

**Development of the Relational Meaning in Life Questionnaire: Relational Meaning in Life
and Well-Being**

by

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DEDICATION

This dissertation is dedicated to those who have filled my life with meaning. To my husband, Chris, my parents De Qiang and Mei Qin Yu, and my sister Emily for your unconditional love and support every step along the way.

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PREFACE

This dissertation aimed to develop and validate a measure of relational meaning in life, the Relational Meaning in Life Questionnaire. The foundation of this research stemmed from decades of research on the important role meaning in life has in relation to well-being and adjustment. Although interpersonal relationships are important in the understanding of self as well as in relation to meaning in life, existing measures of meaning in life have largely focused on a more general and personal sense of meaning in life. This dissertation sought to examine whether an explicitly focused relational meaning in life measure would be a useful tool in furthering the understanding of meaning in life in relation to well-being. This line of research and the specific research questions were formulated with Dr. Edward C. Chang. Each study was designed and conducted in collaboration with Dr. Chang, who also provided supervision and consultation throughout each study. All data were collected between November 2017 and December 2018. I was engaged in researching and writing this dissertation from April 2018 to September 2019. The dissertation was completed in fulfillment of the Ph.D. graduation requirements of the University of Michigan Rackham Graduate School. With my doctorate degree, I hope to continue exploring unique research questions and help to contribute to the body of research that aims to help others to pursue and achieve a rich and meaningful life.

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ABSTRACT

Meaning in life has long been argued and found to be important in psychological adjustment and well-being. While personal meaning in life has been well studied as a correlate and predictor of many personal well-being outcomes, it is unclear how relational meaning in life contributes to well-being, especially to relational/interpersonal well-being outcomes. Study 1 developed and examined the factor structure and reliability of the Relational Meaning in Life Questionnaire (RMLQ). An exploratory factor analysis and a confirmatory factor analysis supported a two-factor model. Results also indicated that the RMLQ is reliable across a 5-6 week period. Study 2 examined for the utility of the RMLQ in predicting interpersonal well-being and adjustment outcomes, above and beyond personal meaning in life. Results indicated that although personal meaning in life accounts for significant variance in all of the interpersonal well-being outcomes examined in the study, relational meaning in life accounts for a significant amount of unique variance above and beyond personal meaning in life for the majority of interpersonal well-being outcomes examined. Study 3 examined for the utility of the RMLQ in predicting both personal and interpersonal well-being and adjustment outcomes, above and beyond social support. Results indicated that although social support accounts for a significant amount of variance in all outcomes examined, relational meaning in life accounts for a significant amount of unique variance above and beyond social support for several well-being outcomes. Overall, dissertation findings suggest that for researchers interested in studying relational meaning in life as a predictor of interpersonal well-being outcomes and conditions in adults, the RMLQ might prove to be an important and useful measure.

CHAPTER I

Overview

Meaning in life has been argued to be a necessity, and primary motivation for an individual (Frankl, 1946/1984). From the numerous bestselling self-help books, to the written viewpoints of philosophers and theorists, to the hundreds of empirical research studies, there is undeniably a strong interest in understanding meaning in life. Over the past several decades, there has been a surge of research focused on furthering the understanding of meaning in life. Indeed, areas of study have ranged from ways to define meaning in life, understanding the positive constructs associated with having a greater sense of meaning in life, or conversely, the negative factors associated with having a low sense of meaning in life (e.g., Hicks & King, 2009; Park, 2010; Schlegel, Hicks, Arndt, & King, 2009), to examining and understanding the sources of meaning in life (e.g., Schnell, 2009). Although several definitions of meaning in life have been proposed, most share in the common themes that meaning in life encompasses a sense of the significance, purpose, and/or coherence of one's life (Heintzeman & King, 2014; Park & George, 2013). Indeed, Steger and his colleagues have defined meaning in life as “the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceive themselves to have a purpose, mission, or overarching aim in life” (Steger, 2009).

Much of the interest in meaning in life research has focused on examining for the role of meaning in life in adjustment (see Park, 2010). Findings have generally shown that having greater meaning in life is reliably associated with a wide range of adjustment and well-being

outcomes. For example, researchers have found meaning in life to be positively related to happiness (Hicks, Schlegel, & King, 2010; Hill et al., 2013), positive affect (Hicks et al., 2010; Hicks, Trent, Davis, & King, 2012), life satisfaction (e.g., Duffy & Sedlacek, 2010; Pan, Wong, Joubert, & Chan, 2008), and psychological well-being (e.g., Ryff, 1989; Ryff & Keyes, 1995); and inversely associated with stress (e.g., Dunn & O'Brien, 2009; Linley & Joseph, 2011), depression (e.g., Steger, Oishi, & Kashdan, 2009), and suicide risk (e.g., Edwards & Holden, 2003; Kleiman & Beaver, 2013).

Researchers have also sought to understand the sources of meaning in life. According to Wong's (1998) Personal Meaning Profile, achievement, religion, self-transcendence, relationships, intimacy, fairness, and self-acceptance are key sources of meaning. Schnell's (2009) Sources of Meaning and Meaning in Life Questionnaire (SoME) recognizes 26 different sources of meaning that can be summarized into four dimensions including: self-transcendence, self-actualization, order, and well-being and relatedness. Using an open-ended question to ask undergraduate students about what makes life meaningful, Lambert et al. (2010) found that 68% of participants listed their family, or a specific family member as their most important source of meaning, while another 14% indicated that friends as their most important source of meaning. In a follow up study with undergraduate students, this group of researchers found that when participants were asked to rank 12 different sources of meaning (family, friends, happiness, religious faith, achievements, self-acceptance, personal growth, self-worth, justice/fairness, personal goals, intimacy, and helping others) from most important to least important, family was rated as significantly more important compared to the other available sources. Similarly, in a study of South African university students, Nell (2014) utilized a qualitative design and identified 25 main sources of meaning in life. In a subsequent study, students rated the sources

from most to least important. Both the qualitative and quantitative data indicated that the most important source of meaning was close personal relationships, especially with family and friends. Other sources identified included hope, achievement and goals, education and learning, God and religion, service to others, creative self-expression, hobbies, recreation and leisure, health, personal autonomy, pets, and money. Furthermore, in a longitudinal study of sources of meaning in life among cancer patients, Scheffold et al. (2014) found that 92.2 percent of participants endorsed “engaging in personal relationships with family and/or friends” as an important source of meaning in life. Other sources of meaning that over 70% of participants endorsed as being important included preserving human values and ideals, feeling financially secure, relationship with nature, participation in “hedonistic” activities, being of service to others, and meeting basic, everyday needs. Interestingly, across these several studies and diverse methodologies, relationships with others emerges as a top source of meaning in life. Furthermore, among other sources of meaning in life that are endorsed, it can be argued that many also have an interpersonal aspect that may drive its connection to meaning in life. For example, religion is another commonly endorsed source of meaning. According to findings from Fletcher (2004), religion involves a set of beliefs as well as involvement and association with a community of others with similar beliefs. In their qualitative study of individuals across different religious faiths, for some, a belief system was sufficient to construct meaning in life whereas for others involvement in the social interactions was necessary to construct meaning in life.

Researchers and theorists have argued that humans are interconnected beings and the interpersonal context of the individual is useful data in understanding human existence (e.g., Baumeister & Leary, 1995). Indeed, Bowen (1978) argued that it is through the understanding of family dynamics (e.g., triangles) and other processes that are shaped by early familial relations

(e.g., differentiation of self) that individual identities can be further understood. According to Baumeister (2005), people's behaviors are largely influenced by others and culture in general. Furthermore, Baumeister (2012) argues that the sense of belongingness is a basic human need that motivates the formation and maintenance of interpersonal relationships, and belongingness and social connections are linked to meaning. Indeed, research has shown a strong connection between sense of belongingness and meaning in life. For example, in a series of four studies utilizing different methodological approaches (correlation, longitudinal, and experimental), Lambert et al. (2013) found that those with a greater sense of belongingness held the highest levels of meaning in life. Conversely, absence of social relationships has also been argued and shown to negatively impact meaning in life (Williams, 1997; 2002). For example, in a study of undergraduate students, Stillman et al. (2009) experimentally manipulated participants' sense of social exclusion and found that compared to the control condition and social acceptance condition, those who experienced social exclusion self-reported lower levels of meaning in life. However, despite the strong findings that relationships are integral in one's sense of self as well as in relation to meaning in life, the most widely used tools to assess for meaning in life have largely been based on a more general and self-focused sense of meaning in life.

According to a 2012 systematic review of meaning in life assessment tools, Brandstätter, Baumann, Borasio, and Fegg identified 59 different measures related to meaning in life, and still more measures continue to be developed. The Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006) has been cited over 2,000 times and is a brief 10-item measure that assesses for both presence of meaning in life as well as searching for meaning in life. The MLQ is one of the most widely used measures of meaning in life in well-being research and has been translated to over 30 languages. The Multidimensional Existential Meaning Scale (MEMS;

George & Park, 2017) is a 15-item measure with three dimensions to assess existential meaning, namely comprehension, purpose, and mattering. In the purpose in life subscale of the Ryff (1989) Psychological Well Being Scale, 7 items measure purpose in life. In each of these measures, and similarly found in other measures of meaning in life, the focus is on a respondent's general sense of personal meaning in life that is focused on the self (e.g., 'I understand my life's meaning,' 'My life makes sense,' or 'I have a sense of direction and purpose in life') and do not explicitly capture the important relational aspects of meaning in life.

Given this potential limitation in methodology, it is possible that there are still important areas in the research literature on meaning in life that have yet to be examined. This may be useful in furthering the understanding of the relationship between meaning in life and well-being, especially interpersonal well-being. Therefore, it might be important to expand the model of meaning in life to in order to more explicitly examine for relational meaning in life. Taking these theories, findings, and limitations into account, a more relationally-informed sense of meaning in life may help to more fully capture the human experience of meaning in life and predict interpersonal well-being outcomes above and beyond a general and self-informed sense of meaning in life.

The present dissertation includes three studies that develop a measure of relational meaning in life, the *Relational Meaning in Life Questionnaire* (RMLQ), test for the reliability, validity of the measure, and examine the predictive utility of the measure in accounting for interpersonal and personal well-being and adjustment outcomes.

The first study aimed to develop the Relational Meaning in life Questionnaire (RMLQ) based on the widely used Meaning in Life Questionnaire and examined for the factor structure and reliability of the measure. Items from the Meaning in Life Questionnaire were modified to

form the Relational Meaning in Life Questionnaire. Factor analyses determined whether the RMLQ followed the same structure as the original MLQ with two distinct dimensions emerging from the 10 items (i.e., RMLQ-Presence & RMLQ-Searching). Correlations between Time 1 and Time 2 RMLQ scores were examined to determine its reliability across 5-6 weeks. Finally, we examined for the amount of shared variance between RMLQ and the MLQ to determine whether the two measures were distinct.

