# Earnings Equality and Relationship Stability for Same-Sex and Heterosexual Couples Katherine Weisshaar

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#### **Abstract**

This paper examines a topic of continuing interest for demographers and sociologists of the family: which factors promote relationship stability among couples. Two competing theories have been highly debated to explain how relative earnings relate to relationship quality and stability. The neoclassical economic theory posits that specialization of home and work duties leads to stability because partners fill complementary roles. Gender scholars propose an alternative explanation, suggesting that when couples violate the traditional male breadwinner model, they experience relationship strain and are more likely to experience a breakup. Using the new How Couples Meet and Stay Together (HCMST) dataset, this paper offers a unique perspective on the debate, by comparing same-sex couples to heterosexual couples. The paper presents three sets of analyses to determine how relative earnings relate to relationship stability. The first analysis employs discrete-time event history models to assess the likelihood of breakup for both heterosexual and same-sex cohabiting couples. Next, the paper presents results predicting self-reported relationship quality among married and cohabiting couples. The final analysis focuses on non-cohabiting couples from Wave I of the HCMST survey and examines the likelihood of entering cohabitation in subsequent survey waves. Results demonstrate that the economic or specialization model does not hold in same-sex relationships, suggesting that the effect of earnings equality is dependent upon gender norms in heterosexual relationships. When earnings power is disentangled from gender, as is the case of same-sex couples, equality in earnings promotes stability.

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#### Introduction

Recent decades have witnessed sizeable shifts in demographic trends relating to family formation and dissolution: the takeoff in the divorce rate, the rise of cohabiting unions as a precursor or alternative to marriage (Cherlin 1992), and the increased visibility of lesbian and gay households. These trends have developed in concert with women's increased representation in the paid labor force, leading to challenges for dual-earning families – particularly in terms of balancing power and time in this egalitarian age. Theoretical perspectives on the family have lagged behind this flux in household compositions, leaving an unanswered question as to whether existing theories on power and earnings within households apply to nontraditional unions, including same-sex couples. This paper tests the applicability of one such theory – the neoclassical economic theory of the household – to same-sex couples, by empirically illustrating the different effects of earnings on same-sex and heterosexual couples' relationship stability. By comparing same-sex couples to heterosexual couples, we can gain leverage on the extent to which effects of relative earnings are tied to gender expectations for heterosexual couples. Findings demonstrate the need for a reevaluation of theoretical assumptions in the area of sociology of the family to account for a growing population of nontraditional families, including LGBT households.

This paper examines three research questions. How do egalitarian earnings predict breakups of both same-sex and heterosexual cohabiting (married and unmarried) couples?<sup>1</sup> Next, how do earnings differentials influence self-reported relationship quality among cohabiting couples? Finally, do relative earnings among non-cohabiting couples influence which couples enter cohabitation in later years? By examining couple stability longitudinally and using a recent dataset with an oversample of same-sex couples, the How Couples Meet and Stay Together (HCMST) survey, this paper aims to test the explanatory strength of two theoretical perspectives: the neoclassical economic theory of the household, and the "doing gender" theory.

## What Promotes Relationship Stability?

An ample amount of scholarship is devoted to explaining the processes leading to divorce or couple dissolution. An ongoing debate in the literature centers on whether an egalitarian relationship or a specialized relationship – in terms of earnings, decision-making, housework, etc. – yields higher satisfaction rates within couples. Two competing theoretical frameworks inform these processes: the neoclassical economic theory and the "doing gender" account. Most empirical studies testing these theories focus on heterosexual couples, with the exception of a handful of scholars. The current study will not only lend insight into how these theories apply to same-sex couples, but the comparison of same-sex couples to heterosexual couples will inform our understanding of heterosexual couples as well. The inclusion of same-sex couples offers two main advantages. First, it fosters an understanding of how these processes work for a growing and often overlooked type of couple. Second, by focusing on couples that share the same sex, we are able to separate the earnings effect from a gender effect. In this way, the study sheds new light on the processes that are at work for heterosexual couples as well.

This review of existing literature proceeds as follows. First, I outline both competing theories and their implications for relationship stability. Next, I highlight relevant empirical findings on relative earnings within couples and the household division of labor. Finally, I describe how these processes apply to couple stability.

## The neoclassical economic theory of specialization of households

The logic of the neoclassical economic theory of households, as promoted by Gary Becker and Talcott Parsons, suggests that a household arrangement is more efficient when specialization of work and home duties occurs: when one partner focuses on paid labor and the other manages unpaid home labor (Parsons 1949). Under this arrangement, partners complement each other's duties, and thus have an interdependent relationship (Becker 1981). This theory serves to explain why heterosexual couples in which partners have differing degrees of attachment to the labor market – as measured by earnings, hours worked, or occupational prestige – are more stable, and why couples deviating from this specialization model are more likely to experience relationship dissolution. The lack of stability arises from two domains: first, if each partner is highly invested in paid labor, they are more independent and do not possess

complementary roles (Becker & Tomes 1984). Second, the inefficiency of labor division can cause tensions within a relationship. If both partners equally value their paid occupation, neither wants to invest time in household work. The effort spent balancing both domains can lead to relationship strain and, eventually, dissolution (Becker 1981).

## The "doing gender" theory of the household

An alternative theory comes from the "doing gender" framework (West and Zimmerman 1987). In this perspective, men and women are held to prescriptive expectations particular to their gender about how to behave, and this is very apparent within the household. This theory's explanatory power lies in the interactional domain: as men and women, we constantly "do" gender, through our behaviors, choices, and appearance (West and Zimmerman 1987).

The doing gender theory lends an alternative explanation to the household division of labor. In heterosexual relationships, men are expected to be the primary earner, while women are expected to maintain the household and do the majority of care work. In this framework, men and women enact gender expectations through their daily behaviors and choices. For instance, men work more hours in paid labor in order to fulfill the male-typed breadwinner expectation. This theory predicts that when heterosexual couples deviate from the traditional gender-typed household arrangement, they experience relationship tension. For example, if both partners earn equally, the husband might experience shame or disappointment – if not self-inflicted, perhaps from family members or friends. The everyday tension that develops from the atypical gender arrangement could eventually spur a breakup.

A substantial collection of empirical evidence has documented each of these theoretical processes as applied to heterosexual couples. Studies often lend uncertain conclusions as to which theory holds. If a heterosexual couple breaks up when both partners equally share paid labor, it is empirically challenging to determine whether this is due to inefficiency as claimed by the neoclassical economic theory, or because of tensions experienced from breaking gender norms. By comparing same-sex couples to heterosexual couples, we can test these competing theories to determine whether specialization or equality promotes relationship stability, without the complexity of gender differences muddling results.

The household division of labor and earnings differentials

Among heterosexual couples, within-couple inequalities have persisted in terms of earnings and time spent on household labor, even as women have been more fully integrated into the paid labor market. Employed women tend to come home to a "second shift" of housework, and childcare, often completing many additional hours of housework than their male partners (Hochschild and Machung 1989: 259). Despite changing attitudes toward the traditional male breadwinner model (see, for example, Cunningham 2008 or Rosenfeld 2007), among heterosexual couples housework is still highly divided by gender lines (e.g., Bianchi et al. 2012, Milkie, Raley, and Bianchi 2009). The relationship between earnings and the division of labor is tied to both earnings and gender norms: as wives approach their husbands' income, the gap in housework time decreases, but when wives surpass husbands' income, the housework gap widens (Brines 1994; see also Blair-Loy 2001). The household is evidently a highly gendered arena, in which heterosexual partners struggle to organize labor. These studies on the dynamics of couples provide a sense of how relative earnings, the key measure examined in this paper, influence daily negotiations in the household.

Studies on the household division of labor have primarily applied to heterosexual couples, mainly due to the lack of available data on same-sex couples. Several scholars suggest that lesbian and gay couples value equality in both earnings and housework (Shechory and Ziv 2007, Blumstein and Schwartz 1983; Jepsen and Jepsen 2002). Patterson (1995) finds that the division of labor among same-sex couples tends to be more equal, as does Kurdek (2007). However, Carrington suggests that same-sex couples outwardly commit to egalitarian arrangements but rarely reach these goals: only about 25 percent of the couples in his sample achieved egalitarianism in housework (Carrington 1999:186). Other scholars argue for the continued relevance of traditional gender divisions, in which the higher earning partner thinks of themselves as the "man" of the couple or exhibits more power (Kennedy and Davis 1993; Fingerhut 2007; Kollack et al. 1985). Despite the substantial effort to study these processes with same-sex couples, data limitations have prevented a consensus of results thus far.

