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Correlated Change in Sense of Purpose and Romantic Relationship Quality

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Abstract

Sense of purpose, or feeling that that one has personally meaningful goals and directions guiding them through life, consistently predicts a variety of desirable well-being, health, and social outcomes. However, work has been limited with respect to evaluating it as a predictor and promoter of romantic relationships, or how purpose may develop in these contexts. For instance, healthy romantic relationships could also help individuals develop and maintain a higher sense of purpose. With cross-sectional evidence finding positive associations between sense of purpose and romantic relationship commitment and satisfaction, the current study expanded on past work by using longitudinal data with three months between two measurement occasions (Time 1: $N = 2243$; Time 2: $N = 1284$) to evaluate whether sense of purpose predicted relationship status over time and how changes in relationship quality and sense of purpose were associated. Results showed that greater sense of purpose predicted maintaining a romantic relationship, but did not predict later romantic relationship quality, while higher romantic relationship quality predicted an increase in sense of purpose. Findings are discussed regarding why people with a higher sense of purpose may be more likely to stay in relationships as well as the role that positive romantic relationships may play in helping maintain a higher sense of purpose.

Keywords

sense of purpose; relationship status; relationship quality; commitment; intimacy; investment

Sense of purpose, or the extent to which one feels that they have personally meaningful goals and directions guiding them through life (Ryff, 1989), is a robust predictor of positive outcomes throughout the lifespan (Pfund & Hill, 2018). However, for many it is hard to find, and others it is hard to maintain (Bronk, Hill, et al., 2009; Mann, DeYoung, et al., 2021; Pfund & Lewis, 2020). As such, it is important to understand the factors that may aid in initially creating and then later maintaining a sense of purpose. A potential path to bolstering purposefulness could be positive, supportive relationships (Weston, Lewis, & Hill, 2020). With romantic relationships being an integral part of many individuals' lives, this domain may be a fruitful area to explore regarding how to promote a higher sense of purpose

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throughout the lifespan. Moreover, sense of purpose may also benefit romantic relationships, as purposeful individuals may be better romantic partners, given that having a purpose promotes better resource allocation and goal organization (McKnight & Kashdan, 2009), desirable qualities likely aiding in the prioritization of one's relationship. The current study will consider two main questions: (1) whether individuals with differing levels of sense of purpose have different relationship statuses over time, and (2) how sense of purpose and relationship quality change together in a large, multi-wave study with a wide age range.

Sense of Purpose and Relationships

Sense of purpose involves holding life goals and aims, which in turn catalyze and promote personally meaningful activity engagement (Ryff, 1989; Scheier et al., 2006). This construct has demonstrated its importance across a variety of life domains, with purposeful people experiencing better well-being (Bronk et al., 2009; Pfund & Hill, 2018), physical and cognitive health (Boyle, Buchman, et al., 2010; Cohen, Bavishi, & Rozanski, 2016; Kim, Sun, et al., 2013), and more positive relations with others (Ryff & Keyes, 1995). More recent work has investigated how sense of purpose connects to more specific relationship domain outcomes.

Cross-sectional evidence suggests that sense of purpose is positively associated with general positive relationships with others (Ryff & Keyes, 1995) and less loneliness (Pfund & Miller-Perrin, 2019). In the context of romantic relationships, work has found that individuals who report a higher sense of purpose also report greater relationship satisfaction, commitment, and investment size across the lifespan (Pfund, Brazeau, et al., 2020). Furthermore, emerging adults who report a higher sense of purpose also have greater relationship satisfaction with parents and friends, as well as greater relationship stability throughout the first semester of university (Pfund, Bono, & Hill, 2021). Thus, there is a growing collection of research beginning to support the value of purposefulness in social contexts.

A number of potential mechanisms may be at play here. For instance, purposeful people may have better resource allocation and the organization of day-to-day activities (McKnight & Kashdan, 2009), which likely allows them to more effectively organize their time and efforts to assure they are nurturing their relationships and prioritizing their social connections. Furthermore, given that purpose is associated with lower stress reactivity when facing obstacles (Hill, Sin, et al., 2018), purposeful people may also be better at maintaining relationship satisfaction and staying committed to their romantic partner in the midst of relational challenges. Finally, sense of purpose is positively associated with both seeing how to overcome an obstacle and feeling capable of overcoming a given obstacle (Bronk et al., 2009). As such, when conflict arises with a romantic partner, purposeful partners may see ways to work through the conflict and believe that they are able to do so; in turn, having a sense of purpose may lead them to enact better relationship behaviors, and ultimately increase their relationship quality.

However, having positive relationships may be valuable for maintaining a higher sense of purpose as well. For example, in one large, cross-sectional study using a machine learning approach, loneliness was the top negative predictor and social support was the

top positive predictor of sense of purpose among the 23 variables considered (Mei, Lori, et al., 2021), emphasizing the importance of perceiving a positive social network for feelings of purposefulness. While there has been longitudinal work evaluating the correlated change between sense of meaning and close relationships (Steptoe & Fancourt, 2020), little work has investigated what romantic relationships mean for sense of purpose specifically. Some initial evidence comes from research showing that married people often report higher sense of purpose in adulthood (Hill & Weston, 2019; Pinquart, 2002), highlighting that having a partner in life may help individuals maintain their sense of purpose. While work with romantic relationships is lacking, there has some discussion regarding the role of parental relationships on purpose development (Bronk, 2012). For example, greater parental conflict in childhood predicts lower sense of purpose in emerging adulthood (Hill, Schultz, et al., 2019), and more secure parental attachment is associated with a higher sense of purpose (Hill, Burrow, & Sumner, 2016). This research suggests that having healthy and positive relationships with individuals who play a large role in one's life could help with purpose development. However, given that the role of parental relationships changes throughout the lifespan, it is possible that having healthy and supportive romantic relationships becomes more important for purpose development and maintenance after adolescence.