The second study examined for the predictive utility of the RMLQ-Presence above and beyond MLQ-Presence in accounting for unique variance in a wide range of interpersonal well-being outcomes. Self-report questionnaires were completed by participants recruited via Amazon MTurk. Predictor variables (RMLQ and MLQ) measured at Time 1 were analyzed as predictors of interpersonal well-being outcomes measured at Time 2 (5-6 weeks after Time 1).

The third study examined for the predictive utility of the RMLQ-Presence above and beyond social support in accounting for unique variance in a wide range of interpersonal and personal well-being and adjustment outcomes. Self-report questionnaires were completed by participants recruited via Amazon MTurk.

The results of this dissertation may help to determine whether the RMLQ is a useful measure to help further build upon the understanding of the relationship between meaning in life and well-being. Indeed, it may be especially important to examine whether the RMLQ is a useful tool for researchers interested in examining relational positive psychological constructs as predictors of interpersonal well-being and adjustment.

Specific Aims

1. Develop the Relational Meaning in life Questionnaire (RMLQ) and examine the factor structure and reliability of the measure.

2. Examine the predictive utility of RMLQ-Presence above and beyond MLQ-Presence in accounting for variance in a wide range of interpersonal well-being and adjustment outcomes.
3. Examine the predictive utility of RMLQ-Presence above and beyond social support in accounting for variance in a wide range of interpersonal and personal well-being and adjustment outcomes.

CHAPTER II

Study 1. Construction of the Relational Meaning in Life Questionnaire: An exploratory and confirmatory factor-analytic study of relational meaning

Abstract

The present research examined the factor structure and test-retest reliability of the Relational Meaning in Life Questionnaire (RMLQ), a measure modified from the widely used Meaning in Life Questionnaire to assess for one's sense of meaning in life through their relationships with others. In Study 1.1, an exploratory factor analysis supported a 2-factor model (i.e., RMLQ-Presence & RMLQ-Searching). In Study 1.2, a confirmatory factor analysis further confirmed the 2-factor structure. In Study 1.3, a prospective study design involving 103 community adults across a 5-6 week indicated that the RMLQ subscales are reliable. Additionally, results indicate that RMLQ and MLQ subscale scores are positively related, but not redundant. Results of the present studies support the structure and reliability of the RMLQ.

Introduction

Although over 50 measures of meaning in life exist (Brandstätter, Baumann, Borasio, & Fegg, 2012) and relationships with others represent an important aspect of meaning in life (Lambert et al., 2010; Schnell, 2009; Wong, 1998), there has yet to be a measure developed to specifically assess for an individual's perception of their meaning in life from their relationships with others. In the present study, we sought to construct and factor analyze a measure of relational meaning in life, the Relational Meaning in Life Questionnaire (RMLQ). The RMLQ assesses for one's sense of meaning in life that stems from relationships with others. This measure is based on Steger and his colleagues' widely used Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, S., & Kaler, 2006) that is comprised of two subscales (presence of meaning in life & searching for meaning in life). Presence of meaning in life is defined as "the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceive themselves to have a purpose, mission, or over-arching aim in life," (Steger, 2009). Searching for meaning in life is defined as "the strength, intensity, and activity of people's desire and efforts to establish and/or augment their understanding of meaning, significance, and purpose of their lives" (Steger, Kashdan, Sullivan, & Lorentz, 2008). In the same way, relational meaning in life may also be understood through both a sense of presence of and searching for relational meaning in life. Individuals who self-rate a higher level of presence of relational meaning in life have a greater sense that their meaning in life comes from relationships with others. Similarly, individuals who self-rate a higher level of search for meaning in life are looking for more of their meaning to come from relationships with others. Given the widespread use of the MLQ, it would be useful to examine whether a modified version of the MLQ that specifically assesses around meaning in life through relationships with

others would be useful in furthering the understanding of meaning in life. Using this top-down approach to examine for relational meaning in life will help to provide a foundation for further research.

Study 1.1 Exploratory Factor Analysis and Confirmatory Factor Analysis

Method

Participants

The sample included a total of 538 (196 male, 342 female) college students from a large Midwestern University in the United States. Participants' ages range from 18 to 27 with a mean age of 19.62 ($SD = 1.46$). Of the participants, 30.7% reported to be European American/White, 49.7% reported to be Asian or Asian American, 7.1% reported to be Hispanic/Latino, 1.5% reported to be Black or African American, and 11% reported to be other. The literature on scale validation recommends conducting an EFA and CFA on the same set of items but with different samples (e.g., DeVellis, 2003; Worthington & Whittaker, 2006). From this larger data set, we randomly generated two independent data sets without replacement. The sample for Study 1 (EFA) included 278 (93 male, 185 female) participants. The sample for Study 2 (CFA) included 260 (103 male, 157 female) participants.

Measures

Relational Meaning in Life Questionnaire (RMLQ) includes 10-items which were modified from the Meaning in Life Questionnaire (Steger et al., 2006) by adding "through my relationships with others" for each item. For example, 'I understand my life's meaning' from the Meaning in Life Questionnaire was transformed to 'I understand my life's meaning through my relationships with others.' Participants are asked to rate how true each statement is to them using a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). Higher

scores on the RMLQ-Presence represent a greater sense of meaning in life from relationships with others and higher scores on the RMLQ-Search represent a greater sense of searching for meaning from relationships with others. The original MLQ items and the transformed items representing RMLQ are presented in **Table 2.1**.

Procedure

Approval for the study was obtained from the Institutional Review Board prior to data collection. The MLQ items were modified by the study authors to create the RMLQ. The purpose for the measure, original MLQ items, as well as the RMLQ items were sent to 12 individuals (6 graduate students, 6 research assistants) for review before finalizing the items for the RMLQ. Participants were recruited via a targeted email sent to 2,000 randomly selected undergraduate students, who were at least 18 years of age, by the Office of the Registrar. The recruitment email provided information about the study and included a link to the online survey. The first page of the online survey included informed consent information and participants indicate that they have read and understand the informed consent information before proceeding to the survey. Participant information remained strictly confidential as no identifiable information was collected with the survey. Participants who completed the survey had the opportunity to enter an email address (not connected to their survey response) for a chance to win a \$25 gift card. Only completed responses were included in the final analyses. The EFA in Study 1 was conducted using IBM SPSS Version 25. The CFA in Study 2 was conducted using Mplus Version 8.

Results

In conducting the exploratory factor analysis, criteria for factorability were analyzed and met. Namely, all 10 items were correlated at least .3 with at least one other item, the Kaiser-

Meyer-Olkin measure of sampling adequacy was .88. Bartlett's test of sphericity was significant ($\chi^2(45) = 2775.42, p < .05$), and the communalities were all above .3. Exploratory Factor Analysis (EFA) was conducted using a maximum likelihood factor extraction to determine the factor structure and a Promax oblique rotation.

Based on Kaiser's criterion of retaining factors with eigenvalues greater than one, a factor solution of two factors was obtained. As shown in **Table 2.2**, the data converged on two factors: a "searching for meaning from relationships" factor accounting for 49.36% of the scale's variance and a "presence of meaning from relationships" factor accounting for 15.46% of the scale's variance. The rotation had a sum of squared loadings ranging from 3.59 to 4.01. There were 10 (22.0%) nonredundant residuals with absolute values greater than 0.05. All 10 items were kept in the final EFA model given that each item contributed to one of the two factors with loadings over .5. Internal consistencies for presence of relational meaning in life and searching for relational meaning in life were examined using Cronbach's alpha. The alphas were .84 for presence of relationship meaning in life and .87 for searching for relationship meaning in life. The findings overall point to two distinct factors in the RMLQ.

The two factor model identified from the EFA in Study 1 was further confirmed by a CFA in Study 2 with an independent sample ($N = 260$) of randomly selected undergraduate students.

The CFA produced an adequate fit to the data with modification indices suggesting error covariance between some pairs of items. We freely estimated error covariances for three pairs of items (#10 and #8, #3 and #1, #4 and #3) that may be semantically similar and share error variance. Model fit indices supported the 2 factor structure: RMSEA = .07, 90% confidence interval [CI] = [.05, .09], CFI = .97, TLI = .96. **Table 2.3** provides standardized factor loadings,

standard errors, and R^2 values for the final CFA model. All variables significantly loaded onto the same factor in the CFA as was shown in the EFA.

Study 1.2 Test-Retest Reliability

Study 1.2 sought to examine for the test-retest reliability of the RMLQ in a community sample of adults across 5-6 weeks.

Method

Participants

The study recruited a total of 103 (43 males, 60 females) participants using Amazon's Mechanical Turk (MTurk). Participants' ages range from 22 to 73 with a mean age of 40.08 ($SD = 12.15$). Of the participants, 76.7% reported to be non-Hispanic White, 7.8% reported to be Asian or Asian American, 7.8% reported to be Black or African American, 4.9% reported to be Hispanic/Latino, and 1% reported to be other.

Measures

Relational Meaning in Life. Relational meaning in life was assessed by using the Relational Meaning in Life Questionnaire (RMLQ; see study 1.1).

Meaning in Life. Meaning in life is assessed for by using the Meaning in Life Questionnaire (MLQ; Steger et al., 2006). The MLQ includes five items representing presence (e.g., "I have a good sense of what makes my life meaningful") and five items representing searching (e.g., "I am looking for something that makes my life feel meaningful"). Participants rated each statement using a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*).

Procedure

Approval for the study was obtained from the Institutional Review Board prior to data collection. Participants were recruited from Amazon's Mechanical Turk (MTurk). The use of an Amazon Mturk sample allows for the examination of psychometric properties of the RMLQ with a non-college convenience sample. Additionally, confidentiality and anonymity can be better protected with an MTurk sample given that participants all have a unique worker ID and can be contacted to take the Time 2 portion of the study without using identifying contact information. Participants were offered \$1.25 for completing the Time 1 survey, and \$2 for completing the Time 2 survey. Participants' Time 1 and Time 2 responses were matched using their MTurk worker IDs, no identifying information was collected. Analyses were conducted using IBM SPSS Version 25.

Results

Correlations between Time 1 and Time 2 responses for RMLQ-Presence and RMLQ-Searching subscales and Time 1 and Time 2 MLQ-Presence and MLQ-Searching subscales are presented in **Table 2.4**. Time 1 and Time 2 RMLQ-Presence scores were significantly and positively correlated, $r = .75, p < .001$. Time 1 and Time 2 RMLQ-Searching scores were also significantly and positively correlated, $r = .72, p < .001$. RMLQ-Presence and MLQ-Presence scores within each cross-sectional timeframe or across time 1 and time 2 were positively and significantly correlated ($r = .55$ to $.68, p < .001$). Similarly, RMLQ-Searching and MLQ-Searching were positively and significantly correlated ($r = .61$ to $.66, p < .001$). Notably, although respective RMLQ and MLQ scores were related, there are not redundant with each other, sharing only 30-46% of variance for Presence subscales and 37-44% of variance for Searching subscales.

