

**Artículo de revista:**

Hewitt, Belinda & Vidal, Sergi. (2025) Health and well-being in cohabitation versus marriage: Are cohabitants' marriage intentions important?". *Social Sciences & Humanities Open*, 11:10148 (ISSN 2590-2911) <https://doi.org/10.1016/j.ssaho.2025.101488>.



## Regular Article

## Health and well-being in cohabitation versus marriage: Are cohabitants' marriage intentions important?

Belinda Hewitt<sup>a,\*</sup>, Sergi Vidal<sup>b</sup><sup>a</sup> School of Social and Political Sciences, The University of Melbourne, Australia<sup>b</sup> Department of Sociology & Centre for Demographic Studies CED-CERCA, Universitat Autònoma de Barcelona, Spain

## ARTICLE INFO

## Keywords:

Marriage  
Cohabitation  
Health  
Well-being  
Life course  
Transitions

## ABSTRACT

We investigated the similarities and differences in health and well-being for individuals in cohabiting relationships compared to marriage, enriching the extant literature by differentiating cohabitants with the intention to marry from those with no intention to marry. We used 18 waves of panel data from the Household Income and Labour Dynamics in Australia (HILDA) survey (n = 2820) and fixed-effects models to examine within-individual differences in general health, mental health, and life satisfaction across different relationship states and transitions among men and women. Differentiating outcomes when respondents are cohabitants with and without intention to marry was important, and our results suggested notable health differences when respondents were cohabiting but likely to marry, cohabiting but not likely to marry, and married. We did not find consistently that being married was associated with the best overall health and well-being. The findings contribute to a growing body of research suggesting that the health and well-being benefits of marriage are also evident when people are cohabiting.

This study contributes to the discussion around health and well-being differences between those who are married and cohabiting. Over the last several decades most developed countries have seen a rise in the rate of unmarried cohabitation and a consequential decline in marriage (Lesthaeghe, 2020). This has stimulated research interest in establishing whether cohabitation has similar health benefits to marriage; however, the evidence is somewhat mixed and inconclusive. Some studies suggest that married people have better health or well-being than cohabitants (Brown, 2000; Soons & Kalmijn, 2009), while other research has found few or no significant health differences between those who are married and those cohabiting (Horowitz & White, 1998; Marcussen, 2005; Zella, 2017). We argue that this mixed evidence may be, in part, because previous studies have not accounted for differences in marriage intentions between cohabitants and change over time in plans to marry.

It is well documented that cohabitants are a diverse group and reasons for cohabiting vary considerably and change over time (Carmichael & Whittaker, 2007; Lindsay, 2000; Manning & Smock, 2002; Seltzer, 2004). Despite this, previous research investigating health differences between cohabitants and married people has tended to treat cohabitants as a homogeneous group regarding marriage intentions (Brown, 2000;

Musick & Bumpass, 2012; Soons et al., 2009; Soons & Kalmijn, 2009; Wu et al., 2003). Compared to cohabitators without marriage intentions, those cohabitants with marriage intentions are similar to married people in ways that are likely to be beneficial to health and well-being, such as better relationship quality (Brown, 2003) and higher levels of relationship commitment (Stanley et al., 2004). In the current study, we develop our understanding of the health differences between marriage and cohabitation by differentiating cohabitators with intentions to marry from those cohabiting without any intention to marry and changes in those plans over time. To examine this issue, data from 18 waves of the annual panel study, the Household Income and Labour Dynamics in Australia (HILDA) were used.

## 1. Literature review and previous research

## 1.1. The marriage premium for health and well-being

The marriage health premium has typically been explained by two main mechanisms: *selection*, which suggests that healthy people are more likely to be married and remain married than their less healthy counterparts, and *causation*, which argues that the benefits associated

\* Corresponding author.

E-mail address: [belinda.hewitt@unimelb.edu.au](mailto:belinda.hewitt@unimelb.edu.au) (B. Hewitt).<https://doi.org/10.1016/j.ssaho.2025.101488>

Received 1 December 2023; Received in revised form 22 November 2024; Accepted 3 April 2025

Available online 26 May 2025

2590-2911/© 2025 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

with being married might mitigate poor health, whereby being married improves health (Blekesaune, 2008; Johnson & Wu, 2002; Perelli-Harris et al., 2018; Waldron et al., 1996). Both mechanisms likely play some part in health differences between those who are married and those who are not married, including cohabitators. Many of the causal mechanisms that are argued to have health benefits for married people, such as living with a partner, having larger social networks, and shared costs of living are also likely to benefit cohabitants to some extent (Seltzer, 2000). In terms of selection, the evidence is mixed. Many studies have found no evidence to suggest that those with better health and well-being are more likely to marry than cohabit (Brown, 2000; Lamb et al., 2003; Marcussen, 2005; Soons & Kalmijn, 2009); however, a more recent study found some evidence to suggest that the transition from cohabiting to marriage may be in part attributable to health selection factors (Huntington et al., 2022). Research has also found that those in marital relationships have higher levels of emotional, social, economic, and instrumental support, which may also contribute to lower levels of health and well-being for cohabitators (Carr & Springer, 2010; Coontz, 2004; Nock, 1995).

Even though some have argued that marriage has de-institutionalised (Cherlin, 2009; Coontz, 2004), it remains more so than cohabitation. Marriage carries legal and normative rights and responsibilities (Perelli-Harris & Sanchez Gassen, 2012; Seltzer, 2004), which arguably provide greater legal, social, and financial security, which, in turn, may be positively associated with health and well-being (Carr & Springer, 2010). For example, previous research indicates that cohabitants as a group tend to be less religious, value individual freedom, and have more egalitarian gender role attitudes than their married counterparts (Axinn & Thornton, 1992; Stanley et al., 2004; Thompson & Colella, 1992). The less defined social roles and obligations in cohabitation could benefit cohabitants, where couples have more freedom to define the relationship to suit themselves rather than to somehow accommodate prescribed roles (Brines & Joyner, 1999; Rhoades et al., 2011), and this may be positively associated with health and well-being.

There are also important compositional differences between cohabitants and married people that are often attributed to the *selection* of people with different characteristics and attitudes into the relationships (Seltzer, 2004). Cohabitants on average tend to have poorer access to social and economic resources than those who are married. Those in cohabiting relationships have been found to have smaller social networks than married people (Nock, 1995). Research from the US indicates that cohabitants face more material hardships than married couples (Halliday & Lucas, 2010) and research from Europe suggests that on average cohabitants have fewer financial resources (Hiekel, Liefbroer, & Poortman, 2014). The links between social and economic resources, health, and well-being are well established, where those with greater networks and access to financial resources tend to have better levels of health and well-being (Bierman, Fazio, & Milkie, 2006).

Arguably, the most important distinction between cohabitants and married people, likely to have consequences for health and well-being, is their level of commitment to each other and their relationship. Commitment theory identifies two types of commitment; *constraint* commitment and *interpersonal* commitment (Stanley et al., 2004). Constraint commitment refers to the “investments” that couples make in their relationship. Research suggests that cohabitants, on average, have lower levels of relationship “investments,” they tend to have been together for less time and are less likely to have children together, hold joint bank accounts, or own a home together (Hiekel et al., 2014). Interpersonal commitment is associated with a strong desire for the relationship to last into the future (Rhoades et al., 2011). Whereas those who are married consistently have an enduring commitment to their relationship, cohabitants are less likely to see their relationship lasting in the future (Wiik et al., 2012). Cohabiting couples have also been found to have lower levels of relationship quality and satisfaction than married couples (Brown & Booth, 1996; Thompson & Colella, 1992).

