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Relationship quality and levels of depression and anxiety in a large population-based survey

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Abstract

Purpose: There is substantial literature suggesting that the mental health benefits of marriage (compared to being single) are greater for those in 'good quality' relationships in comparison to those in 'poor quality' relationships. However, little of this research utilises large population-based surveys. Large surveys in psychiatric epidemiology have focused almost exclusively on the association between marital status and mental health. The current study explores some of the reasons for this gap in the literature, and adopts a large, representative community-based sample to investigate whether associations between relationship status and levels of depression and anxiety are moderated by relationship quality.

Methods: Participants were from Wave 3 of the PATH Survey, a longitudinal community survey assessing the health and well-being of residents of the Canberra region, Australia (n=3820). Relationship quality was measured using the 7 item Dyadic Adjustment Scale (DAS-7), and levels of depression and anxiety were measured using the Goldberg Scales.

Results: Both cross-sectional and prospective analyses showed that associations between relationship status and mental health were moderated by relationship quality for both men and women, such that only good quality relationships bestowed mental health benefits over remaining single. For women, being in a poor quality relationship was associated with greater levels of anxiety than being single.

Conclusions: Epidemiological studies need to measure relationship quality to qualify the effect of relationship status on mental health.

Keywords: Anxiety; Depression; Relationship quality; Population survey

Introduction

There is substantial literature showing the mental health benefits of marriage-like relationships[1] are greatest for those in 'good quality' or supportive relationships, and that marital dissatisfaction is associated with a higher likelihood of psychiatric disorder [1]. This previous research, in conjunction with empirical and theoretical work established by founders in this field such as Brown [2], Henderson [3], and Gove [4], suggests that the quality of marriage-like relationships should be a central risk factor included in and reported widely in major epidemiological studies in psychiatry. However, relationship quality is rarely assessed and/or reported in population-based surveys of mental health. There are several factors which may have contributed.

The first, is the misperception that there is sufficient research on this topic either within clinical or community-based settings, and that these studies provide an adequate evidence base for understanding the role of relationship quality at the population level. However, this perception is flawed. Research conducted in clinical settings is based on samples of individuals seeking treatment, and is therefore likely to be biased. For example, previous research has reported that approximately 50% of married clients presenting for depression in clinical settings also report marital distress [5]. Given previous studies have shown that less than half of individuals with a mental health problem seek treatment (in Australia this proportion has been reported as one third [6]), the results of clinical studies may in part be an artefact of the samples included. Similarly, research recruiting convenience samples from the general community may consist of individuals and/or

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[1] The terms marriage relationship and marital relationship in this paper refer also to 'marriage-like' relationships, and therefore encompass both married and cohabiting individuals.

couples with different patterns of either marital functioning or mental health, than those in the general population. For example, Dehle and Weiss recruited forty-seven recently married couples over a three month period via a marriage licence office and advertisements. The study found that lower scores on marital quality were associated with high scores for depressed mood [7]. While these findings make an important contribution to the literature, the findings may not reflect associations at the population level [8]. Little research examining the association between marital quality and mental health has been conducted using data representative of a general population. Weissman reports one of the few population-based findings using data from the Epidemiology Catchement Area (ECA) study, finding that men and women in an unhappy marriage ('doesn't get along with spouse' versus 'does get along with spouse) have about a 25 fold increased of Major Depression [9].

A second misperception within epidemiological research is that a measure of relationship status alone is enough to adequately assess the links between relationship circumstances and mental health. Many studies in psychiatric epidemiology commonly report on (or adjust for) a measure of relationship status in association with mental health, but omit relationship quality, perhaps perceiving it as redundant, or assuming that relationship status can be effectively used as a proxy for relationship quality. For example, in a recent article Gibb et al. [10] reiterated the finding that those in marriage-like relationships report better mental health than those single and also found that longer relationship duration was associated with lower rates of depression, suicidal ideation and substance-use disorders. However, the study did not evaluate the role of relationship quality. Little

research has investigated how relationship quality ties in or is contextualised within relationship status. For example, results from several large national surveys of mental health commonly claim that being married is better for mental health than being single [11-15], but it is unlikely that this assumption holds in relationships that are of poorer quality [16]. While, it is true that space is at a premium in large epidemiological studies and the inclusion of a relationship quality measure uses valuable space, careful consideration and empirical evidence, rather than convention, is the best way to determine which correlates and risk factors are most relevant to include. For example, following recent research into the complex association between economic advantage and mental health, it is now common for large epidemiological surveys to include measures of financial hardship, welfare receipt, and job quality [17-19]. Similarly, further research is needed to unpack relationship status, and assess whether relationship quality is an important additional risk factor.