Discussion

In the present study, we sought to develop, factor analyze, and examine the reliability of a measure of relational meaning in life, the Relational Meaning in Life Questionnaire (RMLQ). Items from a widely used measure of meaning in life, the Meaning in Life Questionnaire (Steger et al., 2006; MLQ) were modified to include reference to relationships with others. Overall, the present study found that the RMLQ follows the same factor structure as the MLQ, indicating that there are two distinct factors, namely RMLQ-Presence and RMLQ-Searching. In the subsequent study, test-retest data from a community sample indicated that scores of RMLQ-Presence and RMLQ-Searching are reliable across a 5-6 week period of time. Additionally, while MLQ-Presence and MLQ-Searching scores were found to be positively related to RMLQ-Presence and RMLQ-Searching scores, respectively, it is notable that the measures are not redundant with each other.

Utilizing the RMLQ in addition to the MLQ may help researchers to better distinguish sources of meaning-related processes (i.e., relational vs. personal) that are involved across the spectrum of psychological and physical well-being. For example, it would be important to further examine how personal vs. relational meaning in life may be similarly or differentially related to well-being outcomes (e.g., satisfaction with life, family life satisfaction, depression, stress).

Limitations of the present study

Limitations for the present study may include the use of a sample recruited via MTurk. While the use of a MTurk sample of community adults was useful in the present study to examine for the test-retest reliability of the RMLQ, results may differ when examining community adults who are not active MTurk workers. Future studies may benefit from

examining the validity and utility of the RMLQ with adult community samples recruited through other methods.

Concluding thoughts

To conclude, the RMLQ is a reliable measure of relational meaning in life that consists of 10 items, with 5 items representing presence of relational meaning in life and 5 items representing searching for relational meaning in life. Importantly RMLQ is related to but distinct from the MLQ.

Table 2.1: Original items from MLQ and transformed items that make up the RMLQ

MLQ	RMLQ
1. I understand my life's meaning	1. I understand my life's meaning through my relationships with others
2. I am looking for something that makes my life feel meaningful	2. I am looking for relationships with others that make my life feel meaningful
3. I am always looking to find my life's purpose	3. I am always looking to find my life's purpose through my relationships with others
4. My life has a clear sense of purpose	4. My life has a clear sense of purpose because of my relationships with others
5. I have a good sense of what makes my life meaningful	5. I have a good sense that my relationships with others make my life meaningful
6. I have discovered a satisfying life purpose	6. My relationships with others have helped me discover a satisfying life purpose
7. I am always searching for something that makes my life feel significant	7. I am always searching for relationships with others that make my life feel significant
8. I am seeking a purpose or mission for my life	8. I am seeking a purpose or mission for my life through my relationships with others
9. My life has no clear purpose	9. My relationships with others provide my life with no clear sense of purpose
10. I am searching for meaning in my life	10. I am searching for meaning in life through my relationships with others

Note. MLQ = Meaning in Life Questionnaire (Steger et al., 2006). RMLQ = Relational Meaning in Life Questionnaire.

Table 2.2: Exploratory Factor Loadings for the RMLQ ($N = 278$).

Factor name and items	Loadings	
	1	2
Factor 1: Relational Meaning in Life-Presence ($\alpha = .87$)		
1. I understand my life's meaning through my relationships with others	.54	.24
4. My life has a clear sense of purpose because of my relationships with others	.57	.26
5. I have a good sense that my relationships with others make my life meaningful	.79	.00
6. My relationships with others have helped me discover a satisfying life purpose	.78	-.02
9. My relationships with others provide my life with no clear sense of purpose ^a	.72	-.23
Factor 2: Relational Meaning in Life-Searching ($\alpha = .83$)		
2. I am looking for relationships with others that make my life feel meaningful	.24	.51
3. I am always looking to find my life's purpose through my relationships with others	.00	.81
7. I am always searching for relationships with others that make my life feel significant	.03	.71
8. I am seeking a purpose or mission for my life through relationships with others	-.03	.84
10. I am searching for meaning in life through my relationships with others	-.19	.89

Note. Item numbers correspond to final RMLQ scale.

^aindicates that this is a reverse-coded item.

Table 2.3: Measurement Model: Confirmatory Factor Loadings for the RMLQ ($N = 260$).

Latent variable and indicators	Standardized estimate	SE	R^2
Factor 1: Relational Meaning in Life-Presence			
1. I understand my life's meaning through my relationships with others	.77	.03	.60
4. My life has a clear sense of purpose because of my relationships with others	.81	.03	.66
5. I have a good sense that my relationships with others make my life meaningful	.83	.02	.69
6. My relationships with others have helped me discover a satisfying life purpose	.85	.02	.72
9. My relationships with others provide my life with no clear sense of purpose ^a	.43	.05	.18
Factor 2: Relational Meaning in Life-Searching			
2. I am looking for relationships with others that make my life feel meaningful	.63	.05	.39
3. I am always looking to find my life's purpose through my relationships with others	.79	.03	.62
7. I am always searching for relationships with others that make my life feel significant	.75	.04	.56
8. I am seeking a purpose or mission for my life through relationships with others	.75	.04	.56
10. I am searching for meaning in life through my relationships with others	.73	.04	.53

Note. All standardized estimates were significant at $p < .001$.

^aIndicates that Item 9 is a reverse-coded item.

Table 2.4: Correlations between time 1 and time 2 RMLQ and MLQ subscales in community adults ($N = 103$).

Measures	1	2	3	4	5	6	7
1. T1 RMLQ-Presence	--						
2. T1 RMLQ-Searching	.34***	--					
3. T1 MLQ-Presence	.68***	.02	--				
4. T1 MLQ-Searching	-.11	.65***	-.39***	--			
5. T2 RMLQ-Presence	.75***	.25**	.55***	-.10	--		
6. T2 RMLQ-Searching	.24*	.72***	-.06	.61***	.30**	--	
7. T2 MLQ-Presence	.65***	.01	.84***	-.36***	.60***	-.04	--
8. T2 MLQ-Searching	.02	.66***	-.30**	.85***	.00	.73***	-.30**

Note. T1 = Time 1. T2 = Time 2, measured 5-6 weeks after T1. RMLQ = Relational Meaning in Life Questionnaire. MLQ = Meaning in Life Questionnaire.

* $p < .05$. ** $p < .01$. *** $p < .001$.

CHAPTER III

Study 2. Relational Meaning in Life as a Predictor of Interpersonal Well-Being: A Prospective Analysis

Abstract

The present study sought to examine for the predictive utility of the RMLQ in accounting for variance in interpersonal well-being outcomes (e.g., positive friendship functions, family life satisfaction, positive relationships) above and beyond personal meaning in life. The study utilized a prospective design with a community adult sample. We found that personal meaning in life accounted for a significant amount of variance in all of the interpersonal well-being outcomes examined in the present study, and importantly, relational meaning in life accounted for a significant amount of unique variance above and beyond personal meaning in life for the majority of interpersonal well-being outcomes. Findings highlight the importance of considering relational meaning in life, especially when the outcomes are interpersonal.

Introduction

Over the past several decades, psychologists have examined for the role of meaning in life in well-being and adjustment (see Park, 2010). Findings have generally shown that meaning in life is reliably associated with a wide range of adjustment and well-being outcomes, including positively associated with life satisfaction (e.g., Duffy & Sedlacek, 2010; Pan, Wong, Joubert, & Chan, 2008), happiness (e.g., Hicks, Schlegel, & King, 2010; Hill et al., 2013), positive affect (e.g., Hicks et al., 2010; Hicks, Trent, Davis, & King, 2012), and psychological well-being (e.g., Ryff, 1989; Ryff & Keyes, 1995); and inversely associated with stress (e.g., Dunn & O'Brien, 2009; Linley & Joseph, 2011), depression (e.g., Steger, Oishi, & Kashdan, 2009), and suicide risk (e.g., Edwards & Holden, 2003; Kleiman & Beaver, 2013).

Most research on meaning in life has focused on its relation to other intrapersonal well-being outcomes, and few studies have examined for its utility in predicting interpersonal well-being outcomes, which could range from having a low sense of interconnectedness, such as experiences of loneliness, to more specified connections with individuals (e.g., positive functions of a close friend) or groups (e.g., family life satisfaction), and to more general and abstract constructs (e.g., social life satisfaction, positive relations, quality of social relations). Indeed, researchers have found and argued that greater meaning in life may work to promote more positive relationships and interpersonal interactions (e.g., O'Donnell et al., 2014). For example, in a study of undergraduate students, Stillman, Lambert, Fincham, and Baumeister (2011) had independent raters evaluate video recorded interactions between two friends and in a second study evaluate recorded 10 second introductions. They found that the video recorded participants with higher self-rated levels of meaning in life were rated by others more favorably in interpersonal appeal compared to individuals with lower levels of meaning in life even above and

beyond other markers of interpersonal appeal (e.g., extraversion, self-esteem, agreeableness, happiness). However, the limited extant research related to meaning in life and interpersonal well-being have mostly examined for how interpersonal factors predict meaning in life (e.g., Krause, 2007; Lambert et al., 2013) rather than how meaning in life may bolster interpersonal well-being. With the extensive research that exists in examining meaning in life as a predictor of a wide range of intrapersonal well-being, it may also be important to work toward gaining a greater understanding of meaning in life as a predictor of a wide range of interpersonal well-being outcomes.

Researchers and theorists have long argued and demonstrated that humans are interconnected beings and cannot be understood in isolation from other people (e.g., Baumeister & Leary, 1995; Lee & Robbins, 1995). For example, according to Baumeister (2012), the sense of belongingness is a basic human need that motivates the formation and maintenance of interpersonal relationships. Indeed, it is likely that interpersonal well-being outcomes are strongly predicated on an interpersonal understanding of self, including a sense of meaning in life that is relationally informed rather than self-informed. Taking these theories and findings into account, a more relationally-informed sense of meaning in life may help to more fully understand the role of meaning in predicting interpersonal well-being outcomes above and beyond a general and self-focused sense of meaning in life. In the present study, we sought to examine whether relational meaning in life (i.e., meaning in life through one's relationships with others) would predict interpersonal adjustment outcomes above and beyond personal meaning in life (i.e., meaning in life that is general and self-focused).

Method

Participants

The study recruited a total of 314 (157 males, 156 females, & 1 unspecified) participants using Amazon's Mechanical Turk (MTurk). Only 190 were retained to complete the Time 2 portion of the study. Therefore, the present analyses were based off the 190 (91 males, 98 females, & 1 unspecified) who completed both Time 1 and Time 2 surveys. Participants' ages range from 21 to 73 with a mean age of 38.98 ($SD = 12.03$). Of the participants, 77.4% reported to be non-Hispanic White, 7.9% reported to be Asian or Asian American, 5.3% reported to be Hispanic/Latino, 6.8% reported to be Black or African American, and 2.6% reported to be other. Other demographic information about the sample is presented in **Table 3.1**.

Measures

Demographic Variables. The regression analyses will include age, gender, race/ethnicity, marital status, whether the respondent has children, education level, employment status, and income as controls.

