JSPR

Article

Journal of Social and
Personal Relationships
1–28

DOI: 10.1177/0265407520928122
journals.sagepub.com/home/spr
SAGE

Development of the Revised Relational Maximization Scale and explorations of how relational maximization relates to personal and relational outcomes

Alan C. Mikkelson[1] and Colter D. Ray[2]

Abstract

Cheek and Schwartz argued for conceptualizing maximization as the *goal* of "choosing the best" coupled with the *strategy* of "alternative search." Using this conceptualization, we conducted five studies (Total $N = 1{,}617$) to revise the Relational Maximization Scale. Two exploratory factor analyses (Exploratory Study and Study 1) confirmed that choosing the best and alternative search were empirically distinct. A confirmatory factor analysis (Study 2) demonstrated the strength of the factor structure for these two dimensions. Study 2 results also indicated that choosing the best correlated with rational and intuitive decision-making styles, whereas alternative search correlated with indecisive, avoidant, and intuitive decision-making styles. In Study 3, choosing the best was positively related to relational outcomes (e.g., satisfaction, commitment, and trust), whereas alternative search was negatively related to relational outcomes. Study 4 demonstrated that alternative search and the quality of alternatives were empirically distinct. Study 4 also showed that choosing the best was positively related to life satisfaction and optimism, whereas alternative search was positively related to regret and negatively related to optimism. Together, these studies validate the importance of

[1] Whitworth University, USA
[2] San Diego State University, USA

Corresponding author:
Alan C. Mikkelson, Department of Communication Studies, Whitworth University, Spokane, WA 99251, USA.
Email: amikkelson00@whitworth.edu

examining domain-specific maximization in ongoing relationships and offer a new Revised Relational Maximization Scale. Specifically, we propose that the choosing the best subscale be used as a measure of the maximization goal and that the alternative search subscale be used as a measure of the maximization strategy.

Keywords
Alternative search, choosing the best, decision-making, relational maximization, scale development

The desire to make the best decision is often accompanied by better objective outcomes but less satisfaction about the decision (Iyengar et al., 2006; Schwartz et al., 2002). Doing better but feeling worse (Iyengar et al., 2006) is a common plight for individuals high in maximization (Chernev et al., 2015; Schwartz, 2004). Maximization is described as the optimization of choice (Simon, 1957) or the goal of making the best decision possible (Schwartz et al., 2002). Maximization has been most prominently studied with respect to consumer-behavior research; yet some researchers have explored the role of maximization as it relates to choices in relationships (Mikkelson et al., 2016; Newman et al., 2018). Specifically, relational maximization refers to the desire to find (and be in a relationship with) the best romantic relationship partner (Mikkelson & Pauley, 2013) or friend (Newman et al., 2018).

The study of maximization has progressed rapidly since Schwartz (2004) popularized the idea and applied it to the study of consumer behavior. Unfortunately, a great deal of disagreement about how the construct of maximization should be understood and measured has ensued (see Misuraca & Fasolo, 2018). In fact, Cheek and Schwartz (2016) reported that, at the time, there were 11 different conceptual and operational definitions of maximization. The proliferation of maximization research, often with a distinct conceptualization and accompanying measurement, has created construct confusion and contradictory findings. Fortunately, Cheek and Schwartz examined the disparate literature and proposed a two-component model of maximization (choosing the best and alternative search) and accompanying measurements for those components.

Applying the two-component model of maximization to relational decisions has a number of applications. First, understanding the role of maximization in the formation, development, and even dissolution of romantic relationships is informative in much the same way that other individual trait level variables have informed relationship functioning (see McNulty, 2013). Further, understanding relational maximization could illuminate the decision-making process not only in romantic relationships but in other voluntary relationships as well. Finally, relational maximization could inform behaviors not typically explained by traditional theories of relationship functioning (i.e., why people leave high-quality relationships without strong alternatives).

The purpose of this study is to align the conceptual understanding and operational definition of relational maximization with Cheek and Schwartz's (2016) understanding of general maximization. Thus, the primary goal is to revise the Relational Maximization Scale (RMS; Mikkelson & Pauley, 2013) within the context of ongoing romantic

relationships. This process of conceptual and operational alignment will help ensure that relational maximization research will not only have conceptual and operational clarity moving forward, but that future relational maximization research can be compared easily with general maximization research. Our secondary goal is to extend previous research on relational maximization by examining its connection with personal outcomes, decision-making styles, and relational outcomes. First, we will examine maximization both generally and in the domain of relationship decisions. Then, we will review Cheek and Schwartz (2016) and explore how the two-component maximization model relates to relational maximization. Finally, we will discuss how these components should relate to personal, decision-making, and relational outcomes.

Maximization

Simon (1957) originally proposed the ideas of maximizing and satisficing while explaining that human choice was inherently about understanding cognitive limitations. Simon suggested that the optimization of choice (maximization) was essentially impossible in most cases due to the vast number of options. Due to the impossibility of maximizing, most individuals "satisfice." To satisfice, choices only need to be above the level of acceptability or "good enough." Put simply, satisficers evaluate options until they find something that meets or exceeds the goals of the individual, whereas maximizers attempt to find the best possible option.

Building on Simon's work, Schwartz (2000; Schwartz et al., 2002) argued that the tendency to maximize is a relatively stable trait-level variable, with maximizing and satisficing being opposite ends of a continuum. With respect to decision goals, *maximizers* strive to make the best decision possible, whereas satisficers strive to make decisions that meet their standards. Schwartz's original work on maximization found two main problems for maximizers. First, as options increase, the ability to maximize becomes increasingly difficult, if not impossible. Second, maximizers often experience regret as a result of searching longer and consequently believing they could have made a better decision. Further, maximizers experience regret because their standard is the best option, not merely an acceptable option. Instead of asking "Did I make good decision?," maximizers ask "Did I make the best decision?"

Alternatively, *satisficers* deal with added choices in a different way and consequently experience less regret. Because satisficers simply look for options that meet their standard, added options have minimal influence on them. Further, because "good enough" is the accepted standard instead of "best," the satisfier is less likely to experience regret.

The maximization literature, although conflicting at times, has demonstrated a number of primarily negative outcomes associated with the tendency to maximize (Cheek & Schwartz, 2016). Maximization has been linked with increased regret (Mikkelson & Pauley, 2013; Parker et al., 2007; Purvis et al., 2011; Schwartz et al., 2002), decreased optimism (Schwartz et al., 2002), and increased perfectionism (Bergman et al., 2007; Dahling & Thompson, 2012). Maximizers also tend to experience less happiness (Laresen & McKibban, 2008) and report lower life satisfaction (Dahling & Thomas, 2012; Mikkelson et al., 2016; Schwartz et al., 2002) and self-esteem (Schwartz et al., 2002) than satisficers.

With respect to their decision-making style, maximizers consider more options (Chowdhury et al., 2009; Dar-Nimrod et al., 2009; Polman, 2010; Schwartz et al., 2002) and expend more time and effort when making decisions (Polman, 2010; Schwartz et al., 2002). Yet, the extra time and effort do not lead to greater satisfaction. In fact, maximizers are satisfied with their decisions less often than satisficers (Chowdhury et al., 2009; Iyengar et al., 2006; Schwartz et al., 2002). Sacrificing time and effort to attain more options that ultimately lead to decreased satisfaction is known as the "Maximization Paradox" (Dar-Nimrod et al., 2009; Luan & Li, 2017). Interestingly, although maximizers experience less satisfaction, they often make better objective decisions. For example, Iyengar et al. (2006) found that maximizers received higher paying positions than satisficers; yet they were less satisfied with their job decisions than satisficers. Having overviewed the research on maximization, we now focus on the growing body of research on maximization within the context of relationships.

Relational maximization

Relational maximization is the concept of maximization applied to the domain of relational decisions (Mikkelson & Pauley, 2013). Relational maximizers search for the best relationship, rather than one that would meet their standards. In romantic relationships, individuals high in maximization tend to be less satisfied, less invested, and less committed than satisficers (Mikkelson & Pauley, 2013). Further, maximizers also experience less closeness and trust in their romantic relationships and greater uncertainty than satisficers (Mikkelson et al., 2016). Moreover, maximization negatively correlated with the communication of verbal and nonverbal affection. In friendship selection, maximization negatively correlated with life satisfaction, positive affect, and self-esteem and positively correlated with negative affect and regret (Newman et al., 2018).

