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## PSYCHOLOGICAL DISTRESS TRANSMISSION IN SAME-SEX AND DIFFERENT-SEX MARRIAGES

Rachel Behler<sup>1</sup>, Rachel Donnelly<sup>\*,1</sup>, and Debra Umberson<sup>1</sup>

<sup>1</sup>The University of Texas at Austin, Austin, TX, USA

### Abstract

Ample work stresses the interdependence of spouses' psychological distress, and that women are more influenced by their spouse's distress than are men. Yet previous studies have focused primarily on heterosexual couples, raising questions about whether and how this gendered pattern might unfold for men and women in same-sex marriages. We analyze 10 days of diary data from a purposive sample of men and women in same-sex and different-sex marriages (n =756 individuals from 378 couples) to examine psychological distress transmission between spouses and how this process may differ for men and women in same-sex and different-sex marriages. We find that women are more strongly influenced by their partners' distress than men, regardless of whether they are married to a man or a woman and that this relationship is particularly strong for women with male spouses.

### Keywords

mental health; psychological distress; intimacy; gay; lesbian; bisexual; transgender (LGBTQ); marriage; emotion work; gender

## 1. INTRODUCTION

Living with a distressed partner can be very difficult. Indeed, studies consistently show that spouses are strongly influenced by each other's mental health, both in terms of their daily distress levels and in terms of long-term depression (Butterworth and Rodgers 2006; Neff and Karney 2007; Townsend, Miller, and Guo 2001; Thomeer, Umberson, and Pudrovská 2013). Past research demonstrates that one spouse's distress influences the other spouse's distress over time, a phenomenon known as spousal distress transmission (Seigel et al. 2004; Tower and Kasl 1996). However, men and women are not equally influenced by the distress of their spouse; rather women's distress levels are more strongly affected by their spouses' distress than are men's (Kouros and Cummings 2010; Larson and Almeida 1999; Peek et al. 2006). Men and women also tend to express their distress differently, with men more likely than women to express their distress through externalizing behaviors, such as binge drinking, and women more likely than men to internalize feelings of distress, which are often expressed in depressive symptoms (Kessler et al. 2005; Rosenfield, Lennon, and White 2005). Scholars have proposed that traditional gender roles leading women to be more

\*Corresponding Author: Rachel Donnelly, 305 E 23<sup>rd</sup> St. Stop G1800, Austin, TX 78712, redonnelly@utexas.edu.

responsive to their spouse's needs and well-being (Walen and Lachmann 2000), as well as women's tendency to be more empathic (Macaskill et al. 2002; Toussaint and Webb 2005), may make them more vulnerable to taking on their spouses' distress (Gove 1984; Hochschild 1979). However, prior studies have focused exclusively on heterosexual marriages, precluding any analysis of gender differences across same-sex and different-sex couples.

In this study, we work from a gender-as-relational perspective (Connell and Messerschmidt 2005; Springer, Hankivsky, and Bates 2012) to suggest that the process of distress transmission depends not only on one's own gender, but also on whether one is married to a man or a woman. That is, the way that spouses enact or perform gender in their relationships depends on whether they are interacting with a man or a woman. Recent work suggests that individuals in same-sex marriages are more likely to be "on the same page" as their spouse when they are coping with stress, and this both shapes how they provide support to each other, as well as their desire for support (Thomeer, Reczek and Umberson 2015; Umberson, Thomeer, and Lodge 2015). These findings pose an important question of whether distress transmission may be stronger or weaker in same-sex than compared to different-sex unions. For example, if women are more empathic and engage in more emotion work than men to hide their distress from their partners (Macaskill et al. 2002; Toussaint and Webb 2005), then women married to women may be shielded from their spouses' distress to a greater extent than women married to men. Alternatively, if same-sex couples are more likely to share everything—including distress—then distress transmission may be greater between two women than between a woman and a man.

In this spirit, we analyze ten days of dyadic diary data from a purposive sample of 756 cisgender men and women in same-sex and different-sex marriages to consider how spousal distress transmission varies for men and women in same-sex and different-sex marriages. Scholars are calling for more dyadic research on family relationships, such as leveraging data collected from both spouses, to better understand "the complexities of family life" (Carr 2018; Carr and Springer 2010). The unique sampling structure of the dyadic data used for the present study enables us to investigate how patterns of daily spousal distress transmission vary for midlife men and women in same-sex and different-sex marriages. Studying spousal dynamics in both same-sex and different-sex marriages challenges taken-for-granted assumptions about gender differences within marriage and can reframe assumptions about the gendered transmission of psychological distress based solely on heterosexual couples.

## 2. BACKGROUND

### 2.1 Psychological distress and gender

Psychological distress is a marker of mental health that fluctuates on a daily basis and in response to ongoing stressors, such as workplace or family stress. A large body of work has found that one spouse's distress can trigger distress in the other spouse (Meyler, Stimpson, and Peek 2007; Joiner and Katz 2006; Goodman and Shippy 2002; Tower and Kasl 1995; 1996). This is in line with a substantial literature documenting that one spouse's stress may affect the other spouse's mental health, perhaps because spouses are empathic and feel each

other's emotional pain (e.g., Larson and Alameida 1999; Thompson and Bolger 1999). Within marriage, how individuals express and are exposed to their spouses' mental health may differ for men and women. This could be due, in part, to structural systems that constrain men's and women's behaviors (Connell & Messerschmidt 2005; Springer et al. 2012). With regard to psychological distress, norms of masculinity emphasize ignoring or hiding emotions, distress, and discomfort (Courtenay 2000), whereas norms of femininity emphasize awareness and responsiveness to the emotional needs of others as an extension of caregiving roles (Umberson, Thomeer, and Lodge 2015).<sup>1</sup>

The gender-as-relational perspective suggests that gendered expectations for behavior and how individuals perform gender vary based on whether they are interacting with a man or woman (Springer, Hankivsky, and Bates 2012). Spousal distress transmission thus likely varies based on whether one is married to a man or a woman because how one is expected to perform gender depends on the gender of one's spouse in relation to oneself. For example, recent work finds that whereas men married to women are encouraged by their female spouse to open up about their distress, men married to men are not encouraged to disclose their emotions by their male spouse in the same way (Umberson, Thomeer, and Lodge 2015). In the sections below, we review how men and women may be differentially influenced by their spouses' distress, and how this dynamic may vary based on whether they are in a same-sex or different-sex union.

**2.2.1 Gendered Expressions of Distress**—Men and women tend to express distress differently due to systems that structure gendered behavior. Masculine norms foster the externalization of distress through negative health behaviors (e.g., substance use) (Rosenfield et al. 2005) and these behavioral expressions of distress are highly visible and potentially disruptive to daily interactions. In contrast, feminine norms encourage women to engage in internalizing symptoms such as emotional distress and depression (Rosenfield et al. 2005; Rosenfield and Mouzon 2013) and minimizing the visibility of their distress to avoid placing burden on their partners (Erickson 2005; Thomeer, Reczek, and Umberson 2015). In turn, gender differences in how individuals express their distress may shape spousal distress transmission. Women's distress may be less observable to their partner, and this may decrease the extent to which men are affected by their wives' distress. Previous research emphasizes that women work harder than men to minimize the extent to which their mental health impacts their spouses, ranging from perspective taking (i.e. "putting oneself in another's shoes") to active concealment. Women with depression frequently report hiding their depression from their male partners to avoid adding the stress to their partners' lives that accompanies caring for a sick spouse (Gove 1984; Thomeer, Reczek, and Umberson 2015). In turn, the combination of internalizing feelings of distress combined with efforts to shield one's partner from their distress may decrease the magnitude of spousal distress contagion from women to their partners.

