

Running head: GENDER AND SOCIAL SUPPORT

Gender Differences in the Associations between Relationship Status, Social Support, and Wellbeing

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Samantha Stronge, Nickola C Overall, and Chris G. Sibley

School of Psychology, University of Auckland

Corresponding author:

Samantha Stronge
School of Psychology
University of Auckland
Private Bag 92019,
Auckland,
New Zealand.

Email: s.stronge@auckland.ac.nz

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Abstract

Extant research suggests that having a romantic partner has more benefits, in terms of higher subjective wellbeing, for men compared to women. The primary theoretical explanation for these wellbeing differences is that men's romantic partners tend to be their primary source of perceived social support. Yet, there is surprisingly little empirical evidence that perceived social support accounts for these gender differences. The current research used a national panel study in New Zealand ($N = 20,774$) to test whether perceived social support mediated the relationship between having a romantic partner and wellbeing, and whether these associations were noninvariant across gender. Perceived social support partially mediated the association between having a romantic partner and higher wellbeing (life satisfaction and self-esteem), and this pathway was stronger for men than it was for women. These results extend previous research by using large-scale national panel survey data to show that the stronger association between men's relationship status and wellbeing is partially due to men's stronger connection between relationship status and perceived social support.

Keywords: romantic relationships, social support, life satisfaction, self-esteem

Gender Differences in the Associations between Relationship Status, Social Support, and Wellbeing

The wellbeing benefits afforded by romantic relationships have been consistently shown to be greater for men than for women (e.g., Berkman & Syme, 1979; Taylor, 2011). This gender difference is commonly theorized to arise in part from men relying more heavily on their romantic partners for support (Antonucci & Akiyama, 1987; Connidis & Davies, 1990; Gerstel, Riessman, & Rosenfield, 1985; Litwak et al., 1989; Schwarzer, Knoll, & Rieckmann, 2004; Waite & Gallagher, 2000; Weidner, 2000) whereas women tend to have broader sources of social support in addition to their romantic partner (Dykstra & Fokkema, 2007; Umberson, Chen, House, Hopkins, & Slaten, 1996). Despite the widespread acceptance of this theoretical proposition (e.g., Schwarzer et al., 2004; Taylor, 2011), it is surprisingly poorly tested. Rather this proposition is supported by a set of studies that have used decades old data, focused on samples of older adults, and tested specific associations rather than the full model linking relationship status, support and wellbeing, (e.g., Chipperfield & Havens, 2001; Connidis & Davies, 1990; Umberson et al., 1996; Williams & Umberson, 2004).

The current research integrates this disparate research in a unified mediational model that simultaneously tests gender differences in the associations between relationship status, perceived social support, and wellbeing. We draw upon a large nationally-representative sample ($N \approx 20,000$) to directly test: (1) whether having a romantic partner predicts greater wellbeing, (2) whether perceived social support mediates the association between relationship status and wellbeing, and (3) whether gender moderates this association, such that men compared to women report greater social support and, in turn, greater wellbeing when in a romantic relationship versus being single. Given the reliance on social support as an explanation for significant gender differences in psychological health and wellbeing, it is important to verify whether this theoretical proposition is indeed a full or adequate

explanation, and whether this explanation can be appropriately applied across a nationally-representative sample with different ages, ethnicities, incomes, and types of relationships.

Relationship Status and Wellbeing

Wellbeing is strongly linked to having good social support (e.g., Helliwell, Barrington-Leigh, Harris, & Huang, 2009), and a romantic partner is generally considered to be one of the most important sources of social support (Schwarzer et al., 2004). Having a romantic partner is therefore consistently associated with greater wellbeing (for reviews see Bottom, 2013; Coombs, 1991; Waite & Gallagher, 2000). By contrast, divorce, separation, widowhood, or being single are associated with lower happiness (Alesina et al., 2004; Blanchflower & Oswald, 2004), life satisfaction (Brown, Woolf, & Smith, 2012; Diener, Gohm, Suh, & Oishi, 2000; Helliwell et al., 2009) self-esteem (von Soest, Wagner, Hansen, & Gerstorf, 2017), greater negative affect (Diener et al., 2000), and depressive symptoms (Kim & McKenry, 2002; Ross & Mirowsky, 1989; Wu, Penning, Pollard, & Hart, 2003). Moreover, although the links between having a partner and wellbeing depend on relationship quality (Proulx, Helms, & Buehler, 2007; Robles, Slatcher, Trombello, & McGinn, 2014) and people's social motivations (Girme, Overall, Faingataa, & Sibley, 2016), the main effect between relationship status and wellbeing remains strong and significant even when controlling for these factors (Kim & McKenry, 2002; Girme et al., 2016).

Perspectives such as role theory (Gove et al., 1990) and the marital resource model (Ross, Mirowsky, & Goldsteen, 1990; Umberson, 1992; see Gove et al., 1990 for alternative viewpoints) propose that being in a relationship enhances wellbeing because relationships protect individuals from the wellbeing costs arising from life stressors. Longitudinal research and meta-analyses tend to support the idea that relationships are the cause of higher wellbeing by showing that relationship status predicts longitudinal change in wellbeing, but not the reverse (Kim & McKenry, 2002; Proulx et al., 2007; Wu et al., 2003). Although relationships

provide partnered people with more physical resources compared to single people (e.g., income; Gove et al., 1990; Liu & Umberson, 2008; Ross et al., 1990), the greater support available to people in romantic relationships tends to be the more important resource for wellbeing (Gove et al., 1995; Liu & Umberson, 2008; Ross & Mirowsky, 1989; Ross et al., 1990). Compared to single people, those who are married are more likely to report that they have a confidant (Gerstel et al., 1985), have greater social support (Chen & Feeley, 2014; Ross et al., 1990; Schwarzer et al., 2004), and are less lonely (Dykstra & Fokkema, 2007).