In their initial work, Mikkelson and Pauley (2013) understood relational maximization as having three conceptual and empirical dimensions. *High standards* indicated the propensity to have exceedingly high expectations for relationships. *Alternative search* referred to the tendency to seek better relationship options. Finally, *decision difficulty* described the difficulty related to making relational decisions. Mikkelson and Pauley's conceptualization aligned with Nenkov et al. (2008) and their short form version of the Maximization Scale (Schwartz et al., 2002), which included the same three components of maximization (high standards, alternative search, and decision difficulty). Yet, as mentioned above, there is vast disagreement about conceptualizing and measuring maximization (Cheek & Schwartz, 2016). Next, we overview Cheek and Schwartz's (2016) argument for a two-component model of maximization.

Two-component model of maximization

Definitions of maximization have varied widely as research on maximization has progressed. Based on the work of Simon (1955, 1957), Schwartz et al. (2002) defined maximization as having exceedingly high standards for decisions, coupled with comparing alternatives and having difficulty making a decision. Nenkov et al. (2008) echoed these three dimensions from Schwartz et al. (2002) in their creation of the Short Form

Maximization Scale. Diab et al. (2008) conceived of maximization as being the "general tendency to pursue the identification of the optimal alternative" (p. 365). Lai (2010) stated that maximization is finding "the best possible solution by systematically comparing available alternatives" (p. 164). Turner et al. (2012) agreed with the alternative search and decision difficulty dimensions from Schwartz et al. (2002) but eliminated high standards and included satisficing as its own construct. Conversely, Weinhardt et al. (2012) only included the idea of wanting the best option and having high standards. Richardson et al. (2014) claimed that maximization had three factors: wanting the best, experiencing regret when making decisions, and decision difficulty. Finally, Dalal et al. (2015) stated that maximization was being "unwilling to reduce standards when making decision" (p. 438).

In total, maximization can be understood to have as many as seven distinct components. Specifically, maximization can include desiring the best, high standards, alternative search, decision difficulty, satisficing, regret in decision-making, and the unwillingness to reduce standards. Cheek and Schwartz (2016) claimed that although each of these components can be important in understanding maximization, some of them (e.g., regret and decision difficulty) are better understood as *outcomes* of maximization rather than *components* of maximization. Consequently, they proposed a two-component model of maximization.

According to Cheek and Schwartz (2016), maximization includes both a *goal* and a *strategy* to achieve that goal. First, the *goal* of maximization is the idea of "choosing the best" (p. 135). Lai (2010) and Diab et al. (2008) also argued that the idea of desiring the best was central to the maximization construct. The idea of choosing the best is similar to the notion of having high standards in much of the current maximization work. However, Cheek and Schwartz (2016) do make an important clarification in that having high standards and desiring the best are theoretically different. Specifically, one could have high standards without the need to find the best option. Thus, the desire for the best is the key defining factor of a maximizer.

Second, the *strategy* of maximization is that of alternative search. Alternative search refers to seeking out alternatives and comparing those alternatives to each other. Alternative search is included in many of the definitions and measurements of maximization (e.g., Lai, 2010; Nenkov et al., 2008; Schwartz et al., 2002; Turner et al., 2012). Previous research has found support for alternative search being a primary characteristic of maximization (Moyano-Diaz et al., 2014; Rim et al., 2011). Cheek and Schwartz (2016) emphasized the fact that maximization is the combination of the goal and the strategy. That is, maximizers desire selecting the best option and use the strategy of seeking and comparing alternatives to achieve this goal. Thus, Cheek and Schwartz (2016) argued that "a two-component model will . . . facilitate future research by clarifying the distinctions between the goal and strategy that together comprise maximization" (p. 137).

Cheek and Schwartz (2016) also asserted that more research should utilize domain-specific measurements of maximization, specifically those that reflect the goal and strategy of maximization. Indeed, a general maximization measure might not properly gauge the great care individuals demonstrate when choosing romantic partners (Beisswanger et al., 2003). Because relationship choice is one of the domains that has received

specific attention in the maximization literature (Long & Campbell, 2015; Mikkelson et al., 2016; Newman et al., 2018), a scale that reflects this reconceptualization of maximization would aid future research projects.

Though Cheek and Schwartz's study (2016) serves as the foundation for a new conceptualization and measurement of relational maximization, notable differences do exist between the contexts of consumer and relational decision-making. When making purchasing decisions, there is the initial decision about the product or service to purchase and in some cases, the additional opportunity to reverse the decision (e.g., return the product), which Shiner (2015) called a reversible decision (see also Sparks et al., 2012). In romantic relationships, there is also the initial decision about which person to date, but there is also the ongoing decision to stay in the relationship. Up to this point, relational maximization research has focused on ongoing dating relationships (Mikkelson et al., 2016; Mikkelson & Pauley, 2013) or marriage (French & Melzter, 2019). Although both of these decisions (initial and ongoing) are important and worthy of study, our goal is to address relational maximization primarily within ongoing relationships. Because of the reversible nature of romantic relationship decisions (even in highly committed relationships), we believe that the study of relational maximization warrants examination in this context. Indeed, previous research (Mikkelson et al., 2016; Mikkelson & Pauley, 2013) has demonstrated that relational maximization correlates with various detrimental outcomes in ongoing dating relationships.

Given the work by Cheek and Schwartz (2016), we argue for a two-component model of relational maximization, similar to the two-component model presented above. For relational maximization, the goal of choosing the best refers to the desire to find (and be with) the best relational partner. The strategy of alternative search then refers to the tendency to seek out alternative relationship options. Conceptualizing and operationalizing relational maximization using the two-component model meets several important goals outlined in previous research. First, it aligns relational maximization literature with Cheek and Schwartz's (2016) call for consistency in the maximization literature. Additionally, it addresses the need to remove decision difficulty from the conceptualization and measurement of maximization (Cheek & Goebel, 2020; Cheek & Ward, 2019; Dalal et al., 2015). Second, it creates a domain-specific scale that can be used in numerous relational contexts (see Newman et al., 2018). Third, although most maximization has considered initial decisions, maximization can also be important in reversible or ongoing decisions (Sparks et al., 2012), which is the context for the present research.

The goal for the current study is to establish a new, revised measurement of relational maximization based on the conceptual *goal* of choosing the best and the *strategy* of alternative search and understanding some of the decision-making styles and relational and personal outcomes related to this reconceptualization of relational maximization.

Relational maximization, decision-making, and relational and personal outcomes

In addition to developing a revised measure of relational maximization, a secondary goalof this study is to explore associations between relational maximization and

decision-making styles, relational outcomes, and personal outcomes. Previous research on maximization demonstrated that alternative search and high standards (similar to choosing the best) often have contrasting associations to various outcomes. For example, alternative search was negatively related to personal well-being indicators (e.g., happiness and optimism), whereas high standards were positively related to these indicators (Rim et al., 2011).

With respect to relational maximization, a similar pattern occurs, as alternative search negatively correlated with life satisfaction. Conversely, the dimension of high standards positively correlated with life satisfaction (Mikkelson et al., 2016). Furthermore, alternative search negatively correlated with both trust and satisfaction in romantic relationships, whereas high standards positively correlated with both closeness and satisfaction. Due to the focus on reconceptualizing relational maximization, it is worthwhile to explore the potential association between the two components of relational maximization (choosing the best and alternative search) and various decision-making styles, relational outcomes, and personal outcomes. Therefore, we pose the following research questions:

RQ1: What is the relationship between relational maximization (choosing the best and alternative search) and decision-making styles (indecisiveness, avoidant, rational, and intuitive)?

RQ2: What is the relationship between relational maximization (choosing the best and alternative search) and relational outcomes (satisfaction, investments, commitment, closeness, trust, and love)?

RQ3: What is the relationship between relational maximization (choosing the best and alternative search) and personal outcomes (regret, life satisfaction, and optimism)?

Exploratory Study: Method

The Exploratory Study consisted of conducting an exploratory factor analysis to demonstrate that choosing the best and alternative search are empirically distinct dimensions of relational maximization.

