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Legal and Social Ceremonies to Formalize Same-Sex Relationships: Associations with
Commitment, Social Support, and Relationship Outcomes

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Abstract

In this study, we explored whether the formalization of same-sex relationships via legal or social ceremonies is associated with relationship outcomes, and whether these associations could be accounted for by enhanced commitment or social support for the relationship. At time 1, a geographically diverse sample of 604 U.S. adults in cohabiting same-sex relationships reported on whether they had formalized their relationship through a legal or social commitment ceremony, commitment to the relationship, and relationship-specific social support. Participants also reported on two relationship outcomes (satisfaction and instability) at time 1 and time 2 (6 months later). Results from cross-sectional analyses indicated that adults in legally formalized same-sex unions reported higher relationship satisfaction and lower instability than those in either socially formalized or non-formalized relationships, and that these differences were partially accounted for by differences in relationship commitment. Participants in same-sex relationships formalized by *either* legal or social ceremonies reported greater social support for their relationships than adults in non-formalized relationships. Longitudinal analyses indicated that legal formalization predicted reduced instability and marginally predicted increased satisfaction at time 2. Findings did not differ by gender or by the availability of legal recognition in participants' state of residence.

Legal and Social Ceremonies to Formalize Same-Sex Relationships: Associations with Commitment, Social Support, and Relationship Outcomes

Nearly two million adults in the United States are in a committed same-sex relationship, representing just under one percent of all U.S. adults (Gates & Newport, 2015). These numbers highlight the importance of understanding the risk and protective factors for healthy same-sex relationship functioning, in order to inform both policy and clinical practice. Overall, same-sex relationships are highly similar to opposite-sex relationships, showing equivalent levels of satisfaction, conflict, and intimacy (Peplau & Fingerhut, 2007) and similar predictors of couple outcomes, including communication, conflict resolution skills, and commitment (Kurdek, 2005). This suggests that the field's current relationship models, though grounded in research on different-sex (i.e., heterosexual) couples, may be fairly generalizable to same-sex couples.

One well-established predictor of relationship well-being among heterosexual couples is legal formalization of the relationship by marriage. In contrast to non-marital cohabitation, marriage is associated with advantages across numerous indices of relationship quality, including satisfaction, commitment, and stability (e.g., Brown & Booth, 1996; Stanley, Whitton, & Markman, 2004). Being married, versus living together without legal formalization of the relationship, is theorized to promote relationship well-being – as well as the health of the individual partners and their children – in part by providing tangible legal and financial benefits (e.g., health insurance, tax benefits, etc.; Herek, 2006). Although much of the public discourse on same-sex marriage has focused on these tangible benefits that marriage can provide same-sex couples, it is important to note that legal recognition is also theorized to enhance couple functioning via other mechanisms.

Specifically, two primary theoretical explanations have been put forth to explain the relational benefits of relationship formalization. First, commitment theory posits that marriage and other emblems of relationship formalization (e.g., engagement rings or commitment ceremonies)

have a strong symbolic significance, indicating partners' long-term commitment to one another and providing security in the relationship's permanence (Cherlin, 2004; Stanley et al., 2004).

Commitment, in turn, is a well-established and proximal predictor of positive couple outcomes, including relationship stability (vs. break-up; Le et al., 2010). Second, according to the social integration perspective (House, Umberson, & Landis, 1988), marriage may promote couple health by providing integration within social networks and support for the relationship. Such social support is predictive of higher relationship quality and stability in different-sex (Sprecher & Felmee, 1992) and same-sex couples (Blair & Holmberg, 2008).

Unfortunately, marriage has historically been denied to same-sex couples. It was not until 2004 that Massachusetts became the first state to legalize same-sex marriage, and just 6 years ago (in 2009) only three additional states had done so (Connecticut, Iowa, and Vermont). Due to rapid changes since then, as of April 2015, 37 states issue marriage licenses to same-sex couples (Freedom to Marry, 2015). Consequently, the number of married same-sex couples has increased dramatically; 390,000 of the 990,000 committed same-sex couples living in the United States are currently married (Gates & Newport, 2015). Early research suggests that marriage equality laws are associated with the mental and physical health of sexual minorities. Changes in state laws to begin conferring marital rights to same-sex couples have been associated with significant decreases in medical and mental healthcare utilization among sexual minority individuals in those states (Hatzenbuehler et al., 2012). In contrast, the prevalence of psychiatric disorders increased among sexual minority individuals living in states that passed amendments prohibiting same-sex marriage (Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010). Additionally, cross-sectional data have shown that sexual minority adults in legally recognized relationships report better psychological well-being than do those in committed relationships that are not legally formalized (Riggle, Rostosky, & Horne, 2010)

It has not yet been shown, however, whether marriage is associated with enhanced *relationship* outcomes among same-sex couples. Although it is likely that same-sex couples will experience the relationship benefits of marriage observed among different-sex couples, this cannot be assumed for several reasons. First, although many predictors of couple outcomes, such as the couple's communication and conflict resolution skills (Kurdek, 2005), appear to be consistent across couple type, some core differences exist between different-sex and same-sex couples. For example, within different-sex couples, sexual monogamy is nearly universally expected and considered crucial to a healthy relationship (e.g., Conley, Ziegler, Moors, Matsick, & Valentine, 2013); non-monogamy is associated with relationship distress and dissolution (e.g., Allen et al., 2005). In contrast, among male same-sex partnerships, extradyadic sexual activity is commonly acknowledged and even normalized (LaSala, 2005). Several studies have found that monogamy is not a predictor of relationship quality or individual well-being of men in same-sex relationships; rather, couples with non-monogamous agreements are generally as healthy and happy as those with monogamous agreements (Hoff, Beougher, Chakravarty, & Darbes, 2010; Parsons, Starks, DuBois, Grov, & Golub, 2013; Whitton, Weitbrecht, & Kuryluk, 2015). This suggests that perhaps other predictors of different-sex couple outcomes, including legal formalization, may also not generalize to same-sex couples.