Given the limited work on relationships and sense of purpose, considering research on well-being can further guide the current study. Though effects are small, being married is associated with greater subjective well-being than being divorced or widowed, (Lucas & Dyrenforth, 2006; Lucas, Dyrenforth, & Diener, 2008). Other work found that being in a *consistent* relationship was connected to well-being, compared to individuals whose relationship status changed over time or were consistently single (Purol, Keller, et al., 2021). However, the individuals who were in and out of relationships did not differ in subjective well-being from those who were consistently single. When considering subjective relationship variables, evidence from longitudinal studies suggests that higher relationship quality predicts increases in life satisfaction, and vice versa (Gustavon, Røysamb, et al., 2015). Thus, both the presence and quality of a relationship may promote well-being, but greater well-being may also help improve later relationship quality. Although sense of purpose is not a component of subjective well-being (Diener, 1984), such work suggests the potential for sense of purpose and relationship quality to hold similar bidirectional associations.

In sum, preliminary findings on sense of purpose and well-being suggest the associations between sense of purpose and relationship quality likely go in both directions. As such, a transactional approach may be critical for evaluating associations between these variables. Research has found that on days in which people have more positive social interactions, they also report a higher sense of purpose for that day (Pfund, Hofer, et al., 2021). Research also has moved beyond social interactions to consider perceptions of one's support structure. For instance, in one study using three waves of data across twelve years, participants reported their sense of purpose, social support, and social strain across four distinct relational domains: romantic partner, children, family, and friends (Weston, Lewis, & Hill, 2020). When taking social contact frequency into account, initial sense of purpose was positively associated with initial social support and negatively associated with initial social strain across all four relational domains. Furthermore, this study found correlated change in

sense of purpose and social support and social strain (Weston et al., 2020). Correlated change reflects the increase in one variable over time being associated with an increase or decrease in another variable over time (Allemand & Martin, 2017). As such, the past longitudinal work suggests that as sense of purpose increased over the years, social support increased and social strain decreased for romantic relationships, parent-child relationships, and friendships (Weston et al., 2020). Meanwhile, other research has found that increases in life meaningfulness, which captures the extent one's activities are worthwhile, predicts increases in a wide range of social factors (Steptoe & Fancourt, 2020). These findings support the assertion that sense of purpose and relationship quality may promote each other, as well as change together.

It too is important to consider the role that sense of purpose may play in relationship status. Previous work has found that individuals with a higher sense of purpose are also more likely to report being married (Pinquart, 2002). This work though is limited insofar that it focuses on marital status at a single timepoint. Past longitudinal research (Neyer & Asendorpf, 2002) has divided people into four categories: people who stay in their relationship throughout the study (committed continuer), those who exit a relationship during the study (discontinuer), those who start a relationship during the study (beginner), and those who remain single throughout the study (single continuer). Using these categories, one would predict that committed continuer participants may score highest on sense of purpose, based on the marital status findings; however, work is needed to compare all four groups on sense of purpose.

Moving beyond *whether* one is in a relationship, research that has focused on sense of purpose and relationship quality has been limited in a few primary ways. First, research focused on romantic relationships has typically been cross-sectional in nature (Pfund, Brazeau, et al., 2020). Furthermore, research has focused on only a few primary components of relationship quality, like relationship satisfaction and commitment (Pfund, Bono, & Hill, 2020; Pfund, Brazeau, et al., 2020). Thus, research would benefit from taking a longitudinal perspective to romantic relationships as well as assessing a wider range of relationship quality components. To address the first issue, the current study captured sense of purpose and relationship quality over two measurement occasions. To address the second issue, we assessed relationship quality across multiple components. To start, the Investment Model (Rusbult et al., 1998) points to four components of interest: relationship satisfaction (how happy and content one is), commitment (how much one is dedicated), investment size (how much one has put into in the relationship), and perceived quality of alternatives (how appealing other partners are). Missing from this list though is whether individuals feel close to their partners and that they can rely upon partners; as such, research also suggests capturing perceived trust and intimacy with their romantic partner (Fletcher et al., 2000). The utilization of these six components allows for a more complete picture of how romantic relationship quality as a whole and sense of purpose are connected.

The Current Study

The current study added to the extant literature by considering these multiple relationship indicators and sense of purpose across two waves of data. The longitudinal design proves

critical for the current research questions. First, we hypothesize that initial sense of purpose will predict whether individuals are committed continuers, discontinuers, beginners, or single continuers. In particular, we predict that people with a higher sense of purpose will be more likely to be in or enter a relationship. Second, the current study sought to understand the relationship between sense of purpose and relationship quality over time. We predicted that sense of purpose would show correlated change with relationship quality, based on previous work on correlated change between sense of purpose to social support (Weston et al., 2020). Third, we also expected that initial levels on one construct may predict change in the other for those participants who were committed continuers. Specifically, those with a higher sense of purpose will experience an increase in relationship quality from Wave 1 to Wave 2. In addition, higher initial relationship quality will predict increases in sense of purpose from Wave 1 to Wave 2.