The final factor which may have hindered progress in understanding and including measures of relationship quality in studies of psychiatric epidemiology is confusion over which measures to include. Community-based studies that have examined the association between relationship satisfaction and mental health have commonly adopted a single item measure of marital satisfaction, rather than psychometrically sound measures with an evidence base. This is particularly the case in large population-based epidemiological studies, where space is restricted, and thus the number of items included limited. Typically surveys have included one or two items asking participants about the level of satisfaction with their marriage/de facto relationship, responded to using a three or five

point likert scale. Psychometrically sound measures of relationship quality or adjustment, such as the Dyadic Adjustment Scale (DAS), are available and should be more widely adopted. The DAS is a unique measure of relationship functioning with four components – dyadic consensus, dyadic satisfaction, dyadic cohesion and affectional expression – underlying higher order function [20]. There are several versions of the DAS, including a four-item, six-item, seven-item and 14-item scale, as well as the original 32-item scale. Most of these versions have been under-evaluated, except in the case of the DAS-7. Several studies have shown the DAS-7 to meet reliability, criterion and construct validity standards [21,22]. For example, a study by Hunsley, Best, Lefebvre and Vito [23] found that scores on the DAS-7 differentiated distressed couples seeking marital therapy from a control group of non-distressed couples in data from a general community survey.

Aims and objectives

The current study considers the importance of including marriage-like relationship quality as a correlate, above and beyond relationship status, in studies investigating the aetiology of depression and anxiety. The study aims to overcome two of the major short-comings that have hindered previous research in this area by adopting a) a large representative community-based sample and b) a psychiatrically sound measure of relationship quality (DAS-7) to:

a) confirm associations between relationship status and anxiety and depression, and relationship (marriage-like) quality and mental health, and;

b) examine whether the associations between relationship status and levels of depression and anxiety are moderated by relationship quality.

The aims were investigated separately for men and women, given previous research showing gender differences in the association between marriage-like relationship quality and mental health [7].

Methods

Participants

Data were from the PATH Through Life Project, a representative longitudinal community survey assessing the health and well-being of residents of the Canberra region of south-eastern Australia. Ethics approval was obtained from the Australian National University's Human Research Ethics Committee. Briefly, the PATH survey employs a narrow-cohort design, and follows three cohorts of participants, initially aged 20-24, 40-44 and 60-64, interviewing them every four years over a planned 20 year period. Wave 1 participants were randomly selected from the Canberra and Queanbeyan electoral rolls. Australians aged 18 and above are required to register on the electoral role, with few exceptions. Participation rates at baseline (Wave 1) for those who were in the correct age range and could be located were: 20-24 - 58.6%, 40-44 – 64.6%, 60-64 – 58.3%. The wave 1 sample included 7,485 participants aged 20-24 (n=2404), 40-44 (n=2530) or 60-64 (n=2551). The current analysis is based on Wave 3 data for the young (28 to 32 years total n=1978) and mid-age (48 to 52 years total n=2197) cohorts, as data on relationship quality (DAS-7) is only available for this wave. There were 3820 respondents in the sample for the current study (47% male), with 817 who were not partnered and 3003 who were either legally married or in a de facto relationship and completed items assessing relationship quality.

Survey procedure

For Wave 1, individuals selected at random from the Canberra and Queanbeyan electoral rolls were sent a letter informing them of the survey and that an interviewer would contact them soon to see if they wanted to participate. If a person agreed to participate, the interviewer arranged to meet them at some convenient location, usually the participant's home or the Centre for Mental Health Research at the Australian National University (Canberra, Australia). The interviewer took the participant through the first set of questions, demonstrating how to enter responses into a palmtop personal computer using Surveycraft software. The majority of the survey was then completed by the respondent alone. The interview took one-and-a-half to two hours. For Wave 2 of the survey, participants were recontacted by telephone approximately 4 years later and asked whether they would participate in the second wave of the study. This procedure was repeated for Wave 3. Further information on the PATH project including the survey design and procedure has been previously published [24].