Power differentials, earnings, and couple stability

How do earnings differentials relate to couple stability for heterosexual couples? In existing literature, stability is conceived of as breakup or divorce, relationship

quality/satisfaction, and entrance into marriage/cohabitation. Brines and Joyner (1999) examine Becker's economic theory of the household for married couples by examining the relationship between a wife's employment hours and the likelihood of divorce or breakup. They claim that both conditions of equality as well as specialization can promote cohesion within a marriage by creating joint investments, but when couples violate the traditional male-breadwinner arrangement, the likelihood of divorce increases (Brines & Joyner 1999). Sayer and Bianchi (2000) investigate a similar question, but find only weak support for the finding that wives' economic independence predicts divorce. Other scholars weigh in on this debate, but inconsistent empirical results suggest that the literature is still in tension toward understanding this process (e.g., Gong 2007, Sprecher 1988).

In terms of relationship quality, the division of household labor and perceptions of fairness can also influence marital satisfaction (Wilkie, Ferree, and Ratcliff 1998). If partners differ in terms of gender expectations of who is responsible for household duties, this can elevate stress and dissatisfaction in a marriage, particularly if both partners are working in the paid labor market (Hochschild 1989).

Entering into marriage or cohabitation, for previously non-cohabiting couples, is a third outcome variable that measures couple stability. It is generally agreed that both cohabitation and marriage are more stable progressions of relationship statuses, relative to non-cohabiting couples (e.g., Cherlin 2004, Cherlin 1992). Oftentimes cohabitors are less economically stable than married partners, but the household division of labor tends to hold for both cohabiting and married heterosexual couples (see Brines 1994, Smock 2000).

Given the lack of longitudinal data on same-sex couples, few studies have developed indicators for union dissolution among same-sex couples. Blumstein and Schwartz (1983) provide noteworthy scholarship in this area: their study employs a sample of respondents interviewed during the 1970s, whom they revisited 18 months after the initial interview to determine which couples had broken up. Blumstein & Schwartz claim, "lesbians hold up, as the ideal relationship, one where two strong women come together in total equality" (1983: 309). If this equality is not established, the resulting power imbalance can lead to breakup. Kurdek establishes a similar finding, and suggests that equality is positively related to relationship commitment for same-sex couples (2004: 892-894).

Empirical studies suggest that same-sex couples have similar levels of self-reported

relationship quality, relative to heterosexual couples (e.g., Joyner et al. 2013; Otis 2006). Some scholars suggest that same-sex couples are more satisfied in egalitarian settings (e.g., Carrington 1999: 183; Kurdek 2004), though I have not found a study that documents this claim with a large, nationally representative sample.

The existing scholarship about the processes predicting same-sex couples entering cohabitation/marriage is limited. In most large surveys (the Census, CPS, etc.), gay and lesbian couples are identified based on the gender of persons on the survey's household roster, and thus these couples are already cohabiting at the time of the survey. Thus, though we might posit that related processes apply to cohabitation among same-sex couples as for heterosexual couples (in terms of earnings, relationship quality, etc.), this is an open-ended question in the literature.

Given the ambiguous evidence, I suggest that scholarship in this arena would benefit from a nationally representative, sizeable sample of same-sex couples to more thoroughly investigate the relationship between earnings, power, and couple stability. Furthermore, by comparing heterosexual and same-sex couples, I can determine if mechanisms relating earnings, couple dissolution, and relationship satisfaction are themselves gendered processes. By removing differences in partners' sex and examining same-sex couples, we can disentangle power and gender, to understand whether egalitarian relationships fare better. This paper will assess these processes for heterosexual and same-sex couples.

### How similar are same-sex and heterosexual couples?

Before proceeding with the empirical analysis, we must first ensure that heterosexual and same-sex couples are suitable for comparison. That is, in making the comparison of how equality predicts relationship stability for both heterosexual and same-sex couples, we must confirm these groups are similar on other dimensions. One concern is the fact that in most states, same-sex couples do not currently have the right to marry. Past research has concluded that cohabiting same-sex couples are very similar to married and cohabiting heterosexual couples, particularly in what factors predict relationship quality and breakup (see Kurdek 2004). Furthermore, even though same-sex couples are often unable to marry, they use alternative strategies to demonstrate their commitment (Reczek, Elliott, and Umberson 2009), and often think of their partners as spouses (Gates 2009). Lesbians and gays do exhibit some differences from heterosexual individuals: they have higher levels of education on average (Black et al. 2000), are more likely

to live in metropolitan areas and are more likely to both be employed, but are less likely to have children (Gates 2009). Each of these qualities will be accounted for in the analyses.

#### **Theoretical Framework and Hypotheses**

As outlined above, two competing theories yield conflicting hypotheses toward the research question: how does earnings equality predict relationship stability for same-sex and heterosexual couples? The first theory is the specialization theory, or the neoclassical economic theory of the household, which suggests that relationship stability is improved with specialization of work and home duties between partners (Becker 1981). This theoretical framework is ostensibly gender neutral, and implies that outcomes should not vary for same-sex couples compared to heterosexual couples. The competing theoretical approach is the "doing gender" framework (see West & Zimmerman 1987, Ridgeway 2011). This theory suggests that there are gendered expectations within the household that apply to both men and women. When heterosexual couples deviate from the traditional male-breadwinner setting, the arrangement conflicts with gendered expectations and causes problems within the relationship. The doing gender theory would suggest that among same-sex couples, cultural schemas and gender norms about providing for a family do not possess as much power as they do for heterosexual couples.

Before proceeding, I remind the reader that the term "cohabiting" in this paper refers to couples that are sharing a residence and includes both married and unmarried couples, and that these theories provide claims about household dynamics more broadly (i.e., housework), but my empirical test of these theories limits the scope to the effects of earnings equality. The above theories lend two rival hypotheses for each of the three analyses.

The neoclassical economic (specialization) hypotheses are as follows:

- $H_1$ : The specialization model holds for both heterosexual couples and same-sex cohabiting couples. More specifically, unequal earnings will decrease the likelihood of breakup for both same-sex and heterosexual couples.
- **H<sub>2</sub>:** Among both heterosexual and same-sex coresident couples, settings in which one partner earns more will have higher average relationship quality than those in which both partners earn equally.
- **H<sub>3</sub>:** Unmarried non-cohabiting (i.e., dating) couples with unequal earnings are more likely to enter into cohabitation or marriage. In other words, these relationships will be more stable, and thus more likely to progress to the next relationship step of cohabitation or marriage.

The doing gender theory leads to the following hypotheses:

**H**<sub>4</sub>: In same-sex cohabiting couples, equality of earnings will decrease the likelihood of breakup, since preferences toward equality do not conflict with gendered expectations. In heterosexual coresident couples, those with equal earnings will be at higher risk of breakup.

**H**<sub>5</sub>: For same-sex cohabiting couples, equal earnings will increase relationship quality on average. This could be because of preferences for similarity or from an inherent value of egalitarianism. For heterosexual cohabiting couples, relationship quality will be higher if one partner earns more.

**H**<sub>6</sub>: Among heterosexual non-cohabiting couples, unequal earnings will promote stability, and these couples will be more likely to enter into cohabitation or marriage. Among same-sex couples, equal earnings will increase the likelihood of non-cohabitors entering into cohabitation.

Note that while the doing gender framework does not explicitly assess why equal earnings might benefit same-sex couples, many gender scholars have noted that egalitarianism is a widely preferred household arrangement for modern-day couples (e.g., Bolzendahl & Myers 2004, Brines & Joyner 1994, Ridgeway 2011). Whether the reason is fairness (e.g., Wilkie et al. 1998), a preference for similarity (homophily) (e.g, Breen & Salazar 2009), or an innate desire for equality, the consensus among scholars is that egalitarianism between partners is highly sought after but rarely obtained. Following the results I provide additional discussion on potential reasons why equal earnings might operate differently for same-sex couples than heterosexual couples.

To assess the above hypotheses, this paper will provide three sets of analyses. The first analysis compares the role of earnings equality for same-sex and heterosexual cohabiting (both married and unmarried) couples in predicting the likelihood of breakup/divorce. The second analysis examines self-reported relationship quality among same-sex and heterosexual cohabiting couples. Finally, I use a sample of couples that were not cohabiting in the first wave of the HCMST survey (2009). In this analysis, I assess whether earnings have an effect on which couples enter cohabitation or marriage, offering another lens through which we can examine relationship stability. Throughout the paper, I focus both on highlighting differences between same-sex and different-sex couples, and on substantively understanding the processes occurring within each group.

#### **Data and Methods**

Data

The How Couples Meet and Stay Together (HCMST) survey, managed by Michael Rosenfeld, Reuben Thomas, and Maja Falcon (2011 and 2014), is a nationally representative survey of American couples. The survey includes 3,009 respondents that were in a romantic relationship at the time of the first wave of the survey (2009). The survey oversamples lesbian and gay respondents: among all couples, 471 were in a self-identified same-sex relationship in the 2009 Wave I survey. In order to oversample same-sex couples, respondents were asked a screening question as to whether they were in a same-sex relationship, and were additionally asked detailed questions about their partner's name and partner's gender, and whether they identify as lesbian, gay, or bisexual. This methodology allows same-sex couples to be much more accurately identified than in other large datasets (i.e., the Census or ACS), in which reporting error can lead to misidentification of same-sex couples (e.g. Black et al. 2000).