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<sup>1</sup>It is important to note that the majority of the literature on this topic has studied cisgender people and is thus not generalizable to those who identify outside of the gender binary. The theoretical model we advance is therefore also limited in its generalizability beyond cisgender people.

### 2.2.2 Gender and Susceptibility to Spousal Distress Transmission—

Susceptibility captures the extent to which one takes on the distress of their spouse in a given exposure. For example, if two individuals each have a spouse who is very distressed, the more susceptible individual will be more strongly influenced by their spouse's distress. Dominant notions of gender may impose pressures on men and women that shape marital dynamics. For example, women's roles as wives are accompanied by expectations of sustaining social relationships and providing socio-emotional support to family members (Erickson 2005; Hochschild 1979; Pfeffer 2010). As such, women report higher levels of empathy than men (Macaskill et al. 2002; Toussaint and Webb 2005) and are more attuned to the emotional needs and well-being of their partners. This pattern may be particularly pronounced when a spouse is distressed, as men are less likely to recognize, and more likely to downplay, the severity of their partners' distress rather than to engage in emotion work to support their spouse (Thomeer, Umberson and Pudrovska 2013). Compared to women in heterosexual marriages, heterosexual men are also less likely to recognize the emotion work their spouse performs for them (Umberson et al. 2016). As a result, men's distress may be less influenced by their spouses' psychological distress than women's distress because men are less likely to be aware that their spouses are in fact distressed.

Compared to men, women's higher levels of emotional intimacy in their social relationships may also exacerbate the extent to which they are affected by their partners' distress. Previous work suggests that because women are more emotionally invested in their close social relationships, they are more likely to be adversely affected when their friends and relatives are in crisis (Antonucci and Akiyama 1987; Kessler and McLeod 1984; Walen and Lachman 2000). One possibility is that women are more strongly affected by the negative experiences of their network members because they are more concerned than men with the needs of their significant others. Indeed, women are more likely than men to be vulnerable to and burdened by the "costs of caring," which may explain why women experience higher levels of emotional distress than men (Kessler and McLeod 1984; Kessler, McLeod, Wethington 1985; Turner and Avison 1989). This heightened awareness and sensitivity to others' distress may also increase the extent to which women's distress is influenced by their spouses' distress. Moreover, women are more likely than men to ruminate on distress, which can lead it to persist (e.g., Almeida and Kessler 1998; Mohr et al. 2003). As a result of this rumination, spouses' distress may influence women's distress for a longer period of time than men's distress.

**Distress Transmission in Same-Sex and Different-Sex Couples:** Given differences in how men and women express and are susceptible to their spouses' distress, we expect that patterns of distress transmission will unfold differently for same-sex and different-sex couples. For example, if men are less likely to hide their distress from their partners, then spousal distress transmission may be stronger for a man married to a man compared to a man married to a woman. Patterns of distress transmission are then likely to differ in same-sex and different-sex marriages because they represent pairings of individuals who may express distress and respond to their partner's distress in similar (different) ways. Moreover, individuals in same-sex unions may have unique experiences of stress and distress as a result of prejudice, discrimination, and/or rejection as a result of their minority status (Meyer

2003). Sexual minorities may also be exposed to unique minority stressors at the couple level as a result of being in a stigmatized relationship. For example, individuals in same-sex relationships may experience public scrutiny as a couple or may have to navigate benefits available to same-sex couples (Frost et al. 2017; LeBlanc, Frost, and Wight 2015).

Differences in spousal dynamics between same-sex and different-sex spouses may also influence spousal distress transmission. The gender-as-relational approach (Springer, Hankivsky, and Bates 2012) emphasizes that gender performances are inherently relational and co-constructed by actors. Same-sex marriages tend to be more egalitarian, including how spouses support one another and perform emotion work during challenging times, such as periods of poor health (Umberson, Thomeer, & Lodge 2015; Umberson et al. 2016). In contrast to different-sex marriages, same-sex marriages are characterized by greater equality in how spouses monitor, attend to, and provide support to one another (Thomeer, Reczek, and Umberson 2015; Umberson & Kroeger 2016). This pattern of how spouses in same-sex marriages match each another in the frequency, level, and type of support they provide to one another may thus reduce the “support gap” observed between men and women in different-sex marriages in which women give more support than they receive. The more egalitarian dynamic in support provision in same-sex marriages may thereby reduce spousal distress transmission between men married to men and women married to women.

Alternatively, the greater tendency for spouses in same-sex marriages to be “on the same page” emotionally may exacerbate spousal distress transmission, particularly for women who may be more susceptible to a spouse’s distress than men. This possibility is suggested in recent qualitative work investigating patterns of emotion work among same-sex couples (Umberson, Thomeer, and Lodge 2015). In this study, lesbian couples reported more frequent discussion of their emotions and how this sustained empathy sometimes contributed to their own stress. For example, one woman in a lesbian relationship described, “[My wife’s] happiness is the most important thing in my life and when she is not happy, or when is down or depressed or upset, I get right there with her...” (Umberson, Thomeer, and Lodge 2015: 548). There is also evidence that women experience higher average levels of emotional distress than do men (Almeida and Kessler 1998) and that distress following interpersonal events may linger longer for women compared to men (Mohr et al. 2003). As such, women in same-sex relationships may have a particularly greater susceptibility for distress transmission and over a longer period of time.

**The Present Study:** Reflecting a gender-as-relational perspective, we extend prior research on the gendered transmission of psychological distress within couples by examining how spousal distress transmission differs for cisgender men and women in same-sex and different-sex marriages. We analyze ten days of diary data collected from a purposive sample of both spouses in 115 different-sex, 106 male same-sex, and 157 female same-sex couples in midlife. A gender-as-relational perspective, along with prior research, leads to the following specific hypotheses:

1. H1: Spousal distress transmission on the same day will be stronger for women compared to men/

2. H2: Women in same-sex relationships will have a greater susceptibility for distress transmission on the same day compared to individuals in other union types.
3. H3: The gender effects in H1 and H2 will persist when looking at the transmission of spousal distress from one day to the next.

In this study, we theorize and operationalize gender as a binary based on prior literature and sample constraints, a limitation of our data. This approach does not allow us to account for experiences of gender outside of the binary categories, which is particularly important for same-sex relationships where gender roles and identities may be more fluid (Li, Pollitt, and Russell 2016; Lippa 2005). The findings in this study focus on relationship dynamics of midlife cisgender men and women who are married and in long-term relationships.

### 3. DATA AND METHODS

#### 3.1 Data

For the present study, we rely on dyadic data collected as part of a study on marriage and health in midlife couples. We focus on midlife married couples because studies suggest that the health consequences of marriage become more important with advancing age (Williams and Umberson 2004). The study required the participation of both spouses in each marriage. The data come from a baseline survey as well as daily diary questionnaires completed for 10 days; all questionnaires were completed online. Diary data provide a way to assess daily processes through which midlife spouses influence each other's health. The baseline survey took about 45 minutes to complete. The diary questionnaire took 5–10 minutes to complete and was completed at the end of each day. Couples were required to complete at least 6 of the 10 diary questionnaires to be included in the study, and 90% of participants completed all 10 days. We asked spouses to complete all questionnaires separately. The analytic sample for this study includes both spouses in 378 couples (n=756 individuals): 106 gay couples, 157 lesbian couples, and 115 heterosexual couples. All participants were cisgender men or women, aged 35 to 65, legally married, and living together for a minimum of three years at the time of the study (2014–2015).

