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Becoming a Female-Breadwinner Household in Australia: Changes in Relationship Satisfaction

Objective: This study longitudinally investigated the associations between becoming a female-breadwinner household and changes in relationship satisfaction for men and women.

Background: Female-breadwinner households pose a fundamental challenge to gender norms, particularly in countries such as Australia with a strong male breadwinner culture. Despite an increase in their prevalence, the implications for relationship satisfaction is understudied. Hypotheses were formulated based on specialization, relative resource, role collaboration, and doing gender theories.

Method: A total of 17 waves of the Household, Income and Labour Dynamics in Australia household panel survey (76,866 observations, 11,986 people) and fixed effects models were used to study the associations between changes in breadwinner arrangements and relationship

satisfaction. Building on previous research our breadwinner typology combined employment and income differences between partners, differentiating single earners from dual earners.

Results: Both men and women became less satisfied when they transitioned to dual-earner households where women out-earned their partners. Becoming a female-breadwinner household due to male unemployment or illness decreased relationship satisfaction for women. Respondents were most satisfied when they were in male-breadwinner, female-homemaker households. For women, but not men, gender role attitudes influenced some of these associations.

Conclusion: The results extend our understanding of the consequences of the increasing prevalence of female-breadwinner households and suggest that they may be contributing to lower relationship quality and stability.

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Key Words: couples, employment, family economics, gender roles, longitudinal research, marital quality.

Women's increased participation in the labor market has undermined the male-breadwinner model of family life. Although men continue to earn more than women on average, in most developed countries a significant minority of women are now the primary breadwinner (Vitali & Arpino, 2016). For example, Drago, Black, and Wooden (2005) found that women contributed more than 60% to household income in 20.5% of couple households in Australia. In the United States, Winkler, McBride, and Andrews (2005) found that women contributed

51% or more of total annual household earnings in 19% of couple households sampled from the Current Population Survey and 21.2% of households in the Survey of Income Program Participation. In a study encompassing 27 countries across Europe, Klesment and Van Bavel (2017) found on average across all countries 21.9% of couple households had female breadwinners, where women contributed 51% or more to household income, but this varied from a high of 33% in Slovenia to a low of 15.7% in Austria. There is also evidence from Australia (Wooden & Hahn, 2014) and the United States (Winkler et al., 2005) to suggest that the prevalence of female-breadwinner households is increasing over time.

Although women's secondary work often improves the financial well-being and stability of dual-earner households (Oppenheimer, 1997; Rogers, 2004), female-breadwinner households pose more fundamental challenges to traditional gendered expectations within couple relationships and may therefore have different implications the quality and stability of the partner relationship. This study aims to broaden our understanding of female breadwinners by investigating the following question: To what extent do people in female-breadwinner arrangements differ in relationship satisfaction from when they were in other arrangements, and does this differ depending on gender role attitudes? We excluded same-sex couples and by female-breadwinner households we specifically refer to those households where the female partner earns the majority of household income or is the single earner (and vice versa for male-breadwinner households). We used 17 waves of panel data from the Household, Income and Labour Dynamics in Australia survey (HILDA; melbourneinstitute.unimelb.edu.au/hilda) and estimated fixed effects models because we are interested in differences between breadwinner households over time. Our analysis examined relationship satisfaction, which concerns people's cognitive evaluation of how happy or satisfied they are in their partner relationship and is a widely used concept for studying relationship quality (Helms, 2013). We also investigate the influence of gender role attitudes, employment status and control for employment hours, financial prosperity and income, (division of) household labor, relationship characteristics, children, and health.

BACKGROUND

Prior research has identified two main reasons for why female-breadwinner households are formed, which may be differentially associated with relationship satisfaction. Some couples form a female-breadwinner household because they take a gender-equal approach to their relationship, which may be positively associated with relationship quality. Alternatively, other female-breadwinner households form because the male partner is unable to work as much due to unemployment or illness, which may have negative consequences for relationship quality (Drago et al., 2005; Kramer & Kramer, 2016). However, most prior research investigating the associations between breadwinning and relationship satisfaction or quality has disregarded the circumstances that led to becoming a female-breadwinner couple, and these factors are potentially important for the quality of the partner relationship (Rao, 2017; Winslow, 2011).

In the previous research literature on the topic, breadwinning has mostly been defined as being the sole or dominant earner in a household who typically works full-time (Chesley, 2017; Warren, 2007). From this definition, both employment status and income should be taken into consideration when studying breadwinning. Throughout this article, breadwinner couples are defined as couples where one person provides the majority of household income or is the single earner. Thus, we combine two definitions of "breadwinner" by including the division of employment and income in a single typology. However, the majority of previous research only examines earnings, with few studies taking into account employment status.

Income is of course one of the main benefits from employment, and people with a higher income than their partner have more power in the relationship and independence from the relationship (Oppenheimer, 1997; Rogers, 2004). An emerging body of research has examined the differences in relationship quality for those in female-breadwinner arrangements compared with those in more traditional arrangements, mostly in the United States. The majority of studies that defined breadwinning in terms of earnings or income found that people in relationships where the woman out-earned her male partner had poorer relationship outcomes, including lower levels of marital happiness (Bertrand, Kamenica, & Pan, 2015; Wilcox &

Nock, 2006; Zhang, 2015) and poorer marital (role) quality (Brennan, Barnett, & Gareis, 2001). Although the majority of breadwinner research has examined American couples, Zhang (2015) also found lower marital happiness and greater marital instability among Chinese female-breadwinner couples. Of the research reviewed, no studies found positive associations between female-breadwinner households and relationship quality, but some research found no associations (Furdyna, Tucker, & James, 2008; Gong, 2007). Few longitudinal studies have investigated the issue, but there is some evidence that change in household earnings and breadwinning is associated with more relationship conflict (Winslow, 2011).

Few studies have examined relationship quality using measures of breadwinning defined in terms of employment status. This is important because in addition to providing income, employment provides other benefits such as a sense of purpose and identity that may also influence relationship satisfaction (Paul & Moser, 2009). For instance, Gong (2007) found among American couples that women (but not men) reported a lower quality of partner relationship when they were employed for more hours than their male partner.

Our study builds on the previous research in several important ways. First, we incorporated both income and employment status into our definition of household breadwinning. We further differentiate whether one or both partners were not working due to unemployment or home duties. To our knowledge no previous research has incorporated both income and employment status into their definition of household breadwinning. This oversight may be problematic because any possible negative effect of income differences on relationship quality could be due to one partner not working as well as, or instead of, differences in income.