Second, same-sex marriage does not currently provide all of the legal and financial benefits associated with heterosexual marriage. Until the July 2013 Supreme Court decision that laws barring the federal government from recognizing state-issued same-sex marriages were unconstitutional, there were no federal benefits for same-sex marriages. Even now, the extent to which this ruling will be implemented by various federal agencies in ways that will ensure marital benefits to same-sex couples remains unclear. The one-third of married same-sex couples who do not live in a state that recognizes their marriages (which were obtained out-of-state) typically do not

receive state-level marriage benefits.

Third, relevant to social integration and commitment theories, it is possible that legal relationship formalization is not as strongly associated with enhanced social support or relationship commitment among same-sex couples as it is among different-sex couples. Specifically, because the broader culture is not universally accepting of same-sex unions, marriage may not always provide same-sex couples enhanced social integration, particularly from families-of-origin and from religious and other community institutions. Further, qualitative research suggests that many same-sex couples are committed for a lifetime and would marry if they could (Reczek, Elliott, & Umberson, 2009); therefore, being unmarried may not reflect the ambiguous or low levels of commitment that it does for many heterosexual couples, who could marry if they so chose (Stanley et al., 2004). Conversely, couples who formalize their relationships legally may not necessarily be those who are more committed but may instead be those who have more ready access to such formalization (e.g., live in states that offer legal marriage or have financial means to travel). Importantly, many same-sex couples formalize their relationships socially rather than legally, via commitment ceremonies. Often involving the religious or cultural rituals of traditional weddings, commitment ceremonies represent a public declaration of partners' intention to be together permanently. Though they do not confer any legal rights, they may confer many of the benefits of marriage in terms of clarified commitment, relationship security, and social support for the relationship (Fingerhut & Maisel, 2010; Herek, 2006).

Very little research to date has examined whether the formalization of same-sex relationships, either legally or socially, is associated with relationship quality. Most research is qualitative, describing couples' perceptions of how legal or social formalization affected their relationships. These studies suggest that couples perceive their own legal relationship formalization (civil unions and marriages) as powerful events that result in health care benefits, reduced legal

worries, increased relationship commitment, and greater acceptance by family and the community (Ramos, Goldberg, & Badgett, 2009; Rothblum, Balsam, & Solomon, 2011). Commitment ceremonies, despite their lack of legal benefits, are also perceived by participating couples to increase their own sense of commitment and lead to greater community and social network support (Schechter, Tracy, Page, & Luong, 2008).

In terms of quantitative studies, comparisons of same-sex couples who obtained a Vermont civil union to other same-sex couples indicated no differences in relationship satisfaction, intimacy, conflict, or commitment; however, those in civil unions had lower 3 year break-up rates, which were equivalent to those of opposite-sex married couples (Balsam, Beauchaine, Rothblum, & Solomon, 2008). This suggests that civil unions may promote same-sex relationship stability. In the same sample, for male but not female same-sex couples, having a civil union was associated with greater closeness to one's family-of-origin and sharing more mutual friends with one's partner (Solomon, Rothblum, & Balsam, 2004). Although the data were cross-sectional and cannot indicate direction of effects, this finding suggests potential social support benefits of legal formalization. The one study examining both legal and social relationship formalization found that, among same-sex couples in California, social formalization was associated with higher relationship satisfaction but not relationship investments (a key component of commitment), whereas legal formalization was associated with investments but not relationship satisfaction (Fingerhut & Maisel, 2010). In sum, the limited existing evidence suggests that legal and social relationship formalization may provide relationship benefits to same-sex couples; however, these benefits may differ by type of relationship formalization (social vs. legal), gender, and type of benefit (i.e., relationship stability vs. satisfaction vs. commitment vs. social support). More research is clearly needed.

The Current Study

In the current study, we aimed to increase our understanding of whether same-sex

relationship formalization, via legal or social ceremonies, is associated with couple relationship outcomes. Using a large, nationally-recruited sample of individuals in cohabiting same-sex relationships, we examined whether social or legal relationship formalization ceremonies were cross-sectionally associated with relationship outcomes, as well as whether they predicted change in these outcomes or break-up status 6 months later. The current study extended findings from previous research, including the one previous quantitative study that examined both social and legal relationship formalization (Fingerhut & Maisel, 2010), in several ways. First, we assessed relationship outcomes not only with relationship satisfaction but also with relationship instability. This is important because same-sex couples, despite being highly similar to different-sex couples in terms of relationship satisfaction (Kurdek, 2005; Peplau & Fingerhut, 2007), are less stable, breaking up more quickly and more frequently (Kurdek, 2004; Lau, 2012). Consequently, same-sex couples are vulnerable to the host of negative health and mental health outcomes associated with relationship dissolution (Amato, 2000; Rhoades, Kamp Dush, Atkins, Stanley, & Markman, 2011).

The heightened instability of the same-sex couples observed in previous samples was likely due in part to their inability to legally formalize their relationships via marriage; as a whole, marriages dissolve less often than do cohabiting or other dating relationships (Teachman, Thomas, & Paasch, 1991). To inform the public debate and policy regarding legalization of same-sex marriage, it is important to evaluate whether relationship formalization is associated with less instability in same-sex couples— both in comparison to no relationship formalization and to the social ceremonies that many same-sex couples choose when legal marriage is not an option. Consistent with previous theoretical and empirical work (Agnew, Arriaga, & Wilson, 2008; Booth, Johnson, & Edwards, 1983), we conceptualized relationship instability not only as actual break-ups at time 2, but also as the extent to which individuals currently in relationships have thought about or taken steps towards ending their relationship. This definition allowed us to examine correlates of

relationship instability within a large sample of individuals in currently intact relationships.

Second, we tested two theoretically-indicated constructs as potential mediators of the associations between relationship formalization and relationship outcomes. Grounded in commitment and social integration theories, we explored whether enhanced relationship commitment and/or social support for the relationship might account for any observed benefits of relationship formalization on relationship quality (i.e., might mediate the association between relationship formalization and satisfaction or stability).