Methods

Participants

Participants were broken into four groups based on their relationship status at both waves of data collection. Participant age, gender, ethnicity, sexual orientation, and relationship status information for the entire Wave 1 sample ($n = 2,243$), those who responded to Wave 2 excluding those who had never been in a relationship ($n = 1,200$), as well as those who had been in relationships at both waves ($n = 874$) can be found in Table 1. Across both waves, the average age was around 55 with ages ranging from 18-91 at Wave 1 and 20-88 at Wave 2. The 25th percentile for age was 38 and the 75th percentile was 67 at Time 1, with only 5% of the sample being between the ages of 18-26. The sample was approximately 56% male, 43% female, and around 1% of people selected another gender or preferred not to respond. Furthermore, the majority of participants identified as European-American/white, and over 70% of participants were in relationships at both waves of data collection.

To define relationship status groups across the waves, the same terminology was used as Neyer and Asendorpf (2001) set forth in their previous work. Participants in a serious relationship at both waves were considered “committed continuers,” at neither wave of data collection were “single continuers,” at only the first wave were “discontinuers,” and at only the second wave were “beginners.” To be a committed continuer, one had to be in the same relationship at Wave 1 and Wave 2 of data collection. Gender, ethnicity, and age breakdowns were similar across each group. Of those in a serious relationship, 81% were married and 11.9% were not married but lived together. Based on the final overall sample size, a post hoc power analysis indicated the power to find a r effect of .072 with a power of .80 at an alpha level of .05. Based on the sample size for the committed continuers, a post hoc power analysis indicated the power to find a r effect of .115 with a power of .80 at an alpha level of .05.

Procedures

This study was approved by the IRB at Washington University in St. Louis. The current study was conducted as a follow-up to previous cross-sectional work on sense of purpose and relationship quality, and findings using the first wave of data have been published

(Pfund et al., 2020). Participants (Wave 1: $n = 2,243$; Wave 2: $n = 1,284$) were recruited and compensated through Qualtrics Panel Service as part of a two-wave study. The first wave of data collection occurred from mid-July to early-August 2019, and the second wave of data collection occurred from late-October to early-November 2019 (days: $M = 95.96$, $SD = 3.72$, range = 86-110). Time between measurement occasions was not associated with any of the variables of interest at either time point (r range from $-.01$ to $.04$, $p > .386$). To participate, individuals had to be at least 18 years old. After consenting to the study, participants completed an initial 15-minute survey, and were followed up approximately three months later to fill out a nearly identical survey. Participants were excluded if they failed an attention check ($n = 1,134$). All participants responded to questions about their demographics, sense of purpose, personality traits, and affective well-being.

Depending on their relationship status, participants responded to different questions. Those who were in a serious relationship responded to items about their current relationship quality and their perception of their partner's purpose. Those who were not in a serious relationship but had previously been in one responded to items about their break-up and previous partner. Those who had never been in a serious relationship responded to items about their closest friend. Only participants who were in the same romantic relationship at both waves of data collection were included in the sense of purpose and relationship quality analyses.

For the second survey, participants were asked whether they were in the same serious relationship that they had been in three months ago. Committed continuers responded to the same items about their partner in the second survey ($n = 874$); some participants said they were not in the same romantic relationship before ($n = 2$) or did not respond to the item ($n = 26$), so their data was excluded from the committed continuers' analyses. Discontinuers responded to questions about their break-up and their previous partner ($n = 20$). Beginners responded to questions about their new partner ($n = 30$). Single continuers responded to questions about their last serious relationship if they had one ($n = 248$), or about their closest friend if they had not had ever been in a serious relationship (Wave 1: $n = 80$, Wave 2: $n = 22$). Some participants did not report their relationship status at either wave of data collection ($n = 2$).¹ The pre-registered hypotheses and code for the analyses can be found at this link: <https://osf.io/ypkb9/>.²

Measures

Sense of purpose.—Sense of purpose was assessed using the 6-item Life Engagement Test (Scheier et al., 2006), which focuses on the engagement component of sense of purpose.

¹Two other individuals reported being single but having previously been in a romantic relationship at Wave 1 then reported being single but never having been in a romantic relationship at Wave 2. Due to the lack of consistency in the chronology of their responses, they were not placed in any of the main relationship status categories.

²We have reported how we determined our sample size, all data exclusions, and all measures utilized in the current study can be found alongside the hypotheses and analytic plan that were pre-registered prior to data analysis. Code for the analyses can also be found through this link. Data will not be made publicly available online, but researchers can reach out to the corresponding author for access. Based on the small number of participants that were categorized as discontinuers ($n = 20$) and the beginners ($n = 30$), the original plan to conduct a multinomial logistic regression had to change due to lack of power. A binary logistic regression was conducted instead, though sense of purpose still predicted relationship status; only committed continuers and single continuers were used in the analyses. Furthermore, the pre-registration was part of a broader project, so not all of the pre-registered analyses were included in the current paper. Finally, the paired samples t -tests and the CLPM controlling for age, gender, and relationship duration were added as part of the review process.

All participants responded to each item on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), with example items including “To me, the things I do are worthwhile” and “There is not enough purpose in my life” (reverse score). Higher scores represented a higher sense of purpose. This measure displayed good reliability (Wave 1: $\alpha = .86$ [.85, .87]; Wave 2: $\alpha = .87$ [.86, .88]).