Social support is a particularly important provision in romantic relationships because perceived support is a well-documented positive predictor of health and wellbeing (Cutrona & Russell, 1987; Turner, 1981). These wellbeing benefits are theorized to arise because perceived support provides reassurance that tangible and emotional resources are available to navigate challenges and thus buffers stress (Cohen, 2004; Cohen & Wills, 1985). In addition, routine, day-to-day relationship interactions help to enhance healthy regulation of people's affect, thought, and behavior (Lakey & Orehek, 2011). Accordingly, greater perceived social support predicts higher life satisfaction and positive affect, lower negative affect (Siedlecki, Salthouse, Oishi, & Jeswani, 2014), and lower psychological distress (Finch, Okun, Pool, & Ruehlman, 1999). In sum, people in relationships have greater social support available, which in turn promotes better wellbeing (e.g., Chen & Feeley, 2014; Gove et al., 1990).

Relationship Status, Wellbeing, and Gender

The links between relationship status and wellbeing occur for both men and women, but this association is particularly pronounced for men. Compared to women, men tend to have poorer health and wellbeing when they are not in a romantic relationship (Berkman & Syme, 1979; Bottom, 2013; Chipperfield & Havens, 2001; Coombs, 1991; Taylor, 2011; Wanic & Kulik, 2011). Getting married increases men's, but not women's, life satisfaction (Chipperfield & Havens, 2001). The negative impact of relationship dissolution on health and

wellbeing is stronger for men than women (Chipperfield & Havens, 2001; Williams & Umberson, 2004). Finally, although this gender difference may be decreasing over time, it still emerges in recent studies (e.g., Liu & Umberson, 2008; Wanic & Kulik, 2011).

The gender differences in the wellbeing benefits of having a romantic partner may arise because romantic relationships are the principal source of support for men. In particular, the lower wellbeing found among single, divorced, or widowed men has been hypothesized to be due to men relying on their partner as their primary source of social support, whereas women are more likely to draw upon social support from multiple sources (e.g., Gerstel et al., 1985; Schwarzer et al., 2004; Taylor, 2011; Weidner, 2000). Masculinity norms of self-reliance, toughness, and emotional inexpression may reduce the degree to which men ask for support or acknowledge the need to rely on others (e.g., Addis & Mahalik, 2003; Bem, 1974, 1981). However, these masculinity norms may be less applicable within the context of a romantic relationship, which may be seen as the only acceptable domain for seeking support and relying on others (e.g., Courtenay, 2000). Thus, in the absence of a partner, men may perceive lower social support is available to them, which should lead to lower wellbeing.

Indeed, men are approximately twice as likely to name their partner as their primary source of social support, with 49-65% of men naming their partner as their primary confidant or available source of support, but only 20-26% of women (New England Research Institutes, 1997; Umberson et al., 1996). Where 24% of men named their spouse as their only source of social support, only 6% of women did the same (New England Research Institutes, 1997). Men also rank their spouse as a more important source of social support than women (Antonucci & Akiyama, 1987; Connidis & Davies, 1990), and report receiving more social support from their spouse than women (Umberson et al., 1996). Furthermore, women have larger and wider social circles than men (Antonucci & Akiyama, 1987; Dykstra & Fokkema, 2007; Powers & Bultena, 1976; Schwarzer et al., 2004), more close relationships (Powers &

Bultena, 1976; Schwarzer et al., 2004), and receive, seek, and offer more emotional support and closeness to and from their friends (Antonucci & Akiyama, 1987; Powers & Bultena, 1976; Ross et al., 1989; Schwarzer et al., 2004; Tamres, Janicki, & Helgeson, 2002; Taylor, 2011; Umberson et al., 1996). Unpartnered men are generally lonelier than unpartnered women (Dahlberg, Andersson, McKee, & Lennartsson, 2015; Dykstra, Van Tilburg, & Gierveld, 2005; Nicolaisen & Thorsen, 2014), and this can be attributed at least in part to men's smaller social networks, lower social contact, and the higher importance men place on having a partner (Dahlberg et al., 2015; Dykstra & Fokkema, 2007; Pinqart, 2003).

Taken together, this body of work indicates that men more heavily rely on their romantic partner for social support, whereas women have larger social support networks that protect them from the lower social support that single men may experience. However, no prior research has tested whether these gender differences in available sources of social support or levels of loneliness help to explain gender differences between relationship status and wellbeing. The lack of overarching theoretical integration about how relationships may create differences in available social support, and how perceived support availability may differ for men and women, makes it difficult to draw firm conclusions from the literature. Furthermore, several contradictory findings exist. Some studies have found no gender differences in the likelihood of confiding in a spouse over other relationships (Wenger & Jerrome, 1999), and no gender differences in perceived support from one's spouse (Acitelli & Antonucci, 1994; Neff & Karney, 2005). Other research has even found that women report more support from their spouse than men (Aranda, Castaneda, Lee, & Sobel, 2001), or that women are lonelier than men following divorce (Nicolaisen & Thorsen, 2014).

Overview and Hypotheses

In sum, the links between relationship status and wellbeing tend to be stronger for men than women, and a key hypothesis behind this difference is that romantic partners are

men's primary source of perceived support, whereas women feel able to draw upon support from many different sources. However, all of the evidence for men naming their partner as their main source of social support is decades old (Antonucci & Akiyama, 1987; Connidis & Davies, 1990; New England Research Institutes, 1997; Umberson et al., 1996), much of the research regarding gender differences in social support and wellbeing focuses on older adults (e.g., Antonucci & Akiyama, 1987; Connidis & Davies, 1990), and more recent research shows conflicting results (e.g., Neff & Karney, 2005; Nicolaisen & Thorsen, 2014).

Moreover, although prior research has provided evidence of each individual association—gender differences in relationship status and wellbeing, gender differences in importance of romantic partners' support, and links between support and wellbeing—how these effects combine to explain why relationship status is more strongly predictive of wellbeing for men than women has not been fully tested. Instead, the studies that are cited as evidence of this theoretical model have only tested parts of this mediation pathway, or are review articles that propose the mediation pathway but do not empirically test it (e.g., Gerstel et al., 1985; New England Research Institutes, 1997; Phillipson, 1997; Umberson, 1992; Weidner, 2000).