Third, we extended previous research by testing for gender differences in the associations between relationship formalization and couple outcomes. This is important because female same-sex couples have shown greater relationship instability than male same-sex couples; female couples have shown higher break-up rates than male couples both in samples of cohabiting U.S. couples (Kurdek, 2004) and legally recognized couples in Norway and Sweden (Andersson, Noack, Seierstad, & Weedon-Fekjær, 2006). Further, it is possible that relationship formalization may have a greater influence on men's than women's same-sex relationships. Stanley (2010; Stanley, Rhoades & Whitton, 2010) has theorized that commitment, strongly symbolized by relationship formalization, is more important in determining how men than how women approach their relationships. Whereas women often begin investing in and sacrificing for their relationships as soon as they feel romantically attached to their partners, men often will not do so until a long-term commitment to the relationship has been clearly established (Stanley, 2010; Whitton, Stanley & Markman, 2007). Building upon these ideas, we hypothesized that legal and social formalization would be more strongly associated with couple outcomes (satisfaction and stability) for men than for women.

Finally, we expanded previous research by examining the hypothesized associations in a sample of participants recruited from across the U.S. (vs. only in California or Vermont), which

increases generalizability of findings and allowed us to explore if any differences by formalization status depend upon availability of legal relationship formalization in state of residence.

Method

Participants and Procedure

Participants were 604 adults in committed cohabiting relationships of at least 6 months with a same-sex partner, who volunteered to participate in a study of same-sex relationship development from April to November 2012. Study advertisements were distributed by national, city, and state-level LGBT organizations to their members via email listservs, website postings, and flyers at PRIDE events. The online survey included an informed consent document and several measures of relationship and individual characteristics. Participants were not compensated financially for completing the survey. IP addresses and other identifying information were used to delete multiple responses from the same individual (who typically had re-started the survey after partially completing it). Of the 718 individuals who completed the survey, we excluded five who did not respond to the relationship formalization item and 109 individuals whose partner had already completed the survey (identified by responses to a question about whether their partner had completed the survey, as well as by self and partner birthdates), to retain independence of data. This yielded a final sample of 604 participants, which was 62% female, 87% White, 83% Non-Hispanic, and 87% self-identified gay or lesbian (8.4% bisexual, 3.0% queer, 1.6% missing or other). Participants were on average 40.7 years old ($SD = 12.0$ years). Median annual personal income was in the \$40,000 to \$49,999 range. Participants lived in 45 different states and Puerto Rico; 17.8% in the Northeast, 28.5% in the Midwest, 37.6% in the South, and 16.1% in the West. Median relationship length was in the 7-8 year range.

Over 50% ($N = 326$; 54%) of participants completed a brief follow-up survey approximately 6 months after the initial survey. Time 2 participants did not differ from those who did not complete

the time 2 survey on gender, race, ethnicity, age, income, or sexual orientation. However, those who completed the time 2 survey were more likely to have formalized their relationships via ceremony, $\chi^2(2, N = 604) = 8.29, p = .02$, had been in their relationships longer, $t(604) = -2.14, p = .03$, were more satisfied with their relationships, $t(532.91) = -2.56, p = .01$, and reported less relationship instability, $t(455.04) = 2.22, p = .03$ at time 1 than those who did not complete the time 2 survey. These differences suggest that the time 2 sample was selected for individuals in more stable, happy relationships; less happily and stably partnered participants were less likely to complete the time 2 measures. Some of these individuals' relationships had likely ended by time 2, whereas others were likely still together but less willing to complete the relationship-focused survey. Because those with the worst couple outcomes were least likely to have provided time 2 data, there was reduced variability in the data on Time 2 couple outcomes, limiting power to detect any associations between these outcomes and Time 1 relationship formalization. As a consequence, the longitudinal analyses predicting couple outcomes at time 2 were somewhat conservative.

Measures

Relationship formalization status. Participants were asked, "Have you had any legal or non-legal ceremonies to recognize your commitment to one another?" Participants selected one of three responses: *Yes, a legal ceremony*; *Yes, a non-legal ceremony*; or *No*.

Relationship outcome variables. *Relationship satisfaction* was assessed with the 4-item Couple Satisfaction Index (CSI; Funk & Rogge, 2007). Participants provided four global evaluations of their romantic relationship (e.g., "I have a warm and comfortable relationship with my partner") on Likert-type scales (e.g., 0 = Not at all True, 5 = Completely True). All ratings were summed so that higher scores indicate greater satisfaction. The CSI-4 has demonstrated strong psychometric properties (internal consistency, precision, convergent validity) in previous samples (Funk & Rogge, 2007). Internal consistency in the current sample was excellent ($\alpha = .94$).

Relationship instability was assessed using an adapted version of the Marital Instability Index (MII; Booth et al., 1983), a 5-item behaviorally oriented self-report measure designed to assess instability in intact couples. The MII, which asks participants to rate the frequency with which they have thought about or taken steps toward ending their relationship, is a commonly used index of index of instability in married samples (e.g., Whitton, Stanley, Markman, & Johnson, 2013; Yeh, Lorenz, Wickrama, Conger, & Elder, 2006) and is highly predictive of marital dissolution (Booth, Johnson, White, & Edwards, 1985). We developed the 4-item Relationship Instability Index, a modified version of this measure that is appropriate for same-sex couples and does not assume marital status. Specifically, we replaced the word “marriage” with “relationship” and “divorce” with “breaking up or ending my relationship” and deleted one item that asked about consulting an attorney regarding a possible divorce or separation, given that many same-sex couples do not have legal recognition. The final 4 items were: (“I have thought that my relationship might be in trouble,” “The thought of breaking up or ending the relationship has crossed my mind,” “I have discussed ending my relationship with a close friend,” and “My partner or I have seriously suggested the idea of ending our relationship”). Similar revisions of this measure used with unmarried different-sex cohabiting couples have demonstrated good psychometric properties (Lannin et al., 2013). Participants responded to each item on a 5-point scale (0 = *Never*; 4 = *Very Often*). Scores reflect the mean rating across the four items and higher scores represent greater instability. Internal consistency in the current sample was excellent ($\alpha = .87$).

Time 2 relationship status. At time 2, participants were asked: “Are you still in a relationship with the same partner as you were 6 months ago, when you took the first survey as part of this research project?” (Yes = 1; No = 0).