## 1.2. Longitudinal studies comparing marriage and cohabitation

Based on the research comparing couples in cohabiting and marital relationships, one might expect that, on average, the additional security, certainty, and quality of marital relationships would result in a cohabitation gap that favors marriage over cohabitation. This, however, is not necessarily the case; there is an inconsistent story emerging from the body of longitudinal research examining health and well-being differences between cohabitation and marriage relationship states. Some longitudinal studies found a “cohabitation gap” in health and well-being that suggested advantages to being married (Brown, 2004; Lamb et al., 2003; Musick & Bumpass, 2012; Soons & Kalmijn, 2009; Stravrova et al., 2012; Vanassche et al., 2013). Other studies found no differences in well-being or health between people who were cohabiting compared to being married across a range of health outcomes such as subjective well-being (Soons et al., 2009), general health (Perelli-Harris et al., 2018; Zella, 2017), functional health (Wu & Hart, 2002), and mental health (Blekesaune, 2008; Horwitz et al., 1999; Marcussen, 2005; Mikucka et al., 2020; Zella, 2017). Recently, Huntington et al. (2022) examined multiple health and well-being outcomes and found that the transition from cohabiting to being married did not result in substantial improvements in physical health, mental health, or life satisfaction over time. However, the study did not consider intentions to marry among cohabitators.

It should also be noted that finding a cohabitation gap in health and well-being may also vary depending on the outcome being observed. For example, Musick and Bumpass (2012), using a US sample examined multiple outcomes and found that different outcomes yielded different results, where those who got married in their study had better self-reported general health than when cohabiting, but cohabiting people had higher levels of happiness and self-esteem than when they married.

## 1.3. Differences in commitment among cohabitants

No previous research examining differences in health and well-being between cohabitants and married people accounts for marital intentions among cohabitants. There is evidence to suggest that those cohabitants who intend to in future marry their partner may already have a relationship that has similar qualities to marriage. For example, Brown and Booth (1996) found in a large US population sample that most cohabitants reported plans to marry their partner and that their relationship quality was the same as that of married couples. Similarly, Wiik et al. (2012) and Tai et al. (2014) both used cross-national data from the Gender and Generations Survey (<https://www.ggp-i.org/>) and found those who were cohabiting but intending to marry had higher levels of relationship satisfaction and lower levels of union instability than those not intending to marry. In a small-scale study of cohabitants in the Czech Republic, Vaculik and Jedrzejczykova (2009) found that cohabitants intending to marry had higher levels of relationship commitment and satisfaction than those cohabiting but not intending to marry. Cohabitants intending to marry have been found to have higher levels of socioeconomic status than cohabitants not intending to marry (Brown, 2004). These higher levels of relationship stability, satisfaction, quality, commitment, and socioeconomic status among those cohabiting couples who intend to marry are likely to have more positive effects on their health and well-being and potentially greater negative impacts when the relationship ends than those cohabitants who do not intend to marry.

## 1.4. Change in relationships over time

Much of the previous research comparing health and well-being for those married and cohabiting is cross-sectional and does not take into account relationship changes over time. Previous research suggests that many cohabiting relationships do not necessarily begin with the intention to marry; for example, in the US, using the National Survey of

Family Growth, Guzzo (2009) found that only about half of cohabitants in that study intended to marry. This is further supported by research that finds many cohabitations are unplanned (Manning et al., 2014) and that cohabitants decide to live together for a range of reasons including convenience (e.g., apartment lease ending) or just spending more time together (Rhoades et al., 2009b). Thus, cohabitation does not necessarily start with one or both partners having the intention to get married, but rather, marriage intention may develop during cohabitation. In addition, many cohabitants transition into marriage. Qualitative research on cohabitators who do get married suggests that many of them do not anticipate any changes in the relationship after marriage (Hall & Adams, 2020). Thus, they are essentially already viewing the relationship as a marriage. Evidence also suggests that if plans to marry change, there could be a period of anticipation and excitement about the upcoming event that might improve health and well-being during that time (Brown, 2004; Soons & Kalmijn, 2009).

### 1.5. Research questions

The selection and causation explanations for the health effects of relationship transitions can be encompassed by a broader life course framework. The interdependence of life domains has been well documented (Bernadi et al., 2019); those who are happy, healthy, and wealthy are likely to bring those resources into relationships, which make them more attractive marriage partners. It would also then be expected that individuals who have more marital prerequisites will be likely to be in cohabiting relationships with intentions to marry. Our research questions relate to expected differences when individuals are married and when they are cohabiting considering differences in the likelihood of marriage in cohabiting relationships. Our first research question is: are there differences in health and well-being for men and women who are cohabiting and intending to marry compared to when they are married or cohabiting but not intending to marry?

We also consider the role of transitions into and out of relationships, by type of relationship, to develop our understanding of the impacts of different changes in relationship status on health and well-being. As argued above, the evidence suggests that not all cohabiting relationships start with the intention to marry, and many are unplanned and may be for convenience. However, as the relationship develops during cohabitation, plans to marry may consolidate (Carmichael & Whittaker, 2007). In the short term, this may result in an improvement in well-being. For instance, compared to being in a cohabiting relationship without intentions, being in one with intentions to marry may reduce uncertainty about that relationship, and reductions in uncertainty enable people to better plan for the future and may improve well-being (Bernadi et al., 2019; Soons et al., 2009). Previous research has suggested that the well-being-enhancing effect of relationships increases as the relational commitment of partners in an emotional, practical, and legal sense also increases (Soons et al., 2009). Our second research question asks: do transitions into marriage or cohabiting but likely to marry relationships from being single or currently cohabiting (not intending to marry) improve health and well-being?

Previous research has suggested that relationship status and transitions between them may differ depending on the health or well-being outcome (Musick & Bumpass, 2012). Therefore, we examined these associations for physical health, mental health, and life satisfaction. We also considered how these associations may differ for men and women. While both men and women may benefit from being in relationships, previous research suggests a health advantage for men (Williams & Umberson, 2004), and we expect that the associations will be stronger for men. Research has also found gender differences in relationship quality and commitment between cohabitants and married people (Stanley et al., 2004) and in motivations for cohabitation (Rhoades et al., 2009a).

## 2. Methods

### 2.1. Data and analytic sample

The data were obtained from the first 18 waves of the HILDA survey (<https://www.melbourneinstitute.com/hilda>), collected annually between 2001 and 2018. Wave 1 comprised 7682 households and 13,969 individuals. A general top-up sample was added in Wave 11, comprising 2153 households and 5477 individuals. Households were selected using a multistage sampling approach, and a 66 % response rate was achieved in Wave 1 (Watson & Wooden, 2002). Within households, data were collected from each person aged over 15 years using face-to-face interviews and self-completed questionnaires and achieved a 92 % response rate of household members (Watson & Wooden, 2002). Waves 2 to 18 had retention rates ranging between 86.8 % and 97 % (Summerfield et al., 2019). We limited our analysis to these waves of data to avoid the effects of COVID-19 on relationships and well-being and the HILDA data collection.

We restricted our analytic sample to those aged between 18 and 44 who were not in a relationship at first survey participation: wave 1, for original sample members, and at wave 11, for top-up sample members ( $n = 3371$ ). By restricting the age range we excluded longer-term relationships (i.e., marriages) and captured respondents during the life course stage where most relationship formation and dissolution tend to take place (Musick & Bumpass, 2012). The magnitude of the cohabitation gap may depend on the duration of the relationship and by restricting our sample to those who were single at baseline, we only consider those who formed relationships during the 18 years of the panel (Kurdek, 2005; Soons & Kalmijn, 2009). While all respondents were single at first survey participation, we retained those respondents who had prior marital or cohabiting relationships. To reduce bias associated with subsequent relationship breakdown we also retained those who separated during the panel (Musick & Bumpass, 2012). We exclude person-observations ( $n = 155$ ) with missing data on outcome variables.