Three waves of follow-up surveys were administered after the initial survey, so that couple dissolution rate could be studied. After the Wave I survey in 2009, Wave II (2010) has a follow-up response rate of 84.5% (N=2520), Wave III (2011) has a response rate of 72.9% (N=1960), and Wave IV (2013) a rate of 83.1% (N=1536); couples were dropped from analysis in subsequent waves if they had broken up in the previous survey or if a partner was reported as deceased.

The survey is implemented by Knowledge Networks (KN/GfK), and is taken over the Internet. Knowledge Networks has a panel of participants recruited via a random digit dialing (RDD) telephone survey, so the panel is nationally representative and is not a self-selected sample (see Rosenfeld and Thomas 2012). Respondents who did not have Internet were given Internet access while they served on the survey panel. 71% of the KN individuals who were sampled consented to take the HCMST survey. Participants in the KN panel were subject to multiple stages of recruitment, which lowers the overall response rate: the initial RDD process yielded a response rate of 32.6%, and 56.8% of these respondents completed an initial demographic survey. Thus, the overall composite response rate is about 13% (.326\*.568\*.71). Despite this low composite response rate, Internet survey quality meets or exceeds that of telephone surveys (e.g., Chang and Krosnick 2009). Furthermore, the severity of attrition bias is minimized since KN gathered information from its subjects at every stage of the survey (Couper 2000).

#### *Variables*

In Analysis 1, the dependent variable models whether a cohabiting (including married and unmarried) couple experiences a breakup. The dependent variable in Analysis 2 is a self-reported measure of relationship quality among cohabiting couples. Finally, Analysis 3 examines which couples who were non-cohabiting in Wave I entered into cohabitation (or marriage) during Waves II-IV.

The independent variables included are consistent across analyses. The main independent variable of interest measures whether partners have equal earnings. This variable is obtained from responses to the survey question, "Between you and [partner\_name], who earned more income in 2008?" Response choices were, "I earned more," "[Partner\_name] earned more," or "We earned about the same." This variable is coded as 0 if either partner earned more, and 1 if the partners earned about the same. The next key independent variable is a binary variable coded 0 for heterosexual couples, and 1 for same-sex couples. Values for this variable come from the survey questions, "Is [partner\_name] the same gender as you?" And "Are you yourself gay, lesbian, or bisexual?" The primary research question rests on results from the interaction of earnings equality with same-sex couples status, and will determine if equal earnings in a relationship affects same-sex couples differently compared to heterosexual couples.

I control for additional variables, including respondent demographic characteristics, qualities of the couple, and characteristics of the household. The demographic variables include years of education, employment status, race, religion, and age. The measure for years of education is constructed based on the question "what is the highest level of schooling you received?", and ranges from 0 (none or preschool) to 20 (doctoral degree). Same-sex couples are slightly more educated than heterosexual couples on average, and higher education negatively relates to breakup, so this measure is included as a control. Employment status is highly related to earnings, and economic hardship can lead to relationship stress. This measure is dichotomous, and equals 0 if the respondent is working for pay and 1 if not. In all analyses, respondents who report being retired are excluded, but respondents not working for other reasons (e.g., unemployment, temporary leave, disability) are included in the sample.<sup>3</sup> The question text reads, "What is your current employment status?" Respondent race is controlled for because non-whites have higher breakup rates, on average. In my analyses, I include a four-category variable: 0 = non-Hispanic white; 1 = non-Hispanic black; 2 = non-Hispanic American Indian, Asian, Pacific

Islander, or Other; and 3 = Hispanic. This variable is constructed based on a detailed measure of race from the question "Which of these races do you most identify with?" Religion has been shown to relate to breakup in that those who identify as religious are less likely to divorce (Lehrer and Chiswick 1993). This variable is coded as 0 = Christian, 1 = non-Christian, and 2 = no religion. I control for age because younger respondents might be more likely to experience a breakup.

Control variables that measure couple characteristics include length of relationship and whether the couple is in a domestic partnership, civil union, or marriage during the previous wave. Long-term relationships are less likely to dissolve, which is the motivation for relationship length as a control. Relationship duration is measured in years, and is constructed from the question "How long have you been in a romantic relationship with [partner\_name]?" In the first two analyses, I control for whether the couple is in a domestic partnership, civil union, or marriage with a dichotomous variable (1=yes), because this commitment indicates a lower likelihood of breakup. However, it should be noted that depending on the year and geographic location, many same-sex couples do not have access to formal union recognition.

Finally, I control for household characteristics: the respondent's household income and number of children in the household. Respondents were given 19 possible income ranges, from less than \$5,000 to more than \$175,000. The variable is recoded as the median value in the bracket. I control for household income because it is related to relative earnings in a couple, and also to breakups: couples with financial trouble may be more likely to dissolve. Finally, I control for whether the couple has children in the household (yes=1), because couples with children are more stable than those without children, and same-sex couples are less likely to have children than heterosexual couples.

#### [Insert Table 1 About Here.]

In the first two analyses, the data include 1859 cohabiting couples, which represent both married couples and unmarried coresidents. These couples were followed over a period of four years, until they drop out of the study or experience a breakup or death. Among these cohabiting couples, a total of 177 experienced a breakup over the observation window. Table 1 gives descriptive statistics for each of the independent variables, from Wave I of the HCMST survey.

Respondent employment status, cohabitation and marital status of previous wave, length of relationship, household income, and having children in the household are all time-varying covariates.

In this sample, same-sex couples are significantly different from heterosexual couples on several measures. First, they are more likely to have experienced a breakup. Same-sex couples are more likely to be employed, have more years of education, and have higher household income. Relative to heterosexual couples, same-sex couples are less likely to have children, less likely to be in a formalized union, and have lower average relationship lengths. These descriptive findings are no surprise, given previous literature (e.g., Gates 2009) on same-sex couples. There are no statistical differences between heterosexual and same-sex couples on measures of religion, race, or on the key independent variable: equal earnings.

**Models and Methods: Analysis 1** – Equality of Earnings and Likelihood of Breakup for Same-Sex and Heterosexual Couples

The first research question is suitable for an event history analysis framework, because the dependent variable is an event – couple dissolution. In this analysis, I define the risk set to be all cohabiting (both married and unmarried) couples from the first wave of the survey. For this analysis, the dependent variable models when a couple experiences a breakup or divorce. Thus, it is a binary variable (Y=0 or 1), and is assumed to follow a binomial distribution. To determine whether a couple experienced a breakup, respondents are asked several questions. Previously married respondents are asked, "Are you still married to [partner\_name]?" All respondents are asked, "Are you currently living with [partner\_name]?" Non-married cohabiting respondents are asked, "Are you still in a romantic relationship with [partner\_name]?" Responses were coded to note a change in the previous status that would indicate a breakup. The observation receives a value of 1 for the dependent variable during the wave corresponding to a breakup, and is coded as 0 for waves prior to the one in which the breakup occurred.

Censoring is an issue to be aware of when using event history models. Right-censoring is not problematic, in that if a couple drops out of the study before the observation time ends, they are no longer included in the risk set. Left-censoring can be problematic, in that we do not have data on couples before the first survey. To minimize biasing results, I include a duration variable in my models: the length of the relationship. I posit that relationship duration influences the

likelihood of breakup, in that couples with longer relationships are less likely to break up. Thus, the survival curve is downwardly biased – most couples break up within the first several years, so our estimates may be biased toward 0, and provide a conservative test of the processes.

Analyses were conducted using discrete time event history models (Yamaguchi 1991). These models hold several assumptions. First, data are discrete. The HCMST dataset meets this criterion – respondents completed the survey on an annual basis. Discrete time models assume that the hazard rate of breakup is constant, or not time dependent. I manage this assumption with the inclusion of relationship duration as a covariate. The discrete time event history model is given by this equation:

$$\log(\frac{P_{it}}{1 - P_{it}}) = \alpha_t + X_{it}\beta,$$

where X represents a vector of covariates, and  $\beta$  is a vector of coefficients. In this framework,  $P_{it} = P(T_i = t_i T_i \ge t_i, X_i)$ , which is the probability of a couple experiencing a breakup at time t, given that they have survived up to the point t. This model is interpreted as the log-odds of experiencing an event relative to not experiencing an event, for a particular couple at time t.