Proposed Mediators. *Commitment* was assessed with a 3-item version of the Commitment Inventory, Dedication subscale ($\alpha = .76$), which has demonstrated internal consistency and validity

(Stanley, Rhoades, Amato, Markman, & Johnson, 2010). Scores reflect participants' mean level of agreement with three statements (e.g., "My relationship with my partner is more important to me than almost anything in my life") on a 7-point scale (1 = *Disagree Completely*; 7 = *Agree Completely*).

Relationship-specific social support was assessed with Sprecher and Felmlee's (1992) three-item Support for the Relationship Measure ($\alpha = .69$). Participants rated social network support for their relationship (e.g., "To what degree do you think your friends disapprove or approve of this relationship?"; 1 = *Very Much Disapprove*; 7 = *Very Much Approve*). This scale has previously shown good internal consistency in same-sex couples (Buzzella, Whitton, & Tompson, 2012).

Control Variables. Gender was dummy coded (0 = male; 1 = female). Race was coded as White (1) vs. non-White (0) due to low numbers in the other racial groups. Participants self-reported the length of their relationship and personal annual income. Using participants' self-reported state of residence and state legal policies about same-sex unions gathered from public records, we created a variable to indicate the availability of in-state legal recognition for same-sex unions (0 = *none*; 1 = *civil unions, domestic partnerships, or marriage*) for each participant. At the time of data collection in 2012, 15 states offered at least one of these forms of legal recognition.

Analytic Plan

Preliminary analyses. We calculated the proportion of individuals in each relationship formalization group (i.e., legal ceremony, social ceremony, or no ceremony). Then, chi-square analyses and ANOVAs were used to test for group differences on demographic characteristics, to evaluate whether any demographic variables should be included as controls in tests of hypotheses.

Test of Hypotheses. First, to test whether relationship formalization was associated with relationship variables, we first conducted separate analysis of covariance (ANCOVA) for each relationship outcome (satisfaction and instability) and proposed mediator (commitment and

relationship support). For each ANCOVA, we entered a 3-level factor for relationship formalization status (legal vs. social vs. none) and included demographic controls as covariates. Planned pairwise comparisons were conducted to test for statistically reliable differences between groups.

Second, to assess whether the associations between relationship formalization status and the outcomes or proposed mediators differed between men and women, we conducted separate 3 (formalization status) x 2 (gender) ANCOVAs predicting each outcome variable and proposed mediator, with demographic variables included as covariates when appropriate. Third, to assess whether the associations between relationship formalization status and the outcomes might differ between individuals living in states with versus without available legal recognition for same-sex couples, we conducted a 3(formalization status) x 2(available state recognition) factorial ANCOVA, with demographic control variables included as covariates, predicting each outcome variable.

Fourth, to test the hypotheses that enhanced commitment and social support for the relationship mediate the association between relationship formalization and relationship outcomes (satisfaction and stability), we used the PROCESS software (Hayes, 2013). PROCESS uses the product of coefficients method and bootstrapping techniques to estimate the direct and indirect (i.e., mediated) effects in proposed mediational models. Relationship satisfaction and instability were predicted in separate models that each included relationship formalization as the independent variable, both commitment and social support as mediators, and gender, age, relationship length, and income as control variables.

Finally, using chi-square analyses, we explored whether relationship formalization status at time 1 was predictive of relationship status at time 2 and, using regression analysis, whether relationship formalization status at time 1 predicted change in relationship outcomes at time 2. For regression analyses, time 2 scores on the given outcome (satisfaction or instability) were regressed first onto time 1 scores, then onto the dummy variable for legal formalization.

Results

Preliminary Analyses

About one-half of the participants had formalized their relationship: 170 participants (28.1%) had obtained legal recognition, 92 (15.2%) had held a non-legal social ceremony, and 342 (56.6%) had not formalized their relationships either legally or socially. The relationship formalization groups (i.e., legal, social, or no formalization) did not differ in race or ethnicity. Women were more likely to have formalized their relationships legally (30.8%) or socially (17.4%) than were men (23.9% and 11.5%, respectively); $\chi^2(2) = 9.65, p < .01$. Participants who had formalized their relationships either legally or socially were older, $F(2,553) = 17.88, p < .001$ and had been in their relationships longer, $F(2,600) = 49.94, p < .001$ than those with no relationship formalization. Those who had legally formalized their relationships had higher incomes than those with no formalization, $F(2,598) = 5.73, p < .01$. These results indicated the need to control for gender, age, relationship length, and income in the primary analyses that tested hypotheses.

Primary Analyses

Group differences by relationship formalization status. Table 2 displays the means for each relationship formalization group, adjusted for the covariates (gender, age, relationship length, and income), and F values from the ANCOVAs. For both the relationship outcomes, the group who had formalized their relationships legally showed better functioning (i.e., higher satisfaction and lower instability) than either other group (i.e., those with social formalization and those with no formalization, who did not differ from each other). Cohen's d effect sizes, which represent the difference between the group means (adjusted for the covariates) in standard deviation units, indicated small to medium effects of legal formalization on relationship satisfaction ($d = .36$) and relationship instability ($d = .37$). On commitment, the legally formalized group had the highest scores, followed by the socially formalized group, and then the no formalization group. Only the

legally formalized and no formalization groups differed significantly from each other. In contrast, for relationship support, participants in relationships formalized by either legal or social ceremonies reported more relationship-specific social support than did participants in non-formalized relationships ($d = .27$; small effect size). The legal and social formalization groups did not differ from each other on relationship-specific support.

Gender differences. None of the interactions between relationship formalization status and gender were significant. Thus, contrary to hypotheses, the associations of relationship formalization with couple satisfaction, instability, commitment, and social support were not stronger for men than for women.

Differences by availability of legal recognition by state of residence. The interaction between formalization status and available state recognition was non-significant for each outcome variable, suggesting that the associations between formalization ceremonies and the relationship variables are consistent across individuals whose states of residence do and do not offer legal recognition.