Second, we add to the scant longitudinal research on the topic (for an exception, see Winslow, 2011). We used a longitudinal household panel to investigate changes in household arrangements instead of contrasting stable household arrangements. This is important because after a change in breadwinning arrangements, couples have to renegotiate a new division of household labor (Baxter & Hewitt, 2013), which may cause stress and strain in the relationship, at least in the short term. In addition, some people may terminate the relationship

because of changes in breadwinning and the associated strain in the partner relationship (Kalmijn, Loeve, & Manting, 2007), and these couples are not captured in cross-sectional analysis. Thus, the results of cross-sectional studies could be biased by the exclusion of couples who separate over time and changes in relationship satisfaction over time.

Third, we investigated whether changing to a female-breadwinner household was less influential for people's relationship satisfaction when they have more egalitarian gender role attitudes. Although some couples form female-breadwinner households because of egalitarian attitudes, others become one due to economic or health problems (Drago et al., 2005; Kramer & Kramer, 2016), which can be differentiated by looking at one's gender role attitudes (Drago et al., 2005). Several studies found that being a female-breadwinner couple was associated with lower relationship quality for people with more traditional gender role values (Coughlin & Wade, 2012; Furdyna et al., 2008; Zhang, 2015), although not all studies found this moderating effect (Brennan et al., 2001; Gong, 2007; Zhang, 2015).

Furthermore, as noted before, the majority of the discussed literature used American data from the late 1980s to mid-1990s (Bertrand et al., 2015; Brennan et al., 2001; Wilcox & Nock, 2006; Winslow, 2011). In this article, we investigated female breadwinners and relationship satisfaction in Australia between 2001 and 2017. Previous research indicates that when compared with the United States, Australia has a stronger male-breadwinner culture and a more traditional division of household labor (Baxter & Hewitt, 2013; Bittman, England, Sayer, Folbre, & Matheson, 2003). Although Australian women's labor market participation has increased during the past several decades and they are more likely to continue working after having children, they are primarily secondary household earners (Organization for Economic Co-operation and Development, 2018). In Australian couple households, men tend to be employed full-time and do less house and care work, whereas women are often employed part-time or, if they have young children, are not in the labor market and do a greater share of domestic work (Baxter & Hewitt, 2013; Craig & Mullan, 2011). Despite these overall trends, Drago et al. (2005), using two waves of HILDA data, found that in 20.5% of the couple households in their study the female

partner earned 10% or more per annum than the male partner (although this dropped to 13.9% where women were the breadwinner at both waves). In addition, Wooden and Hahn (2014) found that the proportion of female-breadwinner households in HILDA increased from 23.5 in 2000 to 25.8 in 2010. Thus, Australia presents an interesting case because evidence suggests that female-breadwinner households are fairly common and increasing, but this type of household arrangement stands in stark contrast to the prevailing policies, cultural attitudes, and norms that support a male-breadwinner model for couples.

THEORETICAL FRAMEWORK AND HYPOTHESES

We take a longitudinal approach to examining the associations between breadwinning arrangements and relationship satisfaction. Research has shown that for many (but not all) couples relationship quality declines during the course of the relationship (Proulx, Ermer, & Kanter, 2017). The current study is interested in a different understanding of change over time, it is underpinned by the belief that changes in breadwinning arrangements within couples will change perceptions of relationship satisfaction. This assumption is consistent with adaptation theory, which proposes that important life events may affect relationship satisfaction and well-being, at least in the short term (Luhmann, Hofmann, Eid, & Lucas, 2012). Some life events that impact on household breadwinner status, such as unemployment or loss of income, have been found to induce hostile communication between partners (Rao, 2017; Sherman, 2017). Other life events such as a mother returning to the workforce and becoming a dual-earner household improve family financial stability and well-being (Oppenheimer, 1997; Rogers, 2004). These types of events may also therefore trigger a reevaluation and reappraisal of the relationship (either negatively or positively), which in turn may influence relationship satisfaction; this reasoning underpins our hypothesis.

There are several theoretical perspectives that are typically used to explain gendered divisions of household labor that also may provide insight into why differences between spouses in income and employment status could be associated with relationship satisfaction. These include household specialization of labor theory, relative resource and bargaining theories,

role collaboration and companionate model of marriage perspectives, and the doing gender perspective. We examined contrasting hypotheses derived from these theories. The neoclassical household specialization of labor perspective primarily is concerned with differences in labor market participation and household tasks, and previous studies have used this theory to examine the differences in relationship quality and relationship stability (Blom, Kraaykamp, & Verbakel, 2017). This approach suggests that household utility and productivity is highest when one partner specializes in employment and the other in home duties (Becker, 1985). The allocation of (household) labor is based on each partner's comparative advantage in the labor market (Becker, 1985). This theory suggests that a more specialized division of labor within the household would result in a better functioning household with less financial difficulties, time pressure, and stress, and therefore higher relationship satisfaction (Blom et al., 2017; Craig & Mullan, 2009). More complementary roles could therefore increase relationship satisfaction.

The basic principle of specialization is gender neutral, namely that when tasks are divided between partners, the partner relationship is better (Kalmijn et al., 2007). However, because women generally earn less than men and are more often disadvantaged in the labor market, and have (according to Becker) a competitive advantage in unpaid family labor, they are more often allocated the role of home duties and caregiving in specialized households (Becker, 1985). Although single-earner couples are more specialized than dual-earner couples, most dual-earner couples have unequal incomes because the female partner works part-time; this is particularly relevant to the Australian case where part-time work is very common among women (Organization for Economic Cooperation and Development, 2018). Nevertheless, these households are also specialized to some degree where the woman works part-time and earns less income and spends more time doing care work and housework (Craig & Mullan, 2009, 2011). In addition, female-breadwinner households generally have a lower income (Klesment & Van Bavel, 2017) due to the gender pay gap and because many form due to male unemployment. When we take the decline in income into account, the benefits from specialization should come afore. If specialization is beneficial regardless of who is the breadwinner,

people in male- or female-breadwinner couples would be similarly satisfied with relationship. We would expect the following (Hypothesis 1a): For both men and women, transitioning into a female-breadwinner or male-breadwinner (particularly a sole-earner) household will be associated with an increase in relationship satisfaction compared with changing into an equal-earner household.

Other dominant theoretical paradigms drawing on economic arguments are the relative resources and bargaining perspectives (Brines, 1994; Rogers, 2004). In contrast to specialization theory, which assumes a single household utility that all members voluntarily support (Becker, 1985), bargaining and resource perspectives imply that negotiation or conflict are key to determining the conditions of the partnership (Brines, 1994; Rogers, 2004). These perspectives argue that power within intimate relationships is based on the different economic resources each partner brings to the relationship (Blood & Wolfe, 1960). This power can be used to avoid or “buy out” unpleasant tasks, such as housework, and to negotiate more favorable conditions. Hence, one with more resources relative to his or her partner is able to define the conditions of the relationship more in accordance with his or her wishes. Income and employment are important sources of power within couples. The partner with higher income has more power within the couple, enabling him or her to better negotiate a more satisfying partner relationship. These perspectives have been primarily used to study the division of household labor between partners. The Australian evidence does not support the expectation that women who earn more than their partners do less housework but, rather, suggests that they do more household labor relative to their partner compared with equal-earner couples (Baxter & Hewitt, 2013; Bittman et al., 2003). Nevertheless, female-breadwinner women may still be able to determine other decisions, making the relationship more suited to their wishes than their partners. Hence, we would expect the following (Hypothesis 1b): For women, transitioning into a female-breadwinner household will be associated with an increase in relationship satisfaction compared with changing into an equal-earner household, whereas for men this will be associated with a decline in relationship satisfaction.