The sample was recruited in a systematic and purposive way to create comparable groups of same-sex and different-sex married couples. Participants were matched on age, relationship duration, and place of residence. Due to past legal restrictions on marriage for same sex couples, we measure total relationship duration based on number of years cohabiting and married combined. Massachusetts was selected as the study site because it was the first U.S. state to legalize same-sex marriage in 2004, but couples who married in Massachusetts yet resided in other states were also invited to participate. Same-sex couples married between 2004 and 2012 and meeting the age requirements were identified through the Massachusetts Registry of Vital Records and invited to participate through letters mailed to their address. About 70% of same-sex couples were recruited in this way. Participating couples were also asked to refer both same-sex and different-sex spouses who met the study requirements. The remaining 30% of same-sex couples were recruited via referrals. About 40% of different-sex couples were identified and recruited from publicly available city lists in Massachusetts that

list demographic information of city residents. The remaining 60% of different-sex couples were recruited through referrals from both same-sex and different-sex participants.

The demographic characteristics of the sample (discussed below) are consistent with nationally representative data comparing same-sex and different-sex spouses in midlife on many characteristics (e.g., Gates 2014; Gates 2015). We use data from the American Community Survey in 2015 and find that the study sample is consistent to national estimates for married couples age 35–65 on income, age, and the percent of couples with children under age 18. Although the study sample is more highly educated and less racially/ethnically diverse than national estimates, the difference between same-sex and different-sex couples in the study sample is similar to the difference found in national estimates (i.e., same-sex couples are less likely to include racial/ethnic minorities and more highly educated than different-sex couples). We emphasize, however, that our sample is not representative of the larger U.S. population.

**3.1.1 Measures**—The primary outcome for this study is a measure of psychological distress included on each day of the 10-day period. Psychological distress is temporally specific and fluctuates from day to day and diary studies are particularly well-suited to examine daily experiences of distress within families (Almeida and Kessler 1998; Larson and Almeida 1999). Our measure of psychological distress is based on nine questions included in the daily diary questionnaire. These questions were adapted from instruments assessing negative affect and distress that have demonstrated reliability and validity (Crawford and Henry 2004; Watson, Clark, and Tellegen 1988). Respondents were asked: “Over the past 24 hours, to what extent did you feel: a) calm (reverse coded), b) happy (reverse coded), c) frustrated, d) worried, e) tired, f) sad, g) irritable, h) angry, i) upset.” Each question had five response categories ranging from 1 (*Not at all*) to 5 (*Extremely*). We utilize the sum of the responses to these questions ( $\alpha=.87$ ) as our dependent variable (*respondent psychological distress*). We top-code respondent psychological distress at 99% (a score of 34 on the scale) in order to account for a small number of extreme outliers.<sup>2</sup>

Because of the dyadic nature of the data, we are able to calculate the same measure of psychological distress for both the respondent and their partner within each marriage. Thus, we include measures for “Partner Distress” and “Respondent Distress” in the analysis. The main independent variable of interest is “Partner Distress” and the primary dependent variable is “Respondent Distress.” We additionally adjust for covariates that may be independently associated with daily psychological distress of respondents, including children in the household (1=yes), relationship duration (in years), employment status (working = reference group), and educational attainment (less than college degree (reference group), college degree, more than college degree) (Mirowsky and Ross 2003). Finally, as is customary with intensive longitudinal designs, we adjust for time (day 1-day 10 of survey) as a way of absorbing variation in distress across days that is independent from relationship and gender dynamics at hand.

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<sup>2</sup>Our main results are nearly identical in magnitude and in fact slightly statistical stronger in significance when we do not top code outliers. Top coding thus represents a conservative approach to handling these values.

### 3.2 Analytic Strategy

In order to examine respondent and partner daily psychological distress across gender and union type (i.e., whether the respondent is in a same- or different-sex marriage), we employ the factorial method (West, Popp, and Kenny 2008)-- an extension of the Actor Partner Interdependence Model (APIM; Cook and Kenny 2005)-- via multilevel regression modeling with crossed random effects. Multilevel modeling can account for both the nested structure of the data and the interdependence between spouses. Crossed random effects are necessary because partners and days are nested within couples but are “crossed” with one another (Kenny, Kashy, and Cook 2006). Including both distinguishable (i.e., different-sex) and indistinguishable (i.e., same-sex) dyads in the sample creates an additional analytic complexity because there is no meaningful way to separate members in the dyad (e.g., by gender in different-sex couples). Multilevel modeling and structural equation modeling are the methods capable of estimating APIM effects when samples include both distinguishable and indistinguishable dyads; however, structural equation modeling is only preferred when estimating latent variable models or models with measurement error (Kenny, Kashy, and Cook 2006). We model the covariance structure for partners as exchangeable (constraining the error variances to be equal) to model the non-independence in the dyad (Kenny, Kashy, and Cook 2006; West, Popp, and Kenny 2008). We refer to the actor as “respondent” and the partner as “partner.” The factorial method provides separate effects for three different “gender effects” in the model: respondent gender, partner (i.e., the spouse) gender, and the interaction of respondent and partner gender (or dyad gender). We estimate a series of interaction models leading up to a final model with a three-way interaction for the respondent’s gender, partner’s gender, and partner’s daily psychological distress. We examine the spousal distress transmission that occurs on the same-day (Table 2) and lagged spousal distress transmission that flows from the spouse on Day N to the respondent on Day N+1 (Table 3).

In Table 2 and Table 3, the first regression model tests whether partner psychological distress is a significant predictor of respondent psychological distress. Model 1 also tests whether respondent gender is a significant predictor (1=Male) of psychological distress after controlling for partner gender and whether partner gender (1=Male) is a significant predictor of psychological distress after controlling for respondent gender. The second model adds the interaction of respondent gender and partner gender (“Respondent Gender\*Partner Gender”) to test whether respondent gender and/or partner gender effects differ if both spouses are men. Model 3 includes the interaction of respondent gender and psychological distress to test whether/how the association between respondent and partner distress differs for men compared to women. Model 4 includes the interaction of partner gender and psychological distress to test whether/how the association between respondent and partner distress depends on the gender of the spouse (i.e. whether one is *married to* a man or a woman). Model 5 includes all interactions from Models 2–4 in addition to the three-way interaction of respondent gender, partner gender, and psychological distress. The three-way interaction in Model 5 examines whether the effects of respondent gender and partner gender are multiplicative. All models include controls for children present in the household, relationship duration, employment, and education. We then use regression estimates to calculate predicted scores for four groups: men married to men, men married to women,



women married to men, and women married to women. We test for differences in the association between respondent and partner psychological distress across these four groups using post-estimation chi-square tests of equality of the margins (StataCorp 2017).

## 4. RESULTS

### 4.1.1 Descriptive Statistics

Descriptive demographic data for the sample are provided in Table 1. On average, respondents are 48.2 years-old and have been with their spouses for approximately 15 years. Respondents spend an average of 7 hours with their spouse each day, and same-sex spouses spend more time together than different-sex spouses. The sample is highly educated, with 50% of respondents having a post-graduate degree. There is substantial variation in whether individuals have children in the household. Whereas 71% of individuals in different-sex marriages report having children in the household, only 12.7% of men married to men and 40.4% of women married to women report children in the household. Turning to trends in psychological distress, descriptive results demonstrate that women married to men report the highest level of daily psychological distress (17.4), followed by women with women (16.5), men with women (16.2), and men with men (15.5). These trends are in line with population-level data suggesting that women report more psychological distress than men (Kessler et al. 2005; Simon 2002).