Mediation Models. Based on findings from ANCOVAs (reported above) that participants with legally formalized relationships differed from both other groups (social formalization and no formalization) on both of the relationship outcomes, relationship formalization was operationalized in the mediation models with a dummy variable capturing legal formalization (0 = social or no formalization; 1 = legal formalization). Mediation models yielded support for commitment, but not social support, as a mediator of the association between legal formalization and relationship outcomes. Specifically, as shown in Figure 1a, the indirect effect of legal formalization on relationship satisfaction through commitment was positive and statistically significant (unstandardized coefficient = .68, SE = .16; 95% confidence interval = .35 to 1.01) but the indirect effect through social support was non-significant, (unstandardized coefficient = .10, SE = .06; 95%

confidence interval = -.02 to .25). The direct effect of legal formalization on relationship satisfaction remained present (unstandardized coefficient = .62, SE = .26; 95% confidence interval = 0.11 - 1.12), suggesting partial mediation. Similarly, as shown in Figure 1b, there was an indirect effect of legal formalization on relationship instability through commitment (unstandardized coefficient = -.39, SE = .11; 95% confidence interval = -.63 to -.20) but the indirect effect through social support was non-significant, -.07 (SE = .05; 95% confidence interval = -.19 to .01). The direct effect of legal formalization on relationship instability remained present (unstandardized coefficient = -.61, SE = .23; 95% confidence interval = -1.07 to -.15), suggesting partial mediation. Results did not differ when the indirect effects of commitment and social support were tested in separate models (i.e., in these models commitment but not social support showed indirect effects).

It is not entirely surprising that social support for the relationship did not show evidence of mediation in these models, as it did not differ between the legally and socially formalized relationship groups. Rather, the results from ANOVAs (presented above) suggest that any type of formalization (via a social or legal ceremony) is associated with higher perceived support for the relationship, whereas social support did not differ between those with legal vs social ceremonies. We therefore ran post-hoc analyses assessing an alternate mediational model, in which any relationship formalization (dummy-coded as 0 = no formalization; 1 = legal or social formalization) was associated with relationship outcomes via an indirect effect through social support for the relationship. As shown in Figure 2, results indicated that both commitment and social support mediate the association between any formalization and the relationship outcomes. Specifically, as shown in Figure 2a, the indirect effect of any formalization on relationship satisfaction through commitment was .61 (SE = .16; 95% confidence interval = .31 to .94) and the indirect effect through social support was .16 (SE = .07; 95% confidence interval = .05 to .34). The direct effect of any formalization on relationship satisfaction became non-significant ($b = .30$, SE = .25; 95%

confidence interval = -.18 to .79) in the meditational model. Similarly, as shown in Figure 2b, there was an indirect effect of legal formalization on relationship instability through commitment (unstandardized coefficient = -.35, SE = .11; 95% confidence interval = -.59 to -.11) and an indirect effect through social support (unstandardized coefficient = -.11, SE = .05; 95% confidence interval = -.25 to -.03). In the mediational model, the direct effect of legal formalization on relationship instability became non-significant ($b = -.36$, SE = .23; 95% confidence interval = -.81 to .08). Results did not differ when the indirect effects of commitment and social support were tested in separate models.

Longitudinal Analyses. Next, we explored whether relationship formalization status at time 1 was predictive of relationship status at time 2. Only 13 participants (4% of those who completed time 2) had broken up, likely due to the relatively short interval between assessments and attrition of many participants who did break-up. Nevertheless, break-up was associated with relationship formalization: 6.6% ($n = 11$) of those with no formalization at time 1, compared to 1.7% ($n = 1$) of those who had a social ceremony and 1% ($n = 1$) of those with a legal ceremony, had ended their relationships, Fisher's exact test = 5.83, $p = .05$.

In regression analyses, legal formalization at time 1 predicted relationship instability at time 2, controlling for relationship instability at time 1, $\beta = -.12$, $t(323) = -3.24$, $p = .001$. That is, legal formalization was associated with negative residualized changes in instability over the 6-month period. Legal formalization was marginally predictive of time 2 relationship satisfaction controlling for time 1 satisfaction, $\beta = .08$, $t(323) = 1.84$, $p = .07$, indicating that it was marginally associated with positive residualized change (i.e., increases) in satisfaction over time. Parallel regressions using the dummy variable for any formalization indicated that having any ceremony, compared to having no ceremony, was not predictive of residualized change in relationship instability, $\beta = -.07$, $t(323) = -1.82$, $p = .07$ or satisfaction, $\beta = .06$, $t(323) = 1.55$, $p = .12$.

Discussion

The present findings suggest that ceremonies to formalize same-sex relationships – particularly legal ceremonies-- are associated with enhanced relationship quality for both men and women. Echoing findings from different-sex couples (e.g., Stanley et al., 2004), participants in legally formalized same-sex relationships reported higher relationship satisfaction and lower relationship instability than did participants who had not legally formalized their relationships, including those who had held social or “commitment” ceremonies. Further, those with legal formalization showed more positive change in these couple outcomes over a 6-month period than did those without legal formalization.

Given the high costs of divorce and break-up to individuals, to their children, and to society (e.g., Amato, 2010), it is especially significant that legal formalization ceremonies were concurrently and prospectively associated with lower relationship instability. Importantly, social or “commitment” ceremonies, which many same-sex couples choose as an alternate method of formalizing and stabilizing their relationships when denied legal recognition, were not similarly associated with relationship stability. Together with other research indicating that civil unions are associated with reduced break-up rates among same-sex couples (Balsam et al., 2008), these findings suggest that increasing the availability of legal recognition of same-sex unions may be a viable strategy to promote the stability of the many U.S. families that are headed by same-sex couples. Policy-level changes to allow same-sex marriage rights might be associated not only with a wide range of favorable individual health and mental health outcomes (Hatzenbuehler et al., 2010; 2012), but also with positive relationship outcomes, including lower rates of breakup and its negative consequences for adults and their children.

The findings also shed light on one process through which legal ceremonies to formalize relationships may improve same-sex relationship outcomes: enhanced relationship commitment.

Legal ceremonies were associated with higher levels of commitment, which partially accounted for (i.e., mediated) their associations with higher relationship satisfaction and lower instability.

Although the mediation analyses were conducted using cross-sectional data and therefore cannot assert a direction of effects, these findings are consistent with qualitative data that couples perceive legal formalization to increase their commitment to their partner (Ramos et al., 2009). They are also consistent with theory that the act of legally and publically formalizing a relationship is powerful in symbolizing partners' long-term commitment to one another (Cherlin, 2004; Stanley et al., 2004).

