in the bivariate and multivariate analyses, but the current data do not allow a determination of whether an individual's report of their own behavior was more accurate than their spouse's report, so the issue of the accuracy of self and partner reports is another important caveat to consider

Despite that issue, these findings support the large quantity of existing research showing that household tasks are often organized according to sex (Blair & Lichter, 1991; Brayfield, 1992; Lennon & Rosenfield, 1994). This led Bianchi et al. (2000) to distinguish between core housework (e.g., cooking, housecleaning, and laundry) predominantly completed by females and discretionary tasks (e.g., repairs, garden care, and bill paying) often completed by males. As

others have emphasized (e.g., Dex, 2004), these discretionary tasks require less time, are often not completed on a regular basis, and are typically more flexible regarding when they must be completed.

Interestingly, these findings show that not only do household labor tasks remain highly segregated by sex, but the segregation was often even more obvious in partner reports than self-reports. Perhaps this was because participants rely on sex role identity schemas (Bem, 1981) more frequently when they are asked to report their spouse's behavior compared to their own behavior since individuals have less direct knowledge of their spouse's behavior.

Strengths and Limitations

The results of this study should be considered based on its strengths and limitations, some of which are intertwined. A major strength of this study is its application of the theory of planned behavior to examine behaviors occurring within a marital context since the majority of previous research employing this theory has focused on predicting behavior at the individual level. However, additional studies replicating the use of this theory in regards to gender role behaviors are needed for replication and extension purposes. Replication studies are especially important because of the rather small sample size (86 couples), which was partly a product of the use of dyadic data. Using dyadic data restricts the sample to couples who are willing to participate rather than simply individuals. This volunteer bias is a limitation because the sample included couples where both spouses were willing to participate. However, couple data is also a major strength of the study since it allows an examination of the interdependent nature of marital relationships and no other studies taking this interdependence into consideration were found examining these constructs.

Also related to the sample, it is important to acknowledge that sample bias was present because participants were homogenous in several ways that may have impacted the results. For instance, the sample was predominantly Caucasian individuals within the early years of marriage who were highly educated. Because the study employed online data collection, the sample was clearly limited to those with internet access. Moreover, participants were recruited by various methods including online marriage blogs. It is conceivable that individuals who visit these sites are different from the general public in key ways that may influence the results. For instance, individuals who visit these websites may be more attentive to the outcomes within their marriage or more likely to attempt to improve their marriage. These sample characteristics necessitate that caution be taken when applying these findings to couples with other characteristics.

Future studies need to extend on the current findings by using samples that are more diverse in the ways mentioned above, such as ethnicity and education. Additionally, although the current study was purposely limited to the early years of marriage, it is worthwhile to conduct research to determine if these processes occur in other types of relationships and varying relationship lengths. For instance, it is important to examine if gender role attitudes, perceptions of social norms, and perceived behavioral control have the same effect on gender role behaviors in long-term marriages or remarriages. Exploring the use of the theory of planned behavior to predict behavior for homosexual couples and cohabitators would be particularly relevant since these couples, by the very nature of their relationships, are less apt to follow traditional social norms and the theory of planned behavior proposes social norms to be a key determinant of behavior (Cherlin, 2004).

Moreover, studies extending on this work should examine the use of this theory for predicting behaviors other than household tasks. For instance, existing research pertaining to

gender roles has also examined emotion work, childcare, and paid work. Additionally, studies should examine the predictors of gender role behaviors while considering the role of decision-making because egalitarian couples may choose to divide tasks in a traditional manner but for non-traditional reasons. In other words, studies that focus solely on division of behavior do not consider the reasons, or processes, that lead to couples' task distribution.

In addition to considering limitations related to the sample's characteristics, the measurement of perceived behavioral control and household tasks is also a limitation of the study. For the measure of perceived behavioral control, a single item was used to assess the amount of control participants felt that they had over the household tasks they perform. The wording of that item was somewhat vague and may not have allowed participants to fully consider the ways their behavioral control may be limited, such as by a lack of partner's participation. Participants may have been especially likely to not consider how their behavioral control is restricted since this concept is contrary to the strong value the majority of Americans place on being independent and autonomous individuals (Varnum, Grossman, Kitayama, & Nisbett, 2010).

In previous research, household tasks have been measured using hours as the unit of measurement for housework. This is a rather simplistic measure since people do not often take note of the specific amount of time spent on household division of labor tasks. The current study attempted to improve on that by asking participants how often they performed tasks within an average day, week, and month. It was assumed that participants would be more likely to accurately recall the number of times a task was completed than the amount of time (and number of times) each task occurred.

Furthermore, participants answered questions for thirteen specific tasks rather than reporting their household labor in general. This too is a strength of the current study since previous studies have found asking about specific tasks increase the validity of the results (Kurdek, 2007). This is still not a perfect measurement strategy. It required participants to use their own discretion about what constitutes a task. For example, laundry was a specific task category in the study, but participants could have counted washing/drying all the clothes as one task or each load as a separate task. Although example tasks were given for many categories, it is difficult to know how participants interpreted the categories and then developed their numerical value for each category. Moreover, probably as a result of this loosely defined measurement approach, many of the housework items included considerable variation and, consequently, had large standard deviation values.