### 4.1.2 Partner and Respondent Psychological Distress

In Models 1–5 of Table 2, we examine how partner psychological distress predicts respondent psychological distress for men and women in same-sex and different-sex marriages. The multilevel regression results (Table 2) show positive and significant coefficients for partner psychological distress, indicating that higher levels of partner psychological distress are associated with higher levels of respondent psychological distress on concurrent days. We find that a unit increase in partner's distress is associated with a .36 unit (coef: 0.36,  $p < .001$ ) increase in the individual's distress, net of individual and household factors. We also find that compared to working full- or part-time, not working is positively associated with psychological distress (coef: 0.70,  $p < .05$ ). Moreover, having a college degree compared to no college degree (coef: 0.60,  $p < .10$ ) and having children in the household (coef: 0.70,  $p < .001$ ) are positively associated with levels of psychological distress. Time is negatively associated with psychological distress (coef:  $-0.08$ ,  $p < .001$ ), which may indicate a measurement issue wherein asking participants about their daily distress influenced their responses the longer they were in the study.

The significant respondent gender ("Respondent Gender") and partner gender ("Partner Gender") coefficients in Model 1 of Table 2 indicate that regardless of partner gender, women report more psychological distress than men (coef for men:  $-0.97$ ,  $p < .001$ ) and respondents report less psychological distress when married to a woman (coef for male spouses: 0.58,  $p < .05$ ). The non-significant interaction term in Model 2 of Table 2 suggests that the significant respondent and partner gender coefficients in Model 1 are independent of one another and that being married to a same-sex partner is not associated with higher levels of psychological distress.

### 4.1.3 Differences in the Association of Partner and Respondent Psychological Distress on the Same Day for Men and Women in Same- and Different-Sex Marriages

We examine whether spousal distress transmission differs for men and women in same-sex and different-sex marriages. In Table 2, we examine how the association between partner psychological distress and respondent psychological distress on the same day is moderated by respondent gender (Model 3), partner gender (Model 4), and the interaction of respondent and partner gender (i.e., being in a same-sex and different-sex marriage) (Model 5). In Model 3, we test how respondent gender may influence distress transmission by testing whether the relationship between respondent and partner psychological distress is moderated by the respondent's gender. Our results demonstrate that there is a weaker relationship between partner distress and respondent distress for men compared to women (coef:  $-0.07$ ,  $p < .01$ ). That is, compared to men, women's psychological distress is more closely linked with their spouses' level of distress. In Model 4, we test whether psychological distress transmission is conditional on partner gender. The non-significant interaction between partner gender and partner psychological distress suggests that the gender of one's partner does not condition spousal distress transmission on its own.

In Model 5, we consider how respondent and partner gender may interact to determine the strength of the association between partner and respondent distress for men and women in same-sex and different-sex marriages. Model 5 contains the three two-way interactions from Models 2–4 in addition to a three-way interaction of respondent gender, partner gender, and partner psychological distress. With the three-way interaction included in Model 5, the reference group becomes female respondents married to women (represented by the main effect for partner distress), the interaction between respondent gender and distress represents the effect for male respondents married to women, the interaction between partner gender and distress represents the effect for female respondents married to men, and the three-way interaction represents the additional effect for male respondents married to men. The interaction between respondent gender and psychological distress remains significant (coef:  $-0.06$ ,  $p < .05$ ), indicating that spousal distress transmission is weaker for men married to women compared to women married to women. The interaction between partner gender and distress becomes significant (coef:  $0.07$ ,  $p < .05$ ), reflecting that spousal distress transmission for women married to men is statistically stronger for women married to men compared to women married to women. As indicated by the non-significant three-way interaction term, we do not find evidence that spousal distress transmission is stronger in same-sex compared different sex marriages once we account for the gender of the spouses within the marriage.

We illustrate the overall pattern of results in Figure 1. This figure graphs the predicted values of respondent distress by partner distress from Model 5 for the four marital groups: men with men (solid line), men with women (long dashed line), women with men (short dashed line), and women with women (dotted line). First, we observe that the association between partner and respondent daily psychological distress is stronger for women than for men, indicated by the steeper slope for women compared to men. Second, we observe that the magnitude of the association varies between women in same-sex compared to different-sex marriages, and is stronger for women married to men than for women married to women. In contrast, men married to women and men married to men are statistically indistinguishable

with regard to the predicted magnitude of spousal distress transmission. Finally, we observe that gender differences in the predicted relationship between partner's distress and the respondent's distress increase as partner distress increases. At low levels of partner distress, we observe only small differences in the association between partner's distress and respondent's distress by gender, i.e. men and women in same-sex and different-sex marriages appear to be similarly influenced by their partner's level of psychological distress. However, at increasing levels of partner distress, women with male partners are predicted to experience significantly higher levels of distress than every other group. Overall, these results suggest that both men's and women's psychological distress is strongly related to their partner's level of distress, but that 1) women appear to be more influenced by their partner's distress than men, and 2) spousal distress transmission is strongest for women married to men.

The results in Model 5 of Table 2 can be used to calculate the spousal distress transmission coefficient for each group and post-estimation chi-square tests of equality can confirm whether the coefficients differ between the groups. Figure 2 graphs the predicted coefficients for the effect of partner psychological distress on respondent distress from Model 5 of Table 2, includes the overall significance of each coefficient, and denotes significant differences in the coefficient of each group. These coefficients confirm the results in Figure 1: the association between partner distress and respondent distress is strongest for women with male spouses (coef:  $0.38+0.07=0.45$ ,  $p<.001$ ), followed by women with female spouses (coef:  $0.38$ ,  $p<.001$ ), men with male spouses (coef:  $0.38-0.06+0.07-0.06=0.33$ ,  $p<.001$ ), and men with female spouses (coef:  $0.38-0.06=0.32$ ,  $p<.001$ ). The association between partner and respondent psychological distress is stronger for women with male spouses compared to women with female spouses (coef:  $0.45>0.38$ ,  $p<.05$ ), men with male spouses (coef:  $0.45>0.33$ ,  $p<.001$ ), and men with female spouses (coef:  $0.45>0.32$ ,  $p<.001$ ). The association is also stronger for women with female spouses compared to men with female spouses (coef:  $0.38>0.32$ ,  $p<.05$ ). Overall, the results suggest that spousal distress transmission is stronger for women compared to men, and being in a same-sex versus different-sex marriage matters for spousal distress transmission for women. However, the strength of spousal distress transmission is similar for men in both same-sex and different-sex marriages.

#### **4.1.3 Differences in the Association of Partner Distress from the Previous Day and Respondent Psychological Distress for Men and Women in Same- and Different-Sex Marriages**

We also examine how the association between partner psychological distress on the previous day and respondent psychological distress on the next day differs for men and women in same-sex and different-sex marriages (Table 3). Model 1 shows that partner's distress on the previous day is positively associated with a respondent's distress the next day (coef:  $0.03$ ;  $p<.05$ ). In Model 5, the main effect for partner distress on the previous day again represents the association for women with female spouses. The results in Table 3 Model 5 show that women married to women are not significantly (coef:  $0.03$ ;  $p>.05$ ) influenced by their spouse's distress from the previous day. The non-significant interaction terms indicate that

spousal distress transmission for other couple types is not statistically different from women married to women.