The analytic sample was unbalanced, allowing for respondents to enter and exit the sample over the eighteen waves, irrespective of wave nonresponse. We imputed missing information on model variables using multiple imputations for chained equations (Royston & White, 2011). The imputation procedure resulted in 20 imputed datasets with valid imputed values for all observations. After imputation, our final analytic sample comprised 2820 respondents over the eighteen waves, with 1376 men (14,557 observations) and 1440 women (15,713 observations).

### 2.2. Dependent variables

We examined three dependent variables: general health, mental health, and life satisfaction, and each was measured consistently across all 18 waves of data. Our measures of general health and mental health were subscales derived from the Short-Form 36 (SF-36). The SF-36 is a self-completion measure of health status comprising 36 items that measure eight dimensions of functional health and well-being (Ware et al., 2000). The Mental Health Inventory-5 (MHI-5) is a well-validated measure for common mental disorders such as anxiety and depression and the general health measure captures overall personal health with physical and mental dimensions (Butterworth & Crosier, 2004). Original scale scores (ranging from 0 to 100) were rescaled to range from 0 to 10, with a lower score indicating poorer outcomes and a higher score indicating better outcomes. Our third dependent variable was a measure of life satisfaction, which is considered to be a global measure of subjective well-being (Diener et al., 2010). This is a single-item measure based on a question asking: "All things considered how satisfied are you with your life?" Respondents were asked to give a score between 0 (not at all satisfied) and 10 (completely satisfied).

2.3. Relationship status

Relationship status varied over time and derived from a measure of respondents’ relationship status reported at every wave, including: being married, cohabiting, separated, divorced, widowed, and never married. All respondents who had separated, were divorced, widowed or never married were retained and coded as single. We differentiate between cohabiting but likely to marry and cohabiting but not likely to marry, using information from a question asking cohabitants: “How likely are you to marry your current partner?” The responses were on a 5-point Likert scale that included the options: 1 (*very likely*) to 5 (*very unlikely*). Those indicating 1 = “very likely” or 2 = “likely” were considered to be currently cohabiting but likely to marry, and those indicating 3 = “unsure,” 4 = “not likely,” or 5 = “very unlikely” were considered to be currently cohabiting but not likely to marry. Our final measure of relationship status comprised: 1 = “married,” 2 = “cohabiting (likely to marry),” 3 = “cohabiting (not likely to marry),” and 4 = “single.”

2.4. Controls

We included a range of factors in our models that may confound the associations between relationship dynamics and health and well-being. Union duration and prior relationship history are important for health and life satisfaction (Blekesaune, 2008; Soons & Kalmijn, 2009). Our measure of union duration in years was coded 0 when a respondent was classified as single and indicated the number of years (with months as a fraction) a person had been in their union if they were in any of the cohabiting or married union types. To account for differences between higher-order relationships, we included a measure indicating whether the respondent had been previously married (1 = “yes”) or had previously cohabited (1 = “yes”).

In line with previous research, we also included measures for age, attitudes, and socioeconomic position (Musick & Bumpass, 2012; Soons & Kalmijn, 2009). Age was a continuous measure and was centered at age 18 for inclusion in the models. Union duration is often found to be highly correlated with age; however, in the present study with the age-restricted sample, it was moderately correlated at 0.45.

We included attitudinal measures for gender roles and religion. Our measure of gender role attitudes was a continuous measure indicating agreement on a scale of 1 (strongly disagree) to 7 (strongly agree) with the statement: “It is better for everyone involved if the man earns the money and the woman takes care of the home and children.” The question was asked in waves 1, 5, 8, 11, and 15 and responses from wave 1 were used for waves 1–4, responses from wave 5 were used for waves 5–7, responses from wave 8 were used for waves 8–10, responses from wave 11 were used for waves 11–14, and responses from wave 15 were used for waves 15–18. The other attitudinal measure indicates the importance of religion to the respondent on a scale of 0 (*not at all important*) to 10 (*the most important thing*). This was collected in waves 1, 4, 7, 10, and 14 and responses at wave 1 were used for waves 1–3, responses at wave 4 were used for waves 4–6, responses at wave 7 were used for waves 7–9, responses at wave 10 were used for waves 10–13, and responses at wave 14 were used for waves 14–18.

Our measures for socioeconomic position were education and employment status. The highest level of education was measured as 1 = “Yr 12 or Less,” 2 = “Trade/Certificate,” 3 = “Diploma,” and 4 = “Bachelor degree or higher.” Employment status was measured as 1 = “employed full time,” 2 = “employed part time,” 3 = “unemployed,” and 4 = “not in the labor force.” Table 1 reports means and standard deviations or proportions for all model variables separately for men and women.

2.5. Analytic approach

We conducted fixed-effects regression models with cluster-robust

Table 1  
Summary statistics of study variables.

|  | Women               |      | Men                 |      |
|--|---------------------|------|---------------------|------|
|  | Mean/<br>proportion | SD   | Mean/<br>proportion | SD   |
| <b>Dependent Variables</b>               |                     |      |                     |      |
| General Health                           | 6.85                | 2.17 | 6.88                | 2.00 |
| Mental Health                            | 7.06                | 1.83 | 7.22                | 1.75 |
| Life Satisfaction                        | 7.59                | 1.54 | 7.52                | 1.49 |
| <b>Relationship Status</b>               |                     |      |                     |      |
| Married                                  | 0.20                |      | 0.21                |      |
| Cohabiting likely to marry               | 0.09                |      | 0.10                |      |
| Cohabiting                               | 0.07                |      | 0.05                |      |
| Single                                   | 0.64                |      | 0.64                |      |
| <b>Covariates</b>                        |                     |      |                     |      |
| Age (centered)                           | 18.54               | 9.97 | 17.51               | 9.67 |
| Union Duration                           | 1.71                | 3.60 | 1.58                | 3.14 |
| <b>Highest Level of Education:</b>       |                     |      |                     |      |
| High school or less                      | 0.37                |      | 0.38                |      |
| Trade/Certificate                        | 0.18                |      | 0.27                |      |
| Diploma                                  | 0.10                |      | 0.09                |      |
| Bachelor's Degree                        | 0.35                |      | 0.26                |      |
| <b>Employment Status:</b>                |                     |      |                     |      |
| Employed Full Time                       | 0.46                |      | 0.71                |      |
| Employed Part Time                       | 0.29                |      | 0.12                |      |
| Unemployed                               | 0.04                |      | 0.05                |      |
| Not in Labor Force                       | 0.21                |      | 0.11                |      |
| Attitudes: Male breadwinner (0–7)        | 2.71                | 1.83 | 3.25                | 1.74 |
| Attitudes: Importance of Religion (0–10) | 3.36                | 3.34 | 2.47                | 3.15 |
| Previously married                       | 0.26                |      | 0.14                |      |
| Previously cohabiting                    | 0.42                |      | 0.35                |      |
| N Observation–Years                      | 15,713              |      | 14,557              |      |
| N Individuals                            | 1444                |      | 1376                |      |

Data: HILDA (2001–2018, unweighted). Notes: Mean and SD (Standard Deviation) reported for continuous and proportions reported for categorical measures.

standard errors using *xtreg* in Stata 16.0 (StataCorp, 2019). Estimation results on the 20 imputed datasets were combined using Rubin’s rule (Rubin, 1987). This approach adjusted for dependence between repeated observations on individuals over time and controlled for all observed and unobserved characteristics of individuals that are stable over time (Allison, 2009). Doing so accounts for unobserved time-invariant characteristics, such as ethnicity, although it should be noted that these models cannot account for bias associated with unobserved time-varying characteristics (Allison, 2009). We included a range of time-varying controls that act as *confounders* of the associations in our models to account for this as best we can. We noted that *no mediators* of the associations between relationship and health and well-being (e.g., relationship quality or investments in current relationships that have positive effects on health and well-being such as having children or buying a family home) have been included among the control variables since we aim to establish the *overall* effects of relationship status and transitions.