In contrast to the specialization theory, both the companionate model of marriage and role

collaboration perspectives argue that partners will be more satisfied with their relationship when they share tasks and engage in more similar activities (Rogers, 2004; Wilcox & Nock, 2006). The companionate model of marriage emphasizes that the blurring of traditional gender roles leads to more emotional intimacy between partners and stands in contrast to earlier institutional models of marriage (Burgess, Locke, & Thomes, 1963). Shared experiences in both the labor market and home domains, the reduction or elimination of patriarchal authority and power, and more possibilities for men’s emotion work and care work, would lead to more understanding and emotional intimacy between partners (Burgess et al., 1963; Wilcox & Nock, 2006). The role collaboration perspective posits that when the resources and contributions are more equal between partners, partners have more common experiences (such as employment and housework) and divide less enjoyable tasks more equally, therefore increasing the affection between them (Rogers, 2004). Thus, the companionate model of marriage and role collaboration perspectives suggest that if partners engage in similar labor activities, the commonly shared positive and negative experiences foster empathy, mutual understanding, and collaboration. This in turn improves satisfaction with the relationship, suggesting that dual-earner couples would be more satisfied with the relationship than people in either male- or female-breadwinner couples. Although Hypothesis 1a, based on specialization, suggested higher levels of relationship satisfaction with a change from equal-earner to a male- or female-breadwinner household, a companionate approach would suggest the opposite (Hypothesis 1c): For both men and women, transitioning into a female-breadwinner or male-breadwinner household will be associated with a decline in relationship satisfaction compared with changing into an equal-earner household.

In essence, the previous theories mentioned a focus on the economic aspects of relationships and largely ignore socialization and cultural aspects of life. Gender socialization strongly shapes attitudes and values, which are also important for understanding behavior and relationship satisfaction and is explicitly emphasized by the doing gender perspective. This may be important for female-breadwinner arrangements, particularly in the Australian context that has a strong male-breadwinner culture

(Baxter & Hewitt, 2013; Bittman et al., 2003). According to the doing gender perspective, gender is constructed through social interactions that reaffirm gender and gendered expectations (West & Zimmerman, 1987). People and their behavior are evaluated according to these gendered accountability structures, and deviations are discouraged through internal and external pressures.

Although influential, the doing gender perspective has been criticized for not sufficiently taking human agency and resistance toward gender expectations into account (Connell, 2010; Deutsch, 2007). This may be important when studying female breadwinners because some couples become a female-breadwinner couple because they defy traditional gender role expectations about separate life spheres (Drago et al., 2005; Kramer & Kramer, 2016). However, within different-sex couples, men's masculinity and identity is strongly tied to being the household breadwinner (Townsend, 2002), and women's identity to housework, care work, and mothering (Bittman et al., 2003; Johnston & Swanson, 2006). These traditional ideals of masculinity and femininity are challenged when a household diverts from a male-breadwinner arrangement (Coughlin & Wade, 2012; Sherman, 2017). This could diminish men's self-worth and simultaneously reduce women's regard for their partner, reducing both men and women's satisfaction with the relationship (Rao, 2017; Sherman, 2017). Within this framework, becoming a female-breadwinner couple may be negatively associated with relationship quality when compared with an equal-earner couple because a female-breadwinner arrangement is more divergent from the masculine ideal. Therefore, we would expect the following (Hypothesis 1d): For both men and women, transitioning into a female-breadwinner household will be associated with a decline in relationship satisfaction when compared with changing into an equal-earner or male-breadwinner household.

Not everyone adheres to the traditional gender roles emphasized in the doing gender theory to the same degree, and as indicated earlier this may be important for reactions to changes in breadwinning arrangements. Gender role attitudes are a frame of reference with which people judge the division of labor between partners. Some female-breadwinner couples are formed due to gender egalitarian ideology,

whereas others become so because of men's employment difficulties (Drago et al., 2005; Kramer & Kramer, 2016). Although gender role attitudes may shape the couples' division of labor, people may deviate from these preferences due to constraints such as employment opportunities (Drago et al., 2005; Kramer & Kramer, 2016). When people deviate more from their preferred division of labor, they may become more dissatisfied with their relationship (Blom et al., 2017). People who are traditional in their gender role attitudes may find becoming a female-breadwinner couple contrasts more strongly with their beliefs than people with egalitarian attitudes (Coughlin & Wade, 2012). In contrast to people with more egalitarian ideologies, those with more traditional beliefs may feel less comfortable with female-breadwinner arrangements compared with equal-earner or male-breadwinner arrangements, reducing their relationship satisfaction. Hence, our second hypothesis reads as follows (Hypothesis 2): Both men and women who hold more egalitarian gender role attitudes will have a smaller decline in relationship satisfaction when they transition into a female-breadwinner household compared with those who hold more traditional gender role attitudes.

As mentioned previously, our definition of breadwinning distinguishes between single earners, dual earners with unequal income, and dual earners with relatively equal income. We expect that differences in relationship satisfaction will be more prominent between single-earner couples and dual earners with equal income than between dual earners with unequal income and dual earners with an equal income. This is because differences in the level of specialization, resources, role collaboration, and gender typical behavior (the forces behind our hypotheses) will be more prominent between the former than between the latter.

METHOD

Data and Sample

We used 17 waves of the HILDA survey (2001–2017) to test our hypotheses. The HILDA survey is an annual household panel survey that began with a national probability sample of Australian private households in 2001. This formed the basis of the panel and was gradually extended to include any new household members. The sample was replenished in Wave 11

to retain cross-sectional representativeness. The household response rate was 66% in Wave 1 (Summerfield et al., 2018). Within households, data were collected from all household members older than age 15 using face-to-face interviews, phone interviews, and self-completed questionnaires, with a response rate of 92.3% in Wave 1 (Summerfield et al., 2018). The wave-on-wave response rates ranged from 86.9% (Wave 2) to 97.0% (main sample Wave 16). Attrition was higher among people who were younger, born in a non-English-speaking country, Aboriginal or Torres Strait Islander, single, unemployed, or worked in lower skilled occupations (Summerfield et al., 2018).