Personal Meaning in Life. Personal meaning in life is assessed for by using the select items from the Meaning in Life Questionnaire (MLQ; Steger et al., 2006). Five of the total ten items from the MLQ represent presence of meaning in life and were used in the present study. An example item of Personal Meaning in Life is 'I have a good sense of what makes my life meaningful.' Participants are asked to rate how true each statement is to them using a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). In the present sample, internal reliability of Personal Meaning in Life was .95. In general, higher scores represent greater personal meaning in life.

Relational Meaning in Life. Relational meaning in life is assessed for by using five modified items from the Meaning in Life Questionnaire by adding a reference to interpersonal relationships. For example, 'I understand my life's meaning' from the Meaning in Life

Questionnaire was transformed to ‘I understand my life’s meaning through my relationships with others.’ Participants are asked to rate how true each statement is to them using a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). In the present sample, internal reliability of Relational Meaning in Life was .90. In general, higher scores represent greater relational meaning in life.

Interpersonal well-being outcomes. Interpersonal well-being was assessed using 12 constructs including: Loneliness; Romantic Relationship Life Satisfaction; Family Life Satisfaction; Friendship Functions; Positive Relationships; Quality of Social Relationships; and Social Life Satisfaction.

Loneliness was assessed by the revised UCLA Loneliness Scale (R-UCLA; Russell, Peplau, & Cutrona, 1980). The scale is made up of 20 items, 10 items are positively worded (e.g., ‘There are people I feel close to’), representing non-lonely thoughts and are reverse scored, and 10 items are negatively worded, representing feelings of loneliness (e.g., ‘I feel isolated from others’). Participants are asked to rate each statement on the frequency with which they have these experiences using a 4-point Likert-type scale, ranging from 1 (*never*) to 4 (*often*). In the present sample, internal reliability of Loneliness was .96. In general, higher scores represent greater loneliness.

Friendship functions are assessed using the McGill Friendship Questionnaire-Friendship Functions (Mendelson & Aboud, 1999). Friendship functions include stimulating companionship (e.g., ‘is fun to sit and talk to’), help from friend (e.g., ‘helps me when I need it’), intimacy with friend (e.g., ‘is someone I can tell private things to’), reliable alliance with friend, validation from friend (e.g., ‘points out things that I am good at’), and emotional security from friend (e.g., ‘would still want to be my friend even if we had a fight’). Each friendship function domain is

comprised of 5 items. Participants are asked to indicate how often their friend is or does each item using a 9-point Likert-type scale, ranging from 0 (*never*) to 8 (*always*). In the present sample, internal reliability of Stimulating Companionship was .89, Help from Friend was .92, Intimacy with Friend was .92, Reliable Alliance with Friend was .92, Validation from Friend was .93, and Emotional Security from Friend was .93. In general, higher scores represent greater friendship quality.

Romantic relationships, family, and social life satisfactions were assessed using select dimensions from the Extended Satisfaction with Life Scale (ESWLS; Alfonso, Allison, & Radner, 1996). Relationship Life Satisfaction (e.g., ‘I am generally pleased with the quality of my relationship/marriage’), Family Life Satisfaction (e.g., ‘In most ways my family life is close to my ideal’), and Social Life Satisfaction (e.g., ‘I am satisfied with my social life’) are each made up of 5 items. Participants are asked to indicate their level of agreement with each statement using a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In the present sample, internal reliability of Romantic Relationships Life Satisfaction was .93, Family Life Satisfaction was .97, and Social Life Satisfaction was .97. In general, higher scores represent greater romantic relationship, family, and social life satisfaction.

Positive relationships was assessed by the positive relationships dimension of the Psychological Well-being Scale—42-item version (Ryff, 1989). This dimension is made up of 7 items that assess for having trusting and close relationships with others. An example item is ‘I know that I can trust my friends, and they know they can trust me’). Participants are asked to indicate their level of agreement with each statement using a 4-point Likert-type scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agreed*). In the present sample, internal reliability of Positive Relationships was .83. In general, higher scores represent greater positive relationships.

Quality of social relationships was assessed by Domain 3 of the World Health Organization Quality of Life-Brief (WHOQOL-BREF). This domain is made up of 3 items that assess for satisfaction with personal relationships, social support, and sexual activity. An example item is ‘how satisfied are you with the support you get from your friends?’ Participants are asked to rate each statement on their level of satisfaction a 5-point Likert-type scale, ranging from 1 (*very dissatisfied*) to 4 (*very satisfied*). In the present sample, internal reliability of Quality of Social Relationships was .77. In general, higher scores represent greater quality and satisfaction of social relationships.

Procedure

Approval for the study was obtained from the Institutional Review Board prior to data collection. Participants were recruited from Amazon's Mechanical Turk (MTurk). Participants were offered \$1.25 for completing the Time 1 survey, and \$2 for completing the Time 2 survey. Participants' Time 1 and Time 2 responses were matched using their MTurk worker IDs, no identifying information was collected.

Results

Correlations between the main study measures are presented in **Table 3.2**. All correlations emerged as expected, namely, personal meaning in life was significantly and positively related to all positive interpersonal well-being outcomes ($r = .24$ to $.58, p < .01$) and was inversely related to loneliness ($r = -.59, p < .001$). Additionally, relational meaning in life was significantly and positively related to all positive interpersonal well-being outcomes ($r = .28$ to $.54, p < .001$) and was inversely related to loneliness ($r = -.51, p < .001$). Finally, personal meaning in life was significantly, and positively related to relational meaning in life ($r = .65, p <$

.001). Notably, although personal and relational meaning in life are highly related, only 42% of variance is shared, indicating that the two constructs are not redundant with each other.

Results of conducting hierarchical regression analyses are presented in **Table 3.3**. Demographic variables (i.e., gender, age, race/ethnicity, marital status, whether they have children, highest education, employment status, and income) were entered as a set in the First Step as a control. Meaning in life (measured at Time 1) was entered in the Second Step. Finally, relational meaning in life (measured at Time 1) was entered in the Third Step. All outcome measures were assessed at Time 2. To determine whether the predictors accounted for a small, medium, or large amount of the variance in personal meaning in life, we used Cohen's (1977) convention for small ($f^2 = .02$), medium ($f^2 = .15$), and large effects ($f^2 = .35$).

In predicting Loneliness, demographic variables did not account for a significant amount of variance, $F(8, 181) = 1.94, p = .057$. Consistent with our expectations, when personal meaning in life was entered in Step 2, it accounted for an additional large ($f^2 = .46$), 29% of variance, $F(1, 180) = 82.34, p < .001$. Furthermore, supporting our hypothesis, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .04$), but significant, 2.7% of variance, $F(1, 179) = 7.90, p = .005$.

In predicting Romantic Relationship Life Satisfaction, demographic variables did not account for a significant amount of variance, $F(8, 114) = .26, p = .976$. As expected, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .08$), but significant 7% of variance, $F(1, 113) = 8.78, p = .004$. Additionally, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .05$), but significant 4% of variance, $F(1, 112) = 5.67, p = .019$. In predicting Family Life Satisfaction, demographic variables accounted for a significant 6% of variance, $F(8, 181) = 3.38, p < .001$. Consistent with

our expectations, when meaning in life was entered in Step 2, it accounted for an additional medium ($f^2 = .16$), 12% of variance, $F(1, 180) = 29.78, p < .001$. Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .06$), but significant 4% of variance, $F(1, 179) = 11.14, p < .001$. In predicting Social Life Satisfaction, demographic variables did not account for a significant amount of variance, $F(8, 180) = 1.43, p = .187$. As expected, when meaning in life was entered in Step 2, it accounted for an additional large ($f^2 = .44$), 29% of variance, $F(1, 179) = 78.97, p < .001$. Interestingly, and inconsistent with our expectations, when relational meaning in life was added in the Step 3, it did not account for additional significant variance, $F(1, 178) = 2.82, p = .095$.

In predicting Friend's Stimulating Companionship, demographic variables did not account for a significant amount of variance, $F(8, 181) = 1.62, p = .122$. As predicted, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .06$), but significant 5.7% of variance, $F(1, 180) = 11.69, p < .001$. Also as expected, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .04$), but significant 4% of variance, $F(1, 179) = 7.60, p = .006$. In predicting Friend's Help, demographic variables accounted for a significant 8.4% of variance, $F(8, 181) = 2.07, p = .041$. As expected, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .09$), but significant 7.2% of variance, $F(1, 180) = 15.34, p < .001$. Also as expected, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .03$), but significant 2.5% of variance, $F(1, 179) = 5.42, p = .021$. In predicting Friend's Intimacy, demographic variables did not account for a significant amount of variance, $F(8, 181) = 1.69, p = .103$. As expected, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .07$), but significant 6.5% of variance, $F(1, 180) = 13.42, p < .001$. Additionally, when

relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .05$), but significant 3.8% of variance, $F(1, 179) = 8.17, p = .005$. In predicting Friend's Reliable Alliance, demographic variables accounted for a significant 10.5% of variance, $F(8, 181) = 2.66, p = .009$. Consistent with our expectations, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .05$), but significant 4.6% of variance, $F(1, 180) = 9.66, p = .002$. Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .03$), but significant 2.4% of variance, $F(1, 179) = 5.22, p = .02$. In predicting Friend's Self Validation, demographic variables accounted for a significant 9.3% of variance, $F(8, 181) = 2.32, p = .022$. As predicted, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .06$), but significant 4.9% of variance, $F(1, 180) = 10.30, p = .002$. Consistent with our expectations, relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .05$), but significant 3.8% of variance, $F(1, 179) = 8.24, p = .005$. In predicting Friend's Emotional Security, demographic variables did not account for a significant amount of variance, $F(8, 181) = 1.86, p = .069$. As expected, when meaning in life was entered in Step 2, it accounted for an additional small ($f^2 = .08$), but significant 7.1% of variance, $F(1, 180) = 14.97, p < .001$. Similarly, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .03$), but significant 2.8% of variance, $F(1, 179) = 6.00, p = .015$.

In predicting positive relationships, demographic variables accounted for a significant 10% of variance, $F(8, 181) = 2.51, p = .013$. As expected, when meaning in life was entered in Step 2, it accounted for an additional large ($f^2 = .42$) 26.8% of variance, $F(1, 180) = 76.14, p < .001$. Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .09$), but significant 5.3% of variance, $F(1, 179) = 16.41, p < .001$.

Finally, in predicting Quality of Social Relationships, demographic variables accounted for a significant 11.5% of variance, $F(8, 181) = 2.94, p = .004$. As expected, when meaning in life was entered in Step 2, it accounted for an additional medium ($f^2 = .31$) 21.1% of variance, $F(1, 180) = 56.23, p < .001$. Furthermore, as predicted, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .05$), but significant 3.5% of variance, $F(1, 179) = 9.89, p = .002$.

