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Cross-cultural Differences in the Links between Familial Support and Strain in Married and Single Adults' Well-being

Lester Sim, Singapore Management University

Robin Edelstein, University of Michigan Ann Arbor

Author Note

We have no conflicts of interest to disclose.

Correspondence: Lester Sim, https://orcid.org/0000-0003-3339-9348; School of Social Sciences, 10 Canning Rise, Singapore 179873. lestersim@smu.edu.sg

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Abstract

Single adults face greater stigmatization and report poorer well-being compared to those who are married, but most research has focused on Western samples. In a two-wave combined sample of 4,746 Americans and Japanese participants, we showed that singles, regardless of cultural background, reported poorer health and life satisfaction. Married adults, particularly Americans, reported higher family support, which was indirectly related to higher well-being. Both single Americans and Japanese reported greater familial strain; however, strain was significantly associated with lower well-being only among Americans. These findings extend the understanding of singlehood and well-being to an Asian context and emphasize the unique roles of familial support and strain.

Keywords: singlehood, familial support, familial strain, culture, well-being

SOR: This research provides a cross-cultural perspective on singlehood and extends understanding beyond Western contexts by highlighting cultural differences in familial support/strain and their impacts on singles' well-being. By emphasizing the role of cultural and familial dynamics, this study offers valuable insights with implications for personal relationships and societal policies.

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Cross-cultural Differences in the Links between Familial Support and Strain in Married and Single People's Well-being

Marriage has long been considered a cornerstone of societal structure and personal fulfilment, while singlehood has been linked to stigma, isolation, and poorer physical health (Girme et al., 2022). Yet, as global marriage rates decline and the proportion of singles is at an all-time high (United Nations, 2019), does remaining unmarried still correlate with poorer health and well-being (Adamczyk, 2016; Ta et al., 2017)? Intriguingly, recent research conducted primarily in Western contexts, where singlehood is more widely accepted, suggests that singles often report stronger ties with family and friends than coupled adults (Sarkisian & Gerstel, 2016). In stark contrast, singles in Asia–where marriage remains more culturally essential–experience higher levels of discrimination and poorer mental health than their Western counterparts (Himawan et al., 2018). These discrepant findings point to potential cross-cultural heterogeneity in how singlehood impacts well-being, raising the question: Why? To address this, the present study examines how relationship status (single versus married) relates to physical health and life satisfaction (two outcomes commonly associated with the benefits of marriage) in a combined sample of Japanese and American adults.

Marriage Expectations

Marriage is often linked to significant health and psychosocial benefits (Purol et al., 2021; Sullivan et al., 2010). However, single individuals often contend with systemic inequities, such as unfavorable tax policies and biased social systems, alongside pervasive stereotypes that depict them, among others, as immature or burdensome to their families (DePaulo, 2006; Girme et al., 2022). These stigmas not only perpetuate social exclusion but also compound the well-

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being challenges faced by singles worldwide, with their intensity and impact varying across cultural contexts (e.g., Slonim et al., 2015).

Western cultures tend to emphasize individualism, independence, and autonomy (Markus & Kitayama, 1991), which lessens expectations of matrimony. As a corollary, many Western singles willingly embrace their status (Park et al., 2022), correlating with heightened satisfaction with singlehood status (Böger & Huxhold, 2020; Kislev, 2019). Perhaps this may explain why contemporary research indicates that Westerners are more likely to engage in non-traditional relationship arrangements, such as cohabitation or non-traditional partnerships outside of marriage (Morris et al., 2007), and perceive singlehood as a voluntary decision (Kislev, 2019).

In contrast, Asian cultures are influenced by deep-rooted sociohistorical and cultural beliefs that position romantic relationships primarily as pathways to marriage (Chen & Tong, 2021; Jones & Yeung, 2014). Single Asians often remain "never married" until they find a partner willing to commit to marriage, as alternatives like cohabitation, remarriage, dating in late adulthood, and divorce are socially stigmatized (Furstenberg, 2015). This cultural emphasis on marriage often leaves singles feeling caught between their personal status and their cultures' value system, with this dissonance contributing to heightened distress and poor well-being (Lee & Ono, 2012).

Familial Support and Strain: Cross-cultural Differences

What might explain the gap between married and single peoples' well-being? One of the most consistent predictors of well-being is access to and quality of social support (Siedlecki et al., 2014). Marriage often provides a stable source of support and facilitates new opportunities for thriving (Feeney & Collins, 2015). Consequently, single adults are assumed to lack such support, potentially diminishing their well-being; however, often omitted from this discourse is

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the reality that single individuals frequently turn to immediate family to fulfil socioemotional and belongingness needs (Chopik, 2017) and may have more opportunities to nurture non-romantic relationships (Girme et al., 2022). For instance, single people, including the never married, are more likely to share close ties, socialize, and receive help from their family; they are also more likely to have time to nurture and maintain their relationships with their parents and siblings when compared to people who are married (Burton-Chellew & Dunbar, 2015; DePaulo, 2006). At the same time, marriage may bring couples closer at the expense of straining relationships with extended family members (Laditka & Laditka, 2001). This dynamic suggests that single adults may derive unique benefits from non-marital familial ties. However, recent findings complicate this view. Single adults report perceiving less support and feeling less equipped to seek advice and comfort compared to their married counterparts (Girme et al., 2021). This duality highlights a key paradox: while familial relationships can provide comfort, they may also become sources of strain due to societal and familial pressures to marry. In fact, many single people might feel even greater pressure from their family *because* they are their primary source of comfort; such pressure not only creates stress but may also diminish the perceived support that single adults receive, which culminates in worse well-being (Girme et al., 2022).

Critically, the manifestation of familial support and strain varies significantly across cultures, reflecting differences in how families interact and impose expectations. Single individuals often face a lack of familial support, as families tend to prioritize spousal or nuclear ties over extended family ties (Girme et al., 2022). In Western societies where individualism is encouraged, the inherent assumption of self-sufficiency (Markus & Kitayama, 1991) can leave single individuals feeling more isolated, which negatively impacts their well-being. Yet, familial support, when present, is often explicit, direct, and emotion-focused (Chen et al., 2015). Open

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expressions of care, such as verbal encouragement, validation, and active listening, directly address emotional needs and foster a sense of belonging, enabling single individuals with strong supportive familial networks to mitigate and bolster some of the negative effects of singlehood (Ishii et al., 2017). By contrast, in collectivistic Asian cultures, where interdependence and family obligations are emphasized, familial support is more implicit and action-oriented (Kim et al., 2008; Sim et al., 2023). Families often provide instrumental assistance, such as financial aid, caregiving, or help with daily tasks, rather than verbal affirmations (Ishii et al., 2017). However, this form of support may not be adequate in addressing the emotional burdens caused by experiences of singlehood discrimination. Moreover, familial support in Asian contexts often comes with unspoken obligations or strings attached, such as heightened expectations to fulfil other familial duties, which can erode its benefits, leaving single individuals in Asia even more vulnerable to stress and emotional strain, and compromised well-being (Himawan et al., 2018).

Social strain has been conceptualized as the absence of available support when it is needed, critiques related to one's behavior or situation, or unsolicited advice (Coty & Wallston, 2010). Within the familial context, familial strain may refer to a chronic form of interpersonal tension within close family relationships characterized by criticism, excessive demands, disappointment, and unmet expectations. Unlike social pressure or perceived discrimination, familial strain is embedded within the intimate, emotionally invested space of family life. This strain may be especially pronounced in interdependent cultural contexts like Japan, South Korea, and China where (1) marriage remains the primary context for childbearing and is closely tied to access to family support in later life, and (2) fulfilling prescribed familial roles (e.g., marriage, childbearing, caregiving) remains integral to maintaining harmony, filial duty, and intergenerational continuity (Raymo et al., 2015). For singles in these contexts, deviations from

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these norms can generate persistent emotional strain, manifested through unsolicited matchmaking, nagging, subtle (or overt) expressions of disappointment, or support that is delivered with judgment or conditionality (Brinton et al., 2021). These behaviors, while often motivated by concern, reflect both relational ambivalence (Willson et al., 2003), where support and critique co-exist, and social control (Umberson, 1987), as families attempt to regulate individual behavior in line with cultural concern. In this way, familial strain reflects a unique interpersonal construct distinct from social pressure or discrimination; rather, it emerges from the emotionally charged dynamics of family life and reflects sustained relational stress.

In Asian societies, these dynamics may result in a "double burden" for single adults: heightened expectations to meet family obligations alongside a perceived lack of emotional reciprocity or unconditional support. Over time, asymmetries in expectations, alongside a perceived lack of emotional reciprocity, can contribute to perceptions that family members are overly critical, unresponsive, or demanding, undermining health and exacerbating distress.

By contrast, familial strain in Western cultures tends to be less overt, often manifesting as subtle disapproval or reduced investment rather than the *added* systemic familial demands to marry that are more frequently seen in Asian cultures (Markus & Kitayama, 1991). Nevertheless, while less direct, these dynamics can still undermine well-being by intensifying feelings of being unsupported and escalated levels of hostility. Together, these patterns suggest that familial strain, as operationalized through interpersonal tension such as criticisms, unmet expectations, and perceived emotional imbalance, may vary in intensity across cultures, with significant implications for single Asians' well-being.