Of the initial 253,182 observations, we selected observations of people in a relationship who were living with a partner, with or without children, and who lived without others (for instance, parents; $N = 146,727$). Our operationalization of breadwinner households, described in detail later, used information from both partners, and we therefore restricted the analytic sample to couples where both partners responded in a certain wave ($N = 139,377$) and were in a different-sex relationship (excluding 1,492 observations). We then selected couples where both partners were of working age (ages 25–60 to deal with selective entry and exit of the labor force; $N = 92,264$), but could be either employed, unemployed, or not in the labor force due to being a homemaker, ill or disabled, or a full-time caregiver for an ill or disabled person ($N = 87,726$). Of the remaining respondents, 579 individuals separated and subsequently repartnered, which may cause modeling issues as changes in breadwinning and relationship satisfaction may be caused by being in a new relationship. We selected the observations of the first observed partners of these individuals and excluded the observations of these individuals with subsequent partners (4,021 observations). This selection keeps couples whose relationships end over time in our sample, reducing selectivity bias of highly satisfied couples. We also excluded 6,839 observations with missing values on the dependent variable, mostly by not completing the self-completion questionnaire. After these selections, our sample consisted of 76,866 observations (37,913 for men, 38,953 for women), of 11,986 people (5,934 men, 6,052 women) in 6,303 relationships. The average number of wave observations was 6.4 per person for both men and women (see Table 1).

The data come from a household survey, and both partners in a household were included in the sample where data were available, but in some instances only one partner is included due to missing values of the other partner on the dependent variable. We use an unbalanced panel, including respondents who met our criteria for inclusion where they had data available. Missing values of the independent variables were imputed in Stata (StataCorp, College Station, TX) with truncated multiple imputation methods (five datasets) using gender, (partner's) age, and the variables described in Table 1 using a long format, but not whole-wave missing data (Young & Johnson, 2015).

Measures

Relationship satisfaction was measured using the question “How satisfied are you with your relationship with your partner?” which was asked in the self-completion questionnaire. The scale ranged from 0 (*completely dissatisfied*) to 10 (*completely satisfied*). Although single-item measurements are less reliable than multiple-item scales, this and similar questions are widely used as indicators of relationship satisfaction (e.g., Hardie, Geist, & Lucas, 2014). See Table 1 for descriptive statistics of all variables.

Breadwinning was derived from several variables. First, based on individual responses to the main daily activity, we first coded whether people were employed, unable to work (Kramer & Kramer, 2016), or a homemaker (primarily responsible home duties, child care, or looking after an ill or disabled person). If both partners were employed, we used people's income to determine who earned more in a couple who were grouped in the following categories: woman earned less than 40% of the couple's income, both earned about equal percent (both contribute between 40% and 60%), or woman earned 60% or more of the couple's income (Winslow, 2011; Zhang, 2015). Note that this approach ensures that most women working full-time will be considered an equal earner.

There is little consensus in the previous literature on what income measure to use. Some studies used labor market earnings (Brennan et al., 2001; Wilcox & Nock, 2006), whereas others used income from both labor and other sources (Furdyna et al., 2008; Gong, 2007;

Table 1. *Descriptive Statistics Before Mean Centering*

Variables	Number of values imputed	Range	Men (<i>N</i> = 37,913)		Women (<i>N</i> = 38,953)	
			Mean/%	<i>SD</i>	Mean/%	<i>SD</i>
Relationship satisfaction	0	0–10	8.35	1.8	8.15	1.96
Breadwinner						
Equal earner						
Both employed, equal earnings	0		30.61		30.47	
Female breadwinner						
Both employed, woman earned more	0		8.01		8.01	
Woman employed, man unable to work	0		2.27		2.3	
Woman employed, man homemaker	0		0.66		0.67	
Male breadwinner						
Both employed, man earned more	0		35.39		35.51	
Man employed, woman unable to work	0		3.49		3.53	
Man employed, woman homemaker	0		16.46		16.4	
Equal nonearner						
Both not employed	0		3.11		3.11	
Egalitarian gender role attitudes	907	1–7	4.99	1.14	5.32	1.18
Couple's workhours	190	0–224	66.69	25.03	66.85	25.12
Housework hours	1,292	0–128	6.31	6.11	17.94	13.07
Men's share of housework	4,223	0–1	0.29	0.22	0.29	0.22
Financial prosperity	332	1–6	3.88	0.77	3.91	0.76
Household income (log)	0	0–14.169	11.31	0.68	11.32	0.69
Married (reference = cohabiting)	0		81.88		81.7	
Number of children aged 0–4	0	0–4	0.38	0.68	0.38	0.68
Number of children aged 5–9	0	0–4	0.36	0.65	0.35	0.65
Number of children aged 10–14	0	0–5	0.35	0.66	0.35	0.66
Number of children aged 15–24	0	0–5	0.26	0.57	0.26	0.57
Self-rated general health	762	1–5	3.48	0.89	3.55	0.89
Partner's self-rated general health	2,620	1–5	3.54	0.89	3.48	0.88
			Men (<i>N</i> = 5,934)		Women (<i>N</i> = 6,052)	
		Range	Mean	<i>SD</i>	Mean	<i>SD</i>
Number of observations		1–17	6.39	4.82	6.44	4.82

Zhang, 2015). Related research indicates the importance of incorporating multiple sources of income and to use income after taxes (Van Bavel & Klesment, 2017). This is because both "earned" (e.g. wages, business income) and "un-earned" income (e.g. public transfers) comprise one's contribution to the household. In addition, income after tax represents money available for use by the household and also accounts for changes in tax policies. Our income was based on all income received during the previous financial year, including wages and salary, business income, investments, and government benefits minus the estimated taxes (Summerfield et al., 2018), as recommended by Van Bavel and Klesment (2017).

Our breadwinning arrangement typology comprised eight categories taking into account income contribution and employment status. We identified one group of equal earners: (a) couples where both partners were employed and earned approximately similar income. The following three groups of male breadwinner couples were identified: (b) both partners were employed, but man earned more than his partner; (c) man was employed and his partner was unable to work; and (d) man was employed and his partner was a homemaker. We differentiated between three different female-breadwinner households, which were categorized as (e) both partners were employed, but woman earned more than her partner; (f) woman was

employed and her partner was unable to work due to unemployment or illness; (g) woman was employed and her partner was a homemaker. Lastly, equal nonearners—(h) couples where neither partner was employed—were the last category.

We also conducted some sensitivity analysis (results are also available upon request). In the first we reestimated all models using a 50% cut-off point (as used by Klesment & Van Bavel, 2017). Second, we used a measure of (gross) hourly wages for income. The results were similar, but any important differences are noted throughout the Results section. Previous research has used the same or similar measurements of relative income as ours to define breadwinner arrangements without taking employment arrangements into account (e.g., Winslow, 2011; Zhang, 2015). Therefore, we reestimated our models with two different breadwinner typologies, one only using relative income and the other only using employment status (see Part 1, Tables A1.1 and A1.2 in Appendix S1). These approaches led to a slight underestimation of relationship satisfaction for men but similar results for women.