Measures

Depression and anxiety were measured using the Goldberg Depression and Anxiety Scales [25]. Each scale contains 9 binary items (rated with a 'yes/no' response) yielding scale scores ranging from 0 to 9. Total scale scores are calculated by summing the number of 'yes' responses. The scales have been found to effectively detect elevated levels of depression and anxiety in community samples [26]. In the descriptive analyses the Goldberg Scales were dichotomised so that <7 represented no depression/anxiety (0) and 7 or greater represented the presence of depression/anxiety (1). This categorised 9%

or respondents as depressed and 17% of respondents as anxious. These prevalence rates are reasonable indicators of significant symptomology and approximate rates for any 12-month depressive disorder and anxiety disorder found in the Australian National Survey of Mental Health and Wellbeing (25-34 yrs: 7.9% & 16.3%; 35-44 yrs: 8.3% & 18.1%; 45-54 yrs: 7.1% & 17.6%) [6,27].

Relationship Status was categorized as either 'cohabiting relationship (married or de facto)' or 'not in current relationship'. *Relationship Quality/Satisfaction* was measured by the 7 item version of the Dyadic Adjustment Scale (DAS-7) [23]. This scale assesses three components of relationship satisfaction - dyadic consensus, cohesion and global satisfaction – and yields a total score ranging from 0 to 39. Factor analysis using the maximum likelihood method showed the items loaded on a single factor with loadings between 0.57 and 0.70. Married and de facto respondents were comparable in their DAS-7 scores, supporting the decision to combine these groups. In some analyses, relationship quality was divided into two categories (poor vs. good quality), based on the median of the DAS-7 (score of 25; 47% in poor or n=1422 and 53% in good or n=1581). *Other variables* included in the analyses were presence of children, years of completed education, physical functioning (SF-12) [28], financial hardship [17] and the neuroticism scale from the Eysenk Personality Inventory [29].

Analyses

Descriptive statistics are presented. A series of Multivariate Poisson Regression models, reporting incidence rate ratios (IRR), were used to examine the two study aims (Poisson

Regression was used given the skewed distribution of the Goldberg Scales). Model 1 examined the association between relationship status and mental health, and Model 2 examined the association between relationship quality and mental health (depression and anxiety symptoms). Model 3 categorised partnered individuals into either 'good' or 'poor' quality relationships (see Measures section), and coded those not in a relationship as a third category, 'single status'. This third model investigated whether the effects of relationship status on mental health were moderated by relationship quality. Finally, Model 4 used the three category variable described above to confirm the impact of relationship quality on mental health longitudinally. This was done by limiting the analyses to those who were single at Wave 2 of data collection and had not been in a marriage-like relationship previously (n=382). We compared the mental health of those who remained single (n=285), with those who moved into a good quality (n=57) or a poor quality (n=40) relationship at Wave 3. These analyses also controlled for previous (Wave 2) depression/anxiety symptoms. All the Multivariate Poisson Regression models controlled for the following covariates: presence of children, years of completed education, physical functioning and experience of financial hardship. A measure of neuroticism was also adjusted for to control for personality differences that may be associated with negative appraisal of both relationship quality and mental health, and thereby inflate the association [30,31]. The analyses were initially stratified by sex, and any gender differences identified in the stratified analyses were then formally assessed using interaction terms. Cases with missing data were minimal (ranging from 0 to 1.1% for individual items) and therefore excluded on an analysis-by-analysis basis. Analyses were conducted using STATA 10.0.

Results

Table 1 shows descriptive statistics for the relationship variables, measures of anxiety

and depression, and the relevant covariates, for men and women separately. The results

show that the average DAS-7 score was 24.22 for men and 24.70 for women. In

accordance with previous research, levels of depression and anxiety were higher for

women than men [32,33].

Insert Table 1

Table 2 shows the results of Models 1-4 for males. Partnered men reported significantly

fewer symptoms of depression, but not anxiety than single men (Model 1). Higher DAS-7

scores (Model 2) were associated with lower fewer symptoms of depression and anxiety.

Results from Model 3 show that compared to men who were not partnered (n=359), men

in a good quality relationship (at or above median on DAS-7; n=704, 49%) had fewer

depression and anxiety symptoms, whereas men in a poor quality relationship (n=721,

51%) showed similar depression and anxiety symptoms to those not partnered. Model 4

showed this pattern of results was replicated longitudinally. Compared to men who

remained single (n=145), those who moved into good quality relationships (n=25)

reported fewer symptoms of depression and anxiety at Wave 3, whereas those who

moved into a poor quality relationship (n=26) showed no difference in depression or

anxiety symptoms.