In order to further confirm whether relational meaning in life more effectively accounts for variance in interpersonal well-being outcomes than personal meaning in life, we sought to examine whether the opposite might be true. We ran a series of post-hoc hierarchical regression analyses to test whether personal meaning in life would account for unique additional variance, above and beyond relational meaning in life, in the same set of interpersonal well-being outcomes. We found that for 5 out of 12 outcomes (including: loneliness, social life satisfaction, family life satisfaction, quality of social relationships, & positive relationships) personal meaning in life accounted for additional variance beyond relational meaning in life. However, for 7 out of 12 outcomes (including: relationship life satisfaction, friend functions (i.e., stimulating companionship, help from friend, intimacy with friend, reliable alliance with friend, self-validation from friend, & emotional security from friend), personal meaning in life did not account for any additional significant variance after accounting for relational meaning in life.

In order to further confirm whether relational meaning in life more effectively accounts for variance in interpersonal well-being outcomes than personal meaning in life, we sought to examine whether the opposite might be true. We ran a series of post-hoc hierarchical regression analyses to test whether personal meaning in life would account for unique additional variance, above and beyond relational meaning in life, in the same set of interpersonal well-being

outcomes (see **Table 3.4**). We found that for 5 out of 12 outcomes (including: loneliness, social life satisfaction, family life satisfaction, quality of social relationships, & positive relationships) personal meaning in life accounted for additional variance beyond relational meaning in life. However, for 7 out of 12 outcomes (including: relationship life satisfaction, friend functions (i.e., stimulating companionship, help from friend, intimacy with friend, reliable alliance with friend, self-validation from friend, & emotional security from friend), personal meaning in life did not account for any additional significant variance after accounting for relational meaning in life.

Overall, our regression findings showed that relational meaning in life accounted for unique additional variance above and beyond personal meaning in life for 11 out of 12 interpersonal well-being outcomes. This robust pattern highlights the unique value of relational meaning in life for predicting interpersonal well-being and a need for a more inclusive definition and measurement construct of meaning in life when assessing interpersonal outcomes.

Discussion

Meaning in life research has largely focused on the intrapersonal experience of meaning in life and how it is related to other self-informed well-being outcomes. This study sought to expand on the meaning in life literature by first examining how personal meaning in life is related to a wide range of interpersonal well-being outcomes, ranging from the lack of interpersonal well-being (i.e., loneliness) to more specific interpersonal relations (e.g., positive functions of a close friend) or groups (e.g., family life satisfaction) to more broad and abstract ideas of positive interpersonal well-being (e.g., quality of social relationships). Secondly, relational meaning in life was examined as a predictor of interpersonal well-being outcomes, above and beyond personal meaning in life. Notably, by using a prospective study design, this

study was able to more rigorously test whether personal and relational meaning in life predicted future interpersonal well-being outcomes.

Consistent with our expectations, we found that personal meaning in life accounted for significant variance in all interpersonal well-being outcomes examined for in the present study. Given that extant research on meaning in life and well-being has been mostly limited to intrapersonal well-being outcomes, the present findings help to further generalize the positive predictive utility of personal meaning in life to interpersonal well-being outcomes (e.g., Stillman et al., 2011). For example, in Stillman et al.'s (2011) study, strangers rated the participants on how much they would like to be friends with them based on a recorded introduction of themselves. Based on the findings of the present study, it would be interesting to also examine how respondents would rate participants on other interpersonal outcomes (e.g., how supportive of a friend do you think they are). Furthermore, as related research has more often focused on the role of interpersonal well-being on meaning in life, the present findings point to the need to re-examine how meaning in life is related to other interpersonal constructs. For example, in a study of older U.S. adults, Krause (2007) examined for how three types of social support (anticipated, enacted, and negative) are related to changes in meaning in life. Findings from the present study may point to the need to also examine how meaning in life may be related to changes in various perceived social support types.

Furthermore, relational meaning in life accounted for additional significant variance above and beyond personal meaning in life for 11 out of 12 interpersonal well-being outcomes that were examined. Consistent with Baumeister's assertion for more than two decades (2012; Baumeister & Leary, 1995) that people are driven by the need for connectedness, and that seemingly intrapersonal processes also involve interpersonal aspects (e.g., Tice & Baumeister,

2001), our findings indicate that the existing dominant measures of meaning in life, such as the Meaning in Life Questionnaire, may not completely or effectively capture all meaning in life processes and that constructs that more explicitly reference relationships with others may tap into an integral piece of meaning in life experiences that otherwise are not captured by a more general or personal sense of meaning in life. This points to the importance of developing and further building upon positive psychological constructs that center on the important human need of relatedness/connectedness to be considered when assessing for interpersonal well-being outcomes.

Interestingly, the one interpersonal well-being outcome that did not show a significant prediction model with personal meaning and relational meaning was social life satisfaction. While it is important to note that relational meaning in life approached significance in this model, it may be that in thinking about relational meaning in life, positive well-being regarding a specified individual (e.g., friend) or group (e.g., family) is more relevant than broad concepts of interpersonal well-being (e.g., social life satisfaction). Future research may wish to examine specific interpersonal relationships in relation to meaning in life and relational meaning in life. For example, it may be important to examine for the role of meaning in life within specific life domains, such as relationships with one's work colleagues. Indeed, recent studies have sought to understand the role of meaning in life in the work context (Janicke-Bowles, Rieger, Connor, 2019; Steger & Dik, 2009). Allan, Douglass, Duffy, and McCarty (2016) examined and found that meaningful work is an important moderator in the relationship between work-related stress and meaning in life. Meaningful relationships, particularly with one's coworkers may also serve as an important moderator in the relationship between work-related stress and meaning in life. Alternatively, it may also be important to examine the role of relational meaning in life in

relation to specific interpersonal work-related stress (e.g., conflict with co-workers or bosses). Relatedly, within the context of stressful interpersonal experiences, it would also be important to examine how relational meaning in life functions within specific interpersonal domains (e.g., family, friends, community).

Some Limitations of the Present Study

Although the present findings provide promising empirical support for the role of relational meaning in life in predicting interpersonal well-being outcomes above and beyond personal meaning in life, some important limitations should be noted. First, the present study utilized a community sample recruited from Amazon's Mechanical Turk (MTurk). While MTurk offers access to a relatively diverse group (in terms of age, SES, marital status, employment, education), it is unclear whether the findings would generalize to community samples that are not recruited through this method. Second, the sample in the present study was predominantly non-Hispanic White. Therefore, it is unclear whether these findings may be generalizable to other ethnocultural groups. For example, it would be interesting and important to examine how relational meaning in life is related to interpersonal well-being outcomes among specific ethnocultural groups that have also been argued to be more collectivistic (e.g., Asians, Latinos/as). Third and relatedly, research is also needed to examine for possible mechanisms that may account for the strong relationship between relational meaning in life and well-being outcomes, as well as potential moderators of these relationships (e.g., positive affect, cultural values). Fourth, the prospective design spanned 5-6 weeks between assessments. It would be important to examine the predictive utility of relational meaning in life across a longer period of time. Finally, the present study only utilized a single method to examine the relationships between personal meaning, relational meaning, and interpersonal well-being outcomes.

Therefore, future studies may benefit from the use of other methods to examine these relationships further.

Concluding Thoughts

Utilizing a prospective study design, this study sought to examine the predictive utility of relational meaning in life in accounting for variance in future interpersonal well-being outcomes (e.g., family life satisfaction, positive relationships) above and beyond a more general sense of personal meaning in life in a community sample of adults. Findings showed that after controlling for demographic variables, personal meaning in life accounted for a significant amount of variance in all interpersonal well-being outcomes included in the study. Additionally, findings showed that relational meaning in life contributed a significant amount of additional variance for the majority of the interpersonal well-being outcomes above and beyond personal meaning in life. In conclusion, findings add support for the validity of the RMLQ-Presence and demonstrate the unique predictive value relational meaning has when examining interpersonal well-being outcomes. Findings point to the need to continue expanding on the understanding of the role of relational and personal meaning in life in interpersonal well-being.

Table 3.1: Demographic information

Variable	<i>n</i>	%
Marital Status		
Single, never married	72	37.9
Married/Domestic Partnership	92	48.4
Divorced	23	12.1
Separated	3	1.6
Do you have children		
Yes	107	56.3
No	83	43.7
Highest Education		
High school, or equivalent	22	11.6
Some college, no degree	34	17.9
Trade/Technical/Vocational	10	5.3
Associate Degree	21	11.1
Bachelor's Degree	81	42.6
Master's Degree	17	8.9
Professional Degree	3	1.6
Doctorate Degree	2	1.1
Employment Status		
Employed	140	73.7
Self-Employed	28	14.7
Out of work, looking	4	2.1
Out of work, not looking	3	1.6
Homemaker	10	5.3
Student	1	.5
Retired	4	2.1
Income		
Less than \$25,000	28	14.7
\$25,000 to \$49,999	68	45.3
\$50,000 to \$74,999	56	29.5
\$75,000 to \$99,999	22	11.6
\$100,000 to \$149,999	10	5.3
\$150,000 to \$199,999	2	1.1
\$200,000 or more	4	2.1

Table 3.2: Correlations between personal meaning in life, relational meaning in life, and interpersonal well-being outcomes ($N = 190$).

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. PML	--													
2. RML	.65***	--												
3. R-UCLA	-.59***	-.51***	--											
4. FF-SC	.29***	.36***	-.55***	--										
5. FF-H	.33***	.35***	-.58***	.86***	--									
6. FF-I	.29***	.36***	-.62***	.82***	.84***	--								
7. FF-RA	.24***	.28***	-.50***	.75***	.72***	.82***	--							
8. FF-SV	.28***	.35***	-.59***	.85***	.88***	.84***	.74***	--						
9. FF-ES	.32***	.35***	-.56***	.88***	.88***	.88***	.80***	.90***	--					
10. ESWL-RR	.26**	.32**	-.39***	.32***	.36***	.39***	.32***	.34**	.33***	--				
11. ESWL-F	.45***	.46***	-.46***	.40***	.41***	.46***	.38***	.37***	.40***	.58***	--			
12. ESWL-S	.57***	.43***	-.66***	.37***	.42***	.43***	.31***	.38***	.39***	.36***	.61***	--		
13. PWB-PR	.58***	.54***	-.85***	.54***	.52***	.57***	.50***	.53***	.52***	.27**	.41***	.59***	--	
14. QOL-SR	.56***	.50***	-.74***	.47***	.50***	.55***	.45***	.51***	.52***	.61***	.58***	.67***	.68***	--

$N = 190$. PML = Personal Meaning in Life; RML = Relational Meaning in Life; R-UCLA = Loneliness; FF-SC = Stimulating Companionship; FF-Help = H; FF-I = Intimacy with Friend; FF-RA = Reliable Alliance with Friend; FF-SV = Self-validation from Friend; FF-E = Emotional Security from Friend; ESWL-R =

Romantic Relationship Life Satisfaction; ESWL-F = Family Life Satisfaction; PWB-PR = Positive Relations; QOL-SR = Quality of Social Relations; ESQI-S = Social Life Satisfaction. PML and RML were assessed at Time 1, all other measures were assessed at Time 2.