Participants

Participants ($N = 299$) were 170 (56.9%) male and 128 (42.8%) female registered users of Amazon's Mechanical Turk website (one individual did not report their biological sex). Participants ranged in age from 18 years to 44 years ($M = 29.76$ years, standard deviation (SD) $= 5.66$). Participants included 131 (44.1%) single individuals and 166 (55.5%) individuals in a dating relationship (two individuals did not report their relationship status). The majority (68.9%) were White, 14.4% were Asian/Pacific Islander, 8.4% were Hispanic, 12.0% were Black/African American, 1.0% were Native American, and 1.3% selected "other" as their ethnicity. These percentages add up to more than 100% because participants could check all applicable ethnicities.

Procedure

The participants were registered users of Amazon's Mechanical Turk website, specifically from the U.S. Mechanical Turk has been an acceptable and high-quality source of data for research in the social sciences (Buhrmester et al., 2011) and is typically more representative of the U.S. population than convenience samples (Berinsky et al., 2012). To participate in the study, participants needed to be between 18 and 45 years of age and either be single or in a dating relationship but not married. Participation in the study consisted of a brief online questionnaire hosted on the survey platform Qualtrics designed to assess relational maximization, general maximization, and related outcomes like regret and life satisfaction. The study complied with the university's Institutional Review Board policies. Individuals who completed the questionnaire had a monetary award deposited into their Mechanical Turk account.

Measures

Choosing the best. The Maximizing Tendency Scale (MTS-7; Dalal et al., 2015) measured the *goal* of choosing the best. The MTS-7 is composed of seven items designed to measure an individual's tendency or desire to make optimal decisions. Example items include "I don't like having to settle for good enough" and "I will wait for the best option, no matter how long it takes." The α reliability for this scale was .90.

Alternative search. The alternative search subscale from the Maximization Inventory (MI; Turner et al., 2012) measured the *strategy* of alternative search in the present study. The 12-item scale measures the tendency to search for additional alternatives or options before making a decision. One example item states "I usually continue to search for an item until it reaches my expectations." The α reliability for this scale was .92.

The scores on all scales had a theoretical range from 1 to 7, such that higher scores indicated a greater level of the variable. The scores on all multiple-item scales represented the mean of the items comprising that scale.

Scale revision

Creation of the Revised Relational Maximization Scale (RRMS) occurred in three distinct steps. The first step was to assess the face validity of the original RMS (Mikkelson & Pauley, 2013) to determine if the items were reflective of the goal of choosing the best and strategy of alternative search. As previously noted, the original RMS had high standards, alternative search, and decision difficulty subscales. Because decision difficulty is understood better now as a result of maximization (much like regret), the decision difficulty items from the RMS were excluded (Cheek & Schwartz, 2016). Second, the high standards items were examined for face validity and it was determined that the items reflected the notion of choosing the best rather than having high standards. In fact, none of the items explicitly referenced high standards. For example, one item states, "I believe I can find the best relationship for me and I won't settle." Thus, the original high standards items from the RMS were retained as they reflected the choosing

the best dimension. Finally, the alternative search items were examined and were deemed to reflect the conceptualization proposed by Cheek and Schwartz (2016).

The second step was to expand the pool of items by adapting previously existing scales for the romantic relationship context. Because Cheek and Schwartz (2016) determined that the Maximization Tendency Scale (MTS-7) was the best operationalization of choosing the best and the MI alternative search subscale was the best operationalization of alternative search, we adapted each of these scales to fit the romantic relationship domain. For example, the researchers changed "I will wait for the best option, no matter how long it takes" to "In my romantic relationships, I will wait for the best option, no matter how long it takes." All 7 of the MTS-7 items were adapted, and 8 of the 12 MI alternative search items were adapted for the romantic relationship context. Some items from the MI could not be adapted because of specific references to consumer purchasing decisions. For example, "If a store doesn't have exactly what I'm shopping for, then I will go somewhere else" could not be adapted to the romantic relationship context. Along with these adapted items, the 11 original items from the high standards and alternative search subscales from the RMS were also included in the questionnaire. There were 26 items in total, 13 for each of the components (choosing the best and alternative search) of relational maximization.

Factor structure

The researchers conducted a principal components factor analysis using the 26 items from the two adapted scales and the original RMS items. We tried several different factor solutions that met the following three criteria: (1) all factors had to have eigenvalues exceeding 1.0, (2) the scree test had to indicate a reasonable improvement in the variance accounted for by the additional factor, and (3) all factors had to contain at least three items with primary loadings of .60 or better and no greater than .40 on the other factor. Ultimately, we chose the factor solution that met these requirements, accounted for the most variance, and was in theoretical alignment with the recommendations by Cheek and Schwartz (2016).

The initial solution produced four factors with eigenvalues exceeding 1.0. However, after rotating the factor loadings, there were two factors with fewer than three items. Further, the four-factor solution was difficult to interpret from a theoretical standpoint. Extracting only two factors produced a more conceptually acceptable factor solution. We eliminated two of the items from choosing the best factor because they had identical meanings and nearly identical wording to two other items in the scale. We retained the items with the highest factor loadings. The factor solution was obtained using an equamax rotation and resulted in 15 items accounting for 60.04% of the variance. The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was .92 and the Bartlett test for sphericity was significant at $p < .001$. Full results are shown in Table 1.

The first factor included 10 items about the desire to make the best decision or choose the best option in romantic relationships and was labeled choosing the best. The second factor included five items about comparing the current relationship to past relationships or other potential relationships and was labeled alternative search. Conceptually, these two factors mirror the factors Cheek and Schwartz (2016) proposed in their examination

Table 1. Factor structure for the RRMS in the Exploratory Study.

Item	1	2
1. I never settle for second best in my romantic relationships.	.84	.00
2. No matter what I do, I have the highest standards in my romantic relationships.	.83	.10
3. In my romantic relationships, I will wait for the best option, no matter how long it takes.	.82	.09
4.I never settle in my romantic relationships.	.79	.07
5. I believe I can find the best relationship for me and I won't settle.	.77	.18
6. I know what I want in a relationship and I won't compromise.	.77	.05
7. No matter what it takes, I always try to choose the best romantic partner.	.76	.10
8. I don't like having to settle for good enough in my romantic relationships.	.72	.02
9. I am a maximizer in my romantic relationships.	.68	.16
10. In relationships, I am unwilling to settle for less than I feel I deserve.	.66	.11
1. I wonder if I would be happier in another relationship.	−.06	.84
2. I constantly compare my current relationship to other potential relationships.	.04	.82
3. No matter how satisfied I am in my current relationship, I am always on the lookout for a better relationship.	.10	.80
4. I compare my current relationship to my past relationships to see if my current relationship is better.	.11	.72
5. I always like to keep my relational options open.	.16	.69
Eigenvalues	6.13	2.87
Cronbach's α	.92	.84

Note. Factor 1 = choosing the best; Factor 2 = alternative search; RRMS = Revised Relational Maximization Scale.

of various conceptual and operational definitions for maximization. The measure developed in this study is concerned exclusively with individuals' tendency to engage in the maximization goal and strategy in the context of romantic relationship decisions.

Interestingly, the adapted MI alternative search items did not load well on the alternative search factor. On closer reflection, the adapted MI alternative search items referred to engaging in the alternative search strategy before making a romantic relationship decision, whereas the original RMS items referred to the alternative search strategy after making a romantic relationship decision (i.e., being in an ongoing romantic relationship). Furthermore, half of the adapted MI alternative search items also referenced meeting romantic relationships' expectations or criteria, connecting these items to the choosing the best factor. For example, one item states, "I usually continue to search for a romantic relationship until it reaches my expectations." Due to these two differences, it makes sense that the adapted MI alternative search items did not load with the original items from the RMS.

Concurrent validity

Pearson correlations were used to compare both the relational choosing the best and alternative search factor scores to the MTS-7 (choosing the best) and MI alternative search scales. As expected, the RRMS choosing the best factor correlated with the MTS-

7 ($r = .80$, $p < .01$) and the RRMS alternative search factor correlated with the MI alternative search scale ($r = .12$, $p < .05$). As discussed above, differences between the two scales most likely account for the smaller correlation between the RRMS alternative search factor and the MI alternative search subscale. Interestingly, the MTS-7 and MI alternative search scales had a strong positive correlation ($r = .78$, $p < .01$), potentially indicating that these scales have a high degree of empirical overlap.