The results in Model 5 of Table 3 can best be understood by calculating the predicted coefficients and the overall significance of each coefficient for the association of previous-day partner distress with respondent psychological distress the next day for each group (Figure 3). Figure 3 shows that partner distress from the previous day is only significantly associated with respondent distress on the following day for women with male spouses (coef:  $0.03+0.06=0.09$ ;  $p<.05$ ). Post-estimation chi-square tests of equality test whether the coefficients differ significantly between the groups. We find that the association between partner's previous-day distress and respondent distress is stronger for women with male spouses (coef: 0.09) compared to men with male spouses (coef: 0.01;  $p<.05$ ). The magnitude of the predicted relationship between partner's distress and actor's distress for women married to men is also notably larger for this group compared to all others (coef: 0.09 vs. 0.03 and 0.01). The difference between men with male spouses and women with male spouses can also be understood by Table 1 in the Appendix where the reference group of "Actor Gender" and "Partner Gender" is changed from women to men; thus, the comparison group in Model 5 is men married to men instead of women married to women. The significant interaction of actor gender and partner distress (coef: 0.08,  $p<.05$ ) in Model 5 corresponds to the significant difference of women married to men compared to men married to men. Overall, the results suggest that spousal distress transmission from a previous day to the next day is only apparent for women with male spouses.

## 5. DISCUSSION

The marital relationship is an important site for exposure to and transmission of psychological distress. While previous research has demonstrated that distress transmission occurs between spouses (Meyler, Stimpson, and Peek 2007; Joiner and Katz 2006; Goodman and Shippy 2002; Tower and Kasl 1995; 1996), this study is the first to consider how this dynamic differs for midlife men and women in same-sex compared to different-sex marriages. Our study suggests two important themes about midlife spouses in long-term, committed relationships. First, compared to men, women's distress levels may be more affected by their spouses' distress on a day to day basis. Second, this pattern is strongest for women married to men in comparison to women married to women, men married to women, and men married to men. Although patterns of spousal distress transmission diverge for women married to men and women married to women, we find that patterns of spousal distress transmission are similar for men married to men and men married to women.

Our first theme highlights the important role of gender in shaping the susceptibility of individuals to their spouses' psychological distress. Compared to men, we find that women's distress is more closely tied to their spouses' distress on the same day and the following day, regardless of whether they are married to a man or a woman (support for H1). One explanation for this pattern is that structural systems associated with gender impose pressures on women to be more emotionally invested in their close ties and this closeness may be detrimental when their partners' experience emotional distress (Belle 1982; Kessler and McLeod 1984; Kessler et al. 1985). Another possibility is that because women are

encouraged to be more empathic than men (Macaskill et al. 2002; Toussaint and Webb 2005), this increased ability to relate to a distressed spouse may also increase the extent to which they become distressed. In contrast, men may be less likely to recognize that their spouses are distressed or to empathize with a distressed spouse. We also find that the impact of one spouse's distress on the other spouse lingers an additional day for women married to men, but not for other married couples (partial support for H3). This pattern aligns with prior work showing that women are more likely than men to ruminate and thus experience prolonged distress (e.g., Almeida and Kessler 1998; Mohr et al. 2003), although it nuances this finding by suggesting this rumination is primarily true for women married to men. Perhaps women married to women ruminate less because female spouses aid in the recovery from distress transmission, an important consideration for future research.

Our second major theme suggests that women in different-sex marriages are uniquely at risk of taking on their spouse's distress (H2 not supported). Our analysis demonstrates that women married to men are more influenced by their spouses' distress than any other group. The first possible explanation of this finding underscores the importance of the gender-as-relational theoretical approach (Springer, Hankivsky, and Bates 2012), as social interactions appear to unfold differently depending on the gender of the individual in relation to the gender of their spouse. Gender roles that encourage women to hide or downplay the severity of their distress to avoid burdening their partner (Erickson 2005; Thomeer, Reczek, and Umberson 2015) may lead respondents married to women to be less exposed to their spouses' distress. To this end, if male spouses are less likely to downplay or hide their distress from a spouse, respondents married to men may be more likely to take on their spouses' distress. However, we find that distress transmission among men married to men is weaker than the transmission among women married to men. Thus, the combination of women's greater empathy (Macaskill et al. 2002; Toussaint and Webb 2005) with men's decreased tendency to downplay their own distress (Thomeer, Reczek, and Umberson 2015) may place women married to men at greater risk of being influenced by their partners' distress. Structural constraints and demands associated with gender and heteronormativity impose pressures on women in different-sex unions to monitor and attend to the emotions of men – another type of unpaid work that is unequally distributed by gender (Erickson 2005; Umberson et al. 2015). Importantly, these findings suggest that examining respondent gender alone to understand spousal distress transmission obscures the unique dynamic among women in different-sex relationships that increases the extent to their spouses' distress influences their own.

A second possible explanation for the greater spousal distress transmission observed among women married to men compared to women married to women is that relationship dynamics in different-sex unions are less egalitarian and characterized by greater power inequality than the dynamics in same-sex unions. In turn, these relationship dynamics may put women married to men at greater risk of taking on their partners' distress. Indeed, prior work suggests that gay and lesbian couples share parent caregiving, child care, emotion work, and housework responsibilities more equally than heterosexual couples (Goldberg et al., 2012; Reczek & Umberson, 2016; Umberson, Thomeer, and Lodge 2015). In supplemental analyses, we find that having children in the household contributes to greater spousal distress transmission for women married to men only. This may be because women married

to men are providing support to their husbands as well as their children, thereby increasing a “support gap”. Studies of depression suggest that women married to other women are more aware of how their own mental health influences their female partners than are men married to women (Thomeer, Reczek and Umberson 2015). As a result, women in lesbian relationships may engage in both more emotion work and more reciprocal emotion work to limit the extent to which they rely on their partners to relieve their emotional distress. This mutual emotional involvement also reduces the “support gap” often observed in different-sex marriages, wherein women in heterosexual relationships may engage in considerable emotion work that is not reciprocated by their male spouses. Taken together, the emotional “costs of caring” that contribute to women’s psychological distress are more apparent for women married to men. In supplemental analyses controlling for the egalitarianism of the marital relationship (respondent’s response to “My spouse and I have equal power in our relationship”, we continue to find strong evidence that spousal distress transmission is greatest for women with male spouses compared to all other groups. These additional tests suggest that the strength of psychological distress transmission for women with male spouses extends beyond differences in equality of marital relationships. Future research should directly investigate the possibility that gender differences in emotion work contribute to differences in the transmission of distress between spouses.

A final possible explanation for the unique risk of distress transmission experienced by women married to men is that the increased tendency for women to serve as confidants for male spouses may exacerbate the extent to which women married to men are exposed to and influenced by their spouses’ distress. Gender differences in confidant network size may thus moderate the process of spousal distress transmission. Indeed, previous research demonstrates that women maintain more emotionally intimate relationships (Barbee et al. 1993; Liebler and Sandefur 2002; Wellman and Wortley 1990) and may be more likely to activate non-spousal social support from these sources than men. Women also tend to report larger social networks than men (McPherson, Smith-Lovin and Brashears 2006; Moore 1990) and, in samples of different-sex couples, women are less likely than men to name their spouse as their closest confidant (Antonucci and Akiyama 1987; Fuhrer and Stansfeld 2002; Fuhrer et al. 1999; Gurung et al. 2003). These differences between men’s and women’s confidant networks may hinder distressed men’s ability to better draw on social support outside the marriage, thereby increasing spousal distress transmission from men married to women. At the same time, women may turn to their (larger networks) for support when they are distressed, reducing the distress transmitted to their partners. Social network data capturing the confidant networks of men and women in same-sex and different-sex marriages would be particularly valuable in evaluating whether support dynamics beyond the marital dyad shape distress transmission between spouses.