All models are unweighted: since the HCMST survey oversamples lesbian and gay respondents, post-stratification weights would be inappropriate to use. Because same-sex couples account for a small proportion of the national population, using nationally representative weights would under-weight same-sex couples in the sample and attenuate differences between the groups. I address the potential bias of using unweighted data by following the method described in Winship and Radbill (1994). In the multivariate regressions, I include predictors of the weights: age, age-squared, metropolitan residence, having Internet access at home, and recruitment source. This allows for the standard errors to be preserved based on the actual number of same-sex couples in the HCMST data. Winship and Radbill (1994) suggest interacting the weights with all covariates and then completing joint Wald tests on the interactions to determine whether inclusion of the weights significantly changes the coefficients. I find that there is no significant change in the coefficients when weights are used, indicating that the unweighted regression is unbiased (e.g., for the final model in Table 3,  $\chi^2$ =23.86, df = 20, p=0.249). Results do not vary with the weight predictor variables, so coefficients for these predictors are not presented here.

**Results:** Equality of Earnings and Likelihood of Breakup for Same-Sex and Heterosexual Couples

#### [Insert Table 2 About Here.]

Table 2 gives unweighted descriptive statistics on breakup rates among coresident couples from the HCMST survey, Waves I-IV. There are three points to draw from this table. First, note that same-sex couples are not statistically more likely to be in egalitarian relationships than are heterosexual couples: 10.45% of heterosexual couples are in egalitarian relationships, compared to 14.02% of same-sex couples. Next, the breakup rates differ by same-sex couple status: same-sex couples are more likely to experience a breakup compared to heterosexual couples. In the sample, 17.65% of same-sex couples broke up during the four observation years, compared to 8.03% of heterosexual couples. This finding is consistent with previous research (i.e., Blumstein & Schwartz 1983). Finally, equal earnings have a different effect on relationship stability for same-sex couples compared to heterosexual couples. In particular, equal earnings operate as a protectant from breakup among same-sex couples, whereas equal earnings create a risk for breakup among heterosexual couples. For those same-sex couples with equal earnings, the breakup rate in our sample is just 7.69%, compared to a breakup rate of 14.02% for heterosexual couples with equal earnings.

Carrying this logic forward, it follows that as relationship duration increases, the likelihood of heterosexual couples being egalitarian in earnings should decrease, whereas the likelihood of having equal earnings should increase with relationship length for same-sex couples.

# [Insert Figure 1 Here.]

This is precisely what the data show. Figure 1 depicts lowess regressions predicting equal earnings by relationship length for same-sex and heterosexual couples. This figure demonstrates that as relationship length increases, same-sex couples are more likely to possess equal earnings, whereas heterosexual couples are less likely. In other words, Figure 1 suggests that same-sex couples' relationships are more likely to survive for many years if they are egalitarian, while

long-term heterosexual relationships are less likely to be equal in earnings. These bivariate results lend preliminary support for  $H_4$ .

#### [Insert Table 3 Here.]

Table 3 presents results from nested discrete-time models, predicting the occurrence of a breakup for both heterosexual and same-sex cohabiting couples. Model 1 includes only the variables of interest: same-sex couple status and equality of earnings (equal earnings=1). Model 2 interacts these variables to assess whether the effect of earnings equality is different for same-sex couples, compared to heterosexual couples. Model 3 adds variables to account for respondent characteristics, and Model 4 adds variables pertaining to the couple and household. The coefficients are given at the log-rate level, so exponentiation is required to interpret the effect on the rate of couple dissolution. In the discrete-time models presented, the standard errors are clustered to account for multiple observations per respondent, since respondents who completed follow-up surveys appear in the dataset for as many as four waves.

I find that, in Model 1, same-sex couples are significantly more likely to break up, relative to heterosexual couples. Specifically, in this model being a same-sex couple increases the log-rate of breakup by 1.217, and equivalently, increases the rate of dissolution by a factor of 3.377 (=exp(1.217)). In Model 1 I also find that equal earnings increases the rate of breakup by a factor of 1.358, though this effect is not significant in this model. This model initially provides weak support for  $\mathbf{H}_1$ , the neoclassical economic theory, in that equality of earnings increases the likelihood of breakup.

However, I find that the effect of earnings is different for same-sex couples, compared to heterosexual couples. In Model 2 I add the interaction term same-sex couple\*equal earnings, and find that the resulting interaction is significant at the p<.05 level. Equality of earnings reduces the likelihood of breakup for same-sex couples, while it increases the likelihood of breakup for heterosexual couples. This result holds across subsequent models with additional controls: at a baseline rate, same-sex couples are more likely to break up than heterosexual couples, but equal earnings within same-sex couples promote relationship stability.

Several other variables significantly predict couple dissolution. Couples in which the respondent has higher years of education are less likely to experience a breakup. Being married

or in a domestic partnership significantly decreases the likelihood of breakup.<sup>4</sup> Further, the likelihood of breakup decreases with longer relationships, and with higher household incomes.

## [Insert Figure 2 About Here]

Figure 2 graphically illustrates the results from Table 3, showing localized lowess regressions predicting breakup, which give the average breakup rate per year among relationships of varying lengths. Figure 2 demonstrates that same-sex couples with unequal earnings are the most likely to experience a breakup, relative to all other groups. Same-sex couples are less likely to break up if they have equal earnings, whereas heterosexual couples are more likely to break up if the partners have equal earnings. This finding supports hypothesis **H**<sub>4</sub>, as described above.

### **Models and Methods: Analysis 2** – Equality in Earnings and Relationship Quality

To further examine relationship dynamics within couples, I assess the connection between earnings differentials and relationship quality among cohabiting (both married and unmarried) same-sex and heterosexual couples. This analysis consists of two parts: first, I model relationship quality using ordered logit regressions. Next, I use smoothed lowess regressions to assess relationship quality as it varies by couples' earnings, relationship length, and household income. In Wave I of the HCMST survey, respondents were asked to rate the quality of their relationship, based on the question: "In general, how would you describe the quality of your relationship with [partner\_name]? Response options were a 5-point scale, and the dependent variable in models is coded a 3-category measure: 0 = very poor, poor, or fair; 1 = good, 2 = excellent. In the lowess regressions, I examine the likelihood of respondents reporting "excellent" relationship quality, relative to all other options.

To estimate the effect of equality of earnings on relationship quality, I use an ordered logistic model because the dependent variable is discrete, ordered, and of limited range. The ordered logit model follows this functional form:

$$\log(\frac{\Pr(Y \ge J)}{\Pr(Y < J)}) = \tau_J - X\beta,$$

where J is one of K ordered categories,  $\tau_J$  is the threshold of the underlying latent variable, and  $X\beta$  is a set of linear predictors and coefficients. I use the same independent variables as described in the first analysis presented above. The ordered logit model holds the assumption that the coefficients for each variable are equal across each level of the dependent variable. To test the proportionality assumption, I find the results of a Brant test to be insignificant, implying that the assumption holds for this dependent variable (e.g., for Table 4, Model 4,  $\chi^2$ =27.44, df=21, p=0.157).

Results: Equality in Earnings and Relationship Quality

## [Insert Table 4 About Here.]

Table 4 gives the results from nested ordered logit models predicting relationship quality for cohabiting couples at Wave I. Model 1 includes independent variables for same-sex couple status and equal earnings, Model 2 adds the interaction of same-sex couple\*equal earnings, Model 3 includes additional measures of respondent characteristics, and the final model adds in household measures. Coefficients are presented at the log-odds level.

Across all models, same-sex couples with equal earnings report higher levels of relationship quality than other relationship groups. The main effects of same-sex couples and equal earnings are not significant, but the interaction term demonstrates that equal earnings among same-sex couples increases the likelihood of couples reporting "excellent" relationship quality relative to lower categories. Here  $H_2$ , the specialization hypothesis, is not supported, because heterosexual couples with equal earnings report no lower satisfaction levels than couples with unequal earnings, and because same-sex couple with equal earnings report higher relationship quality.

#### [Insert Figure 3 About Here.]

Figure 3 shows the results from smoothed lowess regressions depicting the likelihood of reporting "excellent" relationship quality, for heterosexual and same-sex couples, by relationship length and by household income. The top panel of this figure shows that same-sex couples with

equal earnings report higher relationship quality, relative to both heterosexual couples and to same-sex couples with unequal earnings. In the initial stages of a relationship, same-sex couples with unequal earnings have noticeably lower relationship quality, but this difference diminishes with increased relationship length. There is no observable effect of earnings differences on heterosexuals' relationship quality.

The lower panel of Figure 3 shows how relationship quality varies over household income. This figure illustrates that equal earnings in same-sex couples yields high relationship quality across all income levels, and the effect is thus distinct from the fact that same-sex couples report higher incomes than heterosexuals. Same-sex couples with unequal earnings report the lowest averages of relationship satisfaction across all income levels.