** $p < .01$. *** $p < .001$

Table 3.3: Results of hierarchical regression analyses showing amount of variance in interpersonal well-being outcomes accounted for by time 1 presence of meaning in life and time 1 presence of relational meaning in life ($N = 190$).

Outcome and Measure	β	R^2	ΔR^2	df	F
Loneliness					
Step 1: Demographic Variables		.08	--	(8, 181)	1.94
Step 2: Meaning in life	-.59***	.37	.29	(1, 180)	82.34***
Step 3: Relational Meaning in Life	-.23**	.40	.03	(1, 176)	7.90**
Stimulating Companionship with Friend					
Step 1: Demographic Variables		.07	--	(8, 181)	1.62
Step 2: Meaning in life	.26***	.12	.06	(1, 180)	11.69***
Step 3: Relational Meaning in Life	.26**	.26	.04	(1, 181)	7.60**
Help from Friend					
Step 1: Demographic Variables		.08	--	(8, 181)	2.07
Step 2: Meaning in life	.30***	.16	.07	(1, 180)	15.34***
Step 3: Relational Meaning in Life	.22*	.18	.03	(1, 179)	5.42*
Intimacy with Friend					
Step 1: Demographic Variables		.07	--	(8, 181)	1.69
Step 2: Meaning in life	.28***	.13	.07	(1, 180)	13.42***
Step 3: Relational Meaning in Life	.27**	.17	.04	(1, 179)	8.17**
Reliable Alliance with Friend					
Step 1: Demographic Variables		.11	--	(8, 181)	2.66**
Step 2: Meaning in life	.24**	.15	.06	(1, 180)	9.66**
Step 3: Relational Meaning in Life	.22*	.18	.03	(1, 179)	5.22*
Self-Validation from Friend					
Step 1: Demographic Variables		.09	--	(8, 181)	2.32*
Step 2: Meaning in life	.25**	.14	.05	(1, 180)	10.30***
Step 3: Relational Meaning in Life	.27**	.18	.04	(1, 179)	8.24**
Emotional Security from Friend					
Step 1: Demographic Variables		.08	--	(8, 181)	1.86 [†]
Step 2: Meaning in life	.29***	.15	.07	(1, 180)	14.97***
Step 3: Relational Meaning in Life	.23*	.18	.03	(1, 179)	6.00*
Romantic Relationship Life Satisfaction					
Step 1: Demographic Variables		.02	--	(8, 114)	.26
Step 2: Meaning in life	.29**	.09	.07	(1, 113)	8.78**
Step 3: Relational Meaning in Life	.28*	.13	.04	(1, 112)	5.67*

Family Life Satisfaction

Step 1: Demographic Variables		.13	--	(8, 181)	3.38***
Step 2: Meaning in life	.39***	.25	.12	(1, 180)	29.78***
Step 3: Relational Meaning in Life	.29***	.30	.04	(1, 179)	11.51***

Social Life Satisfaction

Step 1: Demographic Variables		.06	--	(8, 180)	1.43
Step 2: Meaning in life	.59***	.35	.29	(1, 179)	78.97***
Step 3: Relational Meaning in Life	.14 [†]	.36	.01	(1, 178)	2.82 [†]

Positive Relationships

Step 1: Demographic Variables		.10	--	(8, 181)	2.51**
Step 2: Meaning in life	.57***	.37	.27	(1, 180)	76.14***
Step 3: Relational Meaning in Life	.32***	.42	.05	(1, 179)	16.41***

Quality of Social Relationships

Step 1: Demographic Variables		.12	--	(8, 181)	2.94 [†]
Step 2: Meaning in life	.51***	.33	.21	(1, 180)	56.23***
Step 3: Relational Meaning in Life	.26**	.36	.04	(1, 179)	9.89**

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

CHAPTER IV

Study 3. Beyond Social Support as a Predictor of Well-Being: Examining the Role of Relational Meaning in Life

Abstract

The present study sought to examine for the predictive utility of relational meaning in life in accounting for variance in interpersonal and personal well-being and adjustment outcomes above and beyond social support. We found that social support accounted for significant variance in all of the outcomes examined in the present study, and importantly, relational meaning in life accounted for a significant amount of unique variance above and beyond social support for family life satisfaction, social life satisfaction, positive relationships, quality of social life, and satisfaction with life. Thus, findings provide further support that the RMLQ-Presence is a useful measure of relational meaning in life for researchers interested in studying relational meaning as a predictor of interpersonal well-being outcomes and conditions in adults.

Introduction

A longstanding and continually growing body of research has supported the importance of having close, supportive, and meaningful relationships. Indeed, according to Baumeister (2012), relationships with others is a basic human need. *Relational meaning in life* can be defined as one's sense of meaning in life that comes from having relationships with others and results from Study 2 pointed to the role of relational meaning in life in predicting lower levels of loneliness and higher levels of interpersonal well-being outcomes (e.g., positive relationships, romantic relationship life satisfaction, family life satisfaction) above and beyond personal meaning in life. Although findings from Study 1 and Study 2 have supported that relational meaning in life is distinct from personal meaning in life and is important in accounting for variance in interpersonal well-being outcomes, it would be interesting and important to further test the validity the RMLQ in predicting well-being outcomes above and beyond other well-established indices of social functioning.

Although there are many existing indices that help to conceptualize the functions of interpersonal relationships (e.g., social integration, belongingness, connectedness), one area that research has largely focused on is *social support*, the perceived extent to which one has individuals in their social networks from whom they can receive care and assistance when needed (Cohen & Wills, 1985). Indeed, social support has been found to be a key explanatory variable linked to psychological adjustment and well-being including lower levels of depression, anxiety, stress, and suicide (e.g., Baumeister & Leary, 1995; Bell et al., 2018; Hefner & Eisenberg, 2009; Pettit, Roberts, Lewinsohn Seeley, & Yaroslavsky, 2011), and higher levels of life satisfaction and psychological well-being, (Siedlecki, Salthouse, Oishi, & Jeswani, 2014). It has also been found to be related to interpersonal well-being outcomes (e.g., relationship

satisfaction, Brunstein, Dangelmayer, & Schultheiss, 1996). Therefore, in the continued test of the utility of the RMLQ, it would be important to examine its predictive utility above and beyond social support.

Purpose of the Present Study

The purpose of the present study was three-fold: 1) to examine the associations between social support, relational meaning in life, and a wide range of interpersonal well-being outcomes (e.g., romantic relationship life satisfaction, family life satisfaction, positive relationships) and other adjustment and well-being outcomes (e.g., depressive symptoms, life satisfaction, & perceived stress) in a community sample of adults; 2) to examine whether social support is a significant predictor of interpersonal and personal well-being and adjustment outcomes; and 3) to examine whether relational meaning in life would further add to the prediction of interpersonal and personal adjustment outcomes above and beyond social support.

Given that social support has been found to be related to a wide range of well-being outcomes, including interpersonal well-being, we expect to find social support to be significantly and positively related to all positive interpersonal and personal well-being outcomes (i.e., romantic relationship life satisfaction, family life satisfaction, social life satisfaction, positive relationships, quality of social life, & satisfaction with life), and inversely related to both depressive symptoms and perceived stress. Furthermore, given that past initial findings using the RMLQ, we expect to continue to find a significant positive relationship between relational meaning in life and positive interpersonal well-being outcomes. We also expect relational meaning in life to be positively related to satisfaction with life and inversely related to depressive symptoms and perceived stress. As both social support and relational meaning in life represent

constructs of positive social functioning, we expect to find them to be significantly and positively related, but not be redundant with each other.

Furthermore, we expect to find social support to account for a significant amount of variance in all interpersonal and personal well-being and adjustment outcomes included in the present study. While social support and relational meaning in life will likely share some variance in the outcomes examined for, we expect that relational meaning in life will further account for variance above and beyond social support.

Method

Participants

The study recruited a total of 201 (89 male, 111 female, & 1 unspecified) participants using Amazon's Mechanical Turk (MTurk). Participants' ages range from 20 to 71 with a mean age of 41.63 ($SD = 11.75$). Of the participants, 75.6% reported to be non-Hispanic White, 10.4% reported to be Black or African American, 7% reported to be Hispanic/Latino, 6.5% reported to be Asian or Asian American, and .5% reported to be other.

Measures

Demographic Variables. The regression analyses included age, gender, race/ethnicity, marital status, whether the respondent has children, education level, employment status, and income as controls.

Social Support. Social Support was assessed by the Multidimensional Survey of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS includes 12 items that assess for one's sense of social support from various sources (e.g., significant others, family, friends; "I get the emotional help and support I need from my family"). Participants are asked to indicate their level of agreement with each item on a 7-point

Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In the present sample, internal reliability of the MSPSS was $\alpha = .96$. In general, higher scores represent greater perceived social support.

Relational Meaning in Life. Relational meaning in life was assessed using one dimension of the Relational Meaning in Life Questionnaire (RMLQ). The RMLQ-Presence dimension includes 5 items that assess for sense of meaning in life that comes from relationships with others (e.g., “I understand my life’s meaning through my relationships with others.”) Participants are asked to rate how true each statement is to them using a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). In the present sample, internal reliability of RMLQ-Presence was $\alpha = .90$. In general, higher scores represent greater relational meaning in life.

Well-being outcomes. Well-being was assessed using 8 interpersonal and intrapersonal well-being constructs including: Romantic Relationship Life Satisfaction, Family Life Satisfaction, Social Life Satisfaction, Positive Relationships, Quality of Social Life, Satisfaction with Life, Depressive Symptoms, and Perceived Stress.

Romantic relationship, family, and social life satisfactions were assessed using select dimensions from the Extended Satisfaction with Life Scale (ESWLS; Alfonso, Allison, & Radner, 1996). Romantic Relationship Life Satisfaction (e.g., ‘I am generally pleased with the quality of my relationship/marriage’), Family Life Satisfaction (e.g., ‘In most ways my family life is close to my ideal’), and Social Life Satisfaction (e.g., ‘I am satisfied with my social life’) are each made up of 5 items. Participants are asked to indicate their level of agreement with each statement using a 7-point Likert-type scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). In the present sample, internal reliability of Romantic Relationships Life Satisfaction was

$\alpha = .97$, Family Life Satisfaction was $\alpha = .99$, and Social Life Satisfaction was $\alpha = .98$. In general, higher scores represent greater romantic relationship, family, and social life satisfaction.

Positive relationships was assessed by the positive relationships dimension of the Psychological Well-being Scale—42-item version (Ryff, 1989). This dimension is made up of 7 items that assess for having trusting and close relationships with others. An example item is ‘I know that I can trust my friends, and they know they can trust me’). Participants are asked to indicate their level of agreement with each statement using a 4-point Likert-type scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agreed*). In the present sample, internal reliability of Positive Relationships was $\alpha = .86$. In general, higher scores represent greater positive relationships.