Throughout this paper, we have both theorized and operationalized gender as a binary based on prior literature and sample constraints. Although this approach aligns with the gender identities of the respondents in the sample, we recognize that the treatment of gender in this way does not speak to all individuals’ identities and experiences. Especially in LGBT relationships, wherein gender roles, presentations, and identities may be more fluid (Li, Pollitt, and Russell 2016; Lippa, 2005), it is necessary to contextualize our research as speaking to broad differences between individuals in same-sex and different-sex

relationships and not characteristic of all (particularly LGBT) relationships. As a result, the generalizability of our results is limited to individuals who identify as cisgender and are coupled with cisgender partners. More work is needed to understand how these processes vary (or not) for couples in which one or both partners are gender non-conforming. Similarly, due to the composition of our sample<sup>3</sup>, we were unable to tease out how the experience of same-sex and different-sex marriage for distress transmission varies by sexual orientation (e.g., queer, bisexual, lesbian, gay versus heterosexual)—this is in part why we refer to couples as “same-sex” and “different-sex” couples throughout. We hope this work serves as a step toward understanding how relationship dynamics outside of the heterosexual context matter for mental health and urge future work to dig into these differences. Given the worse mental health of both bisexual and transgender individuals (compared to straight and cisgender populations; Institute of Medicine 2011), it will be critical to understand how romantic partners’ mental health contributes to or protects individuals from mental health disadvantage.

There are additional limitations to this work that should be noted. First, we cannot adjust for environmental confounders that would lead to concordance in spouses’ distress. Stressful events that both spouses are exposed to—such as having a sick child or experiences of discrimination based on sexual orientation—may lead to concordance among spouses’ stress and would not reflect the influence of one spouse’s health on the other’s. The stress process model posits that stressors are socially patterned (Pearlin et al., 1981), such that stress is most likely “to impinge on those whose statuses yield the least privilege, power, and prestige” (Pearlin et al., 2005, p. 214), suggesting such confounders could be most salient for same-sex couples. Experiences of prejudice, discrimination, and/or rejection due to a minority status are a source of stress among sexual minority individuals (Meyer 2003) and may translate to distress, which we examine in this paper. We address potentially unequal baseline stress between union types by adjusting for household factors, including education and children at home, that may cause distress for both spouses. In supplemental analyses, the pattern of results remain unchanged after controlling for experiences of discrimination (measured by Williams’ Everyday Discrimination Scale). Although an examination of stress contagion is beyond the purview of this paper, finer-grained detail on the respondents’ schedules and types of stress to which they are exposed would be helpful in ensuring that these differences are more fully accounted for. Nonetheless, if exposure to stress were truly responsible for the distress transmission we observe in this analysis, we would expect spousal distress transmission to be strongest for same-sex couples. We do not find evidence that this is the case as the spousal distress transmission relationship is strongest for women married to men.

While our data include multiple days of self-reported distress and reflect distress experienced on a daily basis, a wider longitudinal window could shed light on how the *endurance* of distress contagion may differ between men and women in same-sex and different-sex marriages. Additionally, future research may consider modeling distress trajectories over time and how these are related to actor gender, partner gender and the

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<sup>3</sup>In the overall sample, 91.4% of the sample identified as straight, gay, or lesbian, thereby limiting our ability to tease out how identifying as bisexual or queer may shape relationship dynamics in same-sex and different sex couples.

gender composition of the marital union. Finally, some aspects of the study design limit the generalizability of the results. This study uses a sample of highly educated midlife adults in long-term relationships. Given the known benefits of socioeconomic status for coping with stress (Pearlin et al. 2005), this could influence the process of spousal distress transmission. However, this limitation does not explain why spousal distress transmission is strongest for women with male spouses. Similarly, if differences in the recruitment of same-sex couples compared to different-sex couples were to bias the results, we would expect different-sex marriages to look different from same-sex marriages; this is only true for women.

The research breaks important ground in understanding the role of intimate relationships for the health of midlife adults. Spouses' distress operates as an important source of social influence for individuals' mental health. Our findings suggest that, for midlife women in long-term relationships, having a same-sex partner may buffer the extent to which they are negatively impacted by their partners' distress, though they still experience greater increases in distress than men when their spouses are distressed. These findings reinforce evidence that spouses play an important role in shaping each other's mental health in gendered ways for individuals in both same-sex and different-sex marriages.

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## Appendix

**Appendix Table 1.**

Estimates from Multi-level Regression Models Testing Previous Day Partner Psychological Distress (mean-centered) on Current Day Actor's Psychological Distress (n=378 couples)

	1	2	3	4	5
Partner Psychological Distress (Previous day)	0.03 <sup>*</sup> (0.01)	0.03 <sup>*</sup> (0.01)	0.00 (0.02)	0.03 (0.02)	0.00 (0.02)
Actor Gender (ref: Male)	0.89 <sup>**</sup> (0.27)	1.30 <sup>**</sup> (0.49)	0.86 <sup>**</sup> (0.27)	0.88 <sup>**</sup> (0.27)	1.29 <sup>**</sup> (0.49)
Partner Gender (ref: Male)	-0.26 (0.27)	0.16 (0.49)	-0.24 (0.27)	-0.26 (0.27)	0.19 (0.49)
Time (in days)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)
Children in Household (ref: No children in household)	1.05 <sup>***</sup> (0.32)	0.89 <sup>*</sup> (0.36)	1.06 <sup>***</sup> (0.32)	1.05 <sup>***</sup> (0.32)	0.89 <sup>*</sup> (0.36)
Relationship Duration (in years)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)
Not working (ref: Working)	0.6	0.59	0.6	0.6	0.58



	1	2	3	4	5
	(0.34)	(0.34)	(0.34)	(0.34)	(0.34)
College Degree (ref: Less than college degree)	0.95 <sup>*</sup>	0.98 <sup>**</sup>	0.96 <sup>*</sup>	0.95 <sup>*</sup>	0.98 <sup>**</sup>
	(0.37)	(0.37)	(0.37)	(0.37)	(0.37)
Graduate Degree (ref: Less than college degree)	0.27	0.31	0.26	0.27	0.30
	(0.35)	(0.36)	(0.35)	(0.35)	(0.36)
Respondent Gender*Partner Gender		-0.76			-0.78
		(0.74)			(0.74)
Respondent Gender* Partner Distress			0.04		0.08 <sup>*</sup>
			(0.02)		(0.04)
Partner Gender*Partner Distress				-0.01	0.01
				(0.02)	(0.04)
Respondent Gender*Partner Gender*Partner Distress					-0.06
					(0.05)
Constant	15.73 <sup>***</sup>	15.66 <sup>***</sup>	15.73 <sup>***</sup>	15.73 <sup>***</sup>	15.64 <sup>***</sup>
	(0.52)	(0.53)	(0.52)	(0.52)	(0.53)