Relationship satisfaction.—Romantic relationship satisfaction was assessed using the 5-item Relationship Satisfaction subscale from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants in a relationship responded to each item on a 9-point Likert scale ranging from 0 (do not agree at all) to 8 (agree completely), with example items including “I feel satisfied with our relationship,” and “My relationship is close to ideal.” Higher scores indicated greater relationship satisfaction. This measure displayed good reliability (Wave 1: $\alpha = .95$ [.95, .96]; Wave 2: $\alpha = .95$ [.95, .96]).

Commitment.—Romantic relationship commitment was assessed using the 7-item Relationship Commitment subscale from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants in a relationship responded to each item on a 9-point Likert scale ranging from 0 (do not agree at all) to 8 (agree completely), with example items including “I want our relationship to last for a very long time,” and “I am committed to maintaining my relationship with my partner.” Higher scores indicated greater relationship commitment. This measure displayed good reliability (Wave 1: $\alpha = .83$ [.81, .85]; Wave 2: $\alpha = .84$ [.82, .86]).

Perceived quality of alternatives.—Perceived quality of alternatives was assessed using the 5-item Perceived Quality of Alternatives subscale from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants in a relationship responded to each item on a 9-point Likert scale ranging from 0 (do not agree at all) to 8 (agree completely), with example items including “Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.” (reverse scored), and “The people other than my partner with whom I might become involved are very appealing.” Higher scores indicated preference for alternative partners. This measure displayed good reliability at both waves of data collection (Wave 1: $\alpha = .83$ [.81, .85]; Wave 2: $\alpha = .83$ [.81, .85]).

Investment Size.—Investment size was assessed using the 5-item Investment Size subscale from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants in a relationship responded to each item on a 9-point Likert scale ranging from 0 (do not agree at all) to 8 (agree completely), with example items including “I have put a great deal into our relationship that I would lose if the relationship were to end,” and “Many aspects of my life have become linked to my partner (recreational activities, etc.), and I would lose all of this if we were to break up.” Higher scores indicated greater relationship investment. This measure displayed good reliability (Wave 1: $\alpha = .77$ [.75, .80]; Wave 2: $\alpha = .79$ [.76, .81]).

Relationship trust.—Relationship trust was assessed using the 3-item Trust subscale from the Perceived Relationship Quality Components measure (Fletcher et al., 2000). Participants in a relationship responded to each item on a 7-point Likert scale ranging from 1 (not at all) to 7 (extremely), with example items including “How much do you trust your partner?” and

“How much can you count on your partner?”. Higher scores indicating greater relationship trust. This measure displayed good reliability (Wave 1: $\alpha = .92$ [.91, .93]; Wave 2: $\alpha = .92$ [.91, .93]).

Relationship intimacy.—Relationship intimacy was assessed using the 3-item Intimacy subscale from the Perceived Relationship Quality Components measure (Fletcher et al., 2000). Participants in a relationship responded to each item on a 7-point Likert scale ranging from 1 (not at all) to 7 (extremely), with example items including “How intimate is your relationship?” and “How connected are you to your partner?”. Higher scores indicated greater relationship intimacy. This measure displayed good reliability (Wave 1: $\alpha = .91$ [.89, .92]; Wave 2: $\alpha = .91$ [.90, .92]).

Data Analytic Plan

All analyses were conducted using *Rstudio* (R Core Team, 2019). Items were averaged for each individual measure. Before conducting analyses to address the hypotheses of interest, correlations were calculated for the variables of interest at each wave of data collection and paired samples *t*-tests were run to compare mean-level differences on the variables of interest at Time 1 and Time 2. To address Hypothesis 1, we conducted a logistic regression to investigate whether initial sense of purpose predicted relationship status across the two waves of data. Due to the smaller sample sizes in the beginners and discontinuers, only the committed continuers and the single continuers were included in this analysis.

To address Hypothesis 2 and 3, a latent cross-lagged panel model was constructed using the *lavaan* package (Rosseel, 2012). This model was utilized to examine whether initial sense of purpose predicted change in relationship quality, and whether initial relationship quality predicted change in sense of purpose. Only the committed continuers were utilized in the current model as only these participants had relationship quality ratings at both waves. The sense of purpose latent variable was composed of the six items from the Life Engagement Test (Scheier et al., 2006). Factor loadings between items were freely estimated, but each respective item had their factor loadings constrained across waves. The relationship quality latent variable was composed of the manifest means for each of the romantic relationship variables (e.g., relationship satisfaction, commitment). As with sense of purpose, the indicators for each romantic relationship quality manifest variable had their loadings fixed across the two waves of data but were able to vary from the other items in a given wave. Furthermore, variances for the manifest variables were constrained across waves, but freely estimated from each other for a given construct wave. Finally, the correlated residuals for the same manifest variable across waves were freely estimated. Maximum likelihood estimation was used to handle missing observations. As a sensitivity analysis, this same model was conducted with centered age, centered relationship duration, and dichotomized gender (0 = men; 1 = women) included as covariates.