Insert Table 2

Table 3 shows the results of Models 1-4 for females. Partnered women reported significantly fewer symptoms of depression but not anxiety than single women (Model 1). Higher DAS-7 scores (Model 2) were associated with fewer symptoms for both depression and anxiety. Results from Model 3 show that compared to women who were not partnered (n=458), women in a good quality relationship (at or above median on DAS-7; n=877, 55%) had fewer depression and anxiety symptoms, whereas women in a poor quality relationship (n=701, 45%) showed similar symptoms of depression and greater anxiety symptoms than those not partnered. Model 4 shows that compared to women who remained single (n=140), those who moved into good quality relationships (n=32) reported no difference in symptoms of depression and anxiety at Wave 3, whereas those who moved into a poor quality relationship (n=14) showed an increase in both depression and anxiety symptoms.

Insert Table 3 here

Given that the results of Model 4 showed differences for men and women, subsequent analyses testing for an interaction between gender and the three category relationship variable were conducted. The results displayed a significant interaction for anxiety, such that the reduction in anxiety when moving into a good quality relationship in comparison to remaining single, was significantly greater for men than women (*IRR*=1.49, *CI*=1.08-2.06, *p*=.028). The results for depression showed the same pattern (*IRR*=1.52, *CI*=1.03-

2.25, *p*=.035), such that the reduction in depression when moving into a good quality relationship in comparison to remaining single, was significantly greater for men than women.

A final set analyses compared the absolute contribution of 'being in a poor quality relationship' versus 'being in no relationship', to understand how each of these factors contributes to the absolute number of people with depression or anxiety. Analyses showed that those who were depressed or anxious (>7 on the Goldberg Scale), are more likely to be in a poor quality relationship than be in no relationship. For depressed males, 44.6% were in a poor quality relationship and 39.6% of those in no relationship. For depressed females, 37.2% were in a poor quality relationship and 32.9% were in no relationship. For anxious males, 49.2% were in a poor quality relationship and 29.5% were in no relationship. For anxious females, 42.1% were in a poor quality relationship and 24.9% were in no relationship. These analyses are relevant to understanding how the modification of risk factors might decrease prevalence of depression and anxiety. They suggest that the modification of relationship status will reduce depression and anxiety in more individuals than the modification of partner status. Common sense also tells us that the modification of relationship quality is a more achievable goal than attempting to change an individual's relationship quality.

Discussion

The initial findings mostly accord with previous research examining marriage-like relationships and mental health. As expected, being partnered was associated with lower

levels of depression for both genders. In addition, better relationship quality was associated with lower levels of both anxiety and depression for both genders. These two findings replicate previous investigations from a) epidemiological studies showing that being in a relationship is better for mental health than being single [11-15] and b) the predominantly clinical research showing that better relationship quality is associated with better mental health [1]. Interestingly though, there was no association between partnered status and anxiety for either gender. While much research has examined the association between partner status and depression, less research has focused on anxiety. A broad examination of prevalence rates from previous epidemiological research suggests the difference in depression between those married and single may be greater than the difference in anxiety [13].

The current study examined whether the association between relationship status and mental health were moderated by relationship quality. We found that men in poorer quality relationships reported similar depression and anxiety symptoms than unpartnered men, and women in poorer quality relationships reported similar depression symptoms and greater anxiety symptoms than unpartnered women. Only good quality relationships bestowed mental health benefits over remaining single. Prospectively, we found that compared to men who remained single, those who moved into a poor quality relationship showed no change in mental health, while those who moved into a good quality relationship showed significant improvement. In contrast, women who moved into a poor quality relationship had significantly worse mental health than those who remained single, and those who moved into a good quality relationship were no better off. These

findings echo previous work suggesting that marital status is more salient to men's psychological well-being that it is to women's [4,34], but qualify this finding as it is only transitions into good quality relationships which bestow greater psychological benefits for men than women. The findings of this study also suggest that transitions into poor quality relationships are worse for women's psychological wellbeing than they are for men's. This accords with previous research such as that conducted by Horwitz, McLaughlin and White [35] suggesting that poor marital quality is particularly distressful for women.