Changes in the household breadwinner can be due to men's or women's change in labor force participation and loss or gain in income. Hence, a couple may transfer to a female-breadwinner arrangement when she starts earning more, when he experiences a decline in income or becomes unable to work, or when he becomes a homemaker (see also Part 3 in Appendix S1). Inspecting the transitions in breadwinner arrangements (Table 2) reveals that female-breadwinner arrangements where both are employed but she earned more are slightly less stable than arrangements where both were employed and both partners earned about the same or where men earned more. On the other hand, female-breadwinner arrangements where he is unable to work are more stable than a male-breadwinner arrangement where she is unable to work. Also note that female-breadwinner couples where he is a homemaker are quite rare, and we cannot make claims about this group because of the limited amount of people in this arrangement.

Egalitarian gender role attitudes were measured using two items that indicated adherence to the male-breadwinner ideology: "It is better for

everyone involved if the man earns the money and the woman takes care of the home and children" (reversed) and "children do just as well if the mother earns the money and the father cares for the home and the children." The answer categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

We calculated the mean of the questions (Cronbach's $\alpha = .547$). Higher scores on the scale indicate more egalitarian gender role attitudes regarding breadwinning. Questions on gender role attitudes were only asked in Waves 1, 5, 8, 11, and 15. We averaged all scores across these waves to develop a time-invariant indicator for overall gender role attitudes, and this made the interpretation of the interaction coefficients easier. We also analyzed the moderating influence of gender role attitudes by using a principle factor score, which led to similar conclusions.

We controlled for several variables. Couple's joint labor market hours, household income (logged), and subjective financial prosperity was measured by a question indicating how prosperous a person felt his or her family was given their current needs and financial responsibilities, ranging from 1 = *very poor* to 6 = *prosperous*. These variables were included to control for possible (subjective) economic changes associated with becoming a female breadwinner. This ensures that effects of breadwinning do not represent objective or subjective effects of economic hardship. In addition, we controlled for marital status (married vs. cohabiting relationship), number of dependent children (aged 0–4, 5–9, 10–14, and 15–24), self-assessed general health (ranging 1 = *poor* to 5 = *excellent*), and partner's self-assessed general health (also ranging 1 = *poor* to 5 = *excellent*), which may be important confounding variables as suggested by previous literature. Lastly, we controlled for the number of hours per week a person spent on household labor and men's share of household labor. This was derived from a question asking how much time each partner spent on housework in a typical week. Men's share of household labor was calculated by dividing his contribution by the sum of both partners' contribution. Information about a person's partner (on their employment hours, income, health, and household labor) were asked directly to the partner, which avoids selective under- or overreporting of the partner's characteristics.

Table 2. Changes in Breadwinner Status, Transition Table

Men	Breadwinner status Year T								Total
	1	2	3	4	5	6	7	8	
Breadwinner status year T-1									
Equal earner									
(1) Both employed, equal earnings	66.64 (6,591)	8.56 (847)	1.3 (129)	0.22 (22)	17.84 (1,764)	1.21 (120)	3.88 (384)	0.33 (33)	100 (9,890)
Female breadwinner									
(2) Both employed, woman earned more	33.91 (847)	46.04 (1,150)	2.44 (61)	0.92 (23)	10.97 (274)	1.24 (31)	40.8 (102)	0.4 (10)	100 (2,498)
(3) Woman employed, man unable to work	16.28 (105)	19.07 (123)	39.53 (255)	2.64 (17)	11.47 (74)	2.33 (15)	2.48 (16)	6.2 (40)	100 (645)
(4) Woman employed, man homemaker	4.72 (10)	17.45 (37)	11.79 (25)	54.72 (116)	2.83 (6)	0 (0)	2.83 (6)	5.66 (12)	100 (212)
Male breadwinner									
(5) Both employed, man earned more	16.94 (1,943)	2.51 (288)	1.29 (148)	0.15 (17)	69.67 (7,993)	2.24 (257)	6.9 (791)	0.31 (35)	100 (11,472)
(6) Man employed, woman unable to work	7.36 (79)	1.77 (19)	0.93 (10)	0.19 (2)	34.54 (371)	26.82 (288)	0.67 (265)	3.72 (40)	100 (1,074)
(7) Man employed, woman homemaker	3.21 (171)	1.16 (62)	0.38 (20)	0.08 (4)	19.87 (1,058)	6.18 (329)	66.84 (3,559)	2.29 (122)	100 (5,325)
Equal nonearner									
(8) Both not employed	3.13 (27)	1.85 (16)	5.1 (44)	1.27 (11)	3.48 (30)	4.06 (35)	12.4 (107)	68.71 (593)	100 (863)
Total	30.56 (9,773)	7.95 (2,542)	2.16 (692)	0.66 (212)	36.18 (11,570)	3.36 (1,075)	16.35 (5,230)	2.77 (885)	100 (31,979)

Women	Breadwinner status year T								Total
	1	2	3	4	5	6	7	8	
Breadwinner status year T-1									
Equal earner									
(1) Both employed, equal earnings	66.35 (6,734)	8.63 (876)	1.34 (136)	0.21 (21)	17.81 (1,808)	1.32 (134)	4.02 (4,008)	0.32 (32)	100 (10,149)
Female breadwinner									
(2) Both employed, woman earned more	34.03 (869)	45.81 (1,170)	2.66 (68)	0.94 (24)	10.88 (278)	1.25 (32)	3.99 (102)	0.43 (11)	100 (2,554)
(3) Woman employed, man unable to work	16.07 (108)	19.79 (133)	39.58 (266)	2.83 (19)	11.46 (77)	2.08 (14)	2.68 (18)	5.51 (37)	100 (672)
(4) Woman employed, man homemaker	4.52 (10)	15.84 (35)	12.67 (28)	56.56 (125)	3.17 (7)	0.45 (1)	1.81 (4)	4.98 (11)	100 (221)
Male breadwinner									
(5) Both employed, man earned more	16.92 (2,001)	2.6 (307)	1.26 (149)	0.14 (17)	69.71 (8,242)	2.18 (258)	6.86 (811)	0.32 (38)	100 (11,823)
(6) Man employed, woman unable to work	7.11 (80)	1.78 (20)	0.98 (11)	0.18 (2)	34.93 (393)	27.47 (309)	23.82 (268)	3.73 (42)	100 (1,125)
(7) Man employed, woman homemaker	3.01 (165)	1.19 (65)	0.4 (22)	0.07 (4)	19.92 (1,090)	6.19 (339)	66.95 (3,664)	2.27 (124)	100 (5,473)
Equal nonearner									
(8) Both not employed	3.05 (27)	1.92 (17)	5.2 (46)	1.24 (11)	3.62 (32)	3.73 (33)	11.65 (103)	69.57 (615)	100 (884)
Total	30.38 (9,994)	7.97 (2,623)	2.21 (726)	0.68 (223)	36.25 (11,927)	3.4 (1,120)	16.35 (5,378)	2.77 (910)	100 (32,901)