Results

Descriptive Statistics and Basic Correlations

Descriptive statistics and zero-order correlations for age, the sense of purpose latent variable, and the relationship quality variable for the committed continuers can be found in Table 2.³ Descriptive statistics and zero-order correlations for the mean of the sense of purpose items and each of the relationship quality measures can be found in Supplemental Table 1 (<https://osf.io/ypkb9/>). Initial sense of purpose and initial relationship quality were positively related ($r = .52$), as were later sense of purpose and later relationship quality ($r = .59$). Furthermore, initial sense of purpose showed a strong positive association with later relationship quality ($r = .49$), and initial relationship quality showed a strong positive association with later sense of purpose ($r = .53$). These correlations indicate that people who score higher on sense of purpose also score higher on relationship quality, both concurrently and at a later time. When looking at the small, positive associations with age and the variables of interest, these correlations indicate that higher age is associated with higher sense of purpose (Time 1: $r = .15$; Time 2: $r = .14$) and better relationship quality (Time 1: $r = .09$; Time 2: $r = .09$), though these associations are weaker than those found between sense of purpose and relationship quality itself.

A series of paired samples t-tests were conducted to evaluate whether there were any meaningful changes on the variables of interest from Time 1 to Time 2. There were no significant differences in sense of purpose scores from Time 1 to Time 2 for the whole sample ($t(2395) = -1.48, p = .140$), the committed continuers ($t(2395) = -1.48, p = .140$), or the single continuers ($t(1799.9) = -1.70, p = .090$). For the committed continuers specifically, there was also no significant change across the individual relationship variables from Time 1 to Time 2: relationship satisfaction ($t(1781.4) = -0.11, p = .910$), investment size ($t(1778.3) = -1.26, p = .209$), commitment ($t(1775.4) = -1.28, p = .199$), perceived quality of alternatives ($t(1780.6) = 0.76, p = .451$), trust ($t(1778.9) = 0.35, p = .723$), or intimacy ($t(1778.1) = 0.36, p = .720$).

Differences in Time 1 Sense of Purpose for Committed and Single Continuers

Average Time 1 sense of purpose scores were 4.10 ($SD = 0.68$) for committed continuers, 3.88 ($SD = 0.79$) for single continuers, 4.01 ($SD = 0.69$) for discontinuers, and 4.01 ($SD = 0.81$) for beginners.⁴ However, only committed continuers and single continuers were used in the current analysis due to larger sample sizes. A binary logistic regression was conducted to investigate whether Time 1 sense of purpose differed amongst committed continuers ($n = 874$) and a single continuers ($n = 248$). Sense of purpose predicted relationship status for both waves of data, where a one unit increase in purpose predicted that an individual was 1.51x more likely to be a committed continuer than a single continuer ($OR = 1.51$ [1.25, 1.83]; $b = 0.41$ [0.22, 0.60], $SE = .10, p < .001$). In support of Hypothesis 1, sense of purpose did predict relationship status, with a higher sense of purpose predicting greater

³A supplemental table includes the descriptive information and zero-order correlations for the mean composites (rather than the latent variables) of the sense of purpose measure and each relationship quality indicators at Time 1 and Time 2 (<https://osf.io/ypkb9/>).

⁴Average Time 2 sense of purpose scores were 4.15 ($SD = 0.68$) for committed continuers, 3.88 ($SD = 0.81$) for single continuers, 3.91 ($SD = 0.69$) for discontinuers, and 4.18 ($SD = 0.65$) for beginners

likelihood of staying in a relationship at both waves of data collection than being single at both waves of data collection.

Cross-Lagged Analyses for Purpose and Relationship Quality

A latent cross-lagged panel model was conducted to address Hypotheses 2 and 3, that higher initial sense of purpose would predict greater relationship quality later on, and that greater initial relationship quality would predict higher sense of purpose later on. All indicators fit well onto the latent variables, excluding perceived quality of alternatives for relationship quality. Originally, perceived quality of alternatives was going to be included as a manifest indicator for the relationship quality latent variable. However, this construct showed poor factor loading onto the latent variable (i.e., absolute value of .164 relative to the next lowest loading being .514 for trust), which led to poor model fit as well. When including this as an indicator, our CFI was .796 and our RMSEA was .111. When we removed this variable from being an indicator, our CFI became .959 and our RMSEA became .054. As such, perceived quality of alternatives was removed from the latent cross-lagged panel model.

With the RMSEA cutoff of .06 and CFI cutoff of .95 recommended by Hu & Bentler (1999), the model showed good fit (RMSEA = .054, 90% CI [.049, .058]; SRMR = .044; CFI = .959). All factor loadings, intercepts, variances, and covariances for the model can be found in Table 3. Because the parameters were constrained across waves for a given manifest variable, the values of the factor loadings, intercepts, and variances are the same at both time points. Furthermore, the covariances represent the association between a given manifest variable with itself at Time 1 and Time 2 after accounting for the portion of it explained by the latent variable.

In this revised model, initial sense of purpose and initial relationship quality showed a strong, positive association ($b = .62$, 95% CI [.51, .73], std. $b = .48$, $p < .001$). Regarding Hypothesis 2, initial sense of purpose did not predict later relationship quality above and beyond initial relationship quality ($b = .05$, 95% CI [−.04, .18], std. $b = .03$, $p = .221$). However, regarding Hypothesis 3, though a small effect, initial relationship quality did predict later sense of purpose above and beyond initial sense of purpose ($b = .05$, 95% CI [.02, .07], std. $b = .12$, $p < .001$). It should be noted that the autoregressive pathway for Wave 1 to Wave 2 relationship quality was extremely high ($b = .88$, 95% CI [.83, .92], std. $b = .92$, $p < .001$), as it also was for sense of purpose ($b = .79$, 95% CI [.73, .85], std. $b = .85$, $p < .001$), indicating strong rank-order stability for both constructs over the timeframe. Notably, even when accounting for the correlated residuals of the manifest variables and the cross-lagged effects of the latent variables for sense of purpose and relationship quality, there was evidence for correlated change between purpose and relationship quality over time ($b = .12$, 95% CI [.09, .16], std. $b = .36$, $p < .001$). These findings indicate that when sense of purpose increased from Time 1 to Time 2, so did relationship quality. However, only initial relationship quality predicted later sense of purpose, not vice versa.