The current findings raise questions about differences in the mechanisms involved in linking poor relationship quality to poor mental health and those linking single status to poor mental health. Previous research has demonstrated the importance of close relative's/partner's characteristics in determining mental health. For example, a large body of research started by Brown, Birley and Wing [36] and Vaughn and Leff [37] has investigated the influence of family life on relapse rates for psychiatric illness. In this body of work, partners/close relatives of those with a psychiatric illness were assessed using an index of 'expressed emotion' (EE). This index contained three main components: critical comments, hostility and emotional over-involvement (all directed towards the ill person). Individuals with close relatives/partners who scored highly on EE were more likely to relapse. High EE is one likely pathway through which poor relationship quality is associated with poor mental health. In contrast, for those who are single, alternate factors associated with not having a partner may be important, such as loneliness and/or not having a traditional framework from which to develop a sense of

purpose and meaning [38]. Lack of economic resources has been offered as one explanation [38,39], however in this study significant differences in depression remained after adjusting for financial strain. The current study raises further questions about the ingredients of good quality relationships, and what factors partners exchange in their daily lives to benefit their mental health? Research examining differences in mental health between those who are married and those who are cohabiting suggests 'stability' is an important factor [40], and indeed components of the current measure of marital quality (DAS-7), such as dyadic consensus and cohesion, can be couched in terms of relationship stability. Future research should more deeply examine the mechanisms involved in the pathways between relationship status, relationship quality and mental health.

Implications for practice

The current research confirms and expands upon our knowledge of the impacts of relationship quality and relationship transitions on mental health. While we acknowledge that the findings are typically what one would expect, they are most importantly a vehicle for resurfacing previous assertions that marriage-like relationship quality is an important correlate and risk factor of depression and anxiety, over and above relationship status. This is critical to note, as the focus of psychiatric epidemiology is to not only identify vulnerable population groups for targeted intervention (e.g. gender, relationship status, age), but to also identify risk factors that can be *modified* for the purposes of prevention. In light of the current findings, future population-based research should consider including an evidence-based measure of relationship quality such as the DAS-7. In addition, it would be beneficial to further develop a measure of relationship status that incorporates relationship quality. The 'good, bad and single' measure adopted in the

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current analyses provides a starting point, however a more comprehensive measure teasing out the homogeneity of the single category (e.g. never married/de facto, divorced/separate) should be investigated.

Limitations

There are limitations which should be noted. Measures of relationship quality and mental health were self-report, though possible response-bias or endogeneity was minimised by adjusting for neuroticism in the analyses. Depression and anxiety levels were measured using continuous scales assessing the number of depression and anxiety symptoms reported. While this allowed us to assess whether poor relationship quality is associated with higher symptom levels (a more sensitive assessment than a diagnostic assessment), we were not able to conclude whether poor relationship quality is associated with an increased likelihood of an affective or anxiety disorder. In addition, the gender difference observed in the current paper using the Goldberg Depression Scale was smaller (approx. 1.2:1) than is typically found (1.5-3:1) [41,42]. Therefore, the current findings regarding gender differences could be viewed as conservative. If a larger gender difference in symptom levels was observed, larger gender differences in how poor marital quality relates to higher depression and anxiety may also have been evident. Once stratified by gender, the prospective analyses were based on small sample sizes limiting the generalisability of the findings. Although we supplemented these analyses with tests for gender interactions (which improved numbers), further work is needed to confirm that relationship transitions impact on depression and anxiety differently for men and women. Future research should also investigate possible heterogeneity within the 'no relationship' group such as differences between never married and previously divorced/separated

respondents. It should be also be noted that while retention rates between waves of the PATH survey were very high (91.1% from Wave 1 to Wave 2, and 92.9% from Wave 2 to Wave 3), as in all longitudinal surveys there was attrition between the original sample and the remaining sample at Wave 3, which introduces potential bias.

The first three sets of models used in the current study used cross-sectional data, and thus, provide no information with regard to the direction of causality between relationship status and mental health, and relationship quality and mental health. While our prospective analyses support the notion that changes in relationship quality lead to changes in mental health, the nature of this association is complex and iterative, involving selection effects (where those with mental health problems are selected into poor quality relationships). Indeed, there is strong longitudinal evidence for a bi-directional relationship between poor relationship quality and psychological distress [43], which is complicated by further evidence of strong concordance in mental health between individuals in couples [44,45]. The current study demonstrates that the positive association between being in a relationship and better mental health is conditional upon relationship quality, and this is also the case for those who move from single status into a relationship. It does not preclude conclusions about the reverse direction in causality or the involvement of other shared risk factors related to both relationship quality and mental health.