Quality of social relationships was assessed by Domain 3 of the World Health Organization Quality of Life-Brief (WHOQOL-BREF). This domain is made up of 3 items that assess for satisfaction with personal relationships, social support, and sexual activity. An example item is ‘how satisfied are you with the support you get from your friends?’ Participants are asked to rate each statement on their level of satisfaction a 5-point Likert-type scale, ranging from 1 (*very dissatisfied*) to 4 (*very satisfied*). In the present sample, internal reliability of Quality of Social Relationships was $\alpha = .85$. In general, higher scores represent greater quality and satisfaction of social relationships.

Satisfaction with life was assessed by using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). The SWLS includes five items that represent life satisfaction (e.g., “I am satisfied with my life”). Participants are asked to rate their level of agreement with each item using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to

7 (*strongly agree*). In the present sample, internal reliability for Satisfaction with Life was $\alpha = .93$. In general, higher scores on the SWLS represent greater life satisfaction.

Depressive symptoms was assessed by using the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The BDI includes 21 items that measure depressive symptomatology. Respondents rate the extent to which they experience each item representing a depressive symptom in the past week using a 4-point Likert-type scale (e.g., “0 = I do not feel sad” to 3 = I am so sad or unhappy that I can’t stand it”). In the present sample, internal reliability for depressive symptoms is $\alpha = .96$. In general, higher scores represent greater levels of depressive symptoms.

Perceived stress was assessed by using the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). The PSS includes 14 items that measure the perception of stress in the past month. Respondents rate the frequency they experience each item using a 5-point Likert-type scale ranging from 0 (*never*) to 4 (*very often*). In the present sample, internal reliability for perceived stress is $\alpha = .92$. In general, higher scores represent greater levels of depressive symptoms.

Procedure

Approval for the study was obtained from the Institutional Review Board prior to data collection. Participants were recruited from Amazon's Mechanical Turk (MTurk). Participants were offered \$1.50 for completing the survey. No identifying information was collected.

Results

Correlations between the main study measures are presented in **Table 3.1**. All correlations emerged as expected, namely, social support was significantly and positively related to all positive well-being outcomes ($r = .55$ to $.81$, $p < .001$) and inversely related to depressive

symptoms ($r = -.65, p < .001$) and perceived stress ($r = -.57, p < .001$). Relational meaning in life was significantly and positively related to all positive well-being outcomes ($r = .48$ to $.61, p < .001$) and was inversely related to depressive symptoms ($r = -.44, p < .001$) and perceived stress ($r = -.41, p < .001$). Additionally, social support was significantly and positively related to relational meaning in life ($r = .57, p < .001$). Notably, although social support and relational meaning in life are highly related, only 32% of variance is shared, indicating that the two constructs are not redundant with each other.

Results of conducting hierarchical regression analyses are presented in **Table 3.2**. Demographic variables (i.e., gender, age, race/ethnicity, marital status, whether they have children, highest education, employment status, and income) were entered as a set in the first step as a control. Social support was entered in the second step. Finally, relational meaning in life was entered in the third step. To determine whether the predictors accounted for a small, medium, or large amount of the variance in personal meaning in life, we used Cohen's (1977) convention for small ($f^2 = .02$), medium ($f^2 = .15$), and large effects ($f^2 = .35$).

In predicting Romantic Relationship Life Satisfaction, demographic variables did not account for a significant amount of variance, $F(8, 109) = 1.35, p = .229$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = .72$), 38% of variance, $F(1, 108) = 78.21, p < .001$, and emerged as a significant individual predictor, $\beta = .65, p < .001$. When relational meaning in life was added in the Step 3, it did not account for additional significant variance, $F(1, 107) = 1.87, p = .171$.

In predicting Family Life Satisfaction, demographic variables accounted for a significant 17% of variance, $F(8, 191) = 4.87, p < .001$. Consistent with our expectations, when social support was entered in Step 2, it accounted for an additional large ($f^2 = .77$), 36% of variance,

$F(1, 190) = 147.89, p < .001$, and emerged as a significant individual predictor, $\beta = .66, p < .001$.

Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .04$), but significant 2% of variance, $F(1, 189) = 8.17, p = .005$, and emerged as a significant individual predictor, $\beta = .18, p = .005$.

In predicting Social Life Satisfaction, demographic variables accounted for a significant amount of variance, $F(8, 191) = 3.08, p = .003$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = .93$), 42% of variance, $F(1, 190) = 173.30, p < .001$, and emerged as a significant individual predictor, $\beta = .71, p < .001$. When relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .02$), but significant, 1% of variance, $F(1, 189) = 5.21, p = .024$, and emerged as a significant individual predictor, $\beta = .14, p = .024$.

In predicting positive relationships, demographic variables accounted for a significant 11% of variance, $F(8, 191) = 2.83, p = .005$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = 1.62$) 56% of variance, $F(1, 190) = 310.86, p < .001$, and emerged as a significant individual predictor, $\beta = .81, p < .001$. Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .10$), but significant 3% of variance, $F(1, 189) = 19.56, p < .001$, and emerged as a significant individual predictor, $\beta = .23, p < .001$.

In predicting quality of social life, demographic variables accounted for a significant 12% of variance, $F(8, 191) = 3.15, p = .002$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = 1.51$) 53% of variance, $F(1, 190) = 289.37, p < .001$, and emerged as a significant individual predictor, $\beta = .79, p < .001$. Furthermore, as predicted, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .09$),

but significant 3% of variance, $F(1, 189) = 16.39, p < .001$, and emerged as a significant individual predictor, $\beta = .21, p < .001$.

In predicting satisfaction with life, demographic variables accounted for a significant 22% of variance, $F(8, 191) = 6.63, p < .001$. As expected, when social support was entered in Step 2, it accounted for an additional medium ($f^2 = .34$) 42% of variance, $F(1, 190) = 66.33, p < .001$, and emerged as a significant individual predictor, $\beta = .49, p < .001$. Furthermore, as predicted, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .09$), but significant 5% of variance, $F(1, 189) = 16.66, p < .001$, and emerged as a significant individual predictor, $\beta = .27, p < .001$.

In predicting depressive symptoms, demographic variables did not account for significant variance, $F(8, 191) = 1.39, p = .204$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = .68$) 38% of variance, $F(1, 190) = 129.82, p < .001$, and emerged as a significant individual predictor, $\beta = -.67, p < .001$. Furthermore, when relational meaning in life was added in the Step 3, it did not account for additional significant variance, $F(1, 189) = 2.03, p = .155$.

Finally, in predicting perceived stress, demographic variables accounted for a significant 8% of variance, $F(8, 191) = 2.10, p = .038$. As expected, when social support was entered in Step 2, it accounted for an additional large ($f^2 = .39$) 26% of variance, $F(1, 190) = 75.62, p < .001$, and emerged as a significant individual predictor, $\beta = -.56, p < .001$. Furthermore, when relational meaning in life was added in the Step 3, it accounted for an additional small ($f^2 = .02$), and marginally significant 1% of variance, $F(1, 189) = 2.86, p = .093$, and emerged as a marginally significant individual predictor, $\beta = -.13, p = .093$.

Discussion

Research findings have long pointed to the importance of relationships with others and how supportive and meaningful relationships contribute to well-being and adjustment. The RMLQ was developed to assess for meaning in life that comes from having relationships with others, and findings from Study 2 demonstrated support for the predictive utility of the RMLQ in accounting for unique variance in a wide range of interpersonal well-being outcomes, even after controlling for personal meaning in life. The present study sought to expand on these findings involving the RMLQ by examining how it compares to another more well-established index of social functioning, namely, social support. Secondly this study sought to examine whether relational meaning in life would account for unique variance in a range of interpersonal and personal well-being and adjustment outcomes after controlling for social support.

Consistent with our expectations, we found that social support was significantly and positively related to all positive interpersonal and personal well-being and adjustment outcomes and inversely related to depressive symptoms and perceived stress. Similarly, relational meaning in life was also significantly and positively related to all positive interpersonal and personal well-being and adjustment outcomes and inversely related to depressive symptoms and perceived stress. Interestingly and importantly, social support was positively correlated with relational meaning in life, but the two constructs only share 32% of variance. This helps to support that social support and relational meaning in life are related, but not redundant with each other. It is also interesting to note that although the directions of correlations between social support and the well-being outcomes and the correlations between relational meaning in life and the well-being outcomes were the same in direction, the strengths of the relationships were generally stronger for social support than for relational meaning in life. This further corroborates past findings of the robust associations social support has with well-being and adjustment outcomes.

Results of hierarchical regression analyses further support the robust role of social support. Consistent with our expectations, social support accounted for 26 to 56 percent of unique variance after accounting for demographic control variables in every outcome examined for in the present study. However, despite the robust predictive role of social support, relational meaning in life still accounted for significant additional unique variance in family life satisfaction, social life satisfaction, positive relationships, quality of social life, and satisfaction with life. Interestingly, relational meaning in life accounted for significant variance in all interpersonal outcomes that referenced relationships more generally or a broader relational group (e.g., family), however it did not account for significant variance in romantic relationship life satisfaction. Given Brunstein et al.'s (1996) finding pointing to the importance of perceived social support in relation to marital satisfaction, it may be that in the specific context of romantic relationships, perceived social support may be a more primary consideration than relational meaning in life. However, it would be important for future studies to further examine how social support and relational meaning in life function within other specific relationships (e.g., specific family members, friendships, work colleagues, etc.)

Furthermore, when examining personal well-being and adjustment, relational meaning in life only accounted for additional variance beyond social support for satisfaction with life, but not the two negative adjustment outcomes (depressive symptoms & perceived stress), although notably, the relationship approached significance for perceived stress. It would be important to further examine relational meaning in life's role in accounting for variance in other positive and negative personal well-being and adjustment outcomes. Taken together, findings from the present study support that relational meaning in life and social support are not redundant constructs and that relational meaning in life is an important predictor of well-being and

adjustment. Indeed, findings point to the value of using the RMLQ-Presence to measure relational meaning in life when examining relational meaning as a predictor of interpersonal well-being outcomes.

Some Limitations of the Present Study

Although the present findings provide promising empirical support for the role of relational meaning in life in predicting interpersonal and personal well-being outcomes above and beyond social support, some important limitations should be noted. First, given the cross-sectional nature of the present study, cause and effect cannot be determined. It is possible that the relationships between social support and relational meaning with the well-being and adjustment outcomes examined for are bidirectional, or reversed. Therefore, it would be important for future studies to utilize a longitudinal study design to examine the directionality of these relationships as well as how social support and relational meaning in life may predict changes in well-being and adjustment over time. Second, the present study utilized a community sample recruited from Amazon's Mechanical Turk (MTurk). While MTurk offers access to a relatively diverse group (in terms of age, SES, marital status, employment, education), it is unclear whether the findings would generalize to other community samples not recruited through this method. Third, the sample in the present study was predominantly non-Hispanic White. Therefore, it is unclear whether these findings may be generalizable to other ethnocultural groups. For example, it would be interesting and important to examine how social support and relational meaning in life are related to well-being outcomes among specific ethnocultural groups that may place heavier emphasis on interpersonal relationships (e.g., Asians, Latinos/as). Finally, research is also needed to examine for possible mechanisms that may account for the strong relationship

between social support, relational meaning in life, and well-being outcomes, as well as potential moderators of these relationships.