As a sensitivity analysis, the same model was conducted, but age, relationship duration, and gender were included as predictors of Time 2 sense of purpose and relationship quality. In this model, sense of purpose, gender, age, and relationship duration did not predict later relationship quality. However, higher age and being a woman predicted higher Time 2 sense

of purpose, but the effect of Time 1 relationship quality still remained ($b = .05$, 95% CI [.02, .07], std. $b = .12$, $p < .001$). Finally, increases in relationship quality continued to be associated with increases in sense of purpose ($b = .12$, 95% CI [.09, .16], std. $b = .36$, $p < .001$). The full results for this model can be found in Supplemental Table 2 (<https://osf.io/ypkb9/>).

Discussion

The current study addressed three main research questions regarding longitudinal associations between sense of purpose and relationship quality. First, we found that people with a higher sense of purpose appeared to be more likely to be in a relationship over time, while people with a lower sense of purpose appeared to be more likely to be single, though we were unable to evaluate whether purpose predicted *changes* in relationship status. These findings pointed to a higher sense of purpose predicting being in a romantic relationship versus not, reifying past work linking marital status to sense of purpose (Hill & Weston, 2019; Pinquart, 2002). Given that purposeful people are better at organizing their day-to-day lives and pursuing their short-term goals (McKnight & Kashdan, 2009), it may be that purposeful individuals are better at setting time aside to maintain their romantic relationships. Moreover, people with a lower sense of purpose may be less likely to engage in the necessary pursuits to find relationships, leading to staying single. Another possibility is that sense of purpose and relationship quality are linked through their shared associations with psychological well-being. Sense of purpose is strongly associated with lower depressive symptoms (e.g., Pfund et al., 2022), and depression is a known risk factor for multiple aspects of relationship dysfunction (e.g., Davila, 2001 for a review). As such, it may be that purposeful individuals are less prone to depressive symptoms and that assists them with romantic relationships.

Second, while romantic relationship quality predicted later sense of purpose, the current study did not find that initial sense of purpose predicts later relationship quality. Notably, romantic relationship quality showed incredibly high levels of stability, limiting the amount of change sense of purpose would be able to predict. Even though sense of purpose also showed strong stability across the three months, we saw that initial romantic relationship quality still predicted later sense of purpose, aligning with past works suggesting the importance of positive and supportive connections with others for sense of purpose (Pfund, Hofer, et al., 2021; Weston et al., 2020). With sense of purpose showing greater rank order stability in middle-aged adulthood and less rank order stability in younger and older adulthood (Mann, DeYoung, & Krueger, 2021), future work should consider whether positive romantic relationships may play a larger role in purpose maintenance and enhancement earlier and later in the lifespan. Some past research has focused on the mediating role of sense of purpose in the connection between negative marital interactions and depressive symptoms (Irani, Park, & Hickman, 2022), suggesting that having negative interactions with one's spouse can lead to a lower sense of purpose, and, in turn, greater depressive symptoms. Taken together with these findings, the current work highlights the need to consider *why* relationship quality may lead to changes in sense of purpose. In particular, these findings may suggest that there are certain behaviors that one's romantic

partner enacts that may help bolster—or even threaten—one’s sense of purpose given the significant cross-lagged effect of initial relationship quality with later sense of purpose.

Third, our model also considered how these constructs changed together, finding that changes in sense of purpose and relationship quality were positively correlated, wherein if one’s sense of purpose increased, their relationship quality did as well. These findings map onto past work suggesting that as social support increases over years, so, too, does sense of purpose (Weston et al., 2020). While these effects were small, they should still be noted given the stability for both constructs. Sense of purpose is a primary promoter of health and well-being across the lifespan (Pfund & Hill, 2018). However, it is often hard to develop early on in adulthood and maintain later in adulthood (Mann et al., 2021; Pfund & Lewis, 2020). As such, these findings help continue laying the groundwork for the importance of relationship quality in the promotion of sense of purpose, as well as set forth future directions that can aid in the development and maintenance of both constructs.

Limitations and Future Directions

Future research should examine bidirectional associations more thoroughly, employing more than two waves of data. Additional waves would allow for the utilization of latent growth models, and/or autoregressive latent trajectory models, which can better estimate the associations between initial levels and changes in the two constructs over time. In particular, this approach would serve to better solidify whether sense of purpose and romantic relationship quality are consistently changing together for individuals. Moreover, utilizing more than two waves also would enable greater insights into mechanisms for explaining why social relationships may aid in the development and maintenance of sense of purpose. Lastly, recent critiques of CLPMs have focused on their inability to account for between-person differences when evaluating within-person changes (e.g., Hamaker et al., 2015; Lucas, 2022). Having more waves of data would allow for the utilization of the Random Intercept CLPM, allowing for the modeling of changes in relation to an individual’s own personal mean on the variables of interest. In other words, more measurement occasions would allow us to test whether in times in which one is higher on sense of purpose than their personal average, if they are also higher on relationship quality than their personal average.