Current Study

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The present study examined the role of culture in the links between individuals' relationship status (single versus married), familial support/strain, and their well-being. We chose American and Japanese participants because Western research comparing married and single individuals has been conducted primarily in America. Japan was chosen due to its high proportion of single adults (United Nations, 2019). Additionally, we restricted our sample to participants aged 30 and above, given that younger adults are often viewed as "marriable" or "temporarily single" (Kaiser & Kashy, 2005) and are thus less likely to experience pressures to marry or show marked differences in well-being. Scholars in the singlehood literature commonly use age 30 as an informal benchmark to differentiate between individuals who are temporarily single versus those who are increasingly perceived as deviating from normative timelines for marriage (i.e., above 30 years old) (Situmorang, 2007; Yeung & Hu, 2016).

For our indirect effects model, we tested mediation predicting physical health and life satisfaction at Time 2 from Time 1 relationship status and family dynamics. Although controlling for T1 outcomes would allow us to model residual change, we chose not to include them due to the high temporal stability of these outcomes noted in past research, which could suppress our ability to detect indirect effects. Instead, we modeled predictors of Time 2 well-being directly, consistent with our goal of understanding how earlier social-relational factors (i.e., relationship status) shape subsequent outcomes.

In line with extant literature, therefore, we hypothesized a main effect of relationship status on two markers of well-being (i.e., physical health and life satisfaction). Specifically, we expected that singles would report lower well-being than married people. Additionally, we posit that familial support and strain would independently explain this association, with a focus on cross-cultural variations between American and Japanese participants. Specifically, we predicted

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that familial support would have a stronger positive association with well-being among Americans, as research shows that single, more than married, Westerners enjoy stronger kinship ties (Sarkisian & Gerstel, 2016). We anticipated that familial strain would have a greater negative association with well-being among Japanese participants, as unmarried Japanese individuals may feel greater family expectations to marry, leading to compromised well-being.

Methods

Participants

We combined data from the Midlife in the US/Japan (MIDUS/MIDJA), two large-scale, nationally representative samples of mid- and later-life adults. These datasets are commonly used in cross-cultural research, and they include assessments of psychological and social factors associated with health and well-being measured over 18 (MIUDS) and 5 (MIDJA) years. MIDUS began in 1995, with follow-ups in 2004 (N = 4,964) and 2013 (N = 3,294). MIDJA started in 2008 (N = 1,027), with a follow-up in 2012 (N = 657). An important goal of MIDJA was to provide a cross-cultural sample for comparison with the MIDUS dataset; thus, items in MIDJA were identical to those used in the MIDUS (but translated into Japanese). We used data from MIDUS2 and 3, and MIDJA1 and 2 to ensure more similar years of data collection.

Participants self-reported their relationship status from one of 5 possible options (i.e., married, separated, divorced, widowed, never married). We only included participants who were either “married” or “never married,” excluding those who were “divorced,” “separated,” or “widowed.” Follow-up items to assess relationship (vs. marital) status differed by sample (due to differences in availability of items in MIDUS versus MIDJA): First, participants were presented with the item “Rate current relationship/marriage” in both MIDUS and MIDJA (at both time points). Participants who provided a valid response for this item (i.e., not missing) were deemed

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as not “single” and were removed from analyses. Second, in MIDUS, participants were asked about cohabitation status at both time points (there were no items concerning cohabitation status in MIDJA). Participants who reported being in a cohabitating relationship were removed from analyses. Third, in MIDJA, participants were presented with a single item: "Are you currently in a relationship?". This item was only asked at MIDJA2. Participants who indicated they were in a relationship at MIDJA2 were removed from analyses. Doing so yielded a final analytical sample of 10.07% single participants across datasets.

Our analytical sample consisted of 3,505 married (M_{age} = 54.73, *SD* = 12.03, 48.4% women) and 308 single (8.08% of all American participants; M_{age} = 51.09, *SD* = 12.53, 56.5% women) Americans; and 710 married (M_{age} = 55.34, *SD* = 13.70, 48.0% women) and 164 single (18.76% of all Japanese participants; M_{age} = 45.26, *SD* = 13.12, 47.0% women) Japanese adults. This sample size was sufficient to detect effects as small as Cohen f^2 = .02. In the MIDUS sample, most participants identified as White (91.4%), followed by Black or African American (3.9%), Native American (1.3%), and Asian (0.5%). The remaining participants identified as Native Hawaiian or Pacific Islander (0.2%), other races (2.3%), or selected “don’t know” or “refused” to provide a response (0.5%). Due to the very small proportion of Asian participants in the American sample (*n* = 20) and because preliminary analyses revealed no meaningful differences in key outcomes when excluding this subgroup, all participants were retained in the analyses for representativeness and statistical power.

In line with our age cutoff, participants’ ages ranged from 30 to 84 across both samples. We examined sociodemographic differences (i.e., age and education levels) by culture using independent-samples *t*-tests. American participants were slightly older than Japanese participants, $t(4685) = 2.11$, $p = .035$, though the effect size was small (Cohen’s $d = .08$, 95% CI

[0.005, 0.153]). Participants also provided their response to a single item that asked for their highest level of education (i.e., covariate) attained on a scale from 1 (no school/some grade school) to 8 (some graduate school); both the mean and median response was "1 to 2 years of college." American participants reported significantly higher levels of education, $t(4670) = 9.79$, $p < .001$, with a moderate effect size (Cohen's $d = .37$, 95% CI [0.295, 0.443]). As such, we included participants' gender, age, and education levels as covariates in our analyses.

Institutional Review Board approval was exempted as secondary data analysis was conducted on publicly available datasets. While the current study was not preregistered, the complete data and documentation for the datasets are accessible via the Inter-University Consortium for Political and Social Research website (icpsr.umich.edu).

Measures

Familial support and strain. Eight items were used to assess participants' familial support (4-items) and strain (4-items), adapted from Schuster et al. (1990) and Walen and Lachman (2000). Both measures have been used frequently in studies assessing support and care within the family environment (e.g., Fitzgerald & Morgan, 2023; Horwitz et al., 2015). They also demonstrate strong construct validity in prior research using MIDUS data. Familial support is positively correlated with indicators of well-being (i.e., social integration), positive mood, and lower anxiety ($r = .26$ to $.38$; Fitzgerald & Morgan, 2023; Walen & Lachman, 2000). Familial strain has shown robust associations with psychological distress, negative mood, and lower levels of control ($r = .22$ to $.29$; Cotter & Lachman, 2010; Pitzer & Fingerman, 2010; Walen & Lachman, 2000).

Participants were presented with the stem, "Not including your spouse or partner, …" and for familial support, they responded to items such as "How much do members of your family

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really care about you?" and "How much can you open up to them if you need to talk about your worries?". For familial strain, participants provided their responses to items such as "How often do they criticize you?" and "How often do they let you down when you are counting on them?" All items were answered on a four-point scale (1 = *never*, 4 = *often*). Higher scores for each scale reflect higher levels of familial support ($\alpha_{support}$'s = .835 - .840) and strain (α_{strain}'s = .783 - .858).

Subjective physical health. Participants were asked to provide subjective ratings of their physical health on a single item: "Using a scale from 0 to 10 where 0 means "*the worst possible health*" and 10 means "*the best possible health*," how would you rate your health these days?" A similar approach has been used in other research assessing global physical health (Alonso-Ferres et al., 2020). Of note, single-item measures of self-reported physical health have demonstrated similar predictive power to longer-form measures (Macias et al., 2015) and comparable validity across multiple countries (van Ginneken & Groenewold, 2012). The single item used in the current study has been extensively validated in MIDUS and other population health studies to predict future mortality and disability (Idler & Benyamini, 1997), demonstrating strong predictive validity. It has also shown robust convergent validity with more objective health indices, including chronic health conditions (r = .38; Fitzgerald & Morgan, 2023).

Life satisfaction. Six items (Prenda & Lachman, 2001) were used to measure participants' satisfaction with various domains of their lives (see also Atherton et al., 2024 for a similar approach). A sample item was "How would you rate your life overall these days?" (0 = *the worst possible*, 10 = *the best possible*). Higher mean scores reflected higher levels of life satisfaction (α_{MIDJA} = .754 - .778; α_{MIDUS} = .650 - .699). This scale is positively and significantly associated with the Satisfaction with Life Scale (Diener et al., 1985), with correlations ranging from r = .29 to .41 for individual domains and r = .53 for life in general for the overall MIDUS2

sample and from r = .24 to .42 for individual domains and r = .62 for life in general for the overall MIDJA1 sample (Robustelli & Whisman, 2018). Convergent validity has also been shown through its associations with other well-being indicators, such as engagement with life (r = .21) and optimism (r = .22), while discriminant validity is supported by weak correlations with cognitive functioning (r = .04), which is theoretically less related to subjective well-being (Bhattacharyya et al., 2025). These findings collectively support the psychometric adequacy of the life satisfaction measure across both cultural samples.