In the current research, we aim to comprehensively test the theorized gender difference in the relationship status—social support—wellbeing pathway by examining the associations between romantic relationship status, perceived social support, and psychological wellbeing in a large representative sample of New Zealand adults. We measure wellbeing using life satisfaction, a global, cognitive evaluation of one's life (Diener, Suh, Lucas, & Smith, 1999), and self-esteem, a global evaluation of one's self and sense of worth (von Soest et al., 2017), which represent unique components of wellbeing across a range of domains (Diener & Diener, 2009). We predict and test a multigroup mediation model that specifies having a romantic partner will be associated with greater perceived social support and, in turn, greater wellbeing, but this pathway will be stronger for men than women due to

men showing a stronger association between having a romantic partner and social support.

Method

Sampling Procedure

This study analyzed cross-sectional data from Wave 8 (2016) of the New Zealand Attitudes and Values Study ($N = 21,937$)—a multiyear study based on a national probability sample of New Zealand adults (for a comparison of the NZAVS sample to the New Zealand census, see Sibley, 2014). Ethics approval for the New Zealand Attitudes and Values Study was attained from the University of Auckland Human Participants Ethics Committee (014889). Wave 8 was selected as it is the most recent wave of data collection, with the largest sample size. A total of 13,779 participants were retained from previous waves of the NZAVS (85.59% of the previous wave), and 8,158 participants were added via booster sampling; additional sampling conducted to increase the sample size and improve representation of undersampled populations. The booster sample frame consisted of 80,000 people aged from 18-65 randomly selected from the 2016 New Zealand Electoral Roll, who were currently residing in New Zealand. We limited our frame to people who were 65 or younger, due to the broader aim of the NZAVS to retain participants across further waves. Participants were posted a copy of the questionnaire, with a second postal follow-up two months later. Participants who provided an email address were invited to complete an online version if they preferred. For further details, refer to Sibley (2018a).

Materials

All measures were embedded within the larger NZAVS battery (see Sibley, 2018b, 2018c). Gender was measured using an open-ended measure that asks “What is your gender?” Participants were coded as male, female, transgender, non-binary, unsure, or outside scope (for full coding, see Fraser, 2017). For the purposes of a multigroup model, only those who were coded as male or female were included in the model (0.2% of participants

identified as gender diverse). Socio-economic status was measured using the New Zealand socio-economic index, which uses age, education, and occupation to calculate a score ranging from 10 to 90, where 90 indicates high socio-economic status (Milne, Byun, & Lee, 2013).

Social support was measured using the mean of three items adapted from Cutrona and Russell's (1987) Social Provisions Scale, on a scale from 1 (very inaccurate) to 7 (very accurate): "There are people I can depend on to help me if I really need it", "There is no one I can turn to for guidance in times of stress" (reverse-coded), "I know there are people I can turn to when I need help" ($\alpha = .81$).

Life satisfaction was assessed using the mean of two items adapted from the Satisfaction with Life scale (Diener, Emmons, Larsen & Griffin, 1985). Responses were rated on a scale from 1 (strongly disagree) to 7 (strongly agree): "I am satisfied with my life" and "In most ways, my life is close to ideal" ($\alpha = .80$).

Self-esteem was measured as the mean of three items adapted from Rosenberg's (1965) Self Esteem Scale, asking participants to indicate how much they agree with statements on a scale from 1 (very inaccurate) to 7 (very accurate): "On the whole am satisfied with myself", "Take a positive attitude toward myself", and "Am inclined to feel that I am a failure" (reverse-coded; $\alpha = .80$).

Participant Details

We analyzed data from participants who provided complete answers to demographic measures identifying gender, age, ethnicity, socioeconomic status, and relationship status ($N = 20,774$, women = 13,044, men = 7,730; 94.7% of the total sample¹). Eleven percent of participants indicated they were of Māori ethnicity, 3% were of Pacific ethnicity, 5% were of

¹ The remaining 1,162 participants did not significantly differ from the main sample in terms of gender and age. They were significantly less likely to be in a relationship ($M = .54$, $SD = .50$) than the main sample ($M = .76$, $SD = .42$, $t(299) = -7.64$), however, 75% of data was missing for this variable. They also reported lower mean levels of social support ($M = 5.76$, $SD = 1.20$, $t(1265) = -6.32$), self-esteem ($M = 5.07$, $SD = 1.29$, $t(21861) = -3.53$), and life satisfaction ($M = 5.08$, $SD = 1.36$, $t(912) = -3.15$) than the main sample ($M = 5.99$, $SD = 1.07$; $M = 5.20$, $SD = 1.23$; $M = 5.23$, $SD = 1.19$ respectively), which is consistent with the lower rate of romantic partners.

Asian ethnicity, and 90% were New Zealand Europeans (participants could indicate multiple ethnicities). The mean age of the sample was 49.57 ($SD = 13.85$). In terms of education, 28.7% of participants finished education in high school, 19.6% achieved a post-high school certificate or diploma, 26.5% had a bachelors degree, 19.8% had a post-graduate degree, 2.5% had a doctorate, and 2.9% had no qualifications.

On a demographic page, participants were asked about their relationship status, religiosity, employment status, parenthood status, and sexual orientation. Thirty-eight percent of the sample were religious, 74% had children, and 79% were employed. Finally, 76.4% ($N = 15,876$) of the sample had a romantic partner; participants were coded as having a partner if they reported being in a committed relationship (4.9%; $N = 1,025$), dating or having a girlfriend/boyfriend (0.7%; $N = 148$), living together/de facto (11.1%; $N = 2,304$), engaged (1%; $N = 205$), or married/civil partnership (58.4%; $N = 12,134$). Participants were coded as having no romantic partner if they reported being single (17.4%; $N = 3,616$), in a casual relationship (0.1%; $N = 22$), divorced or separated (3.5%; $N = 722$), or widowed (2.6%; $N = 537$). For those with a partner, the average relationship length was 20.17 ($SD = 14.49$) years. Participants of all sexualities were included in the analysis: 93% of participants who reported their sexuality were heterosexual, 11.8% of participants chose not to answer this question.