Future research would also benefit from exploring whether the potential influence of purpose enhancement is unique to romantic relationships, or if perceiving support and understanding of one’s life aims can be valuable from other relationship sources. While the current findings indicated that more purposeful people are more likely to be in romantic relationships over time, the current study did not evaluate other relationship types. Given this work suggests that better romantic relationship quality may help bolster a higher sense of purpose, it is important to consider whether this extends to other relationship types, especially when considering that people who were not in romantic relationships reported a lower sense of purpose. Past research on college students has found that a higher sense of purpose is connected to greater relationship satisfaction and stability with friends and parents (Pfund, Bono, & Hill, 2020), while research on older adults has found social support and positive social interactions are connected to a higher sense of purpose (Pfund, Hofer, et al., 2021; Weston et al., 2020). However, with the current study emphasizing the importance

of positive romantic relationships for bolstering a higher sense of purpose, future research should consider whether relationship types outside of the romantic relationship context may help promote purpose maintenance and growth. Given the current work's suggestion that single individuals may be less purposeful, understanding whether other close relationships can function in a similar capacity is a particularly important endeavor.

The current study is limited in ways that provide a foundation for other future research. The main limitations are based on the lack of changes in relationship status, only having two waves of data, and not having both partners in the relationships. Very few participants were in the relationship beginners and discontinuers categories. Thus, it is unclear how sense of purpose plays into decisions surrounding entering into and ending relationships. While past work has found that single individuals and individuals who change relationships have lower well-being than those who are consistently in relationships (Purol et al., 2021), sense of purpose may function differently in these relationship contexts. In particular, those who have a higher sense of purpose may be more likely to end a relationship rather than remain in a potentially negative or undesirable relationships, as purposeful individuals are more likely to have clearer goals and priorities (McKnight & Kashdan, 2009). Furthermore, while the current study highlights that people with a lower sense of purpose were more likely to be single, future work should also consider the role one sees relationships to have in their purposeful pursuits. For example, one individual could perceive relationships to interfere with their life aims versus another seeing it as a primary component of their purpose. Future endeavors should investigate whether one's qualitative understanding of their purpose in life may be an underlying moderator of the purpose by relationship status association.

Moving forward, a younger sample could be used given that the majority of this sample was middle-aged adults and older adults. Commitment, a predictor of relationship dissolution, is often strongly associated with older age (Joel, Eastwick, et al., 2020), and relationship satisfaction often being lower earlier on in a relationship (Bühler, Kross, & Orth, 2021). Moreover, most research focusing on being in a relationship and sense of purpose has focused on older adults (e.g., Hill & Weston, 2019; Pinquart, 2002); thus, it would be valuable to consider whether these findings are consistent across different ages, or whether sense of purpose is more tied to relationship status later in the lifespan. Furthermore, future research could include more time between measurement occasions, as a longer period between waves would allow for more variability in whether one ends or enters a relationship. This would also be valuable in unveiling the long-term implications for sense of purpose and remaining

The final limitation is that this study only captures one partner in the romantic dyad. Some of the main predictors of relationship quality are based on one's own perception (Joel et al., 2020). However, understanding both the target and partner's self-reported sense of purpose and perceptions of each other's sense of purpose would allow greater insights into measurement validity, especially with past subjective well-being findings highlighting how one partner's well-being can influence the other's (Orth, Erol, et al., 2018). Moreover, these additions would also allow for tests of accuracy and similarity on sense of purpose and relationship quality by providing insight into whether being similar on sense of purpose levels as well as accurate in one's perception of each other's sense of purpose levels may

play a role in relationship quality. Dyadic work thus would provide an important next step in expanding upon the current research findings.

Conclusion

Despite these limitations, these findings lay important groundwork for future research endeavors. Having a higher sense of purpose predicts relationship status over time such that more purposeful individuals tend to be in a romantic relationship rather than be single. Furthermore, for individuals in romantic relationships, sense of purpose and romantic relationship quality change together, even with the high level of stability in both constructs, with increases in one being connected to increases in the other. Moreover, having a healthy relationship with one's partner may help one harness or maintain a higher sense of purpose later on. Sense of purpose predicts well-being, health, and social outcomes throughout the lifespan, though it can be elusive for some; the context of one's romantic relationship may provide further information for why one's purpose. Knowing how to bolster and maintain a sense of purpose is imperative for successful lifespan development, and having a quality romantic relationship may be one way to achieve that goal.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Statement of Relevance

The current study explores 1) how having a sense of purpose predicts relationship status, and 2) the connection between sense of purpose and romantic relationship quality over time. Purposeful people are more likely to stay in a relationship than stay single, suggesting that they may be better at entering and staying in relationships. Furthermore, being in a high-quality relationship helps promote a higher sense of purpose, highlighting the importance of partner support for purpose development.

Table 1

Participant Age, Gender, Ethnicity, and Sexuality Information for Entire Wave 1 Sample, for Wave 2 Sample[†], and for Committed Continuers.