Concluding Thoughts

The present study sought to examine the predictive utility of relational meaning in life in accounting for variance in interpersonal and personal well-being and adjustment outcomes above and beyond social support in a community sample of adults. After controlling for demographic variables, social support was found to account for a large significant amount of variance in all well-being and adjustment outcomes included in the study. Furthermore, relational meaning in life was found to further contribute a significant amount of unique variance for family life satisfaction, social life satisfaction, positive relationships, quality of social life, and satisfaction with life above and beyond social support. In conclusion, our findings support that relational meaning in life is distinct from social support and further highlights the value of using the RMLQ-Presence as a measure of relational meaning in life when examining relational predictors of interpersonal well-being outcomes.

Table 4.1. Correlations between social support, relational meaning in life, and adjustment and well-being outcomes ($N = 201$).

Measures	1	2	3	4	5	6	7	8	9	10
1. MSPSS	--									
2. RML	.57***	--								
3. ESWL-RR	.65***	.48***	--							
4. ESWL-F	.70***	.53***	.56***	--						
5. ESWL-S	.72***	.52***	.61***	.63***	--					
6. PWB-PR	.81***	.61***	.53***	.63***	.76***	--				
7. QOL-SR	.80***	.58***	.73***	.65***	.82***	.78***	--			
8. SWLS	.55***	.54***	.57***	.69***	.70***	.58***	.63***	--		
9. BDI	-.65***	-.44***	-.47***	-.64***	-.65***	-.64***	-.68***	-.64***	--	
10. PSS	-.57***	-.41***	-.52***	-.60***	-.63***	-.60***	-.67***	-.68***	.79***	--

Note. MSPSS = Social Support; RML = Relational Meaning in Life; ESWL-R = Romantic Relationship Life Satisfaction; ESWL-F = Family Life Satisfaction; ESWL-S = Social Life Satisfaction; PWB-PR = Positive Relations; QOL-SR = Quality of Social Relations; SWLS = Satisfaction with Life; BDI = Depressive Symptoms; PSS = Perceived Stress.

*** $p < .001$.

Table 4.2. Results of hierarchical regression analyses showing amount of variance in well-being and adjustment outcomes accounted for by social support and relational meaning in life ($N = 201$)

Outcome and Measure	β	R^2	ΔR^2	df	F
Romantic Relationship Life Satisfaction					
Step 1: Demographic Variables		.09	--	(8, 109)	1.35
Step 2: Social Support	.65***	.47	.38	(1, 108)	78.21***
Step 3: Relational Meaning in Life	.14	.48	.01	(1, 107)	1.87
Family Life Satisfaction					
Step 1: Demographic Variables		.17	--	(8, 191)	4.87***
Step 2: Social Support	.66***	.53	.36	(1, 190)	147.89***
Step 3: Relational Meaning in Life	.18**	.55	.02	(1, 189)	8.17**
Social Life Satisfaction					
Step 1: Demographic Variables		.11	--	(8, 191)	3.08**
Step 2: Social Support	.71***	.54	.42	(1, 190)	173.30***
Step 3: Relational Meaning in Life	.14*	.55	.01	(1, 189)	5.21*
Positive Relationships					
Step 1: Demographic Variables		.11	--	(8, 191)	2.83**
Step 2: Social Support	.81***	.66	.56	(1, 190)	310.86***
Step 3: Relational Meaning in Life	.23***	.69	.03	(1, 189)	19.56***
Quality of Social Life					
Step 1: Demographic Variables		.12	--	(8, 191)	3.15**
Step 2: Social Support	.79***	.65	.53	(1, 190)	289.37***
Step 3: Relational Meaning in Life	.21***	.68	.03	(1, 189)	16.39***
Satisfaction with Life					
Step 1: Demographic Variables		.22	--	(8, 191)	6.63***
Step 2: Social Support	.49***	.42	.20	(1, 190)	66.33***
Step 3: Relational Meaning in Life	.27***	.47	.05	(1, 189)	16.66***
Depressive Symptoms					
Step 1: Demographic Variables		.06	--	(8, 191)	1.39
Step 2: Social Support	-.67***	.44	.38	(1, 190)	129.82***
Step 3: Relational Meaning in Life	-.10	.45	.01	(1, 189)	2.03

Perceived Stress

Step 1: Demographic Variables		.08	--	(8, 191)	2.10*
Step 2: Social Support	-.56***	.34	.26	(1, 190)	75.62***
Step 3: Relational Meaning in Life	-.13†	.35	.01	(1, 189)	2.86†

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

CHAPTER V

Summary and Conclusions

This dissertation aimed to develop the Relational Meaning in Life Questionnaire (RMLQ) and to test for the validity of the RMLQ in measuring relational meaning in life. Specifically, relational meaning in life was examined as a predictor of well-being outcomes, above and beyond a more general and self-focused personal meaning in life or above and beyond social support. The methods and findings of each study are summarized below.

Study 1

Given that the Meaning in Life Questionnaire (MLQ; Steger et al., 2006) is the most widely used measure of meaning in life in the extant psychological research, the ten items from the MLQ were modified to reference “through my relationships with others” in order to generate the ten items that make up the Relational Meaning in Life Questionnaire. An exploratory factor analysis and a confirmatory factor analysis were conducted separately for two independent samples of college students. Results of the EFA with a sample of 278 undergraduate students supported a two-factor structure consisting of five items that represent the RMLQ-Presence dimension and five items that represent the RMLQ-Searching dimension. Results of the CFA with an independent sample of 260 undergraduate students confirmed the two factor structure. Finally, utilizing a community sample of 103 community adults recruited via Amazon MTurk, results indicated that the RMLQ is reliable across 5-6 weeks and the dimensions of the RMLQ are related to, but not redundant with the corresponding dimensions from the MLQ.

Study 2

To test for the validity of the RMLQ, specifically the RMLQ-Presence as an measure of relational meaning in life, study 2 utilized a prospective design study of 190 community adults recruited via Amazon MTurk, to examine presence of relational meaning in life as a predictor of a wide range of interpersonal well-being outcomes, above and beyond presence of personal meaning in life. Results of hierarchical regression analyses indicated that relational meaning in life measured at Time 1 accounted for additional significant unique variance, above and beyond personal meaning in life (also measured at Time 1), in eleven out of twelve of the interpersonal well-being outcomes (measured Time 2, 5-6 weeks after Time 1). Interestingly, when analyses were flipped to measure whether personal meaning in life would account for unique significant variance in interpersonal well-being above and beyond relational meaning in life, the model was only significant for five out of twelve interpersonal well-being outcomes included in the study.

Study 3

To further test for the validity of the RMLQ-Presence, presence of relational meaning in life was examined as a predictor of interpersonal and personal well-being and adjustment outcomes above and beyond social support in life among 201 community adults recruited via Amazon MTurk. Social support accounted for a significant amount of variance in all interpersonal and personal well-being and adjustment outcomes examined in this study. Presence of relational meaning in life accounted for additional unique variance in family life satisfaction, social life satisfaction, positive relationships, quality of social life, and satisfaction with life. It did not account for additional significant variance in depressive symptoms but approached significance for perceived stress.

Taken together, this dissertation research demonstrated that the RMLQ is a reliable measure that is related to, but distinct from the MLQ. Additionally, these studies have shown the

predictive utility of presence of relational meaning in life, as measured by the RMLQ-Presence, in accounting for variance in well-being and adjustment outcomes. While both personal meaning in life (in Study 2) and social support (in Study 3) represent important predictors of well-being, relational meaning in life accounted for unique significant variance in well-being outcomes above and beyond these strong predictor variables. These findings suggest that it may be particularly important to consider relational meaning in life and use the RMLQ when examining for predictors of interpersonal/relational well-being outcomes.

There are theoretical, empirical, and practical values of assessing for relational meaning. Theoretically, as previously discussed, theorists have long argued the importance of interpersonal relationships and connectedness in the understanding of the self. Indeed, Tice and Baumeister (2001) have argued that many seemingly intrapersonal/intrapsychic processes involve important interpersonal aspects that largely get ignored in psychological research. Indeed, theories of meaning in life have largely focused on the intrapersonal experience of meaning in life. For example, an alternative measure of meaning in life, the Multidimensional Existential Meaning Scale, focuses on comprehension, purpose, and mattering (George & Park, 2016). These key dimensions of meaning in life reflect one's personal experience, as informed by the self, and are kept general (e.g., mattering to the world). Given that human experience is imbued with a sense of relatedness, connectedness, and belonging, different theoretical models of meaning can be modified and tested for a more targeted interpersonal understanding of meaning in life (e.g., a tripartite model of relational meaning in life). The findings of the present study pave a foundation for the need continue building and exploring new theories of relational meaning in life.

Furthermore, our findings point to the need for continued research dedicated to furthering our understanding of the role of interpersonal relationships in well-being. This study points to the need to look beyond constructs of positive psychological processes that are solely informed by the self toward constructs that are interpersonally informed. While our study sought to examine a wide range of interpersonal well-being outcomes, further research is needed to continue expanding on the current findings. For example, given the strong relationship found between relational meaning in life and friendship functions in Study 2, other more specific relationships may also be of value to examine (e.g., coworkers, parents, children, grandchildren). Relatedly, it would be interesting and important to examine how personal vs. relational meaning in life may differ in relation to well-being outcomes between ethnocultural groups, especially between more individualistic groups compared to more collectivistic groups. As conceptualizations of meaning in life and relationships may differ across cultures, it would also be important to examine whether changes to the wording of items to reflect collectivist values (e.g., *We understand our meaning in life through relationships with others*) may be needed when utilizing the RMLQ in more collectivistic groups. Finally, the RMLQ may also be useful in better understanding the role of personal vs. relational meaning in life the context of interpersonal challenges and setbacks (e.g., relationship, familial, or marital discord). Overall, the development of the RMLQ helps to provide the opportunity to further understand meaning in life across a broader spectrum.

Finally, our findings point to some important clinical implications. For example, in clinical and counseling settings when the main concern and focus are relational (e.g., marital discord, grief, loss of a relationship, intimate partner violence), it may be especially important to assess for relational meaning in life and include this to track the client's progress toward their relational treatment goals. Within treatment methods for interpersonal concerns (e.g., Cognitive

Behavioral couple therapy; Baucom, Epstein, Kirby & LaTaillade, 2015; Gordon, Wischkaemper, & Dixon, 2016), focuses on relational meaning may involve having individuals identify important relationships or groups and reflect on how these relationships currently contribute, or in the past have contributed to their sense of meaning in life and in turn, how their sense of relational meaning can be used to build new positive relationships or maintain or further develop existing positive relationships.

Overall, the findings from these dissertation studies support the RMLQ as a useful tool in measuring a relational meaning in life that is distinct from general and personal meaning in life as well as distinct from social support. Findings have also demonstrated the utility of the RMLQ in accounting for variance in a wide range of interpersonal and personal well-being and adjustment outcomes.

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Appendix

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