Women in the sample were younger ($M = 48.54$ years, $SD = 13.73$) than men ($M = 51.32$ years, $SD = 13.88$, $t(20772) = -14.05$, $p < .001$), and more educated ($M = 5.45$, $SD = 2.72$) than men ($M = 5.17$, $SD = 2.75$, $t(20411) = 7.00$, $p < .001$; 0 no education to 10 doctorate degree). Women were less likely to be employed ($M = .78$, $SD = .42$) than men ($M = .81$, $SD = .39$, $t(17019) = -5.86$, $p < .001$), and had a lower average socio-economic status ($M = 54.85$, $SD = 15.23$) than men ($M = 52.60$, $SD = 15.87$, $t(15699) = 10.03$, $p < .001$).

Results

Analytic Strategy

We first conducted a 2x2 MANOVA to test whether relationship status was associated with wellbeing, and whether this association differed by gender. We then estimated a multigroup Structural Equation Model (SEM) to test the proposed mediation model: having a partner→social support→wellbeing (life satisfaction and self-esteem) with all pathways estimated separately for men and women. Wald chi-square tests were conducted to test for noninvariance across gender for each pathway and the indirect effects, which provided tests of whether social support mediated the association between relationship status and wellbeing, and whether gender moderated this association. Social support and self-esteem included 3 items and so were estimated as latent variables. We included the covariates of age, ethnicity, and socioeconomic status as basic demographic controls. The model was estimated in MPlus 7.4 (Muthén & Muthén, 1998-2015) using Maximum Likelihood Estimation, and 5,000 bootstrapped resamples (with replacement) to estimate bias corrected confidence intervals.

Gender Differences in Relationship Status and Wellbeing Associations

Means, standard deviations, and bivariate correlations for all variables are presented in Table 1. To test if men and women had different levels of wellbeing depending on their relationship status (having a romantic partner versus not), we conducted a 2x2 MANOVA. To demonstrate these differences, Table 2 presents the means (averaged across scale items) and standard deviations of the wellbeing outcomes for men and women according to relationship status. Participants in a relationship had higher levels of life satisfaction ($F(1,20371) = 1370.61, p < .001$) and self-esteem ($F(1,20371) = 423.97, p < .001$). Women reported higher levels of life satisfaction than men ($F(1,20371) = 136.47, p < .001$), but there were no significant differences in self-esteem between men and women ($F(1,20371) = 0.71, p = .400$). As predicted, the interaction between gender and relationship status was significant for life satisfaction ($F(1,20371) = 27.81, p < .001$) and self-esteem ($F(1,20371) = 46.03, p < .001$). As shown in Table 2, compared to single women, single men had lower life

satisfaction and self-esteem, whereas men with a partner had higher levels of self-esteem than women with a partner. The significant interaction for life satisfaction indicated that although women with a partner had higher levels of life satisfaction than men with a partner, this difference was significantly smaller than the differences in life satisfaction between single men and women. Overall, the pattern demonstrates that relationship status has a stronger effect on wellbeing for men than women. The multi-group mediation SEM presented next tested the role of social support in explaining these gender differences.

Gender Differences in Relationship Status, Social Support and Wellbeing Associations

The multi-group mediation SEM had good model fit ($\chi^2(80) = 1337.91$, RMSEA = .039; sRMR = .019, CFI = .980, TLI = .969)². Results are presented in Figure 1, Table 3, and Table 4. First focusing on the pathway between relationship status, social support and wellbeing, having a romantic partner predicted perceiving greater levels of social support (see Table 3). In turn, as shown in Table 4, perceived social support had strong positive associations with life satisfaction and self-esteem. Even when controlling for the links with social support, having a romantic partner continued to predict higher life satisfaction and self-esteem. Wald chi-square tests indicated that the partner→social support pathway ($\chi^2(1) = 17.694$, $p < .001$) was noninvariant across gender, such that there was a stronger association for men than for women. The social support→life satisfaction ($\chi^2(1) = 8.152$, $p = .004$), and the social support→self-esteem pathways ($\chi^2(1) = 6.869$, $p = .009$) were also noninvariant across gender, such that there was a stronger association between social support and wellbeing for women than for men. Finally, even when controlling for social support, there remained significant gender differences in the association between having a romantic partner and higher life satisfaction ($\chi^2(1) = 4.480$, $p = .034$) and self-esteem ($\chi^2(1) = 11.511$, $p <$

² A replication of the model was conducted using participants from Wave 7 of the NZAVS who were not retained into Wave 8, so there was no overlap between the samples. The model held, and full results are presented in Supplementary File 1.

.001), such that the association continued to be stronger for men than for women.

Tests of indirect effects indicated that the indirect pathways between having a romantic partner and life satisfaction mediated by social support were positive and significant for men ($b = .215$, $se = .022$, $t = 9.856$, $p < .001$, 95% CI [.172, .258]) and women ($b = .137$, $se = .014$, $t = 9.698$, $p < .001$, 95% CI [.110, .165]). Similarly, the indirect pathways between having a romantic partner and self-esteem mediated by social support were positive and significant for men ($b = .213$, $se = .021$, $t = 9.954$, $p < .001$, 95% CI [.170, .254]) and women ($b = .136$, $se = .014$, $t = 9.729$, $p < .001$, 95% CI [.109, .163]). The model explained 29.9% of the variance in self-esteem and 31.4% of the variance in life satisfaction for men, and 25.9% of the variance in self-esteem and 29.5% of the variance in life satisfaction for women³. Wald chi-square tests indicated that the mediational pathways from partner→social support→life satisfaction ($\chi^2(1) = 12.139$, $p < .001$) and partner→social support→self-esteem ($\chi^2(1) = 11.757$, $p < .001$) were noninvariant across gender, such that the mediational pathway between relationship status and wellbeing via social support was stronger for men.