The findings from this analysis partially support the doing gender hypothesis  $H_5$ : samesex couples are more satisfied in settings with equal earnings. The hypothesis is not fully supported, however, because heterosexual couples with equal earnings do not report noticeably lower relationship quality relative to those with unequal earnings.

## **Models and Methods: Analysis 3** – Who Enters Cohabitation?

The final analysis considers a different sample of couples: those who were non-cohabiting in Wave I of the HCMST survey (2009). This analysis examines whether earnings differentials among couples influence which former non-cohabitors enter into cohabitation (or marriage) in later years. In other words, this analysis allows us to view a different stage of relationship stability by observing which couples enter into more advanced relationship statuses. Note that in the multivariate models, I do not distinguish between cohabiting and marriage in this analysis because same-sex couples are unable to get married in the majority of states. Thus, when I refer to "cohabitation," this is an inclusive definition and consists of married couples, couples with domestic partnerships or civil unions, and cohabiting couples with no legal relationship formalization.

In the first wave of the HCMST survey, respondents are asked if they are currently in a romantic relationship, and if they are married to this partner or if they are cohabiting with the partner. If participants in the survey responded that they *are* in a romantic relationship but they *are not* married to or cohabiting with this person, they are eligible to be in the risk set for this

analysis: non-cohabiting couples from the first wave of the survey. This group includes 527 non-cohabiting heterosexual couples and 121 non-cohabiting same-sex couples. In the four years of follow-up surveys, 29.8% of the heterosexual couples entered into cohabitation, and an equivalent proportion of same-sex couples entered into cohabitation (29.8%).

The models for this analysis are discrete-time event history models, and the event of interest is entering cohabitation. Couples who did not experience the event during the observation time receive a value of 0 on the dependent variable, and those who do enter cohabitation receive a value of 1 for the wave in which they first reported being in a cohabiting relationship with the same partner from Wave I. To account for left-censoring, I control for relationship length in the models. Additionally, I graphically present the findings over the relationship durations, to assess whether the effects are different for those in shorter relationships.

The variables of interest remain consistent from the previous two analyses: same-sex couple status and equal earnings. I include similar controls as in the first two analyses, all of which could influence relationship stability and the likelihood to enter cohabitation. Specifically, the controls for this analysis include the respondent years of education, employment status, race, religion, and age, the household income, length of relationship, and whether there are children in the respondent's household.

**Results:** Who Enters Cohabitation?

#### [Insert Table 5 About Here.]

The descriptive statistics for non-cohabiting couples are given in Table 5. There are several significant differences between the non-cohabiting heterosexual couples and the non-cohabiting same-sex couples in the sample. First, same-sex couples have higher education levels, and are older on average. Same-sex non-cohabiting couples are also less likely to have children in the household, and have lower household incomes than heterosexual non-cohabiting couples. The remaining differences, and importantly the key variables of interest (entering cohabitation and equal earnings), do not significantly differ between heterosexual and same-sex couples in the sample.

If the doing gender theory is correct, we ought to find that couples vary in their propensity to have equal earnings as they progress through relationship categories. More specifically, the doing gender theory suggests that heterosexual couples who are in cohabiting relationships should be less likely to have equal earnings relative to non-cohabiting couples, and married heterosexual couples ought to be even lower in their likelihood of having equal earnings. On the contrary, for same-sex couples the likelihood of having equal earnings should increase for those couples that survive to later relationship stages: cohabiting and married couples (or those with domestic partnerships or civil unions) should be more likely to have equal earnings.

# [Insert Figure 4 About Here.]

Figure 4 shows the proportion of couples with equal earnings across relationship stages for samesex and heterosexual couples. This figure supports the doing gender theory ( $H_6$ ): in more advanced relationship stages, heterosexual couples are less likely to have equal earnings, whereas same-sex couples are more likely.

## [Insert Table 6 About Here.]

Next, I examine if the trend in Figure 4 holds using longitudinal data and controlling for other independent variable characteristics. Table 6 shows the main results of Analysis 3, presenting the coefficients from discrete-time event history models predicting which non-cohabiting couples from Wave I enter cohabitation in subsequent waves of the HCMST survey. The models proceed in a similar manner as the previous analyses: Model 1 includes indicator variables for same-sex couple status (=1) and equal earnings (=1). Neither variable has a significant effect on the likelihood of couples to enter cohabitation. Model 2 adds the interaction term same-sex couple\*equal earnings, which is significant (p<.10) and positive. This interaction continues to be a significant predictor of entering cohabitation in Models 3 and 4, which add additional control variables. The positive and significant interaction term indicates that formerly non-cohabiting same-sex couples with equal earnings are more likely to enter into cohabitation, compared to both same-sex couples with unequal earnings and to heterosexual couples.

Other control variables significantly predict whether a couple will begin cohabiting in the

four years following the initial HCMST interview. Respondent years of education positively predict cohabitation, as does the length of the couple's relationship. Finally, the number of children is a negative predictor of cohabitation. These factors are supported by previous literature on cohabiting couples (e.g., Smock 2000; Bumpass, Sweet, & Cherlin 1991).

## [Insert Figure 5 About Here.]

Figure 5 graphically displays the differences in the probability of entering cohabitation, for same-sex couples and heterosexual couples over their relationship length, using lowess regressions. Figure 5 shows that heterosexual couples with unequal earnings are more likely to enter cohabitation than those with equal earnings. Among same-sex couples, the likelihood of entering cohabitation greatly increases across relationship length for those with equal earnings, while the likelihood for those with unequal earnings remains consistently low across relationship duration.

The results from this third analysis demonstrate that earnings differentials between partners have a different effect on relationship stability for same-sex and heterosexual couples. For non-cohabiting couples, the successful procession into later relationship stages is consistently associated with earnings differences between partners. This analysis, together with the previous two, demonstrates that same-sex couples with equal earnings are more stable on a number of fronts, whereas heterosexual couples with equal earnings exhibit reduced relationship stability.

### **Conclusion and Discussion**

The analyses in this paper provide a test of the neoclassic specialization theory of the household as it applies to the effect of equal earnings on relationship stability. I first demonstrate that earnings equality operates differently for same-sex couples compared to heterosexual couples: equal earnings reduce the likelihood of breakup for same-sex couples, while it increases the likelihood of breakup for heterosexual couples. Next, I show that same-sex couples report higher relationship quality if both partners have equal earnings. Finally, I demonstrate that as relationships progress to more advanced stages, heterosexual couples are less likely to have equal

earnings, whereas same-sex couples are more likely to have equal earnings. In particular, having equal earnings is a significant and positive predictor of whether a formerly non-cohabiting same-sex couple will enter cohabitation (or marriage) in later years. These analyses together provide an empirical assessment of the neoclassical specialization theory of households, as related to relative earnings in a couple. The results imply that our assumptions about the benefits of specialization are overstated: specialization does not benefit same-sex couples, which suggests that it is actually the doing gender theory that accounts for observed patterns of relationship stability among heterosexual couples. The results further demonstrate that existing theories on the family ought to be revised to account for same-sex couples and other non-traditional families: the existing theoretical framework on families does not adequately explain the positive effect of egalitarianism in earnings on same-sex couples' stability.

While a comparison of same-sex and heterosexual couples allows us to adjudicate between the neoclassical economic theory of the household and the doing gender theory – in the matter of equal earnings – it does not straightforwardly lend an alternative theory to explain the observed processes among same-sex couples. Although the existing data cannot thoroughly test alternative explanations, a few possibilities may be relevant. First, it could be that all couples exhibit a taste for similarity. In this sense, perhaps couples select partners who are similar to them on a number of dimensions, with earnings being a relevant variable in the equation. If this theory holds, heterosexual couples are not easily able to indulge their preferences on this front, since equal earnings violates gendered assumptions and stereotypes. On the other hand, same-sex couples are not as limited by gender roles and can see their preferences for similarity realized.

Relatedly, a second theory suggests that couples these days strongly value equality. Egalitarianism has been espoused as a symbol of modernity and fairness. Currently, the majority young women and men desire both careers and equal sharing of housework and childcare with their partners (e.g., Bolzendahl & Myers 2004). Despite these desires, inequality still exists in most heterosexual marriages (see, for example, Bianchi et al. 2012). If this theory holds, heterosexual couples with equal earnings might aim to be egalitarian in other ways, but cannot fulfill this goal without much effort toward reassessing gendered expectations. Same-sex couples have some escape from those expectations and can better live up to their egalitarian goals.

Finally, in a line of reasoning similar to Brines and Joyner (1999), perhaps equality promotes joint investments in a way in which specialization cannot. In this sense, contributing

equal earnings allows both members of the couple to share in provisions toward their valued utilities. While it's possible that it is more efficient to split duties, equality could promote a sense of fairness and value within a relationship. Equal-earning couples might feel higher levels of security surrounding their worthiness in a relationship. Again, heterosexual couples encounter the problem of gender expectations, and have more difficulty in realizing the positive benefits of egalitarianism.