Standard errors in parentheses

\*\*\*  
p<0.001

\*\*  
p<0.01

\*  
p<0.05

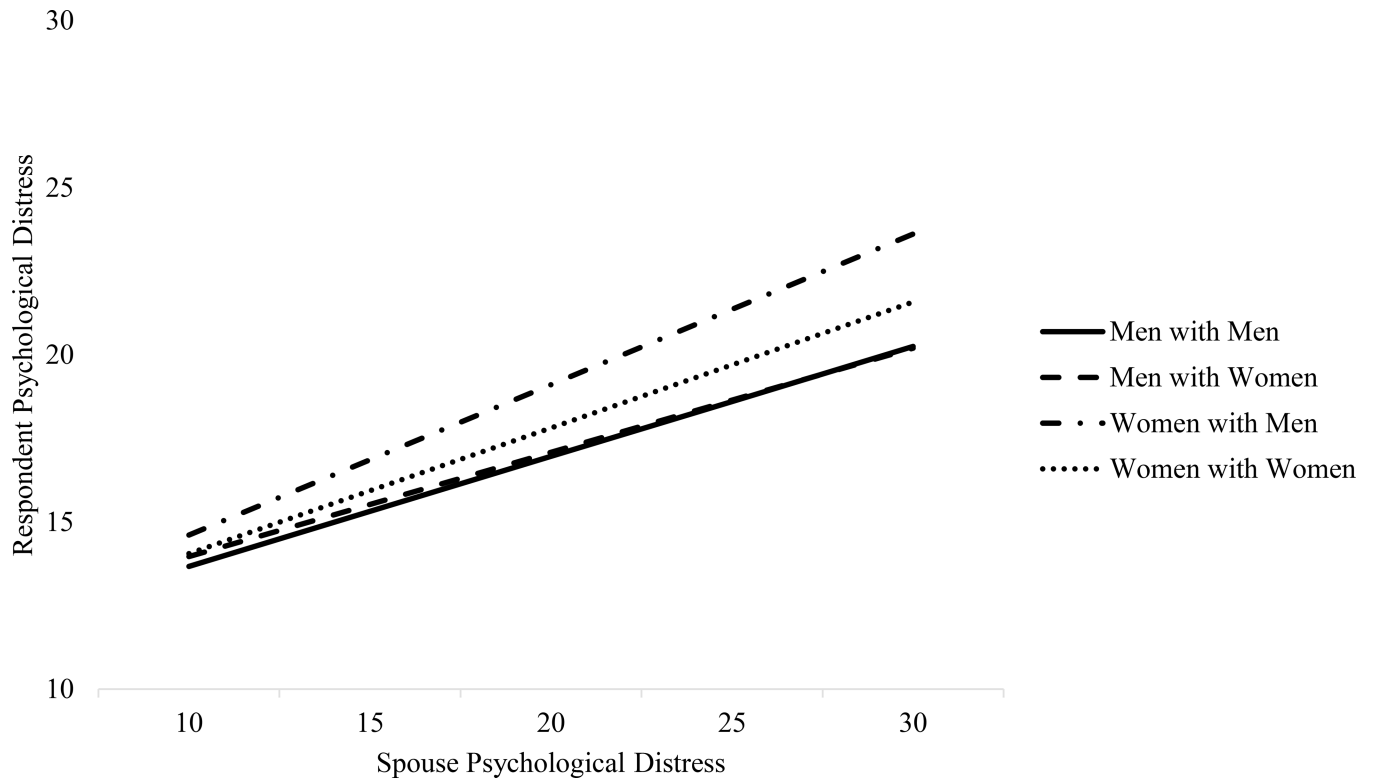
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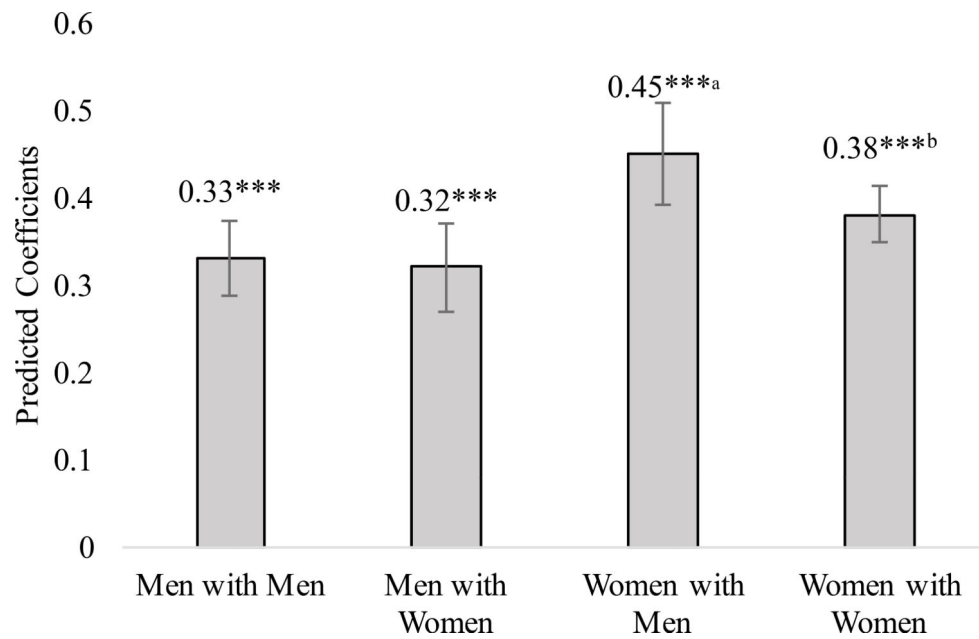
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**Figure 1.**  
Predicted Scores of Respondent Psychological Distress Regressed on Their Spouse's Psychological Distress

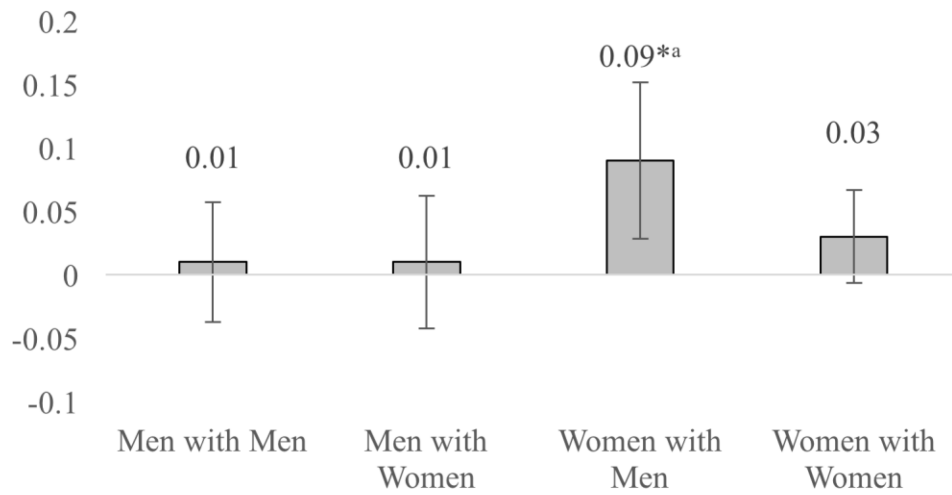


**Figure 2.** Adjusted Predicted Effect of Spouse's Distress on Respondent's Distress by Group (Same-Day Results)

Note. Predicted effects are the predicted coefficients for each group from Table 2, Model 5. Statistical significance denotes overall significance of the association between partner and respondent psychological distress transmission

a. Based on a chi-square test of equality, the coefficient for Women with Men is statistically greater than the coefficients for Women with Women ( $p < .05$ ), Men with Women ( $p < .001$ ), and Men with Men ( $p < .001$ )

b. Based on a chi-square test of equality, the coefficient for Women with Women is statistically greater than the coefficients for Men with Women ( $p < .05$ )