Analytical Strategy

We used fixed effects models in Stata to test our hypotheses. Fixed effects models have the advantage of modeling changes instead of levels, which could take into account over- or underreporting of relationship satisfaction (Hardie et al., 2014). Essentially the models are difference models wherein the scores are the differences between an individuals' level of relationship satisfaction when they were in one breadwinner arrangement compared with when they were in another breadwinner arrangement averaged over all respondents who were observed in each arrangement. The models only include people who change status (see Table 2 and Part 2, Table A2.1, in Appendix S1 for the changes in breadwinner arrangements and relationship satisfaction), but the "direction" of change is not taken into account. The models also control for (or partial out) any time-invariant variables, including omitted variables, with time-invariant effects over time, such as country of birth (Allison, 2009). Thus, they control for selection of people into the various breadwinning arrangements based on unmeasured time-invariant characteristics with time-invariant effects; however, they do not account for selection on the basis of time-varying characteristics or variables where the effects change over time. Variances are clustered in individuals using the Huber and White estimator. The analyses were not weighted.

Our hypotheses are concerned with differences between two pairs of breadwinner arrangements, namely comparing female breadwinners to equal earners and male breadwinners. To formally test this, every model is estimated twice with different reference groups; the first using equal earner couples where both partners were employed (which are presented in Table 3) and the second using male-breadwinner households where both partners were employed and the male partner earned more (available upon request). These categories represent the more dominant breadwinning arrangements within households and were chosen because of the relatively large number of transitions with female-breadwinner arrangements. Significant results for the male breadwinner models are indicated in Table 3 by "a" ($p < .05$) and "b" ($p < .1$) symbols. To test Hypotheses 1a to 1d, Model 1 studied breadwinner arrangements and include the control variables. In Model 2 we tested Hypothesis 2 by including interactions between breadwinner arrangements and gender role attitudes. All

additional analyses are available upon request. The analyses were conducted separately for men and women, but we estimated the models with gender interactions with all variables. Significant ($p < .1$) differences between men and women are indicated by bolded coefficients in Table 3.

RESULTS

The results from our fixed effects panel analyses are shown in Table 3. We started with the results for men. The results of Model 1 for men showed that on average the transition from an equal-earner arrangement to a female-breadwinner arrangement where both were employed but she earned more was associated with a decline in men's relationship satisfaction ($b = -0.07$). Furthermore, the model showed that on average the transition from an equal-earner arrangement to a female-breadwinner arrangement in which the woman was employed and the husband was unable to work was not significantly associated with a change in men's relationship satisfaction once the control variables were taken into account; the couple's combined work hours, household income, financial prosperity, and (partner's) health explained this difference (model available upon request). The results were similar when we compared men transitioning from male-breadwinner arrangement (where he out-earned her) to a female-breadwinner arrangement. On average men became less satisfied with their relationship when they transitioned from this male-breadwinner arrangement to a situation where she earned more than him. We also noted that this association was not significant in our sensitivity analysis where we defined having a higher income as having more than 50% of the household income (instead of 60%). This indicated that a smaller income difference in the female-breadwinner arrangement was not necessarily linked to men's satisfaction. Generally, men's relationship satisfaction did not change when they became unable to work and their partner was employed compared with when they both were employed and he earned more.

For women, the results in Model 1 showed on average the transition from an equal-earner arrangement to a female-breadwinner arrangement (where both were employed but she earned more) was associated with a decline in

Table 3. Fixed Effects Regressions Analysis of Men and Women's Relationship Satisfaction Dependent on Breadwinner Status and the Differential Influence by Gender Role Attitudes

Variables	Men				Women			
	Model 1		Model 2		Model 1		Model 2	
	B	SE	B	SE	B	SE	B	SE
Breadwinner								
Equal earner								
Both employed, equal earnings	Ref.		Ref.		Ref.	B	Ref.	
Female breadwinner								
Both employed woman earned more	-0.07*	0.03	-0.07*	0.03	-0.12**	0.0	-0.14***	0.04
Woman employed man unable to work	-0.10	0.08	-0.10	0.08	-0.28***	0.08	-0.29***	0.09
Woman employed man homemaker	0.07	0.17	0.08	0.19	0.0	0.14	0.12	0.17
Male breadwinner								
Both employed, man earned more ¹	-0.00	0.02	-0.00	0.02	-0.05#	0.03	-0.04	0.03
Man employed woman unable to work	-0.04	0.06	-0.05	0.06	-0.08	0.07	-0.09	0.07
Man employed woman homemaker	0.10*	0.04	0.10*	0.04	0.14**	0.04	0.14**	0.04
Equal nonearner								
Both not employed	0.03	0.10	0.03	0.11	-0.16	0.11	-0.14	0.10
Couple's workhours	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Housework hours	-0.00	0.00	-0.00	0.00	-0.00#	0.00	-0.00#	0.00
Men's share of housework	-0.06	0.09	-0.06	0.09	-0.06	0.07	-0.07	0.07
Financial prosperity	0.13***	0.02	0.13***	0.02	0.18***	0.02	0.18***	0.02
Household income (log)	-0.10***	0.02	-0.10***	0.02	-0.14***	0.02	-0.14***	0.02
Married ²	-0.22***	0.04	-0.22***	0.04	-0.35***	0.05	-0.35***	0.05
Number of children aged 0-4	-0.08***	0.02	-0.08***	0.02	-0.11***	0.03	-0.11***	0.03
Number of children aged 5-9	-0.13***	0.02	-0.13***	0.02	-0.151***	0.02	-0.15***	0.02
Number of children aged 10-14	-0.12***	0.02	-0.12***	0.02	-0.174***	0.02	-0.17***	0.02
Number of children aged 15-24	-0.18***	0.02	-0.18***	0.02	-0.22***	0.02	-0.22***	0.02
Self-rated general health	0.17***	0.016	0.17***	0.016	0.21***	0.02	0.21***	0.02
Partner's self-rated general health	0.11***	0.01	0.11***	0.01	0.13***	0.02	0.13***	0.02
Interactions								
Breadwinner × Egalitarian Gender Role Attitudes								
Equal Earnings, Both Employed × EGRA			Ref.				Ref.	
Both Employed, Woman Earn More × EGRA			-0.03	0.03			0.07*	0.03
Woman Employed, Man Unable × EGRA			0.02	0.08			0.05	0.08
Woman Employed, Man Homemaker × EGRA			-0.04	0.17			-0.06	0.12
Both Employed, Man Earned More × EGRA			0.00	0.02			-0.02	0.02
Man Employed, Woman Unable × EGRA			-0.04	0.05			-0.08#	0.05
Man Employed, Woman Home × EGRA			0.00	0.03			0.01	0.03
Both Not Employed × EGRA			-0.00	0.08			0.07	0.08
Constant	8.50***	0.04	8.50***	0.04	8.46***	0.04	8.46***	0.04
Sigma U	1.53		1.53		1.69		1.69	
Sigma E	1.21		1.21		1.31		1.31	

Note: Bold indicates significant ($p < .1$) differences between men and women. Egalitarian gender role attitudes, financial prosperity, men's share of housework, household income, number of children in the different age groups, self-rated health, and partner's self-rated health were centered at their mean. EGRA = egalitarian gender role attitudes; Ref. = reference.