Future research could take on many avenues to further develop theoretical leverage on egalitarianism and relationship stability. Are younger cohorts of heterosexual couples, who might be less susceptible to rigid gender norms, more stable under egalitarian settings than older cohorts? How do heterosexual couples who value gender equality, both behaviorally and attitudinally, fare in equal earnings settings? These questions could help understand under which conditions it is possible for heterosexuals to escape the constraints of prescriptive gender norms. Among same-sex couples, it would be similarly worthwhile to study how broader definitions of equality relate to stability (in terms of housework, decision-making, egalitarian beliefs, etc.) – the analysis here provides an assessment of relative earnings only. If equality in earnings promotes stability among same-sex couples, do other traits of similarity likewise promote stability? In other words, how do same-sex couples fare if partners have equal earnings but different religious preferences, races, education levels, or ages? Studying these types of measures would help to assess whether the results of this paper can be attributed to same-sex couples valuing equality or if the preference of homophily has better explaining power.

There are several limitations to this study. The sample size of same-sex couples, though large for a nationally representative survey, is still smaller than might be ideal, and does not allow for smaller analytical groups. In an analysis included in the appendix, I find no difference between lesbian and gay couples in the effect of equal earnings. Because of the small sample, this null finding does not eliminate the possibility that the effect of earnings could be different for lesbian partners than for gay male couples, insofar as men, regardless of same-sex couple status, value earnings as a symbol of adherence to the masculine cultural norm. There is much room for future data collection in the study of same-sex couples, and this is one area in which further study would be very beneficial.

Lastly, the conception of egalitarianism used here is somewhat narrow. I do not have measures of the household division of labor or the gender beliefs of the respondent nor their partner. Using earnings as a proxy for egalitarianism could lead to a limited understanding of how other types of egalitarianism affect relationship quality and longevity.

While there is much room for future research to expand upon the findings here, the results of this study provide an analytical test of the neoclassical economic (specialization) theory. By comparing same-sex couples to heterosexual couples, my findings imply that the specialization theory of couple stability is intimately tied to gender roles and ideals of heterosexual relationships. Furthermore, I extend a test of this theory to same-sex relationships, a population which is under studied due to data limitations. In this era of ever-changing family typologies, it is no longer possible to ignore non-traditional unions. Scholars ought to pursue the study of new populations and examine the relevance of existing past theories to alternative partnership arrangements, which is precisely what this paper seeks to do.

#### Notes

1. I refer to couples containing different sex partners as "heterosexual," and couples containing same-sex partners as "same-sex." This terminology refers to the couple, rather than the sexual orientation identity of each partner.

Additionally, in using the term "egalitarianism," I am referring to equality of earnings, not egalitarianism in other relationship aspects, such as housework or perceived power.

2. This question is clearly subjective in nature – respondents might differ in their thresholds for what they count as "earning about the same." The data do not contain information on the actual earnings of each partner, so I could not assess absolute difference in partners' earning power. I argue that the respondent's *perception* of earnings differences matters in its effect on relationship stability. However, the subjectivity of the question may raise concerns over validity. The following two validity checks indicate no obvious signs of reporting bias:

First, are same-sex couples are biased toward reporting equal earnings (see Carrington 1999)? In the HCMST sample, about 13.5% of same-sex couples report having equal earnings, relative to about 10.4% of heterosexual couples. This difference is insignificant, and we might expect a slightly higher proportion among same-sex couples since they are more likely to be dual earners (see Gates 2009).

Since earnings and education are often correlated, I examined the correlation of relative income to relative education. I find a strong correlation (p<.001) between a partner earning more with that same partner also having more (at least one additional year) education ( $\chi^2 = 72.84$ , d.f.=1).

- 3. Retired respondents (N=365) are excluded because of the ambiguity associated with the relative earnings question introduced by retirement: we cannot know whether respondents are answering with respect to retirement or to their pre-retirement income. Their exclusion does not change the direction or significance level of results, but is meant to improve clarity in interpretation of the relative earnings effect. Additionally, while it would be ideal to include a measure of the partner's employment status, only the respondent's information is available.
- 4. Note that the coefficient for same-sex couple status changes sizably in magnitude from Model 3 to Model 4, Table 3. Much of this change is due to the inclusion of the marriage/domestic partnership/civil union covariate. This is because of the different rates of formal unions by same-sex and heterosexual couples. Despite lower access to marriage and formalized unions, scholars

have shown that marriage-like unions operate similarly in terms of relationship stability for same-sex and heterosexual couples (see Rosenfeld 2012 and Ross et al. 2011).

5. The results are very similar if relationship quality is coded differently (e.g., three or five categories).

# **About the Author**

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# **Tables & Figures**

Table 1. Descriptive statistics of dependent and independent variables – cohabiting couples.<sup>a</sup>

|                                       | Mean (Standard Deviation) |               |               |               |
|---------------------------------------|---------------------------|---------------|---------------|---------------|
|                                       | All Couples               | Heterosexual  | Same-sex      | Significance  |
|                                       |                           | Couples       | Couples       | of difference |
| Experienced a Breakup                 | 0.095                     | 0.080         | 0.177         | ***           |
| Relationship Quality at Wave I        |                           |               |               |               |
| Very Poor, Poor, Fair                 | 0.077                     | 0.082         | 0.049         | n.s.          |
| Good                                  | 0.302                     | 0.293         | 0.354         | *             |
| Excellent                             | 0.621                     | 0.625         | 0.597         | n.s.          |
| Equal earnings (=1)                   | 0.108                     | 0.104         | 0.135         | n.s.          |
| Same-sex couple (=1)                  | 0.154                     |               |               |               |
| Respondent years of education         | 14.023                    | 13.737        | 15.597        | ***           |
|                                       | (2.489)                   | (2.408)       | (2.335)       |               |
| Employment status (=1 if not working) | 0.168                     | 0.181         | 0.093         | ***           |
| Respondent race                       |                           |               |               |               |
| White                                 | 0.748                     | 0.745         | 0.766         | n.s.          |
| Black                                 | 0.059                     | 0.061         | 0.052         | n.s.          |
| Hispanic                              | 0.122                     | 0.123         | 0.114         | n.s.          |
| Other                                 | 0.071                     | 0.071         | 0.069         | n.s.          |
| Respondent religion                   |                           |               |               |               |
| Christian                             | 0.813                     | 0.812         | 0.817         | n.s.          |
| Non-Christian                         | 0.052                     | 0.052         | 0.052         | n.s.          |
| Not religious                         | 0.135                     | 0.136         | 0.131         | n.s.          |
| Respondent age                        | 42.381                    | 41.511        | 47.162        | ***           |
|                                       | (12.258)                  | (12.361)      | (10.410)      |               |
| Marriage, civil union, or domestic    | 0.776                     | 0.848         | 0.379         | ***           |
| partnership (=1)                      |                           |               |               |               |
| Length of relationship                | 15.676                    | 16.150        | 13.067        | ***           |
|                                       | (11.495)                  | (11.733)      | (9.692)       |               |
| Household income (in \$10k)           | 7.543 (4.495)             | 7.167 (4.271) | 9.608 (5.102) | ***           |
| Children in household (yes =1)        | 0.330                     | 0.378         | 0.066         | ***           |
| Number of Observations                | 1859                      | 1570          | 289           |               |

Source: HCMST Waves I-IV (2009-2013). \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, n.s. = not significant.

<sup>a</sup> In Analyses 1-2, only cohabiting couples are used. "Cohabiting" couples include all couples residing in the same household, which includes both married and unmarried couples. In Analysis 3, only couples that were not cohabiting (or married) in Wave I are used. This table presents the descriptive statistics pertaining to the cohabiting sample only, and Table 5 contains the descriptive statistics for non-cohabiting couples.

Table 2. Frequency and proportion of breakups by earnings levels, for heterosexual and same-sex cohabiting couples.

|                                  | Frequency (%) of Couples | Frequency (Conditional %) of Breakups |
|----------------------------------|--------------------------|---------------------------------------|
| Heterosexual: Equal earnings     | 164 (10.45%)             | 23 (14.02%)                           |
| Heterosexual: Unequal            | 1406 (89.55%)            | 103 (7.33%)                           |
| Heterosexual: Male earned more   | 1057 (67.32%)            | 72 (6.81%)                            |
| Heterosexual: Female earned more | 349 (22.22%)             | 31 (8.88%)                            |
| Same-Sex: Equal earnings         | 39 (13.49%)              | 3 (7.69%)                             |
| Same-Sex: Unequal earnings       | 250 (86.51%)             | 48 (19.20%)                           |
| Total                            | 1570 Heterosexual        | 126 (8.03%)                           |
|                                  | 289 Same-Sex             | 51 (17.65%)                           |

Source: HCMST Waves I, II, III, IV (2009-2013). Note: all frequency calculations were derived from only couples who were reached for at least one follow-up survey and who had no missing data on earnings differentials question. Cohabiting couples include both married and unmarried coresidents.