Exploratory Study: Discussion

The Exploratory Study examined the extent to which choosing the best and alternative search are empirically distinct dimensions of relational maximization. Data collected from individuals who identified as either single or in a dating relationship were used to conduct an exploratory factor analysis that suggested a two-factor structure that aligned conceptually with Cheek and Schwartz's (2016) two-factor structure. Whereas the choosing the best subscale correlated strongly with the MTS-7, a weak but significant correlation occurred between the alternative search factor and the MI alternative search subscale. This could be the result of the MI alternative search items focusing on a pre-decision phase in terms of choosing a romantic partner, whereas the alternative search factor of our scale focuses on a post-decision phase. That is, the scale under development is best suited for those who are in at least somewhat committed relationships (e.g., a dating relationship) as opposed to one who is single. Consequently, the next study (Study 1) aims to validate the two-factor structure developed in this Exploratory Study via a second exploratory factor analysis using a new participant pool composed of only those in dating relationships.

Study 1: Method

Participants

Participants ($N = 343$) were 216 (63.0%) male and 125 (36.4%) female registered users of Amazon's Mechanical Turk website (two individuals did not report biological sex). Participants ranged in age from 20 years to 45 years ($M = 30.03$ years, $SD = 5.05$). Participants were all currently in dating relationships ($M = 3.84$ years, $SD = 2.90$). The majority (66.2%) were White, 7.3% were Asian/Pacific Islander, 15.2% were Hispanic, 10.2% were Black/African American, 6.1% were Native American, and 0.6% selected "other." These percentages add up to more than 100% because participants were instructed to check all applicable ethnicities.

Procedure

The procedures for the use of Amazon's Mechanical Turk website and the Qualtrics questionnaire were the same as the Exploratory Study. The only difference from the Exploratory Study was that all of the participants had to be in a romantic dating relationship to complete the questionnaire in Study 1. Information on the MTurk webpage and the Qualtrics survey consent indicated that participants needed to be in a dating

Table 2. Factor structure for the RRMS in Study 1.

Item	1	2
1. I never settle for second best in my romantic relationships.	.81	−.01
2. No matter what I do, I have the highest standards in my romantic relationships.	.77	.08
3. In my romantic relationships, I will wait for the best option, no matter how long it takes.	.69	.25
4. I never settle in my romantic relationships.	.82	.05
5. I believe I can find the best relationship for me and I won't settle.	.76	.17
6. I know what I want in a relationship and I won't compromise.[a]	.72	.08
7. No matter what it takes, I always try to choose the best romantic partner.	.76	−.04
8. I don't like having to settle for good enough in my romantic relationships.	.69	−.02
9. I am a maximizer in my romantic relationships.[a] (Item removed from the EFA)		
10. In relationships, I am unwilling to settle for less than I feel I deserve.	.74	.02
1. I wonder if I would be happier in another relationship.	−.03	.85
2. I constantly compare my current relationship to other potential relationships.	−.02	.84
3. No matter how satisfied I am in my current relationship, I am always on the lookout for a better relationship.	−.02	.87
4. I compare my current relationship to my past relationships to see if my current relationship is better.[a]	.21	.65
5. I always like to keep my relational options open.	.06	.85
6. Even if I am satisfied in my current relationship, I will continue searching for a better romantic partner. (Added for Study 2)	.06	.88
7. If my current relational partner is not exactly what I'm looking for, I will continue to search for someone better. (Added for Study 2)	.16	.76
Eigenvalues	5.77	4.24
Cronbach's α	.90	.92

Note. Factor 1 = choosing the best; Factor 2 = alternative search; RRMS = Revised Relational Maximization Scale.

[a] Items removed from the factor structure in Study 2.

relationship but not married. Further, a screening questionnaire was included at the start of the Qualtrics survey to ensure that participants were currently in a dating relationship.

Factor structure

The researchers conducted a principal components factor analysis using the 15 items from the Exploratory Study and two new items adapted from the MI alternative search subscale. The process of the factor structure creation was the same as in the Exploratory Study.

We eliminated one of the items from the choosing the best factor because it had low factor loading with the choosing the best subscale ("I am a maximizer in my romantic relationships"). The factor solution was obtained using an equamax rotation and resulted in 16 items accounting for 62.54% of the variance. The KMO test of sampling adequacy was .89 and the Bartlett test for sphericity was significant at $p < .001$. The same conditions used in the Exploratory Study were used to achieve the factor solution in this analysis. Full results are shown in Table 2.

Table 3. Intercorrelations, internal reliability estimates, *M*, and *SD*s for Study 2 variables.

Variable	α[a]	*M*/*SD*	1	2	3	4	5	6	7
1. Choosing the best—revised	.89	4.92/1.20	—						
2. Alternative search—revised	.89	3.39/1.51	.24**	—					
3. Relational regret	.87	3.51/1.51	.07	.74**	—				
4. Decision difficulty	.80	4.23/1.28	.34**	.50**	.47**	—			
5. Indecisiveness	.92	3.29/1.16	−.25**	.24**	.34**	.28**	—		
6. Avoidant decision-making	.95	3.28/1.73	−.03	.41**	.40**	.38**	.82**	—	
7. Rational decision-making	.93	5.42/1.20	.35*	−.05	−.06	.15**	−.13*	.01	—
8. Intuitive decision-making	.92	3.84/1.44	.22**	.35**	.21**	.26**	.17**	.33**	−.13*

Note. $N = 334$. M = mean; SD = standard deviation.

[a]Internal reliability estimates are based on Cronbach's α. All variables were measured on 7-point scales, wherein higher values indicate a greater frequency or intensity of the variable.

*$p < .05$; **$p < .01$ (two-tailed).

Study 1: Discussion

Study 1 demonstrated the extent to which choosing the best and alternative search are empirically distinct dimensions of relational maximization. Further, two new items were added to the alternative search subscale based on the items from the MI alternative search subscale but within the context of ongoing romantic relationships. The final factor structure included 16 items, and the new factor structure of the RRMS accounted for more variance and had higher factor loadings than the original RMS (Mikkelson & Pauley, 2013). The goal of the next study (Study 2) is to conduct a confirmatory factor analysis (CFA) on these items and to examine the first research question, which focuses on relational maximization and decision-making styles.

Study 2: Method

Participants

Participants ($N = 331$) were 223 (67.4%) male and 107 (32.3%) female registered users of Amazon's Mechanical Turk website (one individual did not report their biological sex). Participants ranged in age from 18 years to 45 years ($M = 30.63$ years, $SD = 5.34$). Participants were all currently in dating relationships ($M = 2.76$ years, $SD = 3.00$). The majority (74.6%) were White, 11.2% were Black/African American, 9.1% were Asian/Pacific Islander, 9.1% were Hispanic, 3.3% were Native American, and 1.2% reported their ethnicity as "other." These percentages add up to more than 100% because participants could check all applicable ethnicities.

Procedure

The procedures for the use of Amazon's Mechanical Turk website and the Qualtrics questionnaire were the same as Study 1. Internal reliabilities, means, and *SD*s for all measures appear in Table 3.

Measurements

Relational decision difficulty. Five items from the RMS (Mikkelson & Pauley, 2013) measured relational decision difficulty. Items from this dimension of the RMS indicate difficulty in making a choice about a relational partner. An example item states, "I have a hard time choosing a relational partner."

Relational regret. Relational regret was measured using a modified version of the scale from Schwartz et al. (2002). Relational regret measures the tendency to experience regret about relationship decisions. One example item states, "In my romantic relationship, whenever I make a choice, I'm curious about what would have happened if I had chosen differently."

Indecisiveness. The 15-item indecisiveness scale (Frost & Shows, 1993) measured indecisiveness in the current study. The scale measures compulsive indecisiveness in the decision-making process. One example item states, "I have a hard time planning my free time."

Avoidant decision-making. The 5-item subscale from Scott and Bruce's (1995) decision-making style measurement measured avoidance decision-making. The measurement examines the extent to which individuals put off making decisions. One example item states, "I put off making many decisions because thinking about them makes me uneasy."

Rational and intuitive decision-making. Hamilton et al.'s (2016) 10-item scale measured rational and intuitive decision-making styles. Both rational and intuitive decision-making scales consisted of five items. An example from the rational decision scale states, "I thoroughly evaluate decision alternatives before making a final choice." An example from the intuitive decision scale states, "I weigh feelings more than analysis in making decisions."

Relational maximization. We tested the items developed for both the choosing the best and alternative search dimensions from Study 1. Because the adapted MI alternative search items from Study 1 did not load onto the RRMS alternative search dimension, the researchers created two new items that were a combination of the MI scale items and the original RMS alternative search items. We used the scales created in Study 1 to test the choosing the best (10 items) and alternative search (a total of seven items after adding two additional items) dimensions in Study 2.