Analytical Plan

Main data analyses were conducted using Structural Equation Modeling (SEM) in Mplus. SEM was chosen due to its ability to simultaneously model multiple pathways and latent constructs. All models included relationship status (married vs. single) as the predictor, familial support and strain as mediators, and later well-being (life satisfaction, self-rated health) as outcomes. Indirect effects were computed to test mediation via familial dynamics.

Although T2 outcomes were specified in the main analyses to maintain temporal separation between predictors and outcomes, this approach should be interpreted as modeling contemporaneous associations (rather than residualized change), as the predictor and mediators were measured concurrently at T1. Thus, we also estimated a parallel set of analyses using T1 outcomes to evaluate the robustness of our findings. When we re-estimated all models predicting T1 outcomes, the indirect effects remained statistically significant and consistent in direction (see *Supplementary Table S1 and Figures S1-3*), supporting the robustness of the observed associations.

To account for non-normality and potential concerns with unequal group sizes (given the small proportion of singles), we used the Maximum Likelihood Estimator with Robust Standard

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Errors (MLR), which provides robust standard errors and a chi-square test statistic resistant to violations of normality and heteroscedasticity. Full Information Maximum Likelihood (FIML) estimation was used to handle missing data, and all models controlled for age, gender, and education (Böger & Huxhold, 2020; Girme et al., 2022) *(see supplementary Table S2 and Figures S4-6 for analyses without covariates).* We report standardized (β) estimates, standard errors, and *p*-values for all model paths. Model fit was evaluated using conventional cutoffs (CFI ≥ .90, RMSEA ≤ .08, SRMR ≤ .08).

Analyses proceeded in three stages. First, we conducted preliminary analyses to assess bivariate associations among our demographic factors, family support/strain, and well-being in SPSS 30.0. Here, we included descriptive statistics, Pearson's correlation, and independent samples *t*-tests. Second, we estimated the SEM using the pooled sample to test the overall model. Finally, multigroup SEM was conducted to examine whether (and how) these pathways differed across countries (US vs. Japan).

Results

Preliminary Analyses

When we ran bivariate correlations across the pooled sample, several sociodemographic variables were associated with key constructs. Being single (vs. married) was negatively associated with younger age (r = .14, p < .001) and male gender (r = –.03, p = .048) but not significantly associated with education (r = –.02, *ns*). In line with our theoretical framework, being single was also modestly associated with lower family support (r = .14, p < .001), higher family strain (r = –.08, p < .001), and lower physical health (r = .11–.12) and life satisfaction (r = .21–.28). Higher education was positively associated with life satisfaction (r = .17–.18) and health (r = .16–.17), and negatively associated with strain (r = .01–.02). These associations

provide initial support for the proposed pathways in our SEM model and for the inclusion of our proposed covariates. For a breakdown of descriptive statistics and bivariate correlations (split by country), please refer to Table 1.

Next, we conducted a series of *t*-tests to examine for cross-national differences in key constructs. Cross-national comparisons revealed that Americans reported significantly greater familial support (M = 3.28, SD = 0.74) than Japanese participants (M = 2.51, SD = 0.72), $t(337) = 8.55$, $p < .001$, Cohen's d = 1.04. In contrast, familial strain did not differ significantly by country (t = –0.02, p = .985, d = –0.002). Health and life satisfaction were moderately correlated (r = .65–.69), indicating convergence across well-being indicators.

To examine cross-national differences in well-being, we conducted a series of independent samples *t*-tests comparing American and Japanese participants on physical health and life satisfaction at both Time 1 and Time 2. At Time 1, Americans reported significantly better physical health (M = 7.43, SD = 1.53) than Japanese participants (M = 6.23, SD = 1.94), $t(3973) = 19.07$, $p < .001$, d = 0.73. They also reported higher life satisfaction (M = 7.59, SD = 1.21) than Japanese participants (M = 6.17, SD = 1.55), $t(3985) = 28.74$, $p < .001$, d = 1.10. These patterns held at Time 2: Americans again reported better physical health (M = 7.37, SD = 1.56) than their Japanese counterparts (M = 6.26, SD = 2.02), $t(2693) = 14.00$, $p < .001$, d = 0.67, and significantly greater life satisfaction (M = 7.67, SD = 1.27) compared to Japanese participants (M = 6.27, SD = 1.56), $t(2700) = 22.04$, $p < .001$, d = 1.05. Effect sizes ranged from medium to large across all comparisons. These results indicate robust and consistent cultural differences in well-being across both time points, with Americans reporting higher subjective health and life satisfaction than Japanese participants.

Main Analyses

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We examined paths between relationship status, familial support/strain, and well-being using SEM. Both models fit well: physical health (comparative fit index [CFI] = .933, root mean square error of approximation [RMSEA] = .063, standardized root mean square residual [SRMR] = .040) and life satisfaction (CFI = .93***4***, RMSEA = .063, SRMR = .040). Figure 1 shows the path coefficients of the SEM model using the pooled dataset, while Table 2 shows all tested indirect effects. Married adults reported more baseline familial support and less strain. Baseline familial support was positively associated with later physical health and life satisfaction. Baseline familial strain was negatively associated with later physical health and life satisfaction. Both indirect effects were significant.

Multigroup analyses were used to test for potential differences between American and Japanese participants.[1]. Model fits were acceptable for physical health (CFI = .923, RMSEA = .061, SRMR = .048) and satisfaction (CFI = .924, RMSEA = .061, SRMR = .048). In the US sample (see Figure 2), married versus single participants reported greater familial support and less strain. Baseline familial support was positively associated with later physical health and life satisfaction, while baseline familial strain had a negative impact on both outcomes. Again, both indirect effects were significant.

In the Japanese sample, single versus married participants reported more familial strain, but familial strain did not predict later outcomes (see Figure 3). Interestingly, there was no difference in familial support between married and single adults; baseline familial support predicted later satisfaction but not later physical health. Unlike in the US sample, both indirect effects were nonsignificant for the Japanese sample (see Table 2). Perhaps because both married

[1] Measurement invariance was conducted by comparing fit indices of the configural, metric, and scalar models. We achieved partial scalar invariance (CFI = .936, RMSEA = .080, SRMR = .063), which allowed assessment of group differences in latent means.

and single adults enjoyed the same levels of familial support (nonsignificant path from IV to mediator) and because singles might learn to cope with familial strain related to their singlehood over time (nonsignificant path from mediator to outcome).

Discussion

Our findings revealed that single adults in two cultures reported worse physical health and lower life satisfaction than their married counterparts, reinforcing previous evidence that singles often experience lower well-being globally (Purol et al., 2021; Sullivan et al., 2010). This disparity was partially explained by familial support and strain, but the impact varied across cultures: while familial strain negatively predicted well-being in the American sample, its influence was not significant for Japanese participants. Similarly, familial support was positively associated with well-being in the US but showed weaker and inconsistent effects in Japan. Across the globe, where marriage remains normative, remaining unmarried can lead to prejudice and feelings of inadequacy (Lee & Ono, 2012). Our cross-cultural approach underscores the importance of considering cultural factors when evaluating the implications of singlehood and provides new evidence for the challenges faced by single adults beyond Western societies.

On average, we found that single people reported worse well-being than married people, which is consistent with a large body of existing work (Sullivan et al., 2010). Our study extends this body of work by providing cross-cultural evidence from Japan, a country where marriage remains deeply embedded in societal expectations (Himawan et al., 2018). Single Japanese adults reported worse well-being than married Japanese participants, mirroring trends observed in the US. This suggests that, regardless of cultural context, singlehood continues to be associated with societal norms that marginalize the unmarried (Morris et al., 2007). This marginalization manifests as prejudice, discrimination, and heightened feelings of inadequacy,

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all of which threaten emotional and physical well-being (DePaulo, 2006). Unfortunately, to the extent that marriages are still viewed as normative around the globe (Chen & Tong, 2021; Gaetano, 2014), discrimination against single people and pressure to marry are likely to persist. Given also that the close relationships literature is disproportionately focused on married people, with few studies specifically focused on single adults, our work sheds new light on the challenges experienced by single people and the cultural norms they must navigate while contributing to a more comprehensive understanding of well-being across relationship statuses and cultural contexts.