To address the first research question, we estimated individual-level fixed-effects regression models for each dependent variable including relationship status and the full set of control variables mentioned before. For life satisfaction, we also included the general health measure as a control because health has also been found to be important for life satisfaction (Diener et al., 2010). Statistically significant higher values of health and well-being were found for individuals who are married or cohabiting but likely to marry compared with those who are in a cohabiting (not likely to marry) status, which will be used as evidence for research question 1.

To address the second research question, we replaced relationship statuses with relationship transitions since the previous year in the regression models. We considered three transitions into relationships: *from* single to cohabiting (not likely to marry), cohabiting and likely to marry, and married; as well as transitions across relationship statuses



with the same partner: *from* cohabiting (likely to marry or not) *to* married. In addition, we did not use individuals as sample units but episodes of relationship formation. Episodes of relationship formation include an individual’s observations starting at first study participation, where all are single and can eventually form a relationship. The episode is adjudged censored if a relationship dissolves, and since the individual is then able to form another relationship with a new person a new episode starts. By contrast, we considered individuals who break up but reconcile at a later point in time with the partner as the same episode, unless there have been other partners between the breakup and reconciliation. In addition, three episodes were censored at the study end or when the individual left the survey. We pooled all episodes of relationship formation to address the impact of relationship changes on health and well-being. We allowed for time-varying relationship formation effects by including time-specific dummies that captured short- and long-term effects around the time of the relationship status change. The reference period was (–2) two or more years before the relationship status change. We included an additional anticipation effect for (–1) one year before the relationship change because health and well-being might change immediately before a change in relationship status. We added additional dummies for the time after the transition was observed: (0) the year of; (1) one year after; (2) two years after; and (3+) three years or more after the change in relationship status. We excluded the first study observation of each individual since no transition since the previous year could be observed. Although estimations were at the episode level, panel robust standard errors were clustered at the individual level. Statistically significant different values of health and well-being when individuals have experienced a relationship change will be used as evidence for our second research question. The number of relationship formation transitions and episodes can be found in Table 2.

We note that the results presented below are from models that were estimated separately for men and women. To determine whether any observed gender differences were statistically significant, we report on differences in coefficients and linear predictions from models with full gender interactions.

3. Results

The results are discussed across all outcomes for both research questions. The results of the analysis examining the associations between relationship status and our study outcomes are presented in Fig. 1 and Table 3. For an overall picture of health and well-being by relationship status, in Fig. 1, we show predicted general health, mental health, and life satisfaction. These are linear predictions from the fitted fixed-effects models, which show the level of health and well-being when sample individuals are in different relationship statuses, and this is based on model estimates and not actual values. To assess within-individual changes in health and well-being, the results in Fig. 1 are supported with estimated coefficients from regression models (for

relationship status and control variables) presented in Table 3.

The results for relationship status and general health indicate that reported levels of general health are not significantly different when women are partnered but in different relationship statuses, with health levels ranging between 6.92 and 6.97. By contrast, women report lower levels of general health when single (6.80) and differences when cohabiting but not likely to marry were statistically significant using a 90 % confidence interval. We found no significant differences in general health when men were in different partnership statuses, with health levels ranging between 6.85 and 6.95.

Women reported higher levels of mental health when they were married (7.23) or cohabiting and likely to get married (7.19) than when they were cohabiting and not likely to marry (7.08) although these differences were not statistically significant. The lowest levels of mental health were reported when women were single (6.99); they reported significantly lower mental health when single than when married or cohabiting likely to marry but not statistically different from when they were cohabiting and not likely to marry. The results for men indicate no differences in reported mental health when they were in different partnered statuses, with levels ranging between 7.30 and 7.38. Lower mental health was reported by men when they were single (7.14), though differences when cohabiting but not likely to marry are only statistically significant using a 90 % confidence interval.

For life satisfaction, we found that when cohabiting and likely to marry, women reported higher levels of life satisfaction (7.89) than when they were married (7.74), cohabiting but not likely to marry (7.75), and single (7.49). Overall, men reported higher levels of life satisfaction when cohabiting and likely to marry (7.76), but this was only statistically significant compared to when they were single (7.49).

Some gender differences are present in the linear predictions of Fig. 1—regarding mental health and life satisfaction when women and men were in single or cohabiting and likely to marry statuses—regression coefficients from models with gender interactions show no statistically significant differences in relationship status coefficients across men and women using a 95 % confidence interval. The gender differences we see in the linear predictions of Fig. 1 are, therefore, attributable to average differences in mental health and life satisfaction among men and women, and not a differential effect of relationship status by gender.

The results in Table 4 address the associations between transitions into relationship and our study outcomes. Regression coefficients are estimates of within-individual changes in general health, mental health and life satisfaction around transitions into relationships, including indicators of time before and time after observed transitions (2 years before the transition up to 3 or more years after). These results address the second research question. There was some evidence that general health and mental health improved around the time of transitions into cohabiting and intending to marry or marriage relationships only.

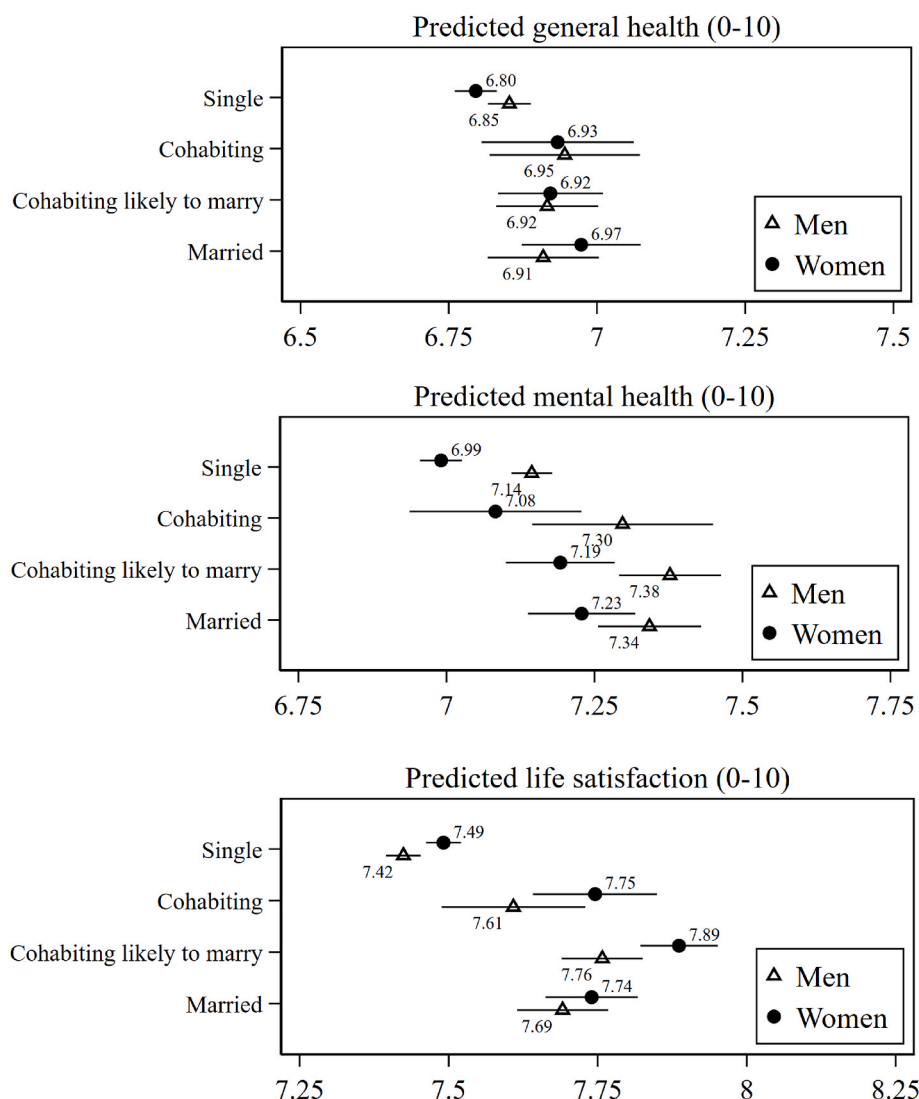
For general health, some transitions into marriage or cohabiting and likely to marry were associated with higher levels of general health for women but not for men. Women who transitioned from single to cohabiting and likely to marry had a significant increase of 0.18 the year before marriage and a significant increase of 0.30 three or more years later. In addition, women who transitioned from cohabiting and likely to marry to married had an increase of 0.25 the year before and an increase of 0.24 the year of the transition. No changes in general health occurred around the time of transitions into cohabiting but not likely to marry or transitions from single to married.