We used SPSS Amos version 24 to conduct confirmatory factor analyses on each of the scales. In line with previous research, we implemented several indices of fit to examine the overall fit of each CFA, including the comparative fit index (CFI), root mean square error of approximation (RMSEA), and χ^2. An acceptable CFI is greater than .90, whereas a good fit is greater than .95 (Holbert & Stephenson, 2008). An RMSEA of .10 or lower is evidence of adequate model fit, while an RMSEA of under .06 indicates excellent model fit (Holbert & Stephenson, 2008).

After the initial CFA was run for each scale, the model fit was improved by removing items that showed significant overlap among error terms. First, the initial CFA for choosing the best showed acceptable model fit ($\chi^2 = 98.57, p < .001$, CFI = .96, RMSEA = .07). We sequentially removed two choosing the best items (Items 6 and 9) from the scale until the model fit became excellent ($\chi^2 = 32.54$, $p = .14$, CFI = .99, RMSEA = .03). Second, the initial CFA for alternative search demonstrated weaker model fit ($\chi^2 = 69.42$, $p = .001$, CFI = .96, RMSEA = .11). We removed one alternative search item (Item 4) from the scale until the model fit became excellent ($\chi^2 = 22.97$, $p = .01$, CFI = .99, RMSEA = .06).

Study 2: Results

Pearson correlations (reported in Table 3) were used to examine the first research question, which asked about the relationship between relational maximization and decision-making styles. The choosing the best dimension had a positive relationship with relational decision difficulty ($r = .34, p < .01$), a rational decision-making style ($r = .35$, $p < .01$), an intuitive decision-making style ($r = .22, p < .01$), and a negative relationship with indecisiveness ($r = -.25, p < .01$). Choosing the best was not related to an avoidant decision-making style nor was it related to relational regret. The dimension of alternative search had a positive relationship with relational regret ($r = .74$, $p < .01$), decision difficulty ($r = .50$, $p < .01$), indecisiveness ($r = .24$, $p < .01$), an avoidant decision-making style ($r = .41, p < .01$), and an intuitive decision-making style ($r = .35, p < .01$). No relationship existed between alternative search and a rational decision-making style.

Study 2: Discussion

Study 2 used a CFA to test and refine the two-factor structure conceptualized by Cheek and Schwartz (2016) and empirically derived from the Study 1 data. The final factor structure included eight items for choosing the best and six items for alternative search. Importantly, reliability coefficients were noticeably higher for the revised subscales as compared to the high standards and alternative search subscales reported in Mikkelson et al. (2016).

With respect to decision-making styles, both choosing the best and alternative search were positively related to an intuitive decision-making style. Choosing the best was negatively related to indecisiveness and positively related to a rational style of decision-making. Conversely, alternative search was positively related to indecisiveness and an avoidant decision-making style but was not related to a rational decision-making style. Although Dalal et al. (2015) did not find a relationship between alternative search and a rational decision-making style, as Cheek and Schwartz (2016) argued, it could be due to the scale used to measure rational decision-making. Conversely, Cheek and Goebel (2020) found that alternative search was strongly related to the Rational Decision Style Scale (Hamilton et al., 2016). Though previous research has found that maximization was a negative predictor of competent decision-making (Bruine de Bruin et al., 2007) and that maximizers utilize problematic decision-making strategies (Parker et al., 2007), another possibility exists for the lack of a significant relationship between alternative

search and a rational decision-making style. As measured in the present study, rational decision-making represents an initial (or pre-choice) decision-making style; yet alternative search in the RRMS represents a strategy in an ongoing relationship. Consequently, the lack of an association between alternative search and a rational style could indicate that the pre-decision alternative search examined in most maximization literature and post-decision alternative search in the current study operate differently. Specifically, in a pre-decision choice, alternative search could function as a productive strategy that improves outcomes and helps meet the goal of choosing the best, yet post-decision, the same strategy then erodes satisfaction with the decision previously made (see Dar-Nimrod et al., 2009; Sparks et al., 2012).

Given the results of Study 2, the use of problematic decision-making styles and strategies might occur primarily for those scoring high in alternative search rather than for those scoring high in choosing the best. The following study (Study 3) addresses our second research question, which explores potential relationships between relational maximization and six relational outcomes: satisfaction, investment, commitment, relational closeness, trust, and love.

Study 3: Method

Participants

Participants ($N = 329$) were 218 (66.3%) male and 111 (33.7%) female registered users of Amazon's Mechanical Turk website. Participants ranged in age from 20 years to 43 years ($M = 30.55$ years, $SD = 5.03$). Participants were all currently in dating relationships ($M = 3.18$ years, $SD = 2.71$). The majority (66.6%) were White, 16.1% were Black/African American, 12.5% were Hispanic, 10.3% were Asian/Pacific Islander, 3.6% were Native American, and 1.2% were of other ethnic origins. These percentages add up to more than 100% because participants could report all applicable ethnicities.

Procedure

The procedures for the use of Amazon's Mechanical Turk website and the Qualtrics questionnaire were the same as in Studies 1 and 2.

Measurements

Satisfaction. The satisfaction subscale from Rusbult et al.'s (1998) Investment Model Scale (IMS) measured satisfaction in the current study. The 10-item scale consists of five priming items and five global items. In accordance with the IMS, only the five global items were employed in the hypothesis tests. An example item states, "I feel satisfied with our relationship."

Investment. The investment subscale from Rusbult et al.'s (1998) IMS measured investment in the present study. Similar to the satisfaction scale, this scale also includes 10 items, with five priming items and five global items. An example item states, "I have put a great deal into our relationship that I would lose if the relationship were to end."

Table 4. Intercorrelations, internal reliability estimates, *M*, and *SD* for Study 3 variables.

Variable	α[a]	*M*/*SD*	1	2	3	4	5	6	7
1. Choosing the best–revised	.91	4.66/1.32	—						
2. Alternative search–revised	.87	3.58/1.50	.32**	—					
3. Satisfaction	.92	6.89/1.66	.28**	−.32**	—				
4. Investments	.80	6.76/1.52	.13*	−.25**	.48**	—			
5. Commitment	.88	6.60/1.55	.13*	−.49**	.66**	.71**	—		
6. Closeness	—	5.34/1.29	.03	−.17**	.43**	.51**	.46**	—	
7. Trust	.87	6.35/1.48	.18**	−.44**	.74**	.50**	.36**	.70**	—
8. Love	.79	6.56/1.52	.11*	−.29**	.53**	.69**	.53**	.69**	.57**

Note. $N = 329$. M = mean; SD = standard deviation.

[a]Internal reliability estimates are based on Cronbach's α. Relational maximization (choosing the best and alternative search), regret, life satisfaction, and optimism were measured on 7-point scales, whereas quality of alternatives was measured on a 9-point scale. Higher values indicate a greater frequency or intensity of the variable.

*$p < .05$; **$p < .01$ (two-tailed).

Commitment. The 7-item commitment scale from Rusbult et al.'s (1998) IMS measured commitment in this study. An example item states, "I am committed to maintaining my relationship with my partner."

Relational closeness. Aron et al.'s (1992) Inclusion of Other in Self pictorial scale measured perceptions of relational closeness. The single-item scale consists of pairs of circles labeled "self" and "other." In each successive pair, the circles overlap one another to increasing degrees, signifying increased levels of relational closeness. Respondents choose the pair of circles that best depicted the nature of their relationship with their relational partner.

Trust. Larzelere and Huston's (1980) 8-item dyadic trust scale measured trust. The scale assesses trust in close relationships and an example item is "I feel that I can trust my relational partner completely."

Love. Love was measured using Solomon and Knobloch's (2004) 5-item version of Rubin's (1970) Love Scale. An example item states, "I would do anything for my partner."

Relational maximization. Relational maximization was measured using items from the CFA in Study 2. These items are presented in Table 2.