To summarize, as predicted, the pathways between relationship status and social support, and relationship status and wellbeing, were stronger for men. Accordingly, indirect effects supported that the mediational pathway between relationship status and wellbeing via social support was stronger for men than women. Of importance, our assessment of social support assessed people's general levels of available support, rather than support within specific relationships. Thus, the results indicate that being in a romantic relationship is more strongly associated with perceiving support is available, which is consistent with men sourcing relatively greater support from romantic partners and perceiving less available support from other sources. Interestingly, despite that the overall associations between having

³ With controls removed, the model explained 22.0% of the variance in self-esteem and 28.4% of the variance in life satisfaction for women, and 26.9% of the variance in self-esteem and 30.3% of the variance in life satisfaction for men.

a partner→social support→wellbeing were stronger for men, the specific link between social support to wellbeing was stronger for women. Thus, men may not only have fewer sources of available support outside romantic relationships, they may also not benefit as much from the support they do perceive compared to women. We discuss this unexpected finding below.

Additional Analyses

We further tested the same model using different categories of relationship status (see Supplementary File 2). The model held when comparing people in a relationship to those who were single but had not been divorced, separated, or widowed. We also compared married people to those who were not in a relationship, and people with a partner who were not married to those who were not in a relationship, and the model held for both. The gender differences in the indirect effects did not hold when comparing people in a relationship to those who were divorced, separated or widowed, but sample sizes here were considerably smaller than for other relationship types. This pattern indicates that the gender differences in social support and wellbeing follow the same general pattern regardless of what type of relationships people were involved in or the reasons why they were single. Thus, compared to women, men gained more from being in a romantic relationship of any kind versus not being in a relationship for any reason except for those who were divorced, separated, or widowed.

Discussion

It has often been suggested that men rely on their romantic partners for social support more than women do (e.g., Kiecolt-Glaser & Newton, 2001), but the relative importance of romantic relationships for perceiving social support is available in explaining why having a romantic partner more strongly affects men's compared to women's wellbeing has not been empirically tested. We examined this proposition in the current research by analysing data from a large nationally representative sample. The results showed that single men had lower mean levels of wellbeing than single women, but partnered men had similar or higher levels

of wellbeing than partnered women. Moreover, as predicted, having a romantic partner was associated with greater perceived social support, and greater perception of support was associated with higher life satisfaction and self-esteem. However, also as predicted, the links between relationship status and social support were stronger for men than women, and thus the mediating role of support linking relationship status to wellbeing was significantly stronger for men than for women. Accordingly, although significant indirect pathways between relationship status, social support and wellbeing were found for both men and women, the overall mediation pathway was significantly stronger for men.

Advances and Implications

These results provide the first empirical evidence that a central reason why having a romantic partners is more strongly associated with men's compared to women's wellbeing (e.g., Dykstra & Fokkema, 2007; Kiecolt-Glaser & Newton, 2001) is the greater social support men vs. women perceive they have available when they are partnered compared to being single. Although differences in social support have been *assumed* to underlie these gender differences (e.g., Taylor, 2011), this mechanism has not been comprehensively tested. The current research pulls together the disparate associations tested within the literature (e.g., Coombs, 1991; Gerstel et al., 1985; Umberson et al., 1996) into a single unified model by testing both the mediating role of social support and the moderating effect of gender. This model was tested on a large, nationally representative sample and held across different types of relationships. The results thus provide strong empirical support and are broadly descriptive of relationship and support processes across various ages and types of relationships.

This pattern has important implications for understanding the greater risks associated with being single or divorced for men. The gender differences in social support and wellbeing associated with relationship status may arise from masculinity norms that specify men should be independent, self-reliant and physically tough (Bem, 1974, 1981; Courtenay, 2000;

Thompson & Pleck, 1986). Indeed, masculine norms emphasize that a man should not be dependent or weak, and that asking for help is a sign of failure (Mahalik et al., 2003). Accordingly, men rely less on friends for emotional or social support (e.g., Powers & Bultena, 1976) and instead romantic relationships may be the only domain in which seeking and relying on support seems acceptable, and thus why having a partner results in men perceiving they have more support available. Such adherence to masculinity norms risks men's wellbeing when men are single and thus perceive less support is available to them, or when relationships dissolve and men lose their primary source of perceived support.

These results also have interesting implications for men's romantic relationships. If men base more of their perceived support from the availability of their romantic partner than women, it has the potential to place a high burden on their romantic relationship, making it more difficult for partners to meet each other's expectations. A healthier support structure likely involves people possessing wider social networks and feeling able to draw upon sources of support outside of specific romantic relationships to help fulfil people's diverse social and emotional needs (Finkel, Cheung, Emery, Carswell, & Larson, 2015; Robles, 2014). The current research suggests that such diversification of support and need fulfilment may be particularly needed for men, which has important practical and clinical implications. Given the importance of social support to health and wellbeing, the lower social support men who are single experience may contribute to or exacerbate psychological difficulties. Thus, helping men cultivate social networks and support outside of romantic relationships may benefit clinical, health and psychoeducational interventions. Within relationships, considering the greater importance of partner support for men, and any burden that this might create in the face of relationship difficulties, could also help enhance the wellbeing of both partners.

Unexpectedly, a gender difference also emerged in the association between social support and wellbeing: perceived social support was more strongly associated with wellbeing

for women compared to men. Unfortunately, this effect may indicate that even though men perceive greater support is available when they have a romantic partner, they may not benefit by it as much as women do. Again, masculine norms are likely to play an explanatory role. Even if support is available, men may not draw upon it as heavily given expectations they should be self-reliant and not depend on others for help. By contrast, women are expected to behave communally (Bem, 1974, 1981), and tend to develop and enact more relational skills, such as more effectively seeking and providing support (e.g., Neff & Karney, 2005). Thus, not only might women perceive greater support is available, from a variety of sources, they may also use and benefit from that available support more. On the other hand, if women perceive a lack of support in their relationships (romantic or not), their wellbeing may also suffer more as a result. Consistent with this possibility, relationship quality is more strongly associated to wellbeing for women compared to men (e.g., Wanic & Kulik, 2011). As with the focal associations examined in this research, the gender difference in the social support–wellbeing pathway is under-researched and more research is needed to explain this finding.