For mental health, we found significant improvements in reported health around the time of transitioning to cohabiting and likely to marry relationships, starting the year before and extending some years after the transitions (for men: only until 1 year after the transition). Less significant, but still positive effects on mental health are also observed with a transition from single or cohabiting into marriage, whereas transitions into cohabiting and not likely to marry were not associated with mental health.

Table 2  
Relationship formation transitions and episodes.

|   | Women | Men  |
|---|-------|------|
| <b>Transitions</b>                      |       |      |
| Single to cohabiting                    | 230   | 200  |
| Single to cohabiting (likely to marry)  | 388   | 395  |
| Single to married                       | 140   | 129  |
| Cohabiting (likely to marry) to married | 237   | 229  |
| <b>Episodes</b>                         | 1699  | 1625 |

Data: HILDA (2001–2018, unweighted). Notes: Cohabiting (likely to marry) to married includes transitions from both states, Cohabiting and Cohabiting (likely to marry). Episodes of relationship formation start with an individual’s observation as single or after the dissolution of a prior union. Relationship formation transitions do not add up to the overall number of episodes, because an episode might be censored before a transitions is observed (e.g., being single for the entire observation window).



**Fig. 1.** Linear predictions of general health, mental health and life satisfaction by partnership status  
**Notes:** Whiskers indicate 95 % confidence intervals. Full model results in [Table 3](#).

Our results suggest that life satisfaction improves for all relationship transitions, with some gender differences. Transitions into cohabitation, whether likely to marry or not, improve life satisfaction mostly from the year of transition onward, although, for men, improvements stop three years after the transition. For women, direct transitions from single to married only improve women's satisfaction during the year of the transition. Last, transitions from cohabiting to married improve life satisfaction from the year before the transition and extend to one year after the transition for women and two years after the transition for men.

#### 4. Discussion and conclusion

This study examined whether the likelihood of marriage for cohabitants was important for their health and well-being when compared to married people and couples cohabiting and not likely to marry. Despite research indicating the diversity of cohabitators ([Carmichael & Whittaker, 2007](#); [Lindsay, 2000](#); [Manning et al., 2014](#)), no prior studies examining health differences between married people and couples cohabiting had taken differences in intentions to marry among cohabitants into consideration.

Concerning the first research question, the results for men suggest that there were no significant differences in health and well-being between those cohabiting, cohabiting and likely to marry, or married. By

contrast, women likely to marry their partner had significantly higher levels of life satisfaction than women in other partnership states although no differences were found for general health and mental health. This suggests the nature of the cohabiting relationship matters but mainly for women's life satisfaction.

Concerning our second research question examining whether transitions into marriage or cohabiting and likely to marry relationships would be associated with higher levels of health and well-being, the results were not universal for all relationship transitions or consistent across outcomes and differed for men and women. General health was not significantly associated with transitions into or between different relationships for men. The results suggested that women who transitioned into cohabiting and likely to marry or being married had some improvement in general health around the time of these transitions; however, this was not the case for women who transitioned into cohabiting and not intending to marry. Similarly, we found that men and women who transitioned into cohabiting and likely to marry relationships showed improvements in mental health that were not observed among those transitioning into cohabiting and not intending to marry relationships. Contrary to our expectations, men and women who transitioned into both types of cohabiting relationships reported similar improvements in life satisfaction around the time of these transitions.

Gender differences were only found for self-reported general health.

**Table 3**

Linear fixed-effects models of general health, mental health, and life satisfaction.

|  | General health (0–10) |                   | Mental health (0–10) |                   | Life satisfaction (0–10) |                   |
|--|-----------------------|-------------------|----------------------|-------------------|--------------------------|-------------------|
|  | Women<br>B/(SE)       | Men<br>B/(SE)     | Women<br>B/(SE)      | Men<br>B/(SE)     | Women<br>B/(SE)          | Men<br>B/(SE)     |
| <b>Relationship status:</b>              |                       |                   |                      |                   |                          |                   |
| Married (ref.)                           |                       |                   |                      |                   |                          |                   |
| Cohabiting (likely to marry)             | −0.05<br>(0.07)       | 0.01<br>(0.06)    | −0.04<br>(0.06)      | 0.03<br>(0.06)    | 0.15**<br>(0.05)         | 0.07<br>(0.05)    |
| Cohabiting                               | −0.04<br>(0.09)       | 0.04<br>(0.09)    | −0.15<br>(0.09)      | −0.05<br>(0.09)   | 0.01<br>(0.07)           | −0.08<br>(0.08)   |
| Single                                   | −0.18**<br>(0.07)     | −0.06<br>(0.06)   | −0.24**<br>(0.06)    | −0.20**<br>(0.06) | −0.25**<br>(0.05)        | −0.27**<br>(0.05) |
| <b>Covariates:</b>                       |                       |                   |                      |                   |                          |                   |
| Age (centered)                           | −0.04**<br>(0.01)     | −0.04**<br>(0.01) | 0.01+<br>(0.00)      | −0.00<br>(0.00)   | 0.01**<br>(0.00)         | 0.01*<br>(0.00)   |
| Union duration                           | −0.01<br>(0.01)       | −0.01<br>(0.01)   | −0.02*<br>(0.01)     | −0.02*<br>(0.01)  | −0.02*<br>(0.01)         | −0.01+<br>(0.01)  |
| Highest level of education               |                       |                   |                      |                   |                          |                   |
| High school or less (ref.)               |                       |                   |                      |                   |                          |                   |
| Trade/Certificate                        | 0.06<br>(0.10)        | −0.09<br>(0.11)   | −0.05<br>(0.10)      | −0.04<br>(0.10)   | −0.10<br>(0.08)          | −0.13<br>(0.09)   |
| Diploma                                  | 0.36*<br>(0.17)       | −0.26<br>(0.18)   | −0.08<br>(0.20)      | −0.27+<br>(0.15)  | −0.18+<br>(0.11)         | −0.26*<br>(0.12)  |
| Bachelor's degree                        | 0.29**<br>(0.10)      | −0.00<br>(0.12)   | 0.07<br>(0.10)       | −0.15<br>(0.11)   | −0.21**<br>(0.07)        | −0.37**<br>(0.09) |
| Employment status                        |                       |                   |                      |                   |                          |                   |
| Employed Full Time (ref.)                |                       |                   |                      |                   |                          |                   |
| Employed Part Time                       | −0.09*<br>(0.04)      | −0.08+<br>(0.05)  | 0.02<br>(0.04)       | −0.10*<br>(0.05)  | 0.05<br>(0.03)           | 0.00<br>(0.05)    |
| Unemployed                               | −0.09<br>(0.07)       | −0.11+<br>(0.06)  | −0.18*<br>(0.07)     | −0.34**<br>(0.07) | −0.18**<br>(0.07)        | −0.43**<br>(0.07) |
| Not in Labor Force                       | −0.20**<br>(0.06)     | −0.49**<br>(0.08) | −0.22**<br>(0.06)    | −0.29**<br>(0.08) | −0.12*<br>(0.05)         | −0.28**<br>(0.07) |
| Attitudes: Male breadwinner (0–7)        | 0.00<br>(0.02)        | 0.00<br>(0.01)    | 0.00<br>(0.01)       | −0.03*<br>(0.01)  | −0.00<br>(0.01)          | −0.02<br>(0.01)   |
| Attitudes: Importance of Religion (0–10) | 0.00<br>(0.01)        | 0.00<br>(0.01)    | 0.00<br>(0.01)       | −0.01<br>(0.01)   | 0.02**<br>(0.01)         | 0.00<br>(0.01)    |
| Previously married                       | 0.10<br>(0.13)        | −0.08<br>(0.15)   | −0.37*<br>(0.16)     | −0.18<br>(0.16)   | −0.28**<br>(0.10)        | −0.30*<br>(0.14)  |
| Previously cohabited                     | 0.04<br>(0.12)        | −0.15<br>(0.13)   | 0.16<br>(0.11)       | 0.02<br>(0.12)    | 0.23*<br>(0.09)          | 0.10<br>(0.10)    |
| General health                           |                       |                   |                      |                   | 0.22**<br>(0.01)         | 0.19**<br>(0.01)  |
| Intercept                                | 7.57**<br>(0.13)      | 7.78**<br>(0.14)  | 7.17**<br>(0.12)     | 7.66**<br>(0.13)  | 6.07**<br>(0.13)         | 6.54**<br>(0.14)  |
| N Observations                           | 15713                 | 14557             | 15713                | 14557             | 15713                    | 14557             |
| N Individuals                            | 1444                  | 1376              | 1444                 | 1376              | 1444                     | 1376              |