It is not clear, however, why social ceremonies were not similarly associated with higher commitment, given that they are perceived as commitment-enhancing by many who participate in them (Schechter et al., 2008); indeed, they are commonly called "commitment ceremonies." Similar results were observed in a sample from California, in which legal formalization via domestic partnership was associated with investments in the relationship (a central component of commitment), whereas social formalization by commitment ceremony was not (Fingerhut & Maisel, 2010). Together, these findings suggest the limitations of non-legal ceremonies in providing same-sex couples with key relational benefits that marriage or other legal ceremonies can provide.

It should be noted, however, that social ceremonies were linked with greater concurrent relationship-specific social support. Couples who had held a social ceremony perceived greater approval and support for their relationship from friends and family than did those with no relationship formalization. In fact, they perceived as much social support as did legally formalized couples. Although these findings, based on cross-sectional data, cannot speak to the direction of effects, they do corroborate qualitative data that both legal and social relationship formalization enhance same-sex couples' perceptions that their relationships are accepted by family and the community (Ramos et al., 2009; Rothblum et al., 2011; Schechter et al., 2008). Given that social support for the relationship is predictive of relationship outcomes across couples types (i.e.,

different-sex and same-sex couples; Blair & Holmberg, 2008; Sprecher & Felmeé, 1992), the findings also suggest that social ceremonies, like legal ceremonies, may represent a potential protective factor against later relationship distress. Indeed, mediation analyses suggested that any type of ceremony (social or legal) may be indirectly associated with higher couple satisfaction and stability via the mechanism of social network support for the relationship. Because relationship-specific support is also linked with better mental and physical health among same-sex and different-sex couples (Blair & Holmberg, 2008), it is also likely that social relationship formalization ceremonies may have health benefits to individual partners.

Study Limitations

There are several limitations of the study that should be considered when drawing conclusions from the results. First, many of the analyses were conducted on cross-sectional data, prohibiting conclusions about direction of effects. It is possible that legal ceremonies do not lead to more satisfaction and stability, but that highly satisfied and stable couples are most likely to formalize their relationships with a ceremony. These concerns are somewhat mitigated by the findings from longitudinal analyses, in which couples who reported having had a legal ceremony at time 1 were less likely to have broken up 6 months later and showed more positive changes in relationship satisfaction and stability over a 6-month period than did couples without such legal formalization. However, the findings regarding breakup were based on a very small number of participants (only 13 break-ups total, with only 1 participant in each of the relationship formalization groups) and therefore should be interpreted with caution. Further, the mediational analyses were entirely cross-sectional. Although there is solid theoretical ground for the interpretation that formalizing one's relationship may increase commitment (Cherlin, 2004; Stanley et al., 2004) and social support for the relationship (Blair & Holmberg, 2008), it is also possible that more committed, socially integrated couples are more likely to formalize their relationships. Future

research assessing not only couple outcomes but also proposed mediators at multiple time points would help to disentangle the direction of effects.

Second, our single item to assess relationship formalization asked about ceremonies rather than legal recognition in general, which may happen outside the context of ceremonies. In particular, many couples legally formalize their partnerships by obtaining a civil unions or domestic partnership without a ceremony. This item also did not allow for the possibility that some couples may have had both legal recognition and a social ceremony. Although previous findings indicate that social and legal formalization do not interact in the prediction of relationship satisfaction or other variables (Fingerhut & Maisel, 2010), assessing them separately would have allowed us to maximally explore the distinct associations between these different types of relationship formalization and couple outcomes. We also did not differentiate between marriage, civil unions, or domestic partnerships, which may differ in their associations with relationship outcomes. Another limitation was the relatively short (6 month) interval between time 1 and time 2; future research spanning longer time periods, which would allow for more change in the outcome variables, might provide more powerful tests of hypotheses. Online data collection has limitations, including reduced generalizability to people who do not have computers. Finally, although the geographically diverse sample likely better captured the experience of U.S. adults in same-sex relationships than samples from only coastal states, it introduced heterogeneity in access to legal recognition. The associations between relationship formalization and the outcome variables did not differ by state-level legal recognition; nevertheless, future research in larger samples should explore whether state recognition influences which couples tend to formalize their relationship legally (e.g., do only high income couples travel to other states to marry?).

Implications of Findings and Future Directions

Despite the acknowledged limitations, the study findings provide important evidence that

relationship formalization, particularly via legal recognition, is associated with positive relationship outcomes for same-sex couples. Especially in light of the results indicating that social ceremonies - which do not include legal recognition of the relationship - were not similarly associated with relationship commitment, satisfaction, or stability, these findings are supportive of policies that grant same-sex couples equal access to marriage. Since the time of data collection for this study, many additional states have begun issuing same-sex marriage licenses. In addition to positively influencing the mental and physical health of sexual minority individuals (Hatzenbuehler et al., 2010; 2012), our results suggest that the increasing availability of legal recognition may also be promoting satisfaction and stability in their relationships. The literature will greatly benefit from future studies empirically evaluating whether these changes in state policies are associated with reductions in break-up rates among same-sex couples living in those states. It will also be interesting to explore whether, as legal marriage becomes more widely available to same-sex couples, those who choose non-marital cohabitation look increasingly different from those who choose marriage, as has been observed in different-sex couples (e.g., Brown & Booth, 1996; Stanley et al., 2004).

The results of this study also have theoretical implications. Specifically, the findings support the commitment theory- based perspective that marriage promotes relationship health and permanence in part because it is a powerful symbol of commitment (Cherlin, 2004; Stanley et al., 2004). Consistent with this theory, participants who had formalized their relationships via legal ceremonies reported higher commitment than other participants, including those who had done so via social ceremonies. Further, mediation analyses indicated an indirect effect of legal formalization on relationship satisfaction and stability through higher commitment levels. Other findings were consistent with the social integration perspective (House et al., 1988). Specifically, both social and legal ceremonies were associated with higher social support levels, which in turn were associated

with relationship satisfaction and stability. It is quite interesting that in this sample only legal formalization was linked with commitment, but both types of relationship formalization were linked with enhanced social support. Perhaps social formalization in the form of commitment ceremonies provides equal integration within supportive social networks—or indicates equal levels of preexisting support—as does as legal formalization, at least in the current sociopolitical landscape where marriage with full federal recognition is not an option for most same-sex couples. Future research should attempt to replicate these findings using more rigorous methods, including longitudinal data that captures any changes in social support across the relationship formalization process. It will also be interesting to explore whether legal formalization will become more strongly associated with support from families and friends than social formalization if same-sex marriage becomes federally sanctioned and available for all couples. Finally, future research might explore whether other theoretically-indicated variables (e.g. psychiatric symptoms, communication patterns) that have been linked with relationship quality and stability among same-sex couples (Khaddouma, Norona, & Whitton, in press), might also be mechanisms through which relationship formalization is associated with couple outcomes.