Strengths, Limitations and Future Directions

We used a large nationally-representative sample which provides good evidence that the gender differences in relationship status, social support, and wellbeing span age, ethnicity, socio-economic status, and different types of relationships. Yet, we acknowledge that these results may not generalise across contexts. The association between relationship status and wellbeing can differ across cultures and is generally weaker in less individualistic cultures where more external sources of social support are available (Diener et al., 2000). Moreover, the data were cross-sectional and do not allow us to make causal assertions. However, the associations of interest here are best tested by examining how social support and wellbeing are associated with *current* relationship status. If men experience greater differences in perceived support when they are partnered versus single, then current relationship status and

perceived support are the critical comparisons. Moreover, this association (and the gender differences) should not change across time because differences in perceived support availability between being partnered versus single should remain relatively stable.

We assessed wellbeing using two similar dependent variables, self-esteem and life satisfaction, which can inflate the type-I error rate. However, as the p-values for the mediation model and the tests of gender differences in the mediation model were small, correcting for multiple tests would not change any of the results to non-significant. It is also worth noting the advantages to testing this effect across multiple wellbeing outcomes. As relationship status typically predicts greater wellbeing across a range of outcomes rather than any one specific variable (e.g., Brown et al., 2012; Diener et al., 2000), social support should be able to mediate this association across multiple outcomes as well. Additionally, a central issue with measuring multiple dependent variables is that researchers are free to choose which associations to report (i.e., those that are significant). Here, we demonstrate that the focal association replicates across the different wellbeing variables available in the dataset⁴.

A valuable goal for future investigations is understanding why men experience greater differences in perceived support across relationship status. We theorized this difference may arise from masculinity norms that restrict the degree to which men feel they are able to draw upon support from others outside their close relationships, which should result in perceiving they have less support available when they do not have a romantic partner. Testing this proposed mechanism is an important next step, as is exploring additional processes that may play a role, such as differences in support seeking and provision across men and women. Identifying the underlying processes for the stronger link between relationship status and perceived social support for men should help provide intervention targets for boosting the

⁴ We removed a wellbeing variable from the analysis due to multicollinearity with life satisfaction, following a reviewer's comment. However, the same pattern of results replicated using the Personal Wellbeing Index (Cummins, Eckersley, Pallant, Vugt, & Misajon, 2003). These analyses are presented in Supplementary File 3.

support men perceive available and the associated wellbeing benefits. Moreover, given the role masculinity norms may play, future investigations could consider whether the gender differences shown here shift as social attitudes change (e.g., Liu & Umberson, 2008).

The results indicate that social support helps to explain gender differences in the relationship status–wellbeing link, but it is not the *only* explanation given that social support only partially mediated this link. Theory regarding social support is underdeveloped, with little differentiation between direct or indirect support (Chipperfield & Havens, 2001), or perceived and received social support (Haber, Cohen, Lucas, & Baltes, 2007). Our finding that differences in perceived support are important in understanding gender differences in the link between relationship status and wellbeing may arise because of differences in the perceived appropriateness of drawing on support from others, beliefs about whether others will provide support, or actual support seeking and provision across different types of relationships. However, focusing solely on support processes (e.g. Coombs, 1991; Chipperfield & Havens, 2001; Taylor, 2011; Schwartz et al., 2004) may inhibit theorizing about further mechanisms that could explain the persistent gender differences in the links between relationship status and wellbeing, such as the social role expectations and meaning associated with being single versus being in a relationship for men and women.

One particularly important direction for future research is to consider whether the positive effects of social support when men are involved in romantic relationships versus single also occur when relationship quality is low. We focused on relationship status given the prior theoretical propositions regarding gender differences in the links between status and wellbeing. However, acrimonious relationships will likely erode the greater perceived support associated with romantic relationships for both men and women (Robles et al., 2014). Some research suggests that the cost of unhappy relationships may be particularly true for women who may respond to relationship difficulties more negatively (Kiecolt-Glaser & Newton,

2001; Wanic & Kulik, 2011). Yet, if men particularly rely on romantic partners for support, men's perceived support may be particularly vulnerable when relationship quality is poor.

Similarly, our focus on relationship status (in a relationship or not) may miss differences in *types* of romantic relationships. Research suggests that those who are living together but not married are still happier than those who are single, but not to the same extent as those who are married (Blanchflower & Oswald, 2004; Kim & McKenry, 2002; Wu et al., 2003). Similarly, people who have been divorced, separated, or widowed tend to be less happy than those who were never married (Alesina et al., 2004, Diener et al., 2000), and these transitions can affect men and women differently (Liu & Umberson, 2008; Williams & Umberson, 2004). Nonetheless, additional analyses in the current research revealed that the benefits of relationship status, perceived support and wellbeing, and gender differences in this pathway, were similar across relationship types, with one exception. The effects were similar for both men and women who were divorced, separated, or widowed, which might be due to the challenges that these events bring for both men and women.

Conclusion

Our comprehensive examination of the links between romantic partners, social support, and wellbeing in a large nationally representative sample support a commonly accepted but poorly investigated theoretical proposition: relationship status matters more for men's versus women's wellbeing because men's perceived social support is more strongly linked to whether or not they have a partner. Consistent with this proposition, the links between being in a relationship and perceived support was stronger for men than for women, and lower perceived support partially accounted for why single men experienced lower wellbeing than single women. The results indicate that men without a partner are likely to perceive they have less social support available and, thus, experience poorer wellbeing.