A key aim of this study was to examine whether familial support and strain could explain the well-being disparities between single and married individuals. Somewhat consistent with our hypothesis, familial support, and familial strain differed as a function of relationship status and culture, albeit not always in the same direction as we had originally hypothesized. In the US, single participants reported lower familial support and higher strain compared to their married counterparts, which contributed to their lower well-being (Girme et al., 2021). Although these findings may appear to contradict prior research suggesting that single individuals enjoy stronger ties to family than married individuals (e.g., Sarkisian & Gerstel, 2016), it is important to distinguish between the structural aspects of family involvement (e.g., frequency of contact, assistance) and the emotional quality of those interactions (i.e., care, count on; criticisms). Our findings focused on perceived emotional support and strain, suggest that greater contact with family does not always translate to more emotionally supportive relationships. Indeed, singles may maintain active involvement with family but also face greater criticism or emotional tension in their interactions, especially in contexts where marriage is viewed as normative. These findings, therefore, may reconcile the seemingly contradictory findings from other empirical

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work demonstrating that single (versus married) adults report perceiving less support and feeling less equipped to seek advice and comfort from their family (Girme et al., 2021). Single individuals may be more embedded in family routines, but they may not always feel emotionally supported and may even be more vulnerable to criticism or unmet expectations, particularly in emotionally charged domains like romantic partnership or life planning. Not surprisingly, single Americans often feel isolated and unsupported, particularly when it comes to emotional guidance and comfort (Adamczyk, 2016; Ta et al., 2017). The greater marital pressure faced by single Americans may continue to strain family relationships, leading to more hostile interactions and increased tension. Additionally, the Western emphasis on spousal or nuclear over extended family ties likely exacerbates this strain, ultimately compromising quality of family support and care and contributing to lower well-being for single Americans (Brinton et al., 2021; Girme et al., 2022).

In contrast, we hypothesized that Japanese singles would experience greater familial strain and lower well-being than Western singles due to the heightened Asian cultural emphasis on marriage (Himawan et al., 2018). While Japanese singles did report significant familial strain, its impact on their well-being was surprisingly nonsignificant. Conceptually, we reason that this may reflect adaptive coping strategies developed by Japanese singles, such as distancing themselves from family pressure or seeking alternative forms of emotional support, which buffers the longitudinal effects of familial strain (Brinton et al., 2021; Raymo et al., 2009). The normalization of marital expectations in Japan may desensitize individuals to family demands, allowing them to maintain family harmony despite personal dissatisfaction. Methodologically, the difference in data collection periods, five (Japanese) versus thirteen (American) years, might explain some of the nonsignificant findings. Familial strain may have a cumulative effect on

well-being, becoming more impactful over a longer period and potentially leading to regret or loneliness later in life that ultimately affects single adults' physical health and life satisfaction.

At the same time, we found no significant difference in reported familial support between single and married Japanese participants. This suggests that, unlike in the US sample, relationship status in Japan was not associated with differential levels of perceived familial support. One possible explanation is that in interdependent cultures like Japan, support is shaped less by individual circumstances (e.g., relationship status) and more by cultural norms that emphasize familial obligation and interdependence (Markus & Kitayama, 1991; Raymo et al., 2009). In such contexts, familial support, particularly instrumental or task-oriented forms of support, may be extended relatively equally to all family members, regardless of their marital status (Ishii et al., 2017; Kim et al., 2008). However, although levels of support may be similar, its subjective meaning and impact may vary. For single individuals navigating cultural stigma, even well-intended acts of support may be accompanied by implicit judgment or pressure to conform (e.g., marry or provide care), which can blunt or even reverse their emotional benefits (Chen et al., 2015). Additionally, support that is indirect or lacks verbal affirmation may be less effective at addressing the emotional needs of singles, particularly in a cultural climate where singlehood remains stigmatized. Put together; these findings suggest that the absence of an association between relationship status and familial support in Japan may reflect both cultural norms around equitable caregiving and the limitations of support that lacks emotional resonance. Importantly, our findings also underscore the need to differentiate not just between support and strain but also between types of support and the cultural meanings attached to them. Had we collapsed these variables into a single index of family relationship quality, we would have

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overlooked meaningful cross-cultural patterns (a common assumption in the existing literature; see also Himawan et al., 2018).

Our findings additionally underscore the need for culturally tailored interventions to support single individuals. In the US, efforts might focus on enhancing familial support through direct emotional expressions and reducing familial strain, which could help mitigate the well-being disparities between singles and married individuals (Sarkisian & Gerstel, 2016). In Japan, enhancing the well-being of single adults may require more than increasing support quantity; it may be especially important to foster more emotionally validating forms of support to reduce the stigma surrounding singlehood that can undermine even well-intentioned family interactions.

There are some important limitations that need to be highlighted. First, although we used rigorous methodology to define singlehood strictly as individuals who are both never married and not currently engaged in a romantic relationship, we acknowledge certain limitations in our classification process. First, we did not have explicit questions asking participants whether they were currently in a relationship (except in MIDJA2), which may have resulted in our inadvertently including partnered individuals in the single category (although single Asians are also likely to be never married; Chen & Tong, 2021; Himawan et al., 2018). The temporal gap between data collection points may also allow for changes in participants' relationship statuses (i.e., single at T1 → in a relationship → single at T2) that are not captured by our study. More frequent and detailed assessments of relationship status in future studies would help to ensure a more precise categorization of singlehood. Second, our mediation models did not adjust for baseline levels of the outcome variables (i.e., T1 health and life satisfaction). While controlling for prior outcome levels allows for the modeling of change over time, doing so can suppress meaningful effects when outcomes are highly stable, as was the case in our dataset. We chose to

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model Time 2 outcomes directly to better capture the associations between Time 1 relationship status, familial experiences, and later well-being. However, this approach means that our models reflect predictors of well-being levels rather than change. Future studies with more frequent measurement occasions and longitudinal assessments of all constructs would help clarify the dynamic interplay between these variables.

Next, although our final sample included substantial numbers of single adults in both the US and Japanese samples, their proportion relative to married participants was smaller, particularly in the MIDUS sample. This imbalance may have reduced our power to detect small or nuanced effects in multigroup comparisons, especially for indirect effects on health outcomes. While robust (MLR) estimation procedures used in the current study may help mitigate this concern, future research would benefit from sampling strategies that ensure greater balance across relationship status groups.

Another limitation concerns the internal consistency of the life satisfaction scale. While reliability was acceptable in the Japanese sample (Cronbach's α = .75 to .78), it fell below the conventional threshold in the American sample (Cronbach's α = .65 to .70). This lower reliability, although consistent with prior research using the MIDUS life satisfaction measure (e.g., Atherton et al., 2024), may have attenuated associations between life satisfaction and other variables, particularly among American participants, and may partially account for the smaller effect sizes observed in some models. Future research should consider employing alternative or expanded measures with stronger psychometric properties across diverse cultural contexts. Doing so would enhance both the precision and generalizability of findings related to well-being across cultural groups.

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Next, considering the growing rates and acceptance (particularly in the West) (Lee & Ono, 2012), perhaps it may be beneficial and informative to examine how satisfied people are with their relationship status, as compared to simply comparing married versus single individuals (Lehmann et al., 2015; Oh et al., 2021). Indeed, recent calls have been made to focus on intrapersonal factors (e.g., attachment styles, acceptance, and fear of singlehood) to better capture the variability among singles and address who may be more or less satisfied with singlehood (Girme et al., 2022). Additionally, our sample consisted of middle-aged participants, limiting the generalizability of findings to other age groups. Studies should explore how relationship status and familial dynamics evolve over the life course, especially as societal expectations around marriage shift (Böger & Huxhold, 2020). Notably, examining other Asian societies would further broaden our understanding of singlehood implications globally and determine whether our findings hold across diverse cultural contexts. Asian countries are not monolithic, and factors such as cultural dimensions (i.e., collectivism versus individualism), population density, and cohabitation norms may shape the experiences of married versus single adults across countries (Himawan et al., 2018). Relatedly, it is also important to be mindful that a country's social policy related to marriage may differ across different Asian countries. Asian countries often target non-marriage through social policies such as providing financial incentives for couples to marry and have children and promoting work-life balance, yet these policies likely fall short in addressing core reasons for non-marriage in their respective countries (Jones et al., 2012). To that end, the Japanese government has emphasized understanding and improving the well-being of the never-married following high rates of suicide-related to isolation and loneliness (e.g., by appointing a Minister of Loneliness in 2021); such nuanced policies can, therefore, be differentially linked to levels of well-being for the never-married across different Asian societies.

In sum, our research offers valuable cross-cultural insights into the well-being of single adults. Despite growing acceptance of singlehood in the West, being unmarried still carries significant stigma and familial pressure, contributing to poor health and life satisfaction globally. Comparing Americans and Japanese, we found that single adults reported worse outcomes compared to married people and that single Japanese felt worse about their health and reported lower life satisfaction. Familial support explained why Americans (particularly married Americans) showed higher well-being, while familial strain helped to explain why single Americans and Japanese reported poorer health and life satisfaction. By addressing these factors with culturally tailored interventions, societies can pave the way for research on diverse single populations and support single adults by recognizing them as valid and fulfilling life choices.