¹In parallel model, male breadwinner, both employed men earned more is the reference category. For these models, significant difference from "both employed, man earned more" category is indicated by a ($p < .05$) and b ($p < .1$). ²Married: cohabiting = 0.

$p < .1$. * $p < .05$. ** $p < .01$. *** $p < .001$.

women's relationship satisfaction ($b = -0.12$). However, these differences did not reach significance in our sensitivity analysis when we used hourly wages to define breadwinning. Also, women became less satisfied when they

transitioned from an equal arrangement to a female-breadwinner arrangement where the man was unable to work ($b = -0.28$). There were no significant changes in satisfaction between women who transitioned between an

equal-earner arrangement (both employed) and a female-breadwinner arrangement where she was employed and he was the homemaker; although this null finding should be interpreted with caution given the small numbers in the latter group. The results were similar when we compared women who transitioned between female-breadwinner arrangements and a male-breadwinner arrangement (where both were employed but he out-earned her). Women became less satisfied with the relationship when they changed to arrangements where they were employed and their male partner was unable to work or when she out-earned him than when they changed to a male-breadwinner arrangement.

Most transitions between equal-earner and male-breadwinner arrangements were not related to changes in relationship satisfaction when control variables were taken into account. There was one important exception: We consistently found that men and women became more satisfied with the relationship when they transitioned to a male-breadwinner arrangement when he was employed and she was a homemaker.

The gender interactions models show that the association between changes in breadwinning arrangements and relationship satisfaction were similar for men and women. Our results also suggest that some of the control variables were important. People became more satisfied with their relationship when they became (subjectively) financial prosperous, but also when they experienced a decline in household income. People became less satisfied with their relationship when they or their partner became less healthy. People who got married became more satisfied. Those with children became more satisfied with their relationship as the children got older. Changes in the division of housework, the amount of housework labor, and the number of work hours were not significantly associated with changes in relationship satisfaction.

Gender Role Attitudes

In Model 2 we studied the moderation effect of gender role attitudes on the association between differences in household breadwinner arrangements and differences in relationship satisfaction. None of the interactions between gender role attitudes and female-breadwinner arrangements were significant for men, both when we

investigated transitions from male-breadwinner and equal-earner arrangements.

However, for women Model 2 indicated that the association between changes in female-breadwinner arrangements and changes in relationship satisfaction were to some extent dependent on one's gender role attitudes. Women's relationship satisfaction decreased less when she started out-earning him (but both remained employed) among women with more egalitarian gender role attitudes compared with women with more traditional attitudes. However, this moderating influence was not significant in our sensitivity analysis when we used 50% of the household income cut-off or hourly wages to identify breadwinner households.

Income Gains and Income Losses

The transition into or out of a female-breadwinner household, even if both partners were employed, may be due to changes in one or both partners' incomes. It could be that it is these changes, and whether it is the male or female partner whose income changes, rather than the change in breadwinner status per se that is driving the differences in relationship satisfaction observed in Table 3. For example, a transition into a female-breadwinner couple arrangement could happen because the man experienced a decline in income, the woman increased her income, or both. We investigated this possibility (results in Appendix S1, Part 3). First, we undertook a descriptive analysis to examine which partner's income changes with breadwinner transitions (Table A3.1 in Appendix S1). These results showed that the majority of transitions into a female-breadwinner couple were because men's income declined and women's increased. Conversely, most transitions out of a female-breadwinner arrangement to an equal-earner or male-breadwinner arrangement were because women's income declined and men's increased. To a lesser extent these transitions were due to both partners experiencing a decline or increase in income, but one partner experienced a larger change than the other. Second, we reestimated Model 1, but included men's and women's income separately instead of total household income (Table A3.2 in Appendix S1). This led to similar conclusions as our main analyses. Third, we investigated

whether changes in men's and women's income affected the degree to which transitions to and from female-breadwinner arrangements were associated with relationship satisfaction by including an interaction between change in each partner's income and breadwinner arrangement (Table A3.3 in Appendix S1). None of the interactions were significant, although we are cautious in dismissing this idea altogether because there were small numbers in the interaction categories, which meant that the standard errors were large thus reducing the likelihood of finding significant associations.

Differentiating Men's Disability or Illness and Unemployment

Some significant results in Table 3 were found for female-breadwinner households where the male partner was not working. This category included men who became unemployed and who were not working due to illness or disability (Kramer & Kramer, 2016). We undertook additional analysis to determine whether the results changed if we differentiated between men who became not employed due to unemployment from those not working due to illness (see Part 4 in Appendix S1). There were no differences in men's relationship satisfaction. For women these additional analyses suggested transitioning to a female-breadwinner household where the male partner was not working due to illness or disability had a stronger negative association with changes in women's relationship satisfaction than becoming a female-breadwinner household where men were unemployed.

CONCLUSION AND DISCUSSION

Although female-breadwinner couples are an increasingly prevalent arrangement in most contemporary Western countries, the consequences of becoming a female-breadwinner household for relationship outcomes have been understudied. Becoming a female-breadwinner couple could have important implications for family life because this may induce a renegotiation of unpaid household labor, create uncertainty, and could result in a reevaluation of the relationship in general. The current article investigated whether changing to or from a female-breadwinner arrangement was related to changes in one's satisfaction with the relationship among Australian heterosexual couples.

In contrast to previous research, which almost exclusively used a cross-sectional approach (Bertrand et al., 2015; Furdyna et al., 2008; Wilcox & Nock, 2006; Zhang, 2015), this study is among the first to investigate the link between female breadwinners and relationship outcomes using longitudinal data. This longitudinal perspective may be especially important given the transient nature of female-breadwinner arrangements (Drago et al., 2005; Winkler et al., 2005), particularly because this transient nature negatively affects relationship quality (Winslow, 2011).

Expectations were formulated based on the specialization of household labor theory (Becker, 1985), bargaining theory (Blood & Wolfe, 1960), the role collaboration perspective (Rogers, 2004), and the doing gender perspective (West & Zimmerman, 1987). In contrast to previous studies on female breadwinners (Bertrand et al., 2015; Brennan et al., 2001; Winslow, 2011), our definition of breadwinning arrangements took both employment status and income into account. This has deepened our understanding of the mechanisms of the formation of female-breadwinner households and their consequences for relationship quality.