Conclusions

The current study provides support for the notion that the quality of marriage-like relationships is an important variable to include in studies of psychiatric epidemiology.

The study shows that the association between marital status and mental health (depression and anxiety) is moderated by relationship quality. In addition, it finds that the mental health benefits of moving into a good quality relationship in comparison to remaining single were significantly greater for men than women. While the current study is relevant to a long tradition of research and theory on gender, marriage and mental health, it improves on previous investigations by incorporating a representative community sample, adopting psychometrically sound measures, and adjusting for a broad range of relevant covariates. It also proposes new directions for this area of research by re-asserting that a combined approach to relationship status and relationship quality is needed.

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Tables

Table 1: Sample characteristics for men and women

		Men n=1784 % or m(SD)	Women n=2036 % or m(SD)
Demographics (covariates)			
Age group	20s	47%	48%
cohort		53%	52%
	40s cohort		
Education (years completed)		15.16 (.04)	15.10 (.04)
Presence of children (yes)		62%	68%
Financial hardship	None	94%	92%
	1 or more	6%	8%
Physical health SF-12 (0-100)		51.92 (.17)	50.44 (.19)
Relationship variables			
Partnered (married or defacto)		80%	78%
Relationship quality – DAS-7 (0-39)[a]		24.22 (.13)	24.70 (.13)
Relationship categories			
	Single	20%	22%
	Poor quality Relationship	41%	35%
	Good quality relationship	39%	43%
Mental health variables			
Depression (0-9)		2.19 (.05)	2.62 (.05)
Anxiety (0-9)		3.06 (.06)	3.86 (.05)
Depression (yes, when dichotomised)		8%	10%
Anxiety (yes, when dichotomised)		14%	20%

Note: [a] For those partnered. i.e. n=3003.

Table 2: Incidence rate ratios (IRR) and 95% confidence intervals assessing predictors of depression and anxiety symptoms for men

	Depressive symptoms		Anxiety symptoms	
	IRR	95% CI	IRR	95% CI
Model 1: all respondents				
Not partnered (ref)	-	-	-	-
Partnered	**.83**	**.76-.90**	.94[a]	.88-1.01
Model 2: only partnered				
Relationship quality (0-39)	**.96**	**.95-.97**	**.97**	**.96-.98**
Model 3: all respondents				
Not partnered (ref)	-	-	-	-
Poor quality relationship	.96	.88-1.05	1.05	.97-1.13
Good quality relationship	**.67**	**.60-.73**	**.82**	**.75-.89**
Model 4: longitudinal no partner previous wave				
Remained single (ref)	-	-	-	-
Poor quality relationship	.93[a]	.71-1.22	.93	.74-1.18
Good quality relationship	**.64**	**.46-.89**	**.68**	**.51-.89**

Note: Covariates include age, children, years education, physical functioning, experience of financial hardship and neuroticism. [a] Removing neuroticism from the model changed these effects to significant.

Table 3: Incidence rate ratios (IRR) and 95% confidence intervals assessing predictors of depression and anxiety symptoms for women

	Depressive symptoms		Anxiety symptoms	
	IRR	**95% CI**	**IRR**	**95% CI**
Model 1: all respondents				
Not partnered (ref)	-	-	-	-
Partnered	**.91**	**.85-.98**	.99	.94-1.05
Model 2: only partnered				
Relationship quality (0-39)	**.97**	**.97-.98**	**.98**	**.97-.99**
Model 3: all respondents				
Not partnered (ref)	-	-	-	-
Poor quality relationship	.99	.92-1.07	**1.07**	**1.00-1.14**
Good quality relationship	**.84**	**.78-.91**	**.94**	**.88-.99**
Model 4: longitudinal no partner previous wave				
Remained single (ref)	-	-	-	-
Poor quality relationship	**1.46**	**1.06-2.01**	**1.43**	**1.10-1.84**
Good quality relationship	.94	.71-1.24	.93	.75-1.15

Note: Covariates include age, children, years education, physical functioning, experience of financial hardship and neuroticism.