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Table 1

Descriptives and Bivariate Correlations by Country

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	*M*	*SD*	Range	α
1. T1 Gender	—	-.061	-.208**	.008	.268**	.116**	.059	.081	.155**	.136**	.480	.500	0-1	
2. T1 Age	-.065**	—	-.297**	.279**	-.010	-.225**	.020	-.069	.100**	.043	53.450	14.143	30-79	
3. T1 Education	-.076**	-.131**	—	.016	-.002	.067	.053	.122**	.148**	.124**	4.120	1.651	1-7	
4. T1 Rel status	-.044*	.082**	-.059**	—	.031	-.182**	.146**	.065	.329**	.215**	.812	.391	0-1	
5. T1 Support	.106**	.110**	-.001	.131**	—	-.156**	.067	.117*	.243**	.228**	2.560	.656	1-4	.835
6. T1 Strain	.119**	-.236**	-.009	-.064**	-.342**	—	-.137**	-.034	-.177**	-.129**	1.891	.604	1-4	.783
7. T1 Health	.014	-.051**	.147**	.036*	.147**	-.152**	—	.489**	.627**	.386**	6.230	1.943	0-10	
8. T2 Health	-.018	-.061**	.135**	.022	.120**	-.143**	.522**	—	.396**	.635**	6.260	2.016	0-10	
9. T1 Life satis	.021	.192**	.111**	.191**	.322**	-.290**	.599**	.369**	—	.675**	6.170	1.550	0-9.75	.754
10. T2 Life satis	-.021	.172**	.116**	.180**	.264**	-.263**	.416**	.605**	.601**	—	6.272	1.564	.75-9.8	.778
M	.490	54.440	4.723	.919	3.535	2.026	7.430	7.370	7.595	7.670				
SD	.500	12.110	1.628	.273	.577	.584	1.532	1.562	1.214	1.271				
Range	0-1	30-84	1-7	0-1	1-4	1-4	0-10	0-10	1.25-10	2.40-10				
α					.840	.858			.650	.699				

Note. Total N = 4,687. Correlations and descriptives for American participants (n = 3,813) are under the diagonal; correlations and descriptives for Japanese participants (n = 874) are above the diagonal. Relationship status: 0 = *single*, 1 = *married*; Gender: 0 = *male*, 1 = *female*. T1 = *Time 1*; T2 = *Time 2*.

* $p < .05$; ** $p < .001$.

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Table 2

Standardized SEM Estimates for Relationship Status, Familial Support/Stain, and Well-Being

	Health			Life satisfaction		
Model pathways	*B*	*SE*	*p*	*B*	*SE*	*p*
Combined analyses						
Indirect effects						
T1 Relationship status → T1 Familial support → T2 Outcome	**.036**	**.006**	**<.001**	**.058**	**.009**	**<.001**
T1 Relationship status → T1 Familial strain → T2 Outcome	.006	.003	.056	**.012**	**.003**	**<.001**
Multigroup analyses						
Japan model *indirect effects*						
T1 Relationship status → T1 Familial support → T2 Outcome	.003	.005	.487	.006	.009	.493
T1 Relationship status → T1 Familial strain → T2 Outcome	.009	.010	.342	.013	.011	.188
US model indirect effects						
T1 Relationship status → T1 Familial support → T2 Outcome	**.011**	**.005**	**.014**	**.026**	**.006**	**>.001**
T1 Relationship status → T1 Familial strain → T2 Outcome	**.009**	**.004**	**.014**	**.011**	**.004**	**.007**

Note. Relationship status (RS): 1 = *married*, -1 = *single*. T1 = *Time 1*; T2 = *Time 2*. Total *N* = 4,687 (US *n* = 3,813; Japan *n* = 874). Significant pathways are bolded. Covariates include gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Table S1*).

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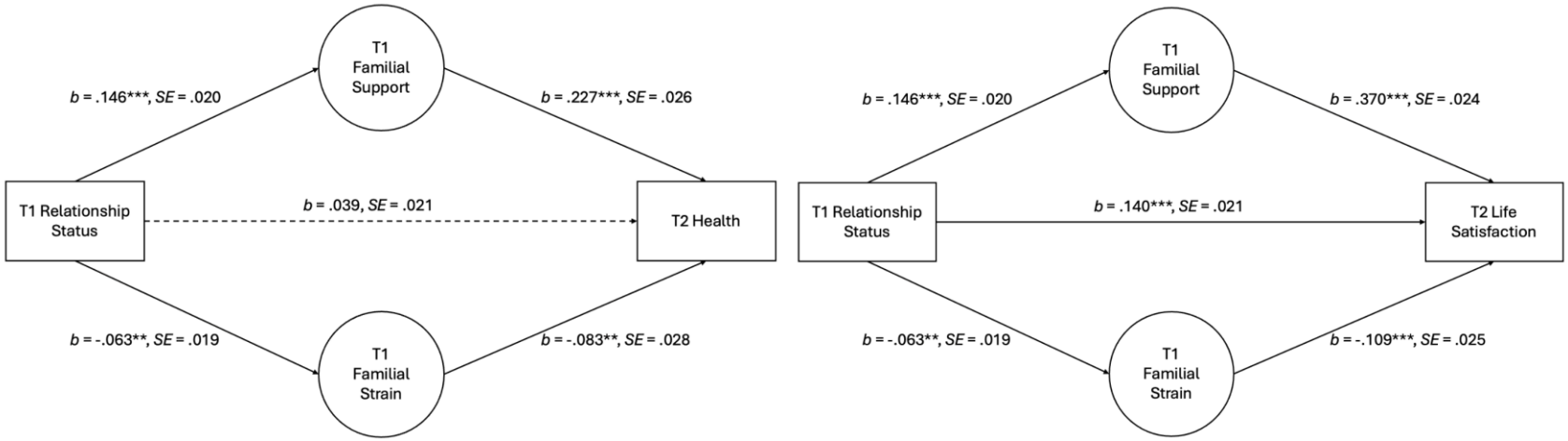
Figure 1

Structural Pathways from Relationship Status to Well-Being Outcomes (Combined Sample)



Note. Indirect effects model for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S1*). * $p < .05$; ** $p < .01$; *** $p < .001$.

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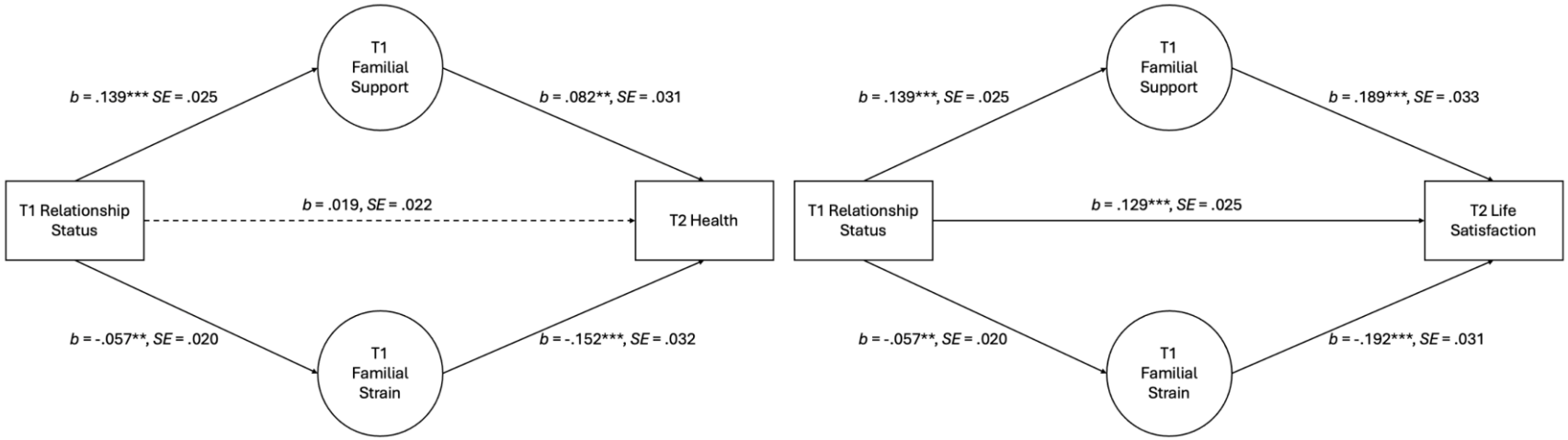
Figure 2

Structural Pathways from Relationship Status to Well-Being Outcomes (US Sample)



Note. Indirect effects model (using multigroup analyses - America) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = never married, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S2*). * $p < .05$; ** $p < .01$; *** $p < .001$.