Finally, there are important clinical implications of the study findings. Overall, results support culturally-sensitive relationship education for same-sex couples that gives attention to helping couples solidify their commitment through formalization ceremonies and other means (Whitton, in press). Relationship educators and therapists working with same-sex couples may want to inform their clients of the associations between legal relationship formalization and positive couple outcomes, including satisfaction, commitment, and stability (i.e., lower probability of taking steps toward ending the relationship). Couples making decisions about whether to formalize their relationship legally or through a social ceremony could benefit from psychoeducation about how these two types of relationship formalization have shown somewhat different patterns of

associations with couple outcomes. Specifically, social ceremonies, though often perceived by many couples to enhance commitment and a sense of relationship permanence (e.g., Schechter et al., 2008), have not been associated with commitment in two samples (the present study and Fingerhut & Maisel, 2010) and were not associated with satisfaction or stability in the current study. Therefore, legal formalization appears to have advantages over social ceremonies. Nevertheless, because social formalization was associated with support for the relationship from family and friends, and with relationship satisfaction in another sample (Fingerhut & Maisel, 2010), couples without access to legal recognition might be advised to have a social ceremony and also engage in additional strategies to strengthen commitment, such as building joint investments.

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Table 1

Descriptive Statistics and Correlations Among Variables

	<i>M</i>	<i>SD</i>	Range	1	2	3	4	5	6	7	8
1. Relationship Satisfaction	16.95	3.25	3-21	--							
2. Relationship Instability	3.18	2.70	0-16	-.56**	--						
3. Relationship Commitment	6.24	.95	1.67-7	.59**	-.46**	--					
4. Social Support for Relationship	5.85	1.08	1-7	.32**	-.26**	.29**	--				
5. Relationship Length	4.43	1.66	1-6	-.00	.06	.19**	.18**	--			
6. Income	6.99	2.63	1-10	.02	-.09*	.10*	.17**	.40**	--		
7. Gender (Male = 0; Female = 1)	.63	.48	0-1	.09*	.04	-.01	-.04	-.05	-.16**	--	
8. Age	40.72	11.99	18-74	-.03	-.11**	.13**	.15**	.53**	.38**	-.15**	--

Note. Higher scores on each measure reflect more of the given construct. * $p < .05$; ** $p < .01$

Table 2

Means of Relationship Outcomes and Proposed Mediators by Relationship Formalization Status.

	Relationship formalization			Group Differences
	Legal (<i>n</i> = 170)	Social (<i>n</i> = 92)	None (<i>n</i> = 342)	<i>F</i>
<u>Relationship Outcomes</u>				
Satisfaction	17.93 ^a	16.97 ^b	16.58 ^b	8.17***
Instability	2.40 ^a	3.17 ^b	3.50 ^b	7.81***
<u>Proposed Mediators</u>				
Relationship support	6.03 ^a	6.06 ^a	5.78 ^b	3.68*
Commitment	6.50 ^a	6.38	6.16 ^b	6.94***

Note. All means are adjusted for gender, age, relationship length, and income. For *F*-tests, $df_{\text{numerator}} = 2$; $df_{\text{denominator}}$ vary from 546 to 581, depending on missing data on individual variables. Means with different superscripts differ significantly from each other at $p < .05$.
 *** $p < .001$. ** $p < .01$. * $p < .05$.