**Figure 3.**

Adjusted Predicted Effect of Spouse's Previous Day Distress on Respondent's Distress the Next Day by Group

Note. Predicted effects are the predicted coefficients for each group from Table 3, Model 5. Statistical significance denotes overall significance of the association between partner and respondent psychological distress transmission

a. Based on a chi-square test of equality, the coefficient for Women with Men is statistically greater than the coefficient for Men with Men ( $p < .05$ )

**Table 1.**

Descriptive Data for Sample, by Sex Composition of the Couple (N=756 individuals; 378 couples)

	<b>Total Sample</b>	<b>Men with Men</b>	<b>Men with Women</b>	<b>Women with Men</b>	<b>Women with Women</b>
N	756	212	115	115	314
Age (mean)	48.2 (8.41)	49.7 (8.45)	46.5 (8.08)	45.0 (7.55)	49.0 (8.40)
Relationship Duration (mean)	15.1 (7.95)	16.3 (7.78)	15.9 (8.19)	15.9 (8.19)	13.7 (7.67)
Education (%)					
Some College or Less	19.6 (3.97)	19.8 (3.40)	30.4 (4.62)	24.3 (4.31)	13.7 (3.44)
College Degree	29.7 (4.57)	31.1 (4.64)	32.2 (4.69)	26.1 (4.41)	29.0 (4.54)
Post Graduate	50.1 (5.00)	49.1 (5.01)	37.4 (4.86)	49.6 (5.02)	57.3 (4.95)
Children in Household (% Yes)	42.1 (4.94)	12.7 (3.34)	71.3 (4.54)	71.3 (4.54)	40.4 (4.92)
Daily Hours Spent with Spouse (mean)	7.04 (4.51)	7.16 (4.69)	6.62 (4.37)	6.70 (4.43)	7.24 (4.44)
Daily Psychological Distress (mean)	16.3 (5.19)	15.5 (4.93)	16.2 (4.91)	17.4 (5.54)	16.5 (5.23)

Standard deviations in parentheses.



**Table 2.**

Estimates from Multi-level Regression Models Testing Respondent's Psychological Distress Regressed on Their Spouse's Psychological Distress on the Same Day (n=378 couples)

	1	2	3	4	5
Partner Psychological Distress	0.36 <sup>***</sup> (0.01)	0.36 <sup>***</sup> (0.01)	0.39 <sup>***</sup> (0.01)	0.36 <sup>***</sup> (0.01)	0.38 <sup>***</sup> (0.02)
Respondent Gender (ref: Female)	-0.97 <sup>***</sup> (0.28)	-0.69 (0.36)	-0.46 <sup>***</sup> (0.28)	-0.96 <sup>***</sup> (0.28)	-0.62 (0.36)
Partner Gender (ref: Female)	0.58 <sup>*</sup> (0.28)	0.86 <sup>*</sup> (0.36)	0.55 (0.28)	0.58 <sup>*</sup> (0.28)	0.84 <sup>*</sup> (0.36)
Time (in days)	-0.08 <sup>***</sup> (0.01)	-0.08 <sup>***</sup> (0.01)	-0.08 <sup>***</sup> (0.01)	-0.08 <sup>***</sup> (0.01)	-0.08 <sup>***</sup> (0.01)
Children in Household (ref: No children in household)	0.70 <sup>***</sup> (0.21)	0.57 <sup>*</sup> (0.23)	0.72 <sup>***</sup> (0.21)	0.71 <sup>***</sup> (0.21)	0.58 <sup>*</sup> (0.23)
Relationship Duration (in years)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Not working (ref: Working)	0.70 <sup>*</sup> (0.31)	0.68 <sup>*</sup> (0.31)	0.68 <sup>*</sup> (0.31)	0.70 <sup>*</sup> (0.31)	0.65 <sup>*</sup> (0.31)
College Degree (ref: Less than college degree)	0.60 (0.33)	0.64 (0.33)	0.60 (0.33)	0.60 (0.33)	0.64 (0.33)
Graduate Degree (ref: Less than college degree)	0.17 (0.29)	0.22 (0.30)	0.17 (0.29)	0.17 (0.29)	0.22 (0.29)
Respondent Gender*Partner Gender		-0.61 (0.49)			-0.67 (0.49)
Respondent Gender* Partner Distress			-0.07 <sup>**</sup> (0.02)		-0.06 <sup>*</sup> (0.03)
Partner Gender*Partner Distress				0.01 (0.02)	0.07 <sup>*</sup> (0.03)
Respondent Gender*Partner Gender*Partner Distress					-0.06 (0.05)
Constant	16.36 <sup>***</sup> (0.37)	16.34 <sup>***</sup> (0.37)	16.35 <sup>***</sup> (0.37)	16.35 <sup>***</sup> (0.37)	16.32 <sup>***</sup> (0.37)

Standard errors in parentheses

\*\*\*  
p<0.001

\*\*  
p<0.01

\*  
p<0.05

**Table 3.**

Estimates from Multi-level Regression Models Testing Respondent's Psychological Distress Regressed on Their Spouse's Psychological Distress from the Previous Day (n=378 couples)

	1	2	3	4	5
Partner Psychological Distress (Previous day)	0.03 <sup>*</sup> (0.01)	0.03 <sup>*</sup> (0.01)	0.05 <sup>**</sup> (0.02)	0.02 (0.02)	0.03 (0.02)
Respondent Gender (ref: Female)	-0.89 <sup>**</sup> (0.27)	-0.55 (0.44)	-0.87 <sup>**</sup> (0.27)	-0.89 <sup>**</sup> (0.27)	-0.52 (0.44)
Partner Gender (ref: Female)	0.26 (0.27)	0.60 (0.43)	0.24 (0.27)	0.26 (0.27)	0.58 (0.43)
Time (in days)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)	-0.09 <sup>***</sup> (0.02)
Children in Household (ref: No children in household)	1.06 <sup>***</sup> (0.32)	0.90 <sup>*</sup> (0.35)	1.07 <sup>***</sup> (0.32)	1.06 <sup>***</sup> (0.32)	0.90 <sup>*</sup> (0.35)
Relationship Duration (in years)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)
Not working (ref: Working)	0.59 (0.34)	0.58 (0.34)	0.59 (0.34)	0.59 (0.34)	0.57 (0.34)
College Degree (ref: Less than college degree)	0.95 <sup>*</sup> (0.37)	0.98 <sup>**</sup> (0.37)	0.96 <sup>*</sup> (0.37)	0.95 <sup>*</sup> (0.37)	0.98 <sup>**</sup> (0.37)
Graduate Degree (ref: Less than college degree)	0.27 (0.35)	0.31 (0.36)	0.26 (0.36)	0.26 (0.35)	0.30 (0.36)
Respondent Gender*Partner Gender		-0.76 (0.74)			-0.77 (0.74)
Respondent Gender* Partner Distress			-0.04 (0.02)		-0.03 (0.03)
Partner Gender*Partner Distress				0.01 (0.02)	0.06 (0.04)
Respondent Gender*Partner Gender*Partner Distress					-0.06 (0.05)
Constant	16.35 <sup>***</sup> (0.51)	16.36 <sup>***</sup> (0.51)	16.35 <sup>***</sup> (0.51)	16.35 <sup>***</sup> (0.51)	16.34 <sup>***</sup> (0.51)

Standard errors in parentheses

\*\*\*  
p<0.001

\*\*  
p<0.01

\*  
p<0.05