Study 3: Results

The researchers used the Pearson correlations (reported in Table 4) to examine the second research question, which asked about the relationship between relational maximization and relational outcomes. The dimension of choosing the best had a positive

relationship with satisfaction ($r = .28$, $p < .01$), investment ($r = .13$, $p < .05$), commitment ($r = .13$, $p < .05$), trust ($r = .18$, $p < .01$), and love ($r = .11$, $p < .05$). Choosing the best and relational closeness were not related. The alternative search dimension had a negative relationship with a satisfaction ($r = -.32$, $p < .01$), investment ($r = -.25$, $p < .01$), commitment ($r = -.49$, $p < .01$), closeness ($r = -.17$, $p < .01$), trust ($r = -.44$, $p < .01$), and love ($r = -.29$, $p < .01$).

Study 3: Discussion

In Study 3, the connection between relational maximization and relational outcomes once again revealed key differences between choosing the best and alternative search. Choosing the best demonstrated a positive relationship to satisfaction, investments, commitment, trust, and love. Most of these relationships were small (expect for satisfaction) and are similar to previous results examining relational outcomes (Mikkelson et al., 2016). Alternative search exhibited a negative relationship to satisfaction, investments, commitment, closeness, trust, and love. Most of these relationships were moderate, with some being large (e.g., commitment). Previous studies examining maximization generally show the problematic nature of maximization (for review, see Cheek & Schwartz, 2016); yet the results of the present study demonstrate that the primary source of difficulty for relational maximizers is the need to search for alternatives, not the desire to choose the best romantic partner. Further, as Cheek and Ward (2019) contend, maximizers might have more positive and more negative choice experiences. Next, Study 4 was conducted to compare the alternative search subscale in the RRMS to the quality of alternatives subscale in the IMS and to answer the third research question addressing correlations between relational maximization and personal outcomes (regret, life satisfaction, and optimism).

Study 4: Method

Participants

Participants ($N = 315$) were 200 (63.5%) male and 111 (35.2%) female registered users of Amazon's Mechanical Turk website (four individuals did not report biological sex). Participants ranged in age from 20 years to 44 years ($M = 30.87$ years, $SD = 5.54$). Participants were all currently in dating relationships ($M = 4.66$ years, $SD = 2.92$). The majority (70.2%) were White, 14.6% were Black/African American, 12.1% were Asian/Pacific Islander, 6.3% were Hispanic, and 2.9% were Native American. These percentages add up to more than 100% because participants could report all applicable ethnicities.

Procedure

The procedures for the use of Amazon's Mechanical Turk website and the Qualtrics questionnaire were the same as that of Studies 1–3.

Measurements

Quality of alternatives. Quality of alternatives was measured with a subscale from the IMS (Rusbult et al., 1998). The 10-item scale consists of five priming items and five global items. In accordance with the IMS, only the five global items were employed in the statistical tests. An example item states, "The people other than my partner with whom I might become involved are very appealing."

Relational maximization. Relational maximization was measured using items from the CFA in Study 2. Choosing the best was measured using eight items and alternative search was measured using six items. These items are presented in Table 2.

Regret. Schwartz et al.'s (2002) 5-item scale measured regret. Specifically, the scale measures the tendency to experience regret about decisions. One example item states, "Whenever I make a choice, I'm curious about what would have happened if I had chosen differently."

Life satisfaction. The Satisfaction With Life Scale contains five items that measure global life satisfaction (Diener et al., 2000). An example item states, "In most ways my life is close to my ideal."

Optimism. The Life Orientation Test (LOT-R; Scheier et al., 1994) measured optimism. The LOT-R contains six items that measure differences in expectations for positive and negative outcomes. An example item states, "In uncertain times I usually expect the best."

Study 4: Results

Pearson correlations were used to examine the third research question, which asked about the relationships between relational maximization and personal outcomes, such as regret, life satisfaction, and optimism. Choosing the best was not related to regret ($r = -.04$, $p > .05$), but alternative search ($r = .62$, $p < .01$) was positively related to regret. The dimension of choosing the best had a positive relationship with life satisfaction ($r = .25$, $p < .01$) and optimism ($r = .25$, $p < .01$). The dimension of alternative search had a negative relationship with optimism ($r = -.18$, $p < .01$), but there was no significant relationship with life satisfaction. The full results can be found in Table 5.

Items measuring alternative search from the RRMS and quality of alternatives from the IMS were subjected to a principal axis factor analysis with a direct Oblimin rotation to allow for the possibility of correlated factors. A correlation of $r = .64$, $p < .01$, occurred between alternative search and quality of alternatives. The KMO test of sampling adequacy was .93 and the Bartlett test for sphericity was significant at $p < .001$. The full results can be found in Table 6. Two factors were produced that had eigenvalues greater than one, accounting for 71.20% of the variance.

The first factor consisted exclusively of items measuring alternative search, whereas the second factor consisted of items measuring quality of alternatives. Notably, the loadings of the alternative search items on the quality of alternative factor were low

Table 5. Intercorrelations, internal reliability estimates, *M*, and *SD*s for Study 4 variables.

Variable	α[a]	*M*/*SD*	1	2	3	4	5
1. Choosing the b–revised	.91	4.92/1.23	—				
2. Alternative search–revised	.91	3.47/1.62	.11*	—			
3. Quality of alternatives	.90	5.03/2.02	.08	−.64**	—		
4. Regret	.79	4.07/1.33	−.04	.62**	.38**	—	
5. Life satisfaction	.93	4.33/1.58	.25*	.04*	.03	−.37**	—
6. Optimism	.89	4.45/1.44	.25**	−.18**	−.02	−.26**	.60**

Note. $N = 315$. M = mean; SD = standard deviation.

[a]Internal reliability estimates are based on Cronbach's α. Relational maximization (choosing the best and alternative search), regret, life satisfaction, and optimism were measured on 7-point scales, whereas quality of alternatives was measured on a 9-point scale. Higher values indicate a greater frequency or intensity of the variable.

*$p < .05$; **$p < .01$ (two-tailed).

Table 6. Factor structure for the alternative search subscale and quality of alternatives subscale.

Variable label	1	2
RRMS Alternative Search Subscale		
1. I wonder if I would be happier in another relationship.	.76	.09
2. I constantly compare my current relationship to other potential relationships.	.82	−.02
3. No matter how satisfied I am in my current relationship, I am always on the lookout for a better relationship.	.93	−.03
4. I always like to keep my relational options open.	.82	.07
5. Even if I am satisfied in my current relationship, I will continue searching for a better romantic partner.	.89	−.01
6. If my current relational partner is not exactly what I'm looking for, I will continue to search for someone better.	.68	.03
IMS Quality of Alternatives Subscale		
1. The people other than my partner with whom I might become involved are very appealing.	.13	.79
2. My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.)	.23	.68
3. If I weren't dating my partner, I would do fine—I would find another appealing person to date.	−.23	.97
4. My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.)	.20	.75
5. My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship.	.12	.78
Eigenvalues	6.39	1.44
Cronbach's α	.91	.90

Note. Factor 1 = alternative search (RRMS); Factor 2 = quality of alternatives (IMS); RRMS = Revised Relational Maximization Scale; IMS = Investment Model Scale.

(mean absolute value = .04), as were the loadings of the quality of alternate items on the alternative search factor (mean absolute value = .18), further supporting the empirical distinctiveness of the two constructs. The full results can be found in Table 6.

Due to the high correlation between the alternative search RRMS subscale and the quality of alternatives IMS scale, a CFA was conducted with both of the scales included. Because alternative search and quality of alternatives are associated conceptually and empirically, we allowed the two latent variables to covary. The initial CFA showed acceptable model fit ($\chi^2 = 117.01$, $p < .001$, CFI = .97, RMSEA = .07). No modifications were made to either scale, demonstrating the empirical distinctiveness of the two scales.

Study 4: Discussion

In Study 4, choosing the best was positively related to life satisfaction and optimism, whereas alternative search was positively related to regret and negatively related to optimism. Previous research has established a pattern between maximization and these outcomes (for review, see Cheek & Schwartz, 2016; Misuraca & Fasolo, 2018). Given that maximization is understood as both the *goal* of choosing the best accompanied with the *strategy* of alternative search (Cheek & Schwartz, 2016), the finding that these two dimensions sometimes demonstrate opposite associations to personal outcomes is not surprising (see Nenkov et al., 2008; Rim et al., 2011). These differences may be due to the positive choice experiences associated with choosing the best and the negative choice experiences associated with alternative search (Cheek & Ward, 2019).