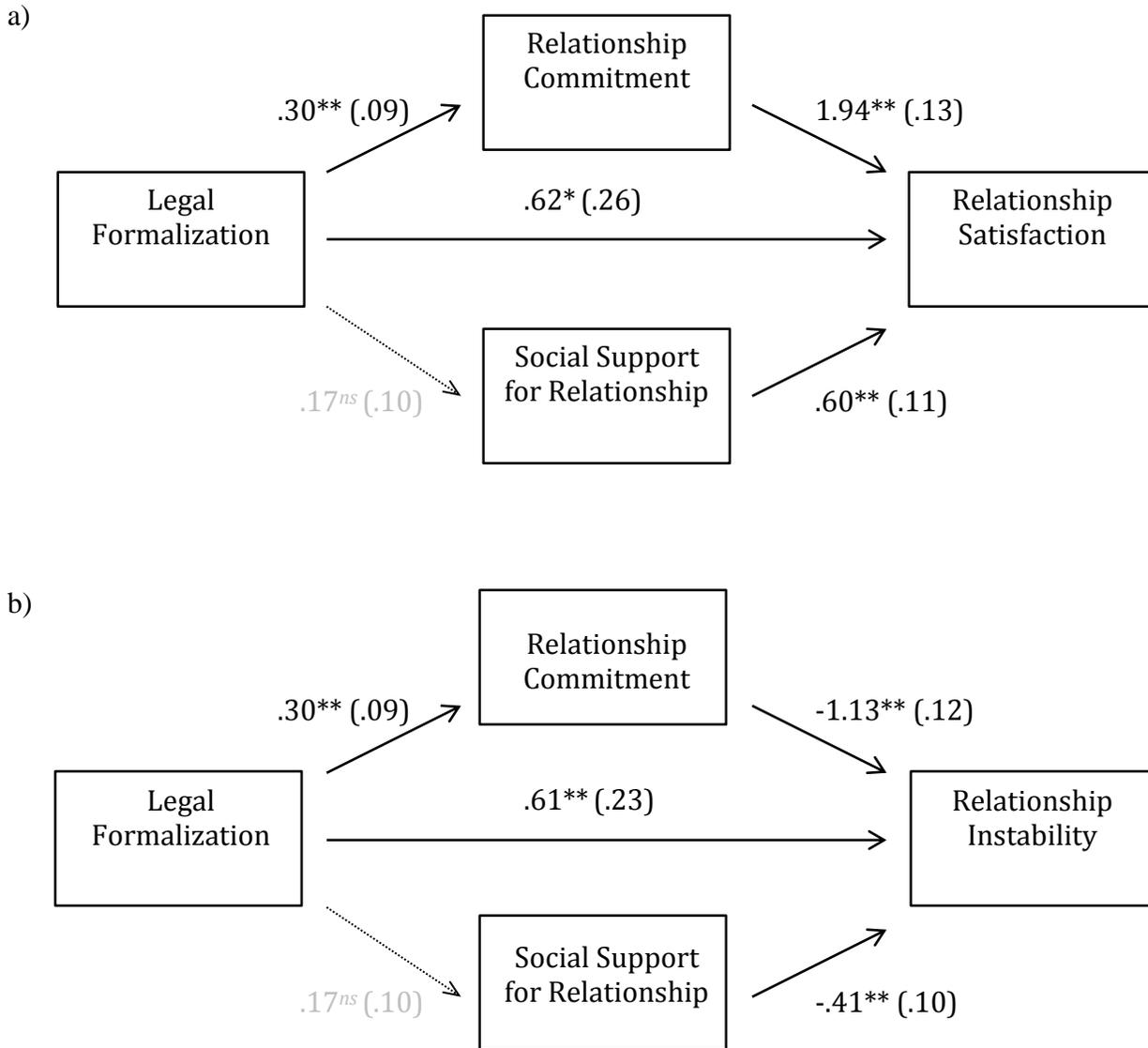


Figure 1. Mediation models of the association between legal relationship formalization ceremonies and relationship outcomes. Note: Values are unstandardized coefficients from models controlling for relationship length, income, age and gender. Non-significant paths are indicated by dotted lines and gray text.

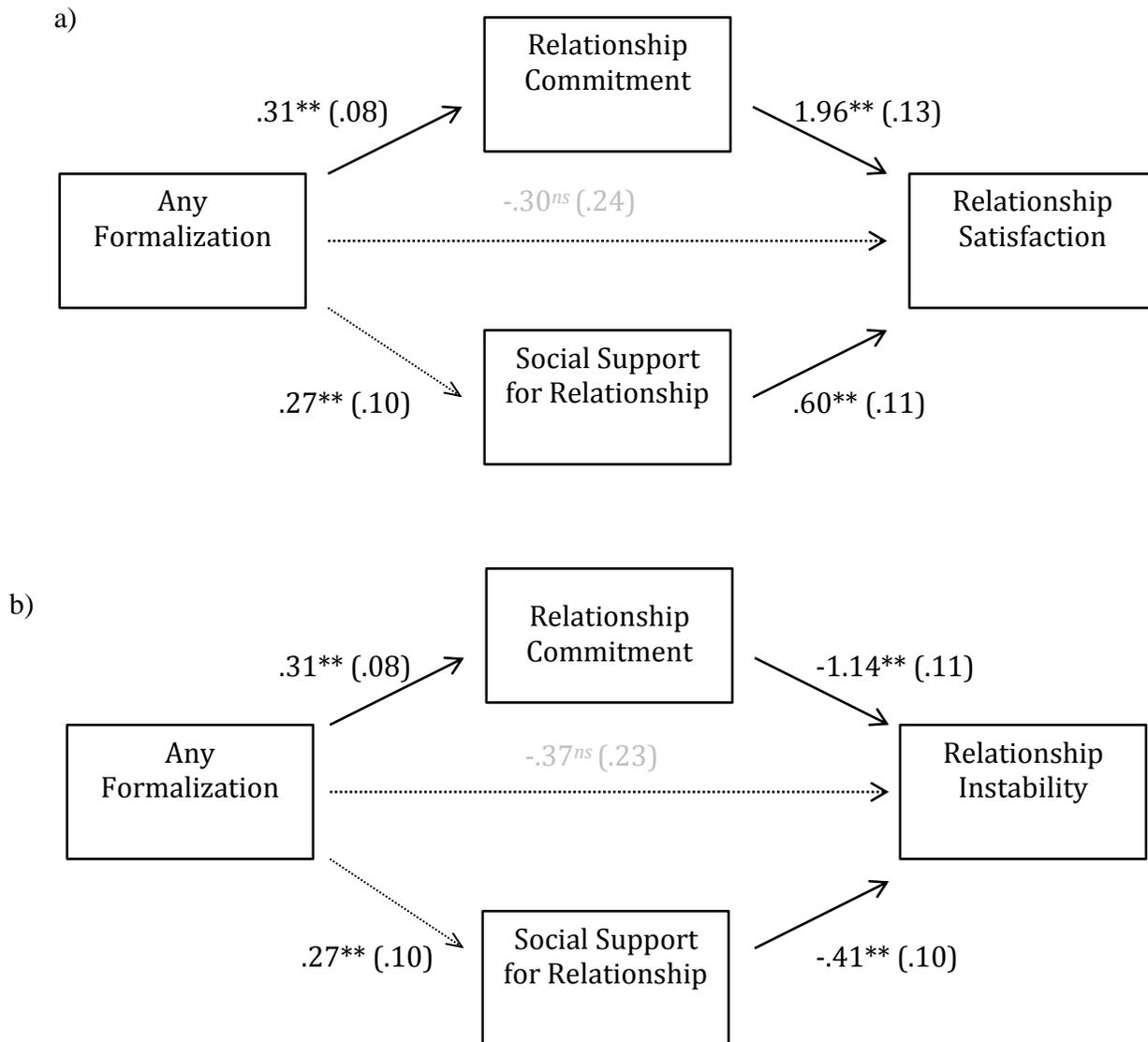


Figure 2. Mediation models of the association between any relationship formalization ceremonies (legal or social) and relationship outcomes. Note: Values are unstandardized coefficients from models controlling for gender, age, relationship length, and income. Non-significant paths are indicated by dotted lines and gray text.