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Table 1

Bivariate correlations between all demographic variables and scale variables

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. |
|--|------------------|-----------|-----------|-----------|------------------|-----------|----------------|----------------|----------------|
| 1. Age | - | -.040 | -.027 | -.109 | -.025 | .146 | -.004 | .167 | .139 |
| 2. Ethnicity – Maori (0 non-Maori, 1 Maori) | -.032 | - | .011 | -.037 | -.087 | -.069 | -.005 | -.009 | -.044 |
| 3. Ethnicity – Pacific (0 non-Pacific, 1 Pacific) | -.078 | .017 | - | .015 | -.037 | .001 | .021 | .005 | -.004 |
| 4. Ethnicity – Asian (0 non-Asian, 1 Asian) | -.123 | -.061 | .019 | - | .061 | -.035 | -.041 | .007 | -.007 |
| 5. Socioeconomic Status | -.029 | -.065 | -.027 | .025 | - | .160 | .099 | .082 | .103 |
| 6. Relationship Status (0 no relationship, 1 relationship) | -.015 | -.076 | -.047 | -.009 | .080 | - | .155 | .194 | .284 |
| 7. Social Support | -.006 | -.024 | -.001 | -.069 | .115 | .111 | - | .421 | .459 |
| 8. Self Esteem | .160 | -.009 | .003 | .021 | .102 | .105 | .394 | - | .668 |
| 9. Life Satisfaction | .080 | -.064 | -.034 | -.029 | .115 | .238 | .457 | .606 | - |
| M (SD) - women | 48.54 (13.73) | .12 (.32) | .03 (.16) | .05 (.22) | 54.85 (15.23) | .74 (.44) | 6.11 (1.02) | 5.17 (1.25) | 5.28 (1.18) |
| M (SD) - men | 51.32 (13.88) | .10 (.30) | .02 (.15) | .04 (.20) | 52.60 (15.87) | .80 (.40) | 5.78 (1.12) | 5.26 (1.20) | 5.15 (1.19) |

Note. $N = 20,774$. Correlations for women are below the diagonal, correlations for men are above. $p < .05$ for $r > .018$. Life satisfaction and self-esteem are measured on a scale from 1-7. Socioeconomic status is measured on a scale from 10-90 where 90 represents the highest socioeconomic status. Means are averaged across scale items.

Table 2

Means and standard deviations for women and men depending on relationship status

| | Women | | Men | |
|-------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | No Partner | Partner | No Partner | Partner |
| Life Satisfaction | 4.80 (1.34) ^{a,b} | 5.45 (1.08) ^{a,b} | 4.46 (1.44) ^{a,b} | 5.32 (1.06) ^{a,b} |
| Self-Esteem | 4.95 (1.35) ^{a,b} | 5.24 (1.20) ^{a,b} | 4.78 (1.39) ^{a,b} | 5.37 (1.12) ^{a,b} |

Note. a = gender difference within same relationship status at $p < .001$, b = partnership difference within same gender at $p < .001$.

Table 3

Regression pathways predicting perceived social support with relationship status and covariates for men and women

| | Perceived Social Support | | | | | | | | | | | | | |
|--------------------------------------|--------------------------|---------|-----------|----------|----------|---------------|-------|----------|---------|-----------|----------|----------|---------------|-------|
| | Women | | | | | | | Men | | | | | | |
| | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> | | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> | |
| Age | .000 | .000 | .001 | 0.016 | .987 | -.001 | .001 | -.002 | -.027 | .001 | -2.242 | .025 | -.004 | .000 |
| Socioeconomic Status | .006 | .105 | .001 | 10.694 | <.001 | .005 | .007 | .005 | .081 | .001 | 6.343 | <.001 | .003 | .007 |
| Ethnicity – Maori | -.037 | -.014 | .028 | -1.326 | .185 | -.091 | .020 | .033 | .010 | .041 | 0.804 | .421 | -.050 | .114 |
| Ethnicity – Pacific | .058 | .011 | .055 | 1.059 | .290 | -.050 | .162 | .198 | .030 | .071 | 2.794 | .005 | .050 | .330 |
| Ethnicity – Asian | -.283 | -.068 | .046 | -6.170 | <.001 | -.375 | -.196 | -.190 | -.039 | .064 | -2.950 | .003 | -.323 | -.067 |
| Relationship status (0 no, 1 yes) | .217 | .107 | .022 | 9.966 | <.001 | .176 | .260 | .370 | .151 | .036 | 10.421 | <.001 | .299 | .439 |

Note. Standard errors, t-values, and confidence intervals are for unstandardized effect sizes.

Table 4

Regression pathways predicting life satisfaction with relationship status, perceived social support and covariates

| | Life Satisfaction | | | | | | | | | | | | |
|--------------------------------------|-------------------|---------|-----------|----------|----------|---------------|----------|---------|-----------|----------|----------|---------------|--|
| | Women | | | | | | Men | | | | | | |
| | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> | |
| Age | .007 | .080 | .001 | 10.237 | <.001 | .006 .008 | .010 | .116 | .001 | 11.218 | <.001 | .008 .012 | |
| Socioeconomic | .004 | .048 | .001 | 5.968 | <.001 | .002 .005 | .002 | .024 | .001 | 2.405 | .016 | .000 .003 | |
| Status | | | | | | | | | | | | | |
| Ethnicity – Maori | -.123 | -.034 | .031 | -4.002 | <.001 | -.185 -.065 | -.085 | -.021 | .044 | -1.942 | .052 | -.172 -.001 | |
| Ethnicity – Pacific | -.136 | -.019 | .064 | -2.118 | .034 | -.265 -.011 | -.099 | -.012 | .082 | -1.200 | .230 | -.266 .054 | |
| Ethnicity – Asian | .070 | .013 | .044 | 1.573 | .116 | -.016 .158 | .159 | .027 | .060 | 2.648 | .008 | .046 .281 | |
| Relationship status (0 no, 1 yes) | .479 | .177 | .023 | 20.583 | <.001 | .433 .523 | .557 | .186 | .035 | 15.702 | <.001 | .490 .629 | |
| Social Support | .631 | .475 | .014 | 44.021 | <.001 | .603 .659 | .581 | .477 | .017 | 33.621 | <.001 | .547 .614 | |

Note. Standard errors, t-values, and confidence intervals are for unstandardized effect sizes.