Importantly, Study 4 also examined the relationship between the alternative search and the quality of alternatives from the Investment Model (Rusbult et al., 1998). Whereas Mikkelson and Pauley (2013) covered this ground conceptually, we sought to demonstrate empirically that these two concepts, although related, were distinct. Results from the exploratory factor analysis demonstrated that items from these scales loaded on separate factors, with zero cross-loading items. Schwartz et al. (2002) maintained that maximizers seek out information about all available options in an effort to choose the best. Thus, as maximizers assess other potential romantic partners through the strategy of alternative search, this likely corresponds with an increase in an individual's quality of alternatives. Another potential reason for the size of this relationship is that individuals in satisfying relationships tend to derogate alternatives (Johnson & Rusbult, 1989). A similar pattern has been found in the maximization literature with reversible decisions (Sparks et al., 2012). Thus, it is likely that maximizers are less likely to engage in this practice and thus perceive more relationship alternatives, even in satisfying relationships. General implications from all five studies are addressed in the general discussion section.

General discussion

Given the conceptual and empirical confusion among maximization research, this study sought to align the RMS (Mikkelson & Pauley, 2013) with current conceptual and operational definitions of maximization (Cheek & Schwartz, 2016). The revision of this

domain-specific scale, and the subsequent development of the RRMS, is important for two reasons. First, maximization research benefits from domain-specific scales because individuals might differ in their need to maximize depending on the context. In particular, individuals might be more inclined to maximize romantic relationship decisions as people typically invest a great deal in long-term romantic relationships (Le & Agnew, 2003). Second, domain-specific maximization scales ought to predict domain-specific outcomes better than a general scale of maximization (Schwartz et al., 2002). Indeed, Mikkelson and Pauley (2013) demonstrated that the RMS was a better predictor of relational outcomes than the Maximization Scale, which measures general maximization (Schwartz et al., 2002). The following paragraphs will provide an overview of the findings, discuss implications, and consider use of the RRMS in future research.

Summary and implications

One goal for the present study was to revise the RMS. Items from the MTS-7 and MI alternative search subscales were adapted for the romantic relationship context and included with the original high standards and alternative search subscales from the RMS. These items were included in an exploratory factor analysis to create a revised version of the RMS. The two extracted factors demonstrated both high conceptual and empirical fit for ongoing romantic relationship decisions. Specifically, naming the factors *choosing the best* and *alternative search* is in accordance with the conceptual redefinition of maximization by Cheek and Schwartz (2016). The results of the current study indicate two substantial issues moving forward.

First, given the differences between initial decisions and ongoing decisions in romantic relationships, it appears that only research examining ongoing committed relationships should use the RRMS alternative search subscale. For individuals not in committed relationships, four adapted items from the MI alternative search subscale could be used instead.[1] Future research should continue to clarify the differences in the use of alternative search by those who are single and considering an initial decision versus those facing an ongoing decision to remain in a committed romantic relationship. The distinction between initial decisions and ongoing decisions could have a number of important applications and implications for other domains (e.g., career-related decisions or brand loyalty).

Second, the disparate results for choosing the best (related to beneficial relational and personal outcomes) and alternative search (related to detrimental relational and personal outcomes) have implications for future research examining both general maximization and relational maximization. Schwartz et al. (2002) determined that the different dimensions of maximization predict different psychological outcomes and that researchers should examine both general maximization and its subdimensions. Cheek and Schwartz (2016) argued for considering both choosing the best and alternative search as it is the combination of both dimensions that defines a maximizer, as opposed to some previous research that measured maximization as a unidimensional construct. The results of the present study align with these suggestions. Thus, similar to the arguments made in prior research (Cheek & Schwartz, 2016; Weinhardt et al., 2012), we propose using the RRMS choosing the best subscale as a measure of the maximization

goal and using the RRMS alternative search subscale as a measure of the maximization *strategy*. Given the different associations with the various outcomes in this study, future research needs to continue to develop an understanding of these two dimensions and carefully consider both the individual and combined outcomes of choosing the best and alternative search.

Limitations and future research

The creation of the RRMS moves the research on relational maximization forward and creates opportunities for future studies. Aligning relational maximization measurement with Cheek and Schwartz's (2016) conceptualization of maximization and eliminating the original RMS's decision difficulty factor as a primary dimension of maximization (Cheek & Goebel, 2020; Cheek & Ward, 2019; Kim & Miller, 2017) are important steps that will improve future relational maximization research. Further, the idea of ongoing or reversible decisions (Shiner, 2015) generates new questions regarding the nature of maximization that can be studied in other contexts with ongoing decisions (e.g., career choices). However, like most of the maximization research, the current study suffers from the use of cross-sectional data and must be understood and interpreted within these bounds.

One assumption of the maximization literature is that maximization operates as the causal factor, even though the majority of the research is cross-sectional. Yet, it is possible that dissatisfaction with a relationship (or dissatisfaction with other decisions, such as a recent purchase) could be the impetus for increased alternative search behaviors. In the case of relational maximization, choosing the best could be symptomatic of perceiving a satisfying relationship, whereas alternative search could be symptomatic of perceiving a dissatisfying relationship. Another possibility is that the relationship between relational maximization and relational outcomes is bidirectional. Previous research, though limited, does indicate that in both relational contexts (French & Meltzer, 2019) and consumer contexts (Dar-Nimrod et al., 2009; Sparks et al., 2012), maximization operates as the causal factor. Importantly, given the limitations of cross-sectional data, the current study cannot answer these questions definitively.

Given the important limitations of cross-sectional data, the first step in future research should be a longitudinal examination of relational maximization. Longitudinal research would establish the stability of the relational maximization construct over time and could also clarify empirically whether relational maximization is the causal factor predicting relational and personal outcomes.

As conceptual and operational clarity around maximization and relational maximization grows, researchers can begin to understand why maximizers often experience lower personal and relational outcomes compared to satisficers. For example, Diab et al. (2008) suggested that regret was a key variable in understanding the relationship between maximization and life satisfaction. Indeed, Peng et al. (2018) found that regret served as a key mediator between maximization and subjective well-being. Kim and Miller (2017) found that when maximizers experience decision difficulty, they are more vulnerable to negative feedback about one's choice. Future researchers could examine the role that regret, decision difficulty, and even negative feedback might play in

relationships; and how these variables might act as mediators or moderators between relational maximization and relational outcomes.

Social comparison may be another key component in understanding maximizers, as maximizers tend to rely on external rather than personal criteria to make decisions (Parker et al., 2007). Weaver et al. (2015) claimed that maximizers not only want to choose the best, but they want to be the best. It is possible that relational maximization is only problematic for romantic relationships when social comparisons are primarily upward as opposed to downward. Understanding social comparison and the types of comparisons maximizers and satisficers make could be fundamental in understanding the relational maximization process and its connection to relational outcomes.

Finally, the inclusion of single individuals in the Exploratory Study was problematic for the RRMS alternative search subdimension (Studies 1–4 only included participants in committed romantic relationships). Therefore, developing an alternate scale for pre-relational (or initial) decisions could be a useful next step. As discussed previously, the four adapted items from the MI (Turner et al., 2012) might serve as a useful starting point.[1]

Conclusion

The present study validates Cheek and Schwartz's (2016) two-component conceptualization of maximization in the relational maximization context and provides evidence of associations between relational maximization and various decision-making styles, relational outcomes, and personal outcomes. Although these findings are encouraging in that they support the importance of examining domain-specific maximization, the authors suggest interpreting the results with some caution. Future research should continue to validate the efficacy of this theoretic concept in the field of personal relationships.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD


Alan C. Mikkelson https://orcid.org/0000-0003-4076-8412

Open research statement

As part of IARR's encouragement of open research practices, the author(s) have provided the following information: This research was not pre-registered. The data and materials used in the research are available. The data and materials can be obtained by emailing: amikkelson00@whitworth.edu.

Note

1. Four items from the adapted MI alternative search subscale that reference pre-decision romantic relationship alternative search:

- When it comes to romantic relationships, I can't come to a decision unless I have carefully considered all of my options.
- When looking for a relational partner, I plan on spending a lot of time looking.
- I find myself meeting many different potential relational partners before finding the person I want to date.
- When it comes to romantic relationships, I take the time to consider all alternatives before making a decision.