Many of these measurement limitations could be addressed in future studies by including diary-based methods when collecting information about housework. Previous research comparing survey and diary-based methods estimating the time spent on housework tasks found diary methods to be more accurate and reliable (Plewis, Creeser & Mooney, 1990; Robinson, 1985), and it seems reasonable to surmise that the same conclusion would be reached regarding collecting task counts of housework. However, because participant attrition is common within diary-based methods, a larger sample size than that collected for this study would be necessary.

A final consideration regarding how housework distribution was measured is that for the bivariate and multivariate analyses, each partner's report of their own housework was the behavioral outcome of interest. Although this provides pertinent information about the topic, future studies may benefit from also examining housework distribution between partners by using difference scores. For instance, gender role attitudes, perceptions of social norms, and

perceived behavioral control may be better predictors of the congruence, or disparity, between husbands' and wives' contribution to household tasks. Studies employing hierarchical linear modeling would be especially useful as it would allow researchers to examine gender role behaviors at the individual level (i.e. each spouse's housework) and the couple-level (i.e., congruency of spouses' behavior) simultaneously (Song, Floyd, Seltzer, Greenburg, & Hong, 2010). Moreover, instead of using only participant's self-report, perhaps an average of self and partner reports would be a better indicator of each spouse's household task performance.

Conclusion

Despite its limitations, this study makes several notable contributions to the existing research. First, it provides evidence that the theory of planned behavior can be successfully used to facilitate an understanding of behaviors, such as household labor tasks, occurring within marital relationships. Although not all of the paths hypothesized by the theory of planned behavior were statistically significant, this was somewhat expected since the creators of the theory surmise that the statistical significance of each component will vary depending on the behavior of interest (Fishbein & Ajzen, 2010). Existing research has mainly emphasized gender role attitudes as a factor influencing the division of household labor, but this study shows that other factors, such as wives' perceptions of social norms and perceived behavioral control over housework tasks, also contribute to the amount of housework completed by marriage partners. Second, this study provides a greater understanding of the dyadic nature of gender roles within marriage relationships, and, thus, supports the use of dyadic data analysis (e.g., the actor-partner interdependence model; Kenny & Cook, 1999) within gender role research, particularly within romantic relationships. Though previous work has considered actor and partner effects, few

studies have provided a comprehensive assessment of the actor and partner effects for husbands and wives within the same analysis.

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APPENDIX A
Traditional-Egalitarian Sex Role Scale (Larson & Long, 1988)

Answer the following statements based on how YOU personally feel about each items.

- | | | | | | | |
|-------------------|---|---|---|--|--|----------------|
| Disagree strongly | | | | | | Agree strongly |
| 1 | 2 | 3 | 4 | | | 5 |
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 B
*Modified Directions for measuring Social Norms using
 the Traditional-Egalitarian Sex Role Scale (Larson & Long, 1988)*

Often there are discrepancies between our personal attitudes and how we think we *should* feel about certain issues based on what seems expected within our community. Putting your personal beliefs aside, please rate the following statements based on how you think *society, or your community members*, would answer. In other words, how would they prefer you to answer?

- | Disagree strongly | | | | | Agree strongly |
|--|---|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 | |
| 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 C

Household Labor Measure

Revised from the National Study of Families and Households (Sweet, Bumpass, & Call, 1988)

In an average month who performs these tasks within your home?

- You may mark "yes" for both spouses.
- Mark "yes" if the task is performed at least once a month on average.
- Example behaviors are included in parentheses to help you think about the types of specific tasks involved.

YES

NO

1. Preparing meals (cooking or picking up prepared food)
2. Washing dishes/cleaning up after meals
3. Cleaning the bathroom (toilet, sink, tub, shower)
4. Basic house cleaning except the bathrooms (sweeping, mopping, dusting, vacuuming)
5. Tidying/"straightening up" the house (organizing, decluttering, making beds)
6. Yard work (mowing the lawn, raking leaves, shoveling snow, weeding, landscaping)
7. Shopping for groceries and household goods
8. Laundry (sorting, washing, ironing, folding)
9. Money management (paying bills, keeping financial records, taxes)
10. Vehicle maintenance (performing or scheduling automobile maintenance and repair, washing car)
11. Household maintenance (household repairs, painting, arranging for repairmen/maintenance work)
12. Completing errands (mailing letters, buying stamps, going to the bank)
13. Taking out trash/sorting recyclables

For each item that a participant answered "yes" to, they were then be asked the following questions:

How many times have you/your partner performed this task...

in the past day?

in the past week?

in the past month?

APPENDIX D
Relationship Assessment Scale (Hendrick, 1988)

We are interested in how satisfied you are with your marriage. Please evaluate your marriage using the following questions.

1. How well does your partner meet your needs?
Poorly Average Very well
2. In general, how satisfied are you with your relationship?
Unsatisfied Average Very satisfied
3. How good is your relationship compared to most?
Must worse Average Must better
4. How often do you wish you hadn't gotten into this relationship?
All the time Occasionally Never
5. To what extent has your relationship met your original expectations?
Poorly Average Very well
6. How much do you love your partner?
Not at all Average Very much
7. How many problems are there in your relationship?
None Some A lot