Data: HILDA (2001–2018, unweighted and imputed). Notes: Individuals' cluster-robust standard errors in parentheses.

+  $p < .1$ , \* $p < .05$ , \*\* $p < .01$ .

The results indicated that transitions into marriage were negatively associated with women's general health and positively associated with men's. This is consistent with Canadian research that found that men's general health improves when they live with a partner compared to single men but women's general health does not necessarily improve (Zella, 2017). In addition, a recent German study found that men's self-rated health was better than women's when they transitioned to legal marriage (Mikucka et al., 2020). These gender differences may be because men are likely to engage in healthier behaviors, such as eating better and consuming less alcohol when they are in a relationship (Umberson et al., 2010). We also found significant gender differences in the transitions between cohabitation states, where going from cohabiting to cohabiting and likely to marry tends to be more important for women's health and well-being than men's. This suggests that accounting for more nuanced understandings of cohabiting intentions may be more important for understanding Australian women's health than men's.

It is also worth noting the consistent finding that women cohabiting and likely to marry and women who transition into cohabiting and likely to marry tended to have higher levels of health and well-being than when married. This may be underpinned by two important findings in previous research. The first is that well-being improves in the years

leading up to marriage (Lucas et al., 2003), suggesting that cohabitants with plans to marry are anticipating marriage, their relationship quality and satisfaction are likely high at that time, and consequently, their well-being levels are elevated (Brown, 2000; Soons et al., 2009). The second is that once married, women's relationship satisfaction declines more quickly than men's (Kurdek, 2005). Our results, while not statistically significant, indicate that women cohabiting and intending to marry who become married have a small decline in their health and well-being. This suggests that a state of anticipating marriage but not being married appears to be the most supportive relationship state for women's health and well-being.

Our results suggest differences in the importance of relationship status and relationship transitions for different health outcomes. While general health tends to not be significantly associated with relationship status and change, mental health and life satisfaction are. This might indicate that relationship status is more important for mental health and well-being indicators such as life satisfaction. It also underscores the importance of examining multiple dimensions of health and well-being to provide a more comprehensive picture of the associations (Bierman et al., 2006).

This study had several limitations. Even in a large national population sample, we observe a relatively small number of transitions for



**Table 4**

Linear fixed-effects models of general health, mental health, and life satisfaction around transitions into relationship types.

|   | General health<br>(0–10) |                  | Mental health<br>(0–10) |                  | Life satisfaction<br>(0–10) |                  |
|---|--------------------------|------------------|-------------------------|------------------|-----------------------------|------------------|
|   | Women<br>B/(SE)          | Men<br>B/(SE)    | Women<br>B/(SE)         | Men<br>B/(SE)    | Women<br>B/(SE)             | Men<br>B/(SE)    |
| <i>Years before/after relationship transition:</i>                        |                          |                  |                         |                  |                             |                  |
| <b>Single to cohabitating</b><br>(ref. 2+ years before)                   |                          |                  |                         |                  |                             |                  |
| 1 year before   | 0.11<br>(0.11)           | −0.02<br>(0.13)  | 0.07<br>(0.13)          | 0.04<br>(0.12)   | −0.01<br>(0.10)             | 0.09<br>(0.09)   |
| Year of   | 0.03<br>(0.13)           | 0.05<br>(0.12)   | 0.08<br>(0.15)          | 0.11<br>(0.12)   | 0.34**<br>(0.12)            | 0.27**<br>(0.09) |
| 1 year after  | 0.03<br>(0.13)           | 0.03<br>(0.15)   | 0.02<br>(0.16)          | 0.16<br>(0.14)   | 0.42**<br>(0.12)            | 0.28*<br>(0.11)  |
| 2 years after   | 0.12<br>(0.17)           | 0.11<br>(0.14)   | −0.02<br>(0.17)         | 0.14<br>(0.13)   | 0.24*<br>(0.12)             | 0.29**<br>(0.11) |
| 3+ years after  | −0.00<br>(0.15)          | 0.11<br>(0.13)   | 0.11<br>(0.17)          | 0.12<br>(0.13)   | 0.37**<br>(0.11)            | 0.18<br>(0.11)   |
| <b>Single to cohabitating (likely to marry)</b><br>(ref. 2+ years before) |                          |                  |                         |                  |                             |                  |
| 1 year before   | 0.18*<br>(0.08)          | 0.06<br>(0.08)   | 0.30**<br>(0.10)        | 0.24**<br>(0.09) | 0.15*<br>(0.07)             | 0.08<br>(0.07)   |
| Year of   | 0.07<br>(0.09)           | 0.13<br>(0.09)   | 0.29**<br>(0.09)        | 0.34**<br>(0.09) | 0.45**<br>(0.07)            | 0.30**<br>(0.07) |
| 1 year after  | 0.05<br>(0.10)           | 0.05<br>(0.09)   | 0.31**<br>(0.09)        | 0.24*<br>(0.10)  | 0.30**<br>(0.07)            | 0.21**<br>(0.08) |
| 2 years after   | 0.10<br>(0.11)           | 0.05<br>(0.11)   | 0.17<br>(0.11)          | 0.06<br>(0.12)   | 0.31**<br>(0.09)            | 0.14+<br>(0.08)  |
| 3+ years after  | 0.30*<br>(0.12)          | 0.01<br>(0.13)   | 0.23*<br>(0.11)         | 0.06<br>(0.13)   | 0.20*<br>(0.08)             | 0.02<br>(0.09)   |
| <b>Single to married</b><br>(ref. 2+ years before)                        |                          |                  |                         |                  |                             |                  |
| 1 year before   | 0.18<br>(0.13)           | −0.00<br>(0.14)  | 0.11<br>(0.12)          | 0.12<br>(0.12)   | 0.12<br>(0.10)              | −0.09<br>(0.10)  |
| Year of   | −0.05<br>(0.13)          | 0.17<br>(0.13)   | 0.07<br>(0.12)          | 0.17<br>(0.11)   | 0.42**<br>(0.09)            | 0.17<br>(0.12)   |
| 1 year after  | −0.09<br>(0.14)          | 0.08<br>(0.13)   | −0.07<br>(0.11)         | 0.21+<br>(0.13)  | 0.03<br>(0.10)              | 0.13<br>(0.08)   |
| 2 years after   | −0.18<br>(0.12)          | −0.09<br>(0.11)  | −0.03<br>(0.15)         | −0.01<br>(0.14)  | 0.05<br>(0.11)              | 0.06<br>(0.10)   |
| 3+ years after  | −0.15<br>(0.13)          | −0.08<br>(0.12)  | 0.26*<br>(0.12)         | 0.13<br>(0.11)   | 0.04<br>(0.09)              | 0.14<br>(0.11)   |
| <b>Cohabiting (likely to marry) to married</b><br>(ref. 2+ years before)  |                          |                  |                         |                  |                             |                  |
| 1 year before   | 0.25**<br>(0.09)         | 0.02<br>(0.09)   | 0.15+<br>(0.08)         | 0.09<br>(0.09)   | 0.21**<br>(0.07)            | 0.16*<br>(0.07)  |
| Year of   | 0.24*<br>(0.11)          | 0.17<br>(0.10)   | 0.13<br>(0.10)          | 0.26*<br>(0.10)  | 0.17*<br>(0.07)             | 0.29**<br>(0.08) |
| 1 year after  | 0.10<br>(0.12)           | 0.09<br>(0.12)   | 0.08<br>(0.11)          | 0.21+<br>(0.11)  | 0.17+<br>(0.09)             | 0.18*<br>(0.09)  |
| 2 years after   | 0.01<br>(0.13)           | 0.11<br>(0.12)   | 0.18+<br>(0.11)         | 0.11<br>(0.12)   | 0.15<br>(0.09)              | 0.19*<br>(0.09)  |
| 3+ years after  | 0.03<br>(0.13)           | 0.07<br>(0.12)   | 0.02<br>(0.10)          | 0.12<br>(0.11)   | 0.01<br>(0.08)              | 0.05<br>(0.08)   |
| Intercept   | 7.60**<br>(0.14)         | 7.80**<br>(0.13) | 7.04**<br>(0.13)        | 7.58**<br>(0.13) | 6.01**<br>(0.14)            | 6.31**<br>(0.14) |
| N Observations  | 14403                    | 13298            | 14403                   | 13298            | 14403                       | 13298            |
| N Episodes  | 1695                     | 1623             | 1695                    | 1623             | 1695                        | 1623             |