	Wave 1 Sample (<i>n</i> = 2,243)	Wave 2 Sample [†] (<i>n</i> = 1,200)	Committed Continuers (<i>n</i> = 874)
Age			
Range	18 – 91	20 – 88	20 – 86
Mean	54.46	54.81	55.07
Std. Dev.	18.79	17.27	17.14
Gender			
Female	42.6%	40.7%	40.8%
Male	56.4%	58.8%	58.9%
Other	0.8%	0.6%	0.2%
Ethnicity			
African American/Black	5.8%	5.3%	4.2%
Asian American/Asian	5.4%	4.6%	5.2%
European American/White	78.3%	81.2%	82.0%
Latinx-American/Hispanic	3.6%	2.8%	3.0%
Middle Eastern	0.4%	0.4%	0.3%
Multiracial	0.8%	1%	0.9%
Other/Free Responses	4.2%	4.1%	3.6%
rather not say	1.1%	0.5%	0.6%
Sexual Orientation			
Exclusively heterosexual	89.4%	91.8%	94.2%
More heterosexual than homosexual	3.2%	2.3%	1.9%
Bisexual	2.4%	1.1%	0.6%
More homosexual than heterosexual	0.7%	0.7%	0.6%
Homosexual	4.4%	4.1%	2.8%
Relationship Status			
In a relationship	71.2%	77.8%	100%
Single but previously in a relationship	22.1%	22.4%	0.0%
Never been in a relationship	6.7%	0.0%	0.0%

Note.

[†]Does not include those who did not report relationship status or were never in a relationship.

Table 2

Time 1 Means, Standard Deviations, and Correlations with 95% Confidence Intervals for Committed Continuers (n = 874) below the Diagonal and Time 2 Associations above the Diagonal and 95% Confidence Intervals in Brackets.

	1.	2.	3.	4.	5.
1. Age	-				
2. Time 1 Purpose	.15 [.07, .21]	-			
3. Time 2 Purpose	.14 [.07, .19]	.88 [.86, .90]	-		
4. Time 1 Rel. Quality	.09 [.04, .15]	.52 [.46, .59]	.53 [.47, .59]	-	
5. Time 2 Rel. Quality	.09 [.04, .15]	.49 [.42, .56]	.59 [.53, .64]	.90 [.89, .92]	-
Range	20 – 86	–3.2 – 1.0	–3.4 – 0.9	–6.9 – 1.9	–6.9 – 1.9
<i>M</i> (<i>SD</i>)	55.07 (17.14)	0.0 (0.74)	0.0 (0.75)	0.0 (1.80)	0.0 (1.81)

Note. Purpose and relationship quality information comes from the latent variables created in the cross-lagged panel model.

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Table 3

Factor Loadings, Intercepts, Variances, and Covariances for the Six Sense of Purpose Items and the Five Relationship Quality Manifest Variables: Relationship Satisfaction, Investment Size, Commitment, Intimacy, and Trust.

	Estimate	Lower 95% CI	Upper 95% CI	Std. Est.
Factor Loadings				
Item 1	1.00	1.00	1.00	0.73
Item 2	0.79	0.72	0.86	0.58
Item 3	1.07	1.00	1.15	0.78
Item 4	0.75	0.68	0.81	0.54
Item 5	0.89	0.83	0.96	0.65
Item 6	0.74	0.68	0.80	0.54
Satisfaction	1.00	1.00	1.00	1.81
Investment	0.53	0.48	0.57	0.95
Commitment	0.53	0.50	0.57	0.96
Intimacy	0.72	0.70	0.75	1.30
Trust	0.51	0.48	0.54	0.92
Intercepts				
Item 1	4.03	3.97	4.09	4.03
Item 2	3.91	3.86	3.96	3.91
Item 3	3.95	3.89	4.01	3.95
Item 4	4.07	4.03	4.12	4.07
Item 5	4.27	4.22	4.32	4.27
Item 6	4.47	4.42	4.52	4.47
Satisfaction	6.99	6.87	7.12	6.99
Investment	7.01	6.92	7.10	7.01
Commitment	7.89	7.80	7.97	7.89
Intimacy	5.80	5.71	5.88	5.8
Trust	6.25	6.17	6.32	6.25
Variances				
Item 1	0.57	0.52	0.61	0.57
Item 2	0.46	0.42	0.49	0.46
Item 3	0.38	0.35	0.42	0.38
Item 4	0.31	0.28	0.33	0.31
Item 5	0.30	0.27	0.32	0.30
Item 6	0.32	0.30	0.35	0.32
Satisfaction	0.58	0.51	0.66	0.58
Investment	1.50	1.38	1.61	1.50
Commitment	0.96	0.89	1.04	0.96
Intimacy	0.26	0.23	0.30	0.26
Trust	0.58	0.53	0.63	0.58
Covariances				

	Estimate	Lower 95% CI	Upper 95% CI	Std. Est.
Item 1	0.12	0.07	0.16	0.12
Item 2	0.14	0.10	0.17	0.14
Item 3	0.08	0.05	0.11	0.08
Item 4	0.09	0.07	0.12	0.09
Item 5	0.06	0.03	0.08	0.06
Item 6	0.14	0.11	0.16	0.14
Satisfaction	0.31	0.24	0.39	0.31
Investment	0.68	0.57	0.79	0.68
Commitment	0.52	0.44	0.59	0.52
Intimacy	0.12	0.09	0.15	0.12
Trust	0.37	0.32	0.42	0.37

Note. Because the indicators were constrained across waves for an individual manifest variable, the estimates are the same for both Time 1 and Time 2. Covariances represent the associated residuals of a given manifest variable with itself across both time points after accounting for the latent variable.

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