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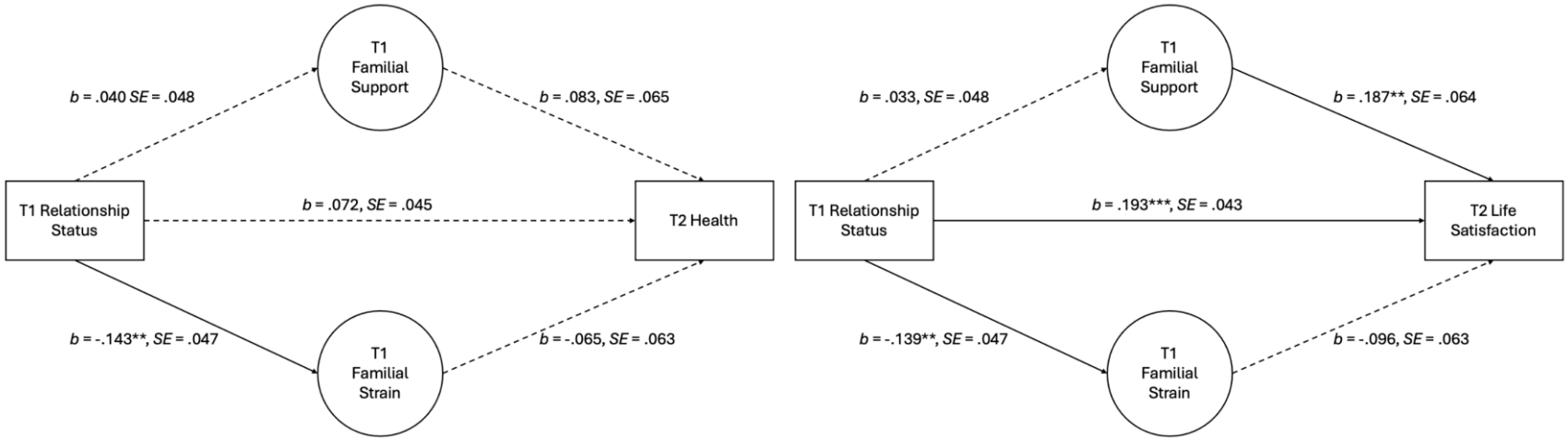
Figure 3

Structural Pathways from Relationship Status to Well-Being Outcomes (Japan Sample)



Note. Indirect effects model (using multigroup analyses - Japan) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S3*). * $p < .05$; ** $p < .01$; *** $p < .001$.

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Table S1

Standardized SEM Estimates for Relationship Status, Familial Support/Stain, and Well-Being at T1

	Health			Life satisfaction		
Model pathways	*B*	*SE*	*p*	*B*	*SE*	*p*
Combined analyses						
Indirect effects						
T1 Relationship status → T1 Familial support → T1 Outcome	**.034**	**.006**	**<.001**	**.062**	**.008**	**<.001**
T1 Relationship status → T1 Familial strain → T1 Outcome	**.007**	**.002**	**.004**	**.008**	**.003**	**.001**
Multigroup analyses						
Japan model *indirect effects*						
T1 Relationship status → T1 Familial support → T1 Outcome	.000	.002	.983	.009	.009	.308
T1 Relationship status → T1 Familial strain → T1 Outcome	**.025**	**.011**	**.024**	**.023**	**.010**	**.022**
US model indirect effects						
T1 Relationship status → T1 Familial support → T1 Outcome	**.013**	**.004**	**.002**	**.030**	**.007**	**<.001**
T1 Relationship status → T1 Familial strain → T1 Outcome	**.009**	**.003**	**.008**	**.011**	**.004**	**.007**

Note. Relationship status (RS): 1 = *married*, -1 = *single*. T1 = *Time 1*. Total *N* = 4,687 (US *n* = 3,813; Japan *n* = 874). Significant pathways are bolded.

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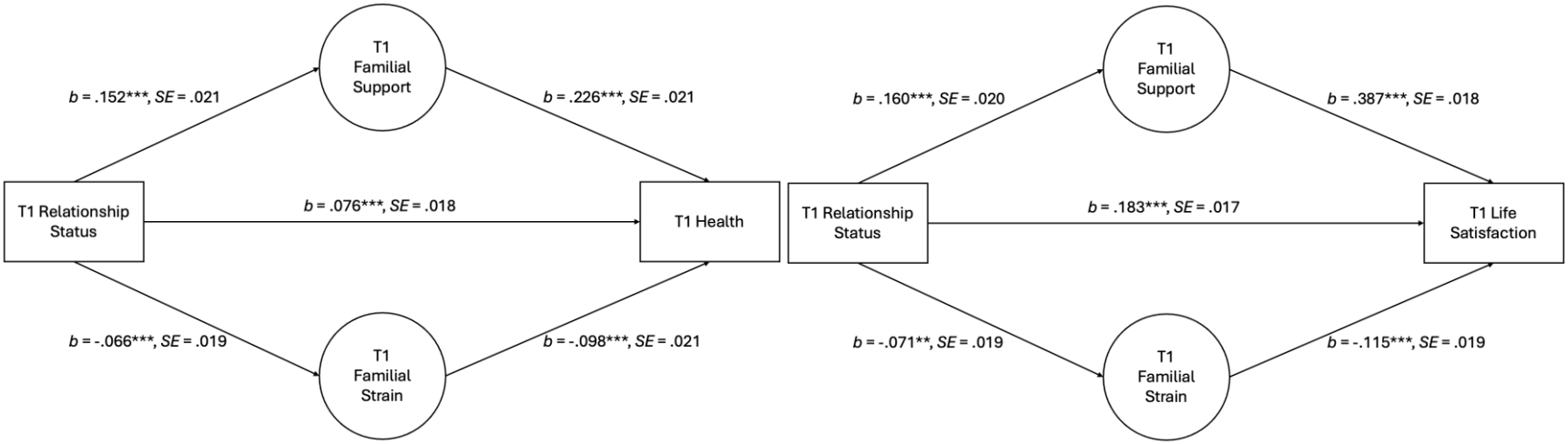
Figure S1

Structural Pathways from Relationship Status to Well-Being Outcomes (Combined Sample)



Note. Indirect effects model for relationship status to familial support and strain to well-being outcomes at baseline (i.e., cross-sectional model), health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. * $p < .05$; ** $p < .01$; *** $p < .001$.

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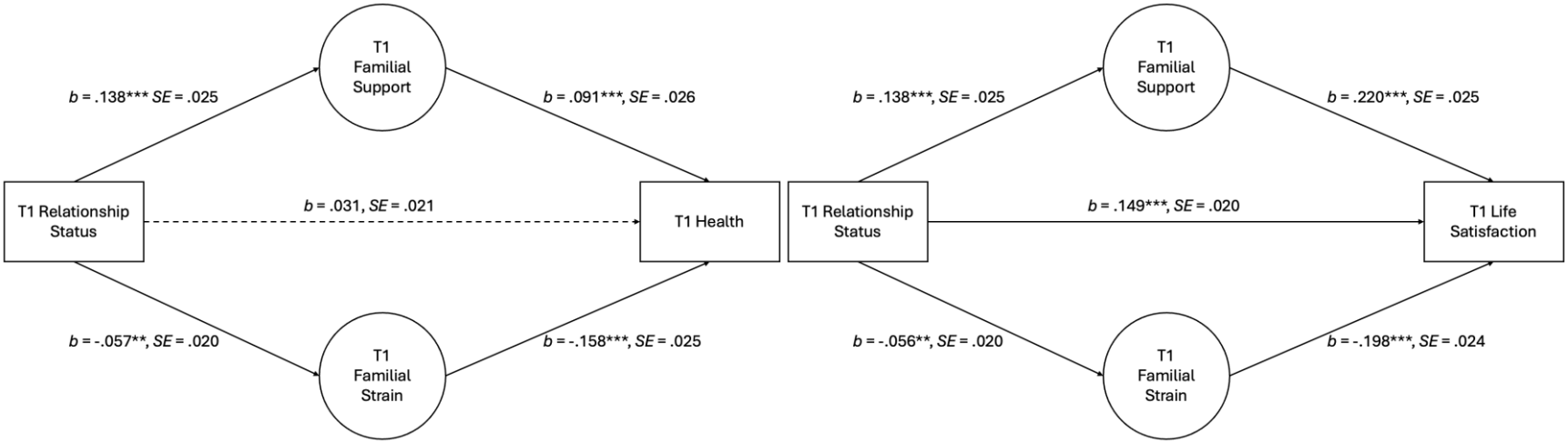
Figure S2

Structural Pathways from Relationship Status to Well-Being Outcomes (US Sample)



Note. Indirect effects model (using multigroup analyses - America) for relationship status to familial support and strain to well-being outcomes at baseline (i.e., cross-sectional model), health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = never married, 1 = *married*; T1 = *Time 1*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. * $p < .05$; ** $p < .01$; *** $p < .001$.