Our results largely indicated that men and women became less satisfied with their relationship when they transitioned to a female-breadwinner arrangement from when they both contributed equally to the household or when men were the main provider. This core finding provided only partial support for our specialization hypothesis (Hypothesis 1a). Although men and women became on average more satisfied with their relationship in a more specialized male-breadwinner arrangement, they did not become more satisfied with the relationship in a specialized female-breadwinner arrangement. Our results were also not consistent with Hypothesis 1b, testing a bargaining perspective, because women did not become more satisfied with their relationship when they became the sole or main breadwinner. This finding, that women on average became less satisfied with the relationship when they became the breadwinner, is consistent with previous Australian research that suggests women who earn more than their partners do not necessarily spend less time on domestic work than women who earn less than their partners (Baxter & Hewitt, 2013; Bittman et al., 2003).

Thus, this suggests that female breadwinners in the Australian context do not bargain out of housework, but because they are also working and earning more and doing more of the housework, they may be less satisfied with their relationship.

Some evidence was found for Hypothesis 1c, testing the companionate perspective, but only for women. Women became more satisfied when they transitioned into an equal-earner household than a transition into a female-breadwinner or male-breadwinner household (where both partners were employed). Overall, the results suggested that women who transitioned to equal-earner arrangements became more satisfied than when they were in almost all other arrangements, although the coefficients did not always reach significance. The only exception were those who transitioned to a male-breadwinner arrangement where women were the homemakers, they experienced the largest rise in relationship satisfaction, consistent with the “happy homemaker” finding (Treas, Van der Lippe, & Tai, 2011).

The results were most in line with Hypothesis 1d, the doing gender perspective; both men and women became more satisfied when they transitioned to more traditional arrangements (dual earner where men earn more, male breadwinner and female homemaker) or relatively equal arrangements (dual earner with similar income) than in arrangements diverting further from this traditional ideal (female-breadwinner arrangements). Conversely, men and women became less satisfied with their relationship when women became the breadwinner compared with equal-earner and male-breadwinner arrangements. Even when both partners remained employed, men and women became less satisfied with the relationship when she started earning more than him. Notably, our additional analysis suggests (see Appendix S1, Part 3) that the changes in partners’ income that underpinned the change in breadwinner arrangements were not significantly associated with relationship satisfaction. Our findings are consistent with previous research that suggests the loss of the breadwinner role could diminish men’s self-worth and simultaneously reduce women’s regard for their partner, thereby reducing both men and women’s satisfaction with the relationship (Rao, 2017; Sherman, 2017). People became especially less satisfied when the income differences were larger, whereas

smaller differences seemed less influential. We note that no significant differences in changes in relationship satisfaction were found between people who became a female breadwinner and male homemaker. That we do not find a significant difference in relationship satisfaction for women in female-breadwinner and male-homemaker households may be in part due to the small number of households with this arrangement (see Table 2).

Importantly, we find that women on average became less satisfied with their relationship when men became not employed due to illness or unemployment. For men this was also found in initial models, but this was largely due to the economic consequences (e.g., a lower income). Women became primarily less satisfied with their relationship when men became unable to work due to illness or disability, highlighting the far-reaching impact of the partner’s illness. Notably, men and women experienced no changes in relationship satisfaction when women became unable to work due to illness or disability. This further emphasizes the gendered nature of breadwinning where it is seen as men’s role to be the main provider. Possibly, men’s illness requires a greater renegotiation of household arrangements or induces inequitable arrangements both in employment and home duties. This remains a topic for future investigation.

Although our findings are most in line with the doing gender perspective, we only found partial evidence to suggest that gender role attitudes influenced these associations. Especially women with more traditional attitudes toward gender roles were less satisfied with the relationship when they became the primary earner. However, this finding was not very robust and was not found for men. This suggests that men, and to a lesser extent women, become less satisfied when they become a female-breadwinner household, mostly regardless of their own personal gender role attitudes. This conclusion is similar to findings by Gong (2007) and Brennan et al. (2001), but in contrast to others (Coughlin & Wade, 2012; Furdyna et al., 2008; Zhang, 2015). This finding may indicate the dominance of traditional values about the divisions of labor between partners in Australia, as even though people may be relatively egalitarian in their attitudes, becoming a female-breadwinner couple is still similarly detrimental for people’s relationships.

Our research had a number of limitations. Our modeling strategy investigated only the short-term consequences of changes in breadwinner arrangements. A longer scope after such a change could be informative to study the adaptation process after changes in breadwinning. In addition, there were a limited number of transitions between certain groups, particularly female-breadwinner and male-homemaker households. These small numbers increased the standard errors and the likelihood of making a type 2 error, where we erroneously reject the null hypothesis. We also had a similar problem with small numbers in the interaction analysis conducted to examine whose income gains and losses precipitated change in breadwinner status (see A3.3 in Appendix S1). Thus, some of our results are conservative and should be interpreted keeping this in mind. Also, although we hypothesized certain mechanisms whereby relationships are influenced by becoming a female-breadwinner household, such as reevaluation and reappraisal of the relationship, we did not have the data to explicitly investigate these mechanisms in this study. Lastly, our measurements were not always ideal. Relationship satisfaction was measured with a single item asking people's general appraisal of the partner relationship. However, relationship satisfaction is composed of various dimensions and future research may employ a broader definition of relationship satisfaction. Finally, although our use of fixed effects models enabled us to control for selection on unmeasured factors that are stable over time, it does not account for time varying unmeasured factors.

Despite these limitations, this study expanded upon previous research by showing that becoming a female breadwinner or women's increasing relative contribution to household finances are generally associated with poorer relationship satisfaction (Oppenheimer, 1997; Rogers, 2004). This was particularly acute when men become unable to work due to unemployment or illness, highlighting the gendered nature or breadwinning. However, we also note that the negative consequences of becoming a female-breadwinner couple for relationship satisfaction were relatively small. This is important as Australia has a particularly strong male breadwinner culture and a labor market that strongly favors men's work (Baxter & Hewitt, 2013). Our results are therefore somewhat reassuring for relationship quality and stability in

contemporary societies where the prevalence of female-breadwinner households is growing (Winkler et al., 2005), and women are increasingly becoming more educated than men with the potential to out-earn their male partners (Klesment & Van Bavel, 2017; Van Bavel & Klesment, 2017). It is also possible that these negative consequences may be smaller or nonexistent in countries with stronger cultural norms of gender equality, such as Sweden or Norway (Vitali & Arpino, 2016). Or alternatively, the negative consequences for relationship satisfaction and quality may be stronger or more pronounced in countries that have relatively high levels of female-breadwinner households due to high levels of male unemployment, such as Spain, Ireland, and the United Kingdom (Vitali & Arpino, 2016). It is the task of future research to investigate these possibilities and test the generalizability of these findings.

NOTE

This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS) and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Appendix S1. Supporting Information

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