Table 3. Discrete-time event history models predicting breakup for heterosexual & same-sex

cohabiting couples, in log-odds.

|   | Model 1  | Model 2  | Model 3   | Model 4          |
|---|----------|----------|-----------|------------------|
| Same-sex couple (=1)                      | 1.217*** | 1.361*** | 1.495***  | 0.828**          |
| • • • •                                   | (0.283)  | (0.282)  | (0.272)   | (0.294)          |
| Equal earnings (=1 if earnings are equal, | 0.306    | 0.639**  | 0.673**   | 0.428 +          |
| =0 if unequal)                            | (0.222)  | (0.236)  | (0.236)   | (0.231)          |
| Same-sex couple*Equal earnings            |          | -1.549*  | -1.551*   | -1.300*          |
| Same Sex coupie Equal carnings            |          | (0.655)  | (0.651)   | (0.639)          |
| Respondent years of education             |          | (0.055)  | -0.116*** | -0.086*          |
|   |          |          | (0.031)   | (0.034)          |
| Respondent employment status              |          |          | 0.118     | 0.052            |
| (=1 if not working)                       |          |          | (0.202)   | (0.203)          |
| Respondent race (ref=White)               |          |          | , ,       | , ,              |
| Black                                     |          |          | 0.531*    | 0.322            |
|   |          |          | (0.259)   | (0.264)          |
| Hispanic                                  |          |          | 0.131     | 0.011            |
|   |          |          | (0.229)   | (0.238)          |
| Other                                     |          |          | 0.214     | 0.163            |
|   |          |          | (0.281)   | (0.279)          |
| Respondent religion (ref=Christian)       |          |          |           | 0.0.0            |
| Non-Christian                             |          |          | 0.433     | 0.362            |
| M. D. P. C.                               |          |          | (0.314)   | (0.309)          |
| Not Religious                             |          |          | 0.008     | -0.000           |
| Daniel daniel man                         |          |          | (0.226)   | (0.225)          |
| Respondent age                            |          |          | -0.073+   | 0.019            |
|   |          |          | (0.042)   | (0.045)          |
| Married/DP/CU in previous wave            |          |          |           | -0.977***        |
|   |          |          |           | (0.196)          |
| Length of relationship (years)            |          |          |           | -0.066***        |
| II  |          |          |           | (0.015)          |
| Household income (in \$10k)               |          |          |           | -0.055**         |
| Children in household (yes=1)             |          |          |           | (0.019)<br>0.249 |
| Children in household (yes-1)             |          |          |           | (0.194)          |
| Constant                                  | -1.280   | -1.386   | -0.376    | -1.852           |
| Model chi-square                          | 105.2    | 117.2    | 140.8     | 201.5            |
| df  | 9        | 10       | 17        | 21               |
| Pseudo R-squared                          | 0.061    | 0.065    | 0.076     | 0.128            |
| N (couple-years)                          | 5565     | 5565     | 5565      | 5565             |

Source: HCMST, Waves I, II, III, IV (2009-2013).

Note: Standard errors in parentheses; \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10.

DP = Domestic partnership; CU = Civil Union.

Cohabiting couples include both married and unmarried partnerships.

Table 4. Ordered logit models predicting relationship quality in Wave I for heterosexual & same-

sex cohabiting couples, in log-odds.

|   | Model 1 | Model 2 | Model 3  | Model 4  |
|---|---------|---------|----------|----------|
| Same-sex couple (=1)                      | 0.120   | 0.034   | -0.068   | 0.081    |
|   | (0.186) | (0.190) | (0.192)  | (0.208)  |
| Equal earnings (=1 if earnings are equal, | 0.174   | 0.026   | 0.025    | 0.034    |
| =0 if unequal)                            | (0.144) | (0.159) | (0.160)  | (0.161)  |
| Same-sex couple*Equal earnings            |         | 0.780*  | 0.795*   | 0.751+   |
| 1 1                                       |         | (0.385) | (0.387)  | (0.390)  |
| Respondent years of education             |         | ,       | 0.058**  | 0.046*   |
| 1 2 3                                     |         |         | (0.020)  | (0.021)  |
| Respondent employment status              |         |         | 0.079    | 0.089    |
| (=1 if not working)                       |         |         | (0.124)  | (0.126)  |
| Respondent race (ref=White)               |         |         | ()       | ()       |
| Black                                     |         |         | -0.377*  | -0.349+  |
| ~ · · · · · ·                             |         |         | (0.184)  | (0.185)  |
| Hispanic                                  |         |         | -0.037   | -0.015   |
| Trispanie                                 |         |         | (0.146)  | (0.147)  |
| Other                                     |         |         | -0.223   | -0.217   |
| Other                                     |         |         | (0.175)  | (0.176)  |
| Respondent religion (ref=Christian)       |         |         | (0.170)  | (0.170)  |
| Non-Christian                             |         |         | -0.261   | -0.224   |
| 11011 (1111)                              |         |         | (0.205)  | (0.207)  |
| Not Religious                             |         |         | -0.253*  | -0.250+  |
| Not Religious                             |         |         | (0.128)  | (0.129)  |
| Respondent age                            |         |         | -0.074** | -0.085** |
| Respondent age                            |         |         |          |          |
|   |         |         | (0.025)  | (0.027)  |
| Married/DP/CU (=1)                        |         |         |          | 0.466*** |
|   |         |         |          | (0.128)  |
| Length of relationship (years)            |         |         |          | -0.003   |
|   |         |         |          | (0.006)  |
| Household income (in \$10k)               |         |         |          | 0.011    |
|   |         |         |          | (0.012)  |
| Children in household (yes=1)             |         |         |          | -0.268*  |
| <u> </u>                                  |         |         |          | (0.105)  |
| Model chi-square                          | 36.03   | 40.40   | 59.46    | 79.42    |
| df  | 9       | 10      | 17       | 21       |
| Pseudo R-squared                          | 0.010   | 0.011   | 0.017    | 0.023    |
| N (couples)                               | 2058    | 2058    | 2058     | 2058     |

Source: HCMST, Wave I (2009-2013).

Note: Standard errors in parentheses; \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10.

Sample size in this table differs from previous tables because this cross-sectional analysis uses only Wave I data, and does not require follow-up surveys to be completed.

Cohabiting couples include both married and unmarried partnerships.

DP = Domestic partnership; CU = Civil Union.

Table 5. Descriptive statistics of dependent and independent variables – non-cohabiting couples.

|                                       | Mean (Standard Deviation) |               |               |               |
|---------------------------------------|---------------------------|---------------|---------------|---------------|
|                                       | All Couples               | Heterosexual  | Same-sex      | Significance  |
|                                       |                           | Couples       | Couples       | of difference |
| Entered into Cohabitation (previously | 0.298                     | 0.298         | 0.298         | n.s.          |
| non-cohabiting)                       |                           |               |               |               |
| Equal earnings (=1)                   | 0.164                     | 0.174         | 0.124         | n.s.          |
| Same-sex couple (=1)                  | 0.187                     |               |               |               |
| Respondent years of education         | 13.960                    | 13.636        | 15.372        | ***           |
|                                       | (2.213)                   | (2.047)       | (2.360)       |               |
| Employment status (=1 if not working) | 0.171                     | 0.180         | 0.132         | n.s.          |
| Respondent race                       |                           |               |               |               |
| White                                 | 0.681                     | 0.674         | 0.711         | n.s.          |
| Black                                 | 0.130                     | 0.144         | 0.066         | *             |
| Hispanic                              | 0.988                     | 0.091         | 0.132         | n.s.          |
| Other                                 | 0.091                     | 0.091         | 0.091         | n.s.          |
| Respondent religion                   |                           |               |               |               |
| Christian                             | 0.777                     | 0.792         | 0.711         | n.s.          |
| Non-Christian                         | 0.082                     | 0.082         | 0.116         | n.s.          |
| Not religious                         | 0.135                     | 0.126         | 0.167         | n.s.          |
| Respondent age                        | 39.901                    | 38.526        | 45.893        | ***           |
|                                       | (14.623)                  | (15.038)      | (11.123)      |               |
| Length of relationship (years)        | 7.298                     | 7.413         | 6.804 (8.316) | n.s.          |
| <u> </u>                              | (10.253)                  | (10.656)      | , ,           |               |
| Household income (in \$10k)           | 5.946 (4.550)             | 5.774 (4.476) | 6.693 (4.809) | *             |
| Children in household (yes=1)         | 0.210                     | 0.239         | 0.083         | ***           |
| Number of Observations                | 648                       | 527           | 121           |               |

Source: HCMST Waves I-IV (2009-2013). \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, n.s. = not significant.