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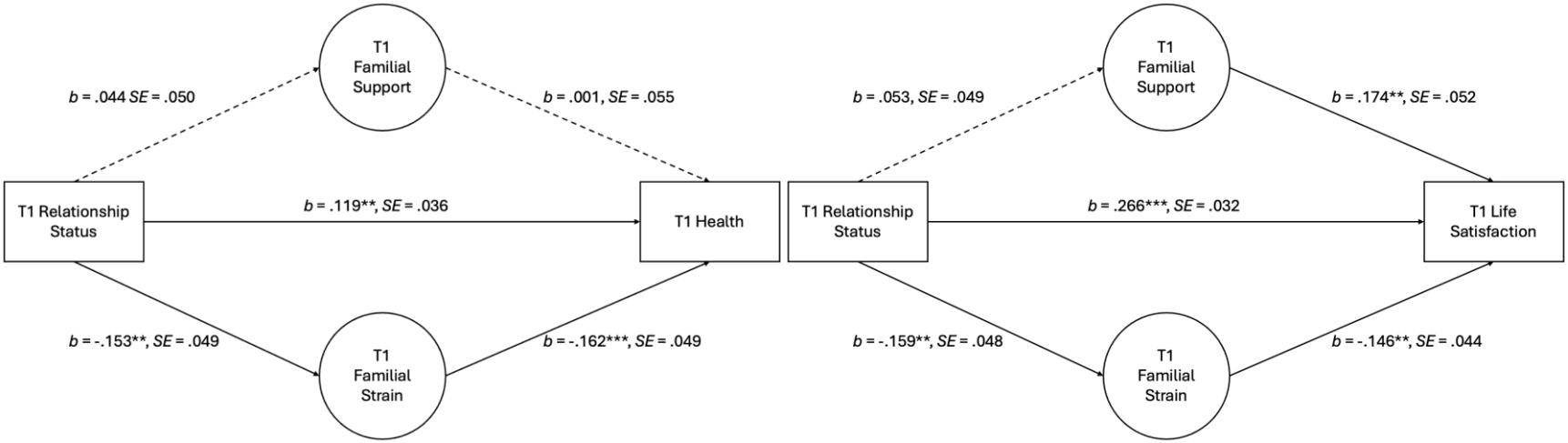
Figure S3

Structural Pathways from Relationship Status to Well-Being Outcomes (Japan Sample)



Note. Indirect effects model (using multigroup analyses - Japan) for relationship status to familial support and strain to well-being outcomes at baseline (i.e., cross-sectional model), health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. * $p < .05$; ** $p < .01$; *** $p < .001$.

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Table S2

Baseline SEM Model with Standardized Estimates for Relationship Status, Familial Support/Stain, and Well-Being

	Health			Life satisfaction		
Model pathways	*B*	*SE*	*p*	*B*	*SE*	*p*
Combined analyses						
Indirect effects						
T1 Relationship status → T1 Familial support → T2 Outcome	**.033**	**.006**	**<.001**	**.054**	**.008**	**<.001**
T1 Relationship status → T1 Familial strain → T2 Outcome	**.005**	**.021**	**.026**	**.007**	**.003**	**.008**
Multigroup analyses						
Japan model *indirect effects*						
T1 Relationship status → T1 Familial support → T2 Outcome	.005	.007	.476	.008	.012	.499
T1 Relationship status → T1 Familial strain → T2 Outcome	.001	.012	.920	.009	.012	.442
US model indirect effects						
T1 Relationship status → T1 Familial support → T2 Outcome	**.011**	**.005**	**.019**	**.026**	**.006**	**<.001**
T1 Relationship status → T1 Familial strain → T2 Outcome	**.011**	**.004**	**.004**	**.017**	**.005**	**<.001**

Note. Relationship status (RS): 1 = *married*, -1 = *single*. T1 = *Time 1*; T2 = *Time 2*. Total *N* = 4,687 (US *n* = 3,813; Japan *n* = 874). Significant pathways are bolded. Outcomes are T2 well-being measures.

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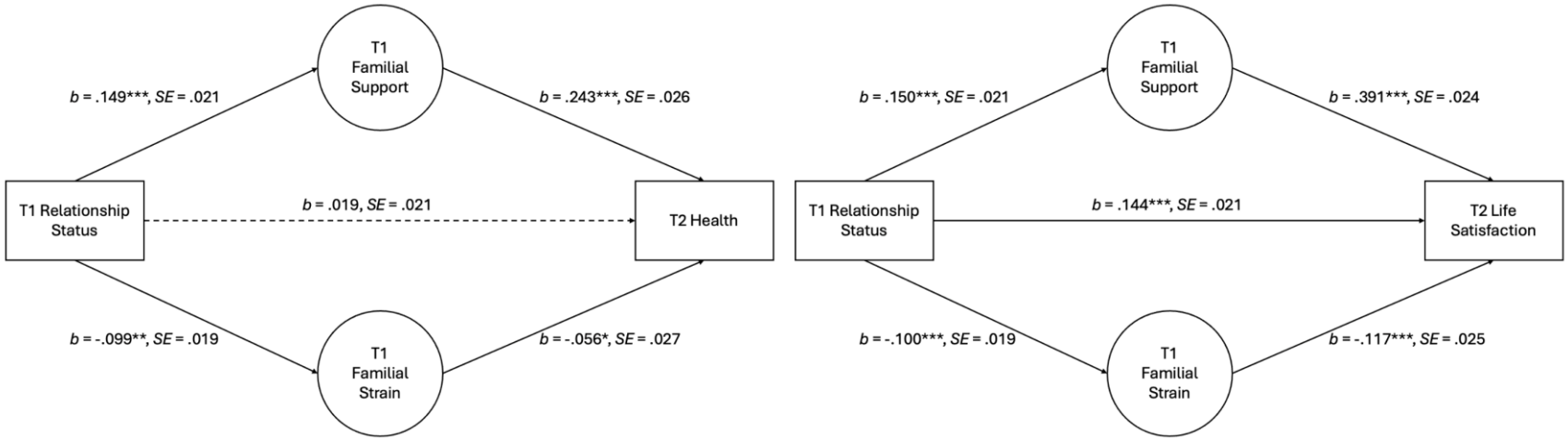
Figure S4

Structural Pathways from Relationship Status to Well-Being Outcomes (Combined Sample)



Note. Indirect effects model (without covariates) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Outcomes are T2 well-being measures. * $p < .05$; ** $p < .01$; *** $p < .001$.

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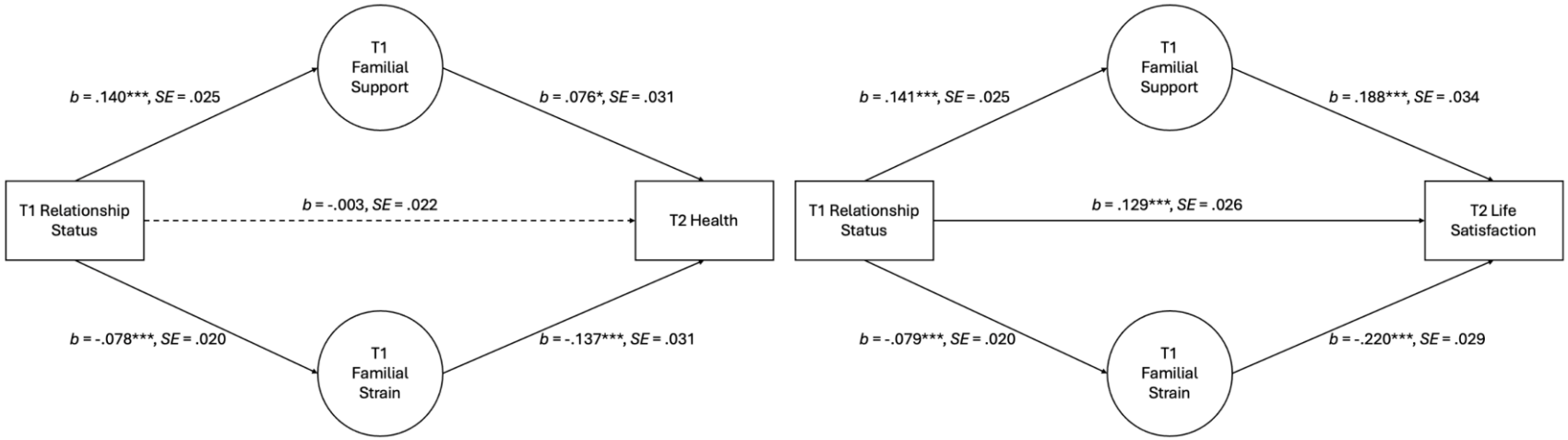
Figure S5

Structural Pathways from Relationship Status to Well-Being Outcomes (US Sample)



Note. Indirect effects model (using multigroup analyses – America, without covariates) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Outcomes are T2 well-being measures. * $p < .05$; ** $p < .01$; *** $p < .001$.

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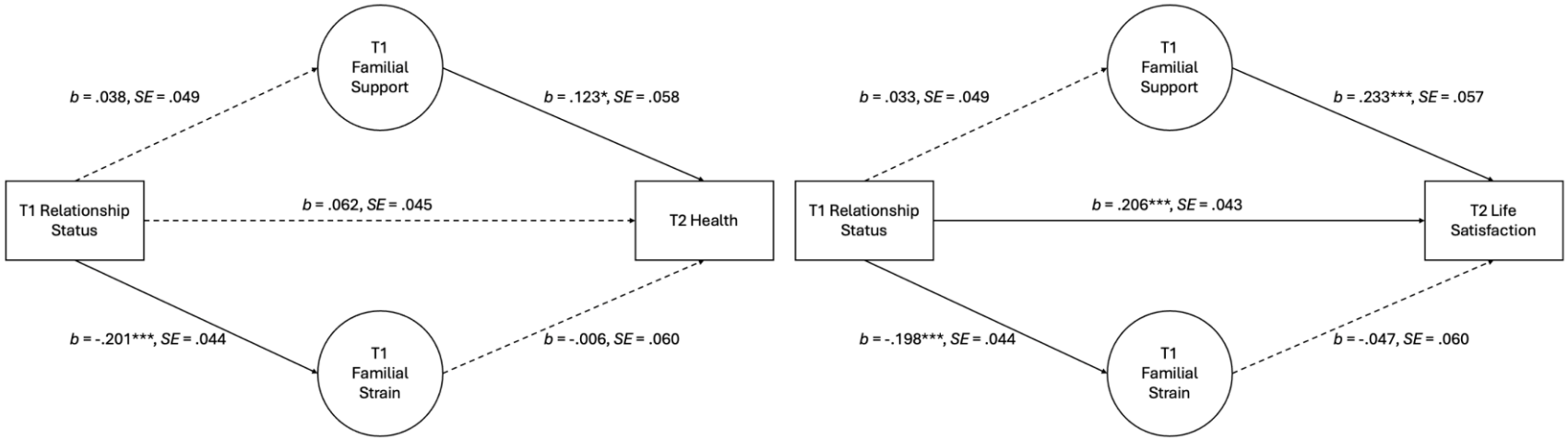
Figure S6

Structural Pathways from Relationship Status to Well-Being Outcomes (Japan Sample)



Note. Indirect effects model (using multigroup analyses – Japan, without covariates) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = married; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Outcomes are T2 well-being measures. * $p < .05$; ** $p < .01$; *** $p < .001$.