Data: HILDA (2001–2018, unweighted and imputed). Notes: Individuals' cluster-robust standard errors in parentheses. Models include control variables for age, union duration, level of education, employment status, gender attitudes, religious attitudes and indicators for previous cohabitation and for previous

marriage.

+  $p < .1$ , \* $p < .05$ , \*\* $p < .01$ .

some relationships. In addition, those whose relationships dissolve have higher rates of attrition in the HILDA survey than those whose relationships are stable (Summerfield et al., 2019). These two factors increase the standard error and, therefore, increase the risk of making a type II error, making our results somewhat conservative. Additionally, we were only able to differentiate cohabitants intending to marry from cohabitants without intentions to marry. Those who are cohabiting without intentions to marry potentially comprise two main groups: the first group comprises those who want to live with their partner but will not marry because they do not believe in marriage and the second group comprises those who are living together for convenience (Seltzer, 2004). We did not have the information to differentiate these groups, which is also likely to be important as we would expect those who are cohabiting as an alternative to marriage may be more similar to married people. This would be an important direction for future research.

Nevertheless, our study suggests that developing our understanding of differences among cohabitants and between cohabitants and those who are married is important. This study adds to the growing body of evidence suggesting that the institution of marriage does not uniquely provide health protection to individuals and that the health benefits of marriage may be diminishing as cohabiting becomes more normalized (Mikucka et al., 2020; Musick & Bumpass, 2012; Perelli-Harris et al., 2018). This suggests that the social health arguments promulgated by governments for the institution of legal marriage over cohabitation are in question and governments should consider this when developing family policy (van Acker, 2008).

#### Data availability statement

This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The unit record data from the HILDA Survey was obtained from the Australian Data Archive, which is hosted by The Australian National University. The HILDA Survey 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 based on the data, however, are those of the authors and should not be attributed to the Australian Government, DSS, the Melbourne Institute, the Australian Data Archive or The Australian National University and none of those entities bear any responsibility for the analysis or interpretation of the unit record data from the HILDA Survey provided by the authors. The data are not publicly available due to privacy and ethical restrictions on access and use of the data.

#### Ethics statement

The data were collected in adherence to strict ethical guidelines and informed consent was obtained by all participants. This project has human research ethics approval from The University of Melbourne [Project ID 13551].

#### Funding statement

This research was supported by funding from the Australian Research Council to Hewitt (FT140100861).

#### Declaration of the use of AI assisted technologies

No AI assisted technologies were used in the production of this article.

## CRediT authorship contribution statement

**Belinda Hewitt:** Writing – review & editing, Writing – original draft, Data curation, Conceptualization. **Sergi Vidal:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## References