Table 5

Regression pathways predicting self-esteem with relationship status, perceived social support and covariates

| | Self-Esteem | | | | | | | | | | | |
|--------------------------------------|-------------|---------|-----------|----------|----------|---------------|----------|---------|-----------|----------|----------|---------------|
| | Women | | | | | | Men | | | | | |
| | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> | <i>b</i> | β | <i>se</i> | <i>t</i> | <i>p</i> | 95% <i>CI</i> |
| Age | .016 | .184 | .001 | 20.501 | <.001 | .015 .018 | .015 | .176 | .001 | 14.908 | <.001 | .013 .017 |
| Socioeconomic | .005 | .057 | .001 | 6.435 | <.001 | .003 .006 | .002 | .021 | .001 | 1.813 | .070 | .000 .003 |
| Status | | | | | | | | | | | | |
| Ethnicity – Maori | .072 | .019 | .035 | 2.054 | .040 | .005 .142 | .062 | .016 | .043 | 1.437 | .151 | -.024 .141 |
| Ethnicity – Pacific | .168 | .022 | .070 | 2.395 | .017 | .029 .305 | .048 | .006 | .084 | 0.571 | .568 | -.117 .212 |
| Ethnicity – Asian | .449 | .079 | .050 | 9.062 | <.001 | .352 .546 | .283 | .049 | .070 | 4.024 | <.001 | .145 .419 |
| Relationship status (0 no, 1 yes) | .170 | .061 | .026 | 6.632 | <.001 | .119 .218 | .311 | .107 | .037 | 8.393 | <.001 | .241 .387 |
| Social Support | .627 | .457 | .016 | 38.597 | <.001 | .595 .660 | .574 | .484 | .018 | 32.366 | <.001 | .540 .609 |

Note. Standard errors, t-values, and confidence intervals are for unstandardized effect sizes.

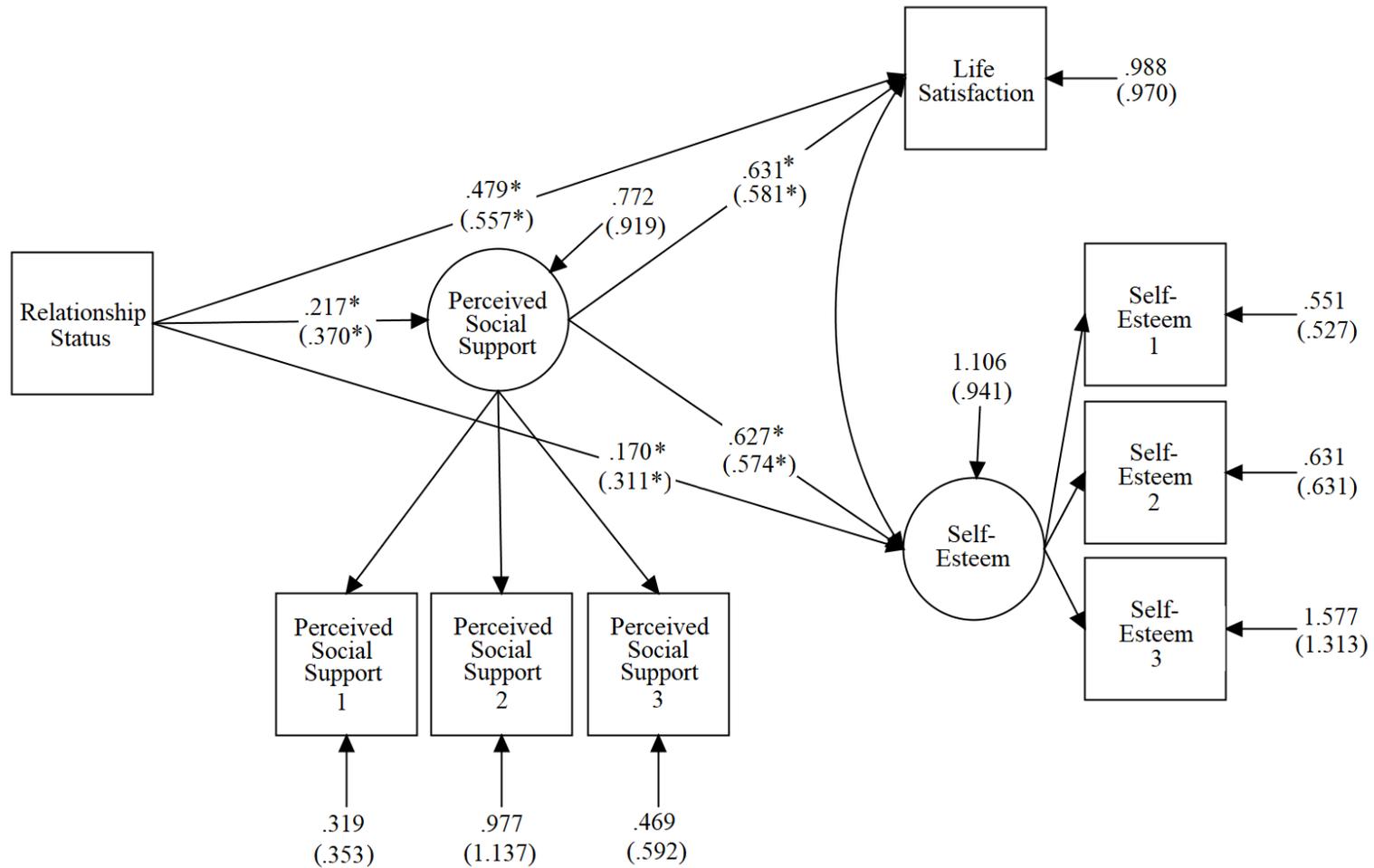


Figure 1. Structural equation model with standardized coefficients presenting the pathways between relationship status and wellbeing outcomes mediated by social support for women ($N = 13,044$) and men (in brackets, $N = 7,730$). The model controls for age, ethnicity, and socioeconomic status, * $p < .001$.