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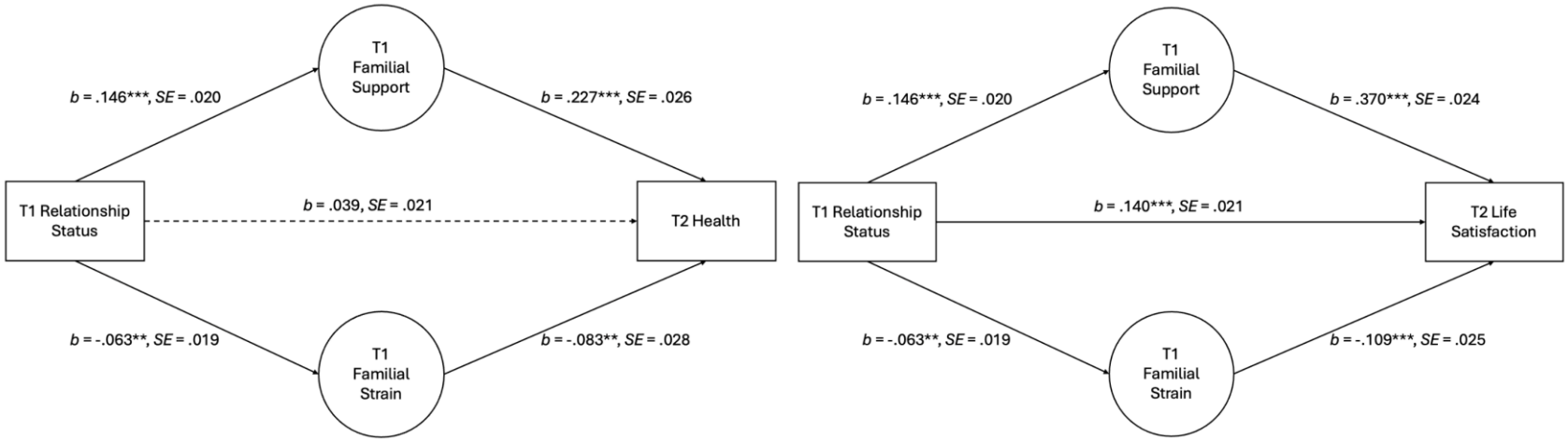
Figure 1

Structural Pathways from Relationship Status to Well-Being Outcomes (Combined Sample)



Note. Indirect effects model for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S1*). * $p < .05$; ** $p < .01$; *** $p < .001$.

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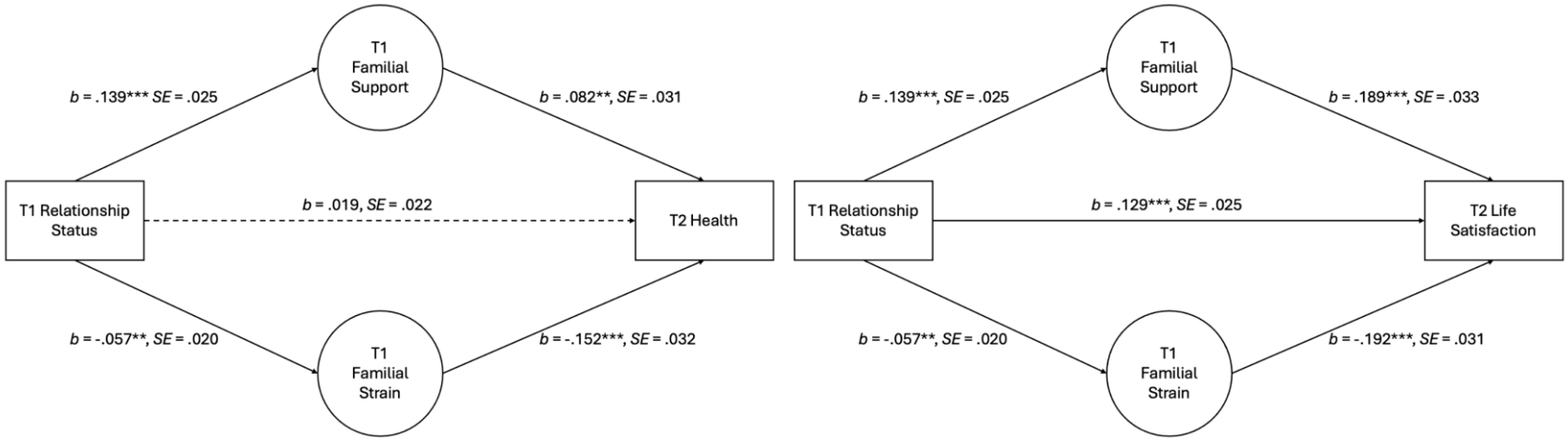
Figure 2

Structural Pathways from Relationship Status to Well-Being Outcomes (US Sample)



Note. Indirect effects model (using multigroup analyses - America) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = never married, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S2*). * $p < .05$; ** $p < .01$; *** $p < .001$.

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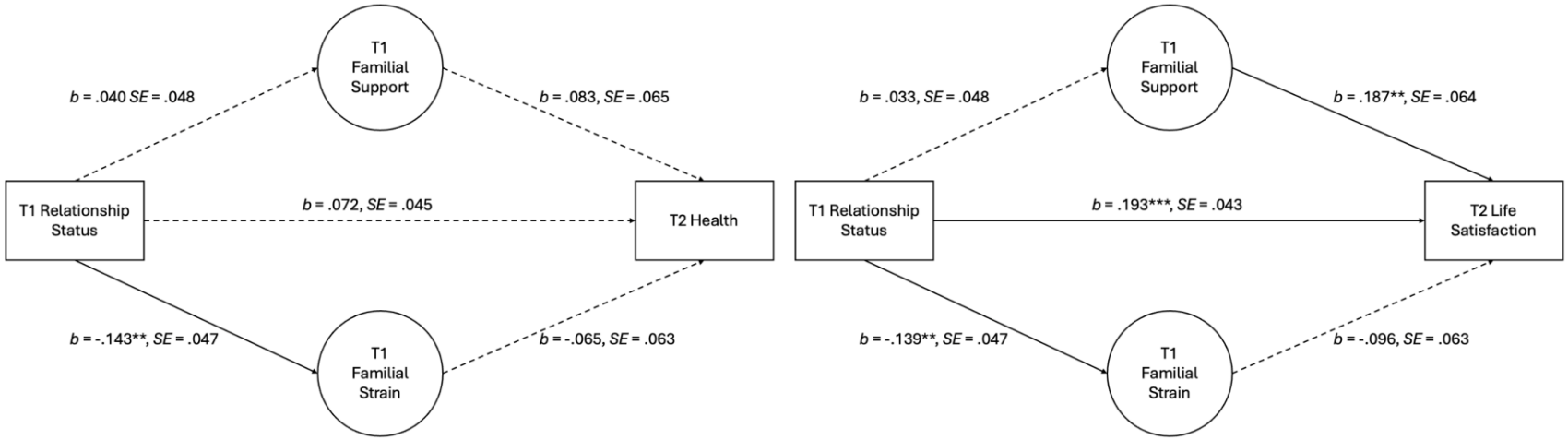
Figure 3

Structural Pathways from Relationship Status to Well-Being Outcomes (Japan Sample)



Note. Indirect effects model (using multigroup analyses - Japan) for relationship status to familial support and strain to well-being outcomes, health (left), and life satisfaction (right). Results are presented in standardized values. Standard lines represent significant associations, while dashed lines represent nonsignificant associations. Relationship status was coded 0 = *never married*, 1 = *married*; T1 = *Time 1*; T2 = *Time 2*. Total N = 4,687 (US n = 3,813; Japan n = 874). Covariates included gender, age, and education. Outcomes are T2 well-being measures; comparable results were observed for T1 outcomes (see *Supplementary Figure S3*). * $p < .05$; ** $p < .01$; *** $p < .001$.