- Allison, P. D. (2009). *Fixed effect regression models* (Vol. 160). Sage Publications Inc.
- Axinn, W. G., & Thornton, A. (1992). The relationship between cohabitation and divorce: Selectivity or causal influence? *Demography*, 29(3), 357–374.
- Bernadi, L., Huinink, J., & Settersten, R. A. (2019). The life course cube: A tool for studying lives. *Advances in Life Course Research*, 41, Article 100258. <https://doi.org/10.1016/j.alcr.2018.11.004>
- Blekesaune, M. (2008). Partnership transitions and mental distress. *Journal of Marriage and Family*, 72, 705–725.
- Brines, J., & Joyner, K. (1999). The ties that bind: Principles of cohesion in cohabitation and marriage. *American Sociological Review*, 64(3), 333–355.
- Brown, S. L. (2000). The effect of union type on psychological wellbeing: Depression among cohabitators versus marrieds. *Journal of Health and Social Behavior*, 41(3), 241–255.
- Brown, S. L. (2003). Relationship quality dynamics of cohabiting unions. *Journal of Family Issues*, 24(5), 583–601.
- Brown, S. L. (2004). Moving from cohabitation to marriage: Effects on relationship quality. *Social Science Research*, 33, 1–19.
- Brown, S. L., & Booth, A. (1996). Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and Family*, 58(3), 668–678.
- Butterworth, P., & Crosier, T. (2004). The validity of the SF-36 in an Australian national household survey: Demonstrating the applicability of the household Income and Labour dynamics in Australia (HILDA) survey to examination of health inequalities. *BMC Public Health*, 4(44). <https://doi.org/10.1186/1471-2458-4-44>
- Carmichael, G. A., & Whittaker, A. (2007). Living together in Australia: Qualitative Insights into a complex phenomenon. *Journal of Family Studies*, 13(2), 202–223.
- Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, 72(6), 743–761.
- Cherlin, A. (2009). *The marriage-go-round: The state of marriage and the family in America today*. Knopf.
- Coontz, S. (2004). The world historical transformation of marriage. *Journal of Marriage and Family*, 66(4), 974–979.
- Diener, E., Kahneman, D., & Helliwell, J. (2010). *International differences in wellbeing*. Oxford University Press.
- Guzzo, K. B. (2009). Marital intentions and the stability of first cohabitations. *Journal of Family Issues*, 30(2), 179–205. <https://doi.org/10.1177/0192513X08323694>
- Hall, S., & Adams, A. (2020). "Not just me anymore." A qualitative study of transitioning to marriage from cohabitation. *Journal of Family Issues*, 41(12), 2275–2296.
- Horowitz, A., & White, H. R. (1998). The relationship of cohabitation and mental health: A study of a young adult cohort. *Journal of Marriage and Family*, 60(2), 505–514.
- Horwitz, A. V., White, H. R., & Howell-White, S. (1999). The use of multiple outcomes in stress research: A case study of gender differences in responses to marital dissolution. *Journal of Health and Social Behavior*, 37(3), 278–291.
- Huntington, C., Stanley, S. M., Doss, B., & Rhoades, G. K. (2022). Happy, healthy, and wedded? How the transition to marriage affects mental and physical health. *Journal of Family Psychology*, 36(4), 608–617.
- Johnson, D. R., & Wu, J. (2002). An empirical test of crisis, social selection and role explanations of the relationship between marital disruption and psychological distress: A pooled time-series analysis of four-wave panel data. *Journal of Marriage and Family*, 64, 211–224.
- Kurdek, L. A. (2005). Gender and marital satisfaction early in marriage: A growth curve approach. *Journal of Marriage and Family*, 67(1), 68–84.
- Lamb, K. A., Lee, G. R., & DeMaris, A. (2003). Union Formation and depression: Selection and relationship effects. *Journal of Marriage and Family*, 65, 953–962.
- Lesthaeghe, R. J. (2020). Chapter 4 the second demographic transition: Cohabitation. In K. W. Halford, & H. Van De Vijver (Eds.), *Cross-cultural family research and practice* (pp. 103–138). Elsevier.
- Lindsay, J. (2000). An ambiguous commitment: Moving in to a cohabiting relationship. *Journal of Family Studies*, 6(1), 120–134. <https://doi.org/10.5172/jfs.6.1.120>
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2003). Reexamining adaption and the set point model of happiness: Reactions to changes in marital status. *Journal of Personality & Social Psychology*, 84(3), 527–539.
- Manning, W. D., & Smock, P. J. (2002). First comes cohabitation and then comes marriage? A research note. *Journal of Family Issues*, 23(8), 1065–1087.
- Manning, W. D., Smock, P. J., Dorius, C., & Cooksey, E. (2014). Cohabitation expectations among young adults in the United States: Do they match behavior. *Population Research and Policy Review*, 33, 287–305. <https://doi.org/10.1007/s11113-013-9316-3>
- Marcussen, K. (2005). Explaining differences in mental health between married and cohabiting individuals. *Social Psychology Quarterly*, 68(3), 239–257.
- Mikucka, M., Becker, O. A., & Wolf, C. (2020). Revisiting marital health protection: Intraindividual health dynamics around transition to legal marriage. *Journal of Marriage and Family*, 83, 1439–1459.
- Musick, K., & Bumpass, L. L. (2012). Reexamining the case for marriage: Union formation and changes in well-being. *Journal of Marriage and Family*, 74(2), 1–18.
- Perelli-Harris, B., Hoherz, S., Addo, F., Lappegard, T., Evans, A., Sassler, S., & Styrck, M. (2018). Do marriage and cohabitation provide benefits to health in mid-life? The role of childhood selection mechanisms and partnership characteristics across countries. *Population Research and Policy Review*, 37, 703–728. <https://doi.org/10.1007/s11113-018-9467-3>
- Perelli-Harris, B., & Sanchez Gassen, N. (2012). How similar are cohabitation and marriage? Legal approaches to cohabitation across western Europe. *Population and Development Review*, 38(3), 435–467.
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009a). Couples' reasons for cohabitation: Associations with individual well-being and relationship quality. *Journal of Family Issues*, 30(2), 233–258.
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009b). Couples' reasons for cohabitation: Associations with individual well-being and relationship quality. *Journal of Family Issues*, 30(2), 233–258. <https://doi.org/10.1177/0192513X08324388>
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2011). A longitudinal investigation of commitment dynamics in cohabiting relationships. *Journal of Family Issues*, 33(3), 369–390.
- Royston, P., & White, I. R. (2011). Multiple imputation by chained equations (MICE): Implementation in Stata. *Journal of Statistical Software*, 45(4), 1–20. <https://doi.org/10.18637/jss.v045.i04>
- Rubin, D. B. (1987). *Multiple Imputation for nonresponse in surveys*. John Wiley & Sons, Inc. <https://doi.org/10.1002/9780470316696>
- Seltzer, J. A. (2000). Families formed outside of marriage. *Journal of Marriage and Family*, 62, 1247–1268.
- Seltzer, J. A. (2004). Cohabitation in the United States and Britain: Demography, kinship, and the future. *Journal of Marriage and Family*, 66, 921–928.
- Soons, J., & Kalmijn, M. (2009). Is marriage more than cohabitation? Well-Being differences in 30 European countries. *Journal of Marriage and Family*, 71, 1141–1157.
- Soons, J., Liefbroer, A. C., & Kalmijn, M. (2009). The long term consequences of relationship formation for subjective well-being. *Journal of Marriage and Family*, 71, 1170–1254.
- Stanley, S. M., Whitton, S. W., & Markman, H. J. (2004). Maybe I do: Interpersonal commitment and premarital or nonmarital cohabitation. *Journal of Family Issues*, 25(4), 496–519.
- StataCorp. (2019). Stata statistical software, release 16.0. In Stata corporation.
- Stravrova, O., Fetschenhauer, D., & Schlösser, T. (2012). Cohabitation, gender, and happiness: A cross-cultural study in thirty countries. *Journal of Cross-Cultural Psychology*, 43(7), 1063–1081.
- Summerfield, M., Bright, S., Hahn, M., La, N., Macalalad, N., Watson, N., Wilkins, R., & Wooden, M. (2019). HILDA user manual – release 18. [https://melbourneinstitute.unimelb.edu.au/\\_data/assets/pdf\\_file/0008/3247289/HILDA-User-Manual-Release-18.0.pdf](https://melbourneinstitute.unimelb.edu.au/_data/assets/pdf_file/0008/3247289/HILDA-User-Manual-Release-18.0.pdf)
- Tai, T.-o., Baxter, J., & Hewitt, B. (2014). Do co-residence and intentions make a difference? Relationship satisfaction in married, cohabiting, and living apart together couples in four countries. *Demographic Research*, 31(3), 71–104.
- Thompson, E., & Colella, U. (1992). Cohabitation and marital stability: Quality or commitment? *Journal of Marriage and Family*, 54, 259–267.
- Vaculik, M., & Jedrejczykova, V. (2009). Commitment in unmarried cohabitation. *Studia Psychologica*, 51(1), 101–117.
- Vanassche, S., Swicegood, G., & Matthijs, K. (2013). Marriage and children as a key to happiness? Cross-national differences in the effects of marital status and children on well-being. *Journal of Happiness Studies*, 14, 501–524.
- Waldron, I., Hughes, M. E., & Brooks, T. L. (1996). Marriage protection and marriage selection-prospective evidence for reciprocal effects of marital status and health. *Social Science & Medicine*, 43(1), 113–123.
- Ware, J. E., Snow, K. K., Kosinski, M., & Gandek, B. (2000). *SF-36 health survey: Manual and interpretation guide*. Quality Metric Incorporated.
- Watson, N., & Wooden, M. (2002). The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 survey methodology (HILDA project technical paper series, No. 1/02). <http://www.melbourneinstitute.com/hilda/hdps-techn01.pdf>
- Wiik, K. A., Keizer, R., & Lappegard, T. (2012). Relationship quality in marital and cohabiting unions across Europe. *Journal of Marriage and Family*, 74, 389–398.
- Williams, K., & Umberson, D. (2004). Marital status, marital transitions, and health: A gendered life course perspective. *Journal of Health and Social Behavior*, 45(1), 81–98.
- Wu, Z., & Hart, R. (2002). The effects of marital and nonmarital union transition on health. *Journal of Marriage and Family*, 64, 420–432.
- Wu, Z., Penning, M. J., Pollard, M. S., & Hart, R. (2003). "In sickness and in health": Does cohabitation count? *Journal of Family Issues*, 24(6), 811–838.
- Zella, S. (2017). Marital status transitions and self-reported health among Canadians: A life course perspective. *Applied Research Quality Life*, 12, 303–325.