Table 6. Discrete-time event history models predicting cohabitation for previously non-cohabiting

heterosexual & same-sex couples, in log-odds.

|   | Model 1 | Model 2 | Model 3 | Model 4  |
|---|---------|---------|---------|----------|
| Same-sex couple (=1)                      | 0.248   | 0.033   | -0.035  | 0.011    |
|   | (0.263) | (0.291) | (0.297) | (0.302)  |
| Equal earnings (=1 if earnings are equal, | 0.017   | -0.183  | -0.152  | -0.144   |
| =0 if unequal)                            | (0.207) | (0.229) | (0.226) | (0.232)  |
|   |         |         |         |          |
| Same-sex couple*Equal earnings            |         | 1.046+  | 1.049*  | 1.048*   |
|   |         | (0.550) | (0.532) | (0.518)  |
| Respondent years of education             |         |         | 0.093*  | 0.094*   |
|   |         |         | (0.043) | (0.045)  |
| Respondent employment status              |         |         | -0.101  | -0.068   |
| (=1 if not working)                       |         |         | (0.212) | (0.218)  |
| Respondent race (ref=White)               |         |         |         |          |
| Black                                     |         |         | -0.572+ | -0.614*  |
|   |         |         | (0.292) | (0.310)  |
| Hispanic                                  |         |         | -0.122  | -0.073   |
|   |         |         | (0.239) | (0.245)  |
| Other                                     |         |         | 0.099   | 0.012    |
|   |         |         | (0.224) | (0.229)  |
| Respondent religion (ref=Christian)       |         |         |         |          |
| Non-Christian                             |         |         | 0.026   | 0.017    |
|   |         |         | (0.263) | (0.268)  |
| Not Religious                             |         |         | -0.278  | -0.293   |
|   |         |         | (0.217) | (0.218)  |
| Respondent age                            |         |         | 0.034   | 0.059    |
|   |         |         | (0.038) | (0.042)  |
| Length of relationship (years)            |         |         |         | 0.046*** |
|   |         |         |         | (0.010)  |
| Household income (in \$10k)               |         |         |         | 0.014    |
| ,   |         |         |         | (0.018)  |
| Children in household (yes=1)             |         |         |         | -0.473*  |
| ,   |         |         |         | (0.214)  |
| Constant                                  | -3.001  | -2.904  | -3.839  | -4.374   |
| Model chi-square                          | 25.83   | 29.37   | 37.65   | 52.95    |
| df  | 9       | 10      | 17      | 20       |
| Pseudo R-squared                          | 0.023   | 0.026   | 0.037   | 0.057    |
| N (couple-years)                          | 1088    | 1088    | 1088    | 1088     |

Source: HCMST, Waves I, II, III, IV (2009-2013).

Note: Standard errors in parentheses; \*\*\* p<0.001, \*\* p<0.05.

DP = Domestic partnership; CU = Civil Union.

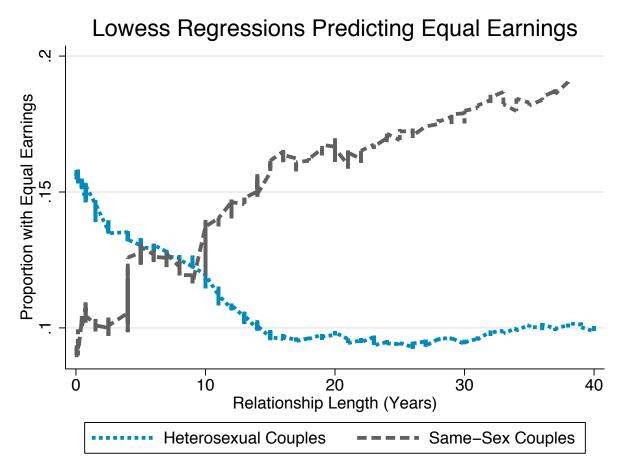


Figure 1. Lowess regressions predicting equal earnings, by relationship length, for same-sex and heterosexual cohabiting couples. Data smoothed with local lowess regressions, bandwidth=.8. Source: HCMST survey, Wave I (2009). Cohabiting couples include both married and unmarried partnerships.

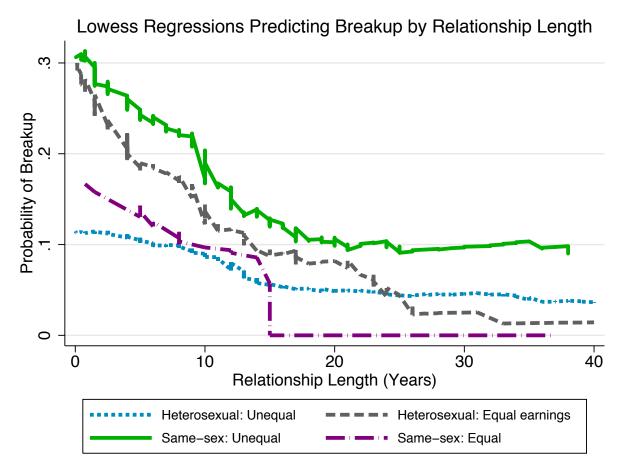


Figure 2. Lowess regressions predicting breakup, by relationship length, for same-sex and heterosexual cohabiting couples. Data smoothed with local lowess regressions, bandwidth=.8. Source: HCMST survey, Waves I-IV (2009-2013). Cohabiting couples include both married and unmarried partnerships.

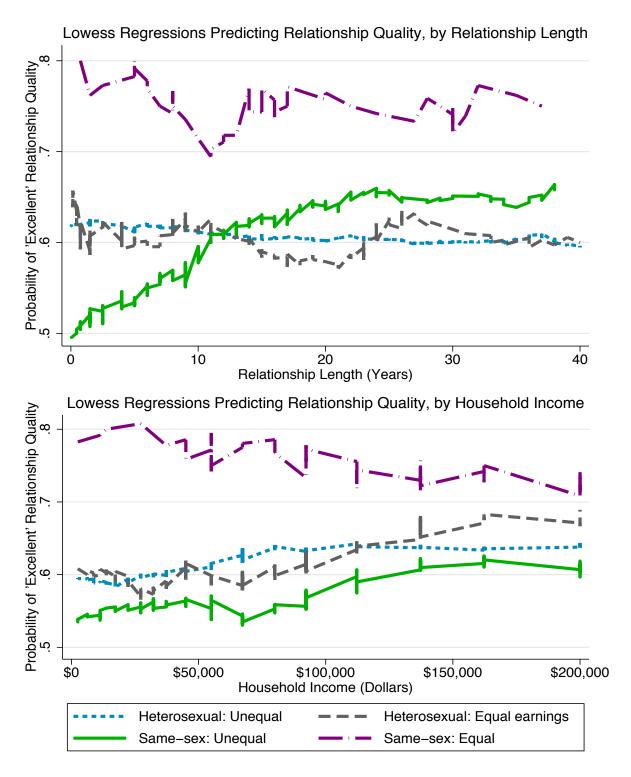


Figure 3. Lowess regressions predicting average relationship quality, by relationship length and household income, for same-sex and heterosexual cohabiting couples. Data smoothed with local lowess regressions, bandwidth=.8. Source: HCMST survey, Wave I (2009). Cohabiting couples include both married and unmarried partnerships.



Figure 4. Proportion of couples with equal earnings, by relationship status, for heterosexual and same-sex couples. Source: HCMST survey, Wave I (2009). Note: DP = domestic partnership; CU = civil union.

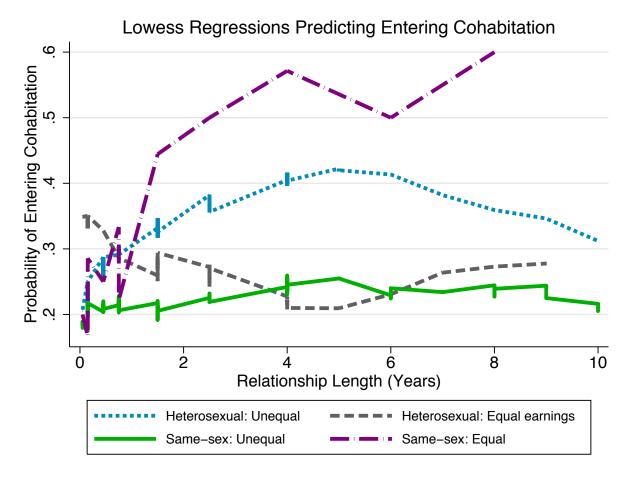


Figure 5. Lowess regressions predicting entering cohabitation, by relationship length, for same-sex and heterosexual who were non-cohabiting in Wave I. Data smoothed with local lowess regressions, bandwidth=.8. Source: HCMST survey, Waves I-IV (2009-2013).