References

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*(4), 596–612. https://doi.org/10.1037/h0046016

Beisswanger, A. H., Stone, E. R., Hupp, J. M., & Allgaier, L. (2003). Risk taking in relationships: Differences in deciding for oneself versus for a friend. *Basic and Applied Social Psychology*, *25*(2), 121–135. https://doi.org/10.1207/S15324834BASP2502_3

Bergman, A. J., Nyland, J. E., & Burns, L. R. (2007). Correlates with perfectionism and the utility of a dual process model. *Personality and Individual Differences*, *43*(2), 389–399. https://doi.org/10.1016/j.paid.2006.12.007

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's Mechanical Turk. *Political Analysis*, *20*, 351–368. https://doi.org/10.1093/pan/mpr057

Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in adult decision-making competence. *Journal of Personality and Social Psychology*, *92*(5), 938–956. https://doi.org/10.1037/0022-3514.92.5.938

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical Turk: A new source of inexpensive, yet high-quality data? *Perspective on Psychological Science*, *6*, 3–5. https://doi.org/10.1177/1745691610393980

Cheek, N. N., & Goebel, J. (2020). What does it mean to maximize? "Decision difficulty," indecisiveness, and the jingle-jangle fallacies in the measurement of maximizing. *Judgment and Decision Making*, *15*(1), 7–24.

Cheek, N. N., & Schwartz, B. (2016). On the meaning and measurement of maximization. *Judgment and Decision Making*, *11*(2), 126. https://doi.org/10.1037/t03407-000

Cheek, N. N., & Ward, A. (2019). When choice is a double-edged sword: Understanding maximizers' paradoxical experiences with choice. *Personality and Individual Differences*, *143*, 55–61. https://doi.org/10.1016/j.paid.2019.02.004

Chernev, A., Bockenholt, U., & Goodman, J. (2015). Choice overload: A conceptual review and meta-analysis. *Journal of Consumer Psychology*, *25*(2), 333–358. https://doi.org/10.1016/j.jcps.2014.08.002

Chowdhury, T. G., Ratneshwar, S., & Mohanty, P. (2009). The time-harried shopper: Exploring the difference between maximizers and satisficers. *Marketing Letters*, *20*, 155–167. https://doi.org/10.1007/s11002-008-9063-0

Dahling, J. J., & Thompson, M. N. (2012). Detrimental relations of maximization with academic and career attitudes. *Journal of Career Assessment*, *21*(2), 278–294. https://doi.org/10.1177/1069072712471322

Dalal, D. K., Diab, D. L., Zhu, X., & Hwang, T. (2015). Understanding the construct of maximizing tendency: A theoretical and empirical evaluation. *Journal of Behavioral Decision Making*, *28*(5), 437–450. https://doi.org/10.1002/bdm.1859

Dar-Nimrod, I., Rawn, C. D., Lehman, D. R., & Schwartz, B. (2009). The maximization paradox: The cost of seeking alternatives. *Personality and Individual Differences*, *46*(5-6), 631–635. https://doi.org/10.1016/j.paid.2009.01

Diab, D. L., Gillespie, M. A., & Highouse, S. (2008). Are maximizers really unhappy? The measurement of maximizing tendency. *Judgment and Decision Making*, *3*(5), 364–370. https://doi.org/10.1037/t01069-000

Diener, E., Emmons, R. A., Laren, R. J., & Griffin, S. (2000). The satisfaction with life scale. *Journal of Personality Assessment*, *49*(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

French, J. E., & Meltzer, A. L. (2019). Maximizing tendencies in marriage: Accentuating the implications of readily observable partner characteristics for intimates' satisfaction. *Personality and Social Psychology Bulletin*, *45*(10), 1468–1481. https://doi.org/10.1177/0146167219832337

Frost, R. O., & Shows, D. L. (1993). The nature and measurement of compulsive indecisiveness. *Behaviour Research and Therapy*, *31*(7), 683–692. https://doi.org/10.1016/0005-7967(93)90121

Hamilton, K., Shih, S. I., & Mohammed, S. (2016). The development and validation of the rational and intuitive decision styles scale. *Journal of Personality Assessment*, *98*(5), 523–535. https://doi.org/10.1080/00223891.2015.1132426

Holbert, R. L., & Stephenson, M. T. (2008). Commentary on the uses and misuses of structural equation modeling in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The sage sourcebook of advanced data analysis methods for communication research* (pp. 185–218). Sage.

Iyengar, S. S., Wells, R. E., & Schwartz, B. (2006). Doing better but feeling worse: Looking for the "best" job undermines satisfaction. *Psychological Science*, *17*(2), 143–150. https://doi.org/10.1111/j.1467-9280.2006.01677.x

Johnson, D. J., & Rusbult, C. E. (1989). Resisting temptation: Devaluation of alternative partners as a means of maintaining commitment in close relationships. *Journal of Personality and Social Psychology*, *57*, 967. https://doi.org/10.1037/0022-3514.57.6.967

Kim, K., & Miller, E. G. (2017). Vulnerable maximizers: The role of decision difficulty. *Judgment & Decision Making*, *12*(5), 516–526. https://doi.org/10.1037/t45865-000

Lai, L. (2010). Maximizing without difficulty: A modified maximization scale and its correlates. *Judgment and Decision Making*, *5*(3), 164–175. https://doi.org/10.1037/t06287-000

Larsen, J. T., & McKibban, A. R. (2008). Is happiness having what you want, wanting what you have, or both? *Psychological Science*, *19*(4), 371–377. https://doi.org/10.1111/j.1467-9280.2008.02095.x

Larzelere, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, *42*(3), 595–604. https://doi.org/10.2307/351903

Le, B., & Agnew, C. R. (2003). Commitment and its theorized determinants: A meta-analysis of the investment model. *Personal Relationships*, *10*(1), 37–57. https://doi.org/10.1111/1475-6811.00035

Long, M. L. W., & Campbell, A. (2015). Female mate choice: A comparison between accept-the-best and reject-the-worst strategies in sequential decision making. *Evolutionary Psychology*, *13*(3), 1–6. https://doi.org/10.1177/1474704915594553

Luan, M., & Li, H. (2017). Maximization paradox: Result of believing in an objective best. *Personality and Social Psychology Bulletin*, *43*(5), 652–661. https://doi.org/10.1177/0146167217695552

McNulty, J. K. (2013). Personality and relationships. In J. A. Simpson & L. Campbell (Eds.), *The Oxford handbook of close relationships* (pp. 535–550). Oxford University Press.

Mikkelson, A. C., Hesse, C., & Pauley, P. (2016). The attributes of relational maximizers. *Communication Studies*, *67*(5), 567–587. https://doi.org/10.1080/10510974.2016.1239644

Mikkelson, A. C., & Pauley, P. M. (2013). Maximizing relationship possibilities: Relational maximization in romantic relationships. *Journal of Social Psychology*, *153*(4), 467–485. https://doi.org/10.1080/00224545.2013.767776

Misuraca, R., & Fasolo, B. (2018). Maximizing versus satisficing in the digital age: Disjoin scales and the case for "construct consensus." *Personality and Individual Differences*, *121*, 152–160. https://doi.org/10.1016/j.paid.2017.09.031

Moyano-Diaz, E., Martinez-Molina, A., & Ponce, F. (2014). The price of gaining: Maximization and decision-making, regret, and life satisfaction. *Judgment and Decision Making*, *9*(5), 500–509. https://doi.org/10.1037/h0036316

Nenkov, G. Y., Morrin, M., Ward, A., Schwartz, B., & Hulland, J. (2008). A short form of the maximization scale: Factor structure, reliability and validity studies. *Judgment and Decision Making*, *3*(5), 371–388. https://doi.org/10.1037/t03407-00

Newman, D. B., Schug, J., Yuki, M., Yamada, J., & Nezlek, J. B. (2018). The negative consequences of maximizing in friendship selection. *Journal of Personality and Social Psychology*, *114*(5), 804–824. https://doi.org/10.1037/0882-7974.7

Parker, A. M., Bruine de Bruin, W., & Fischoff, B. (2007). Maximizers versus satisficers: Decision-making styles, competence, and outcomes. *Judgment and Decision Making*, *2*(6), 342–350. https://doi.org/10.1037/t30193-000

Peng, J., Zhang, J., Zhang, Y., Gong, P., Han, B., Sun, H., Cao, F, & Miao, D. (2018). A new look at the impact of maximizing on unhappiness: Two competing mediating effects. *Frontiers in Psychology*, *9*, 66. https://doi.org/10.3389/fpsyg.2018.00066

Polman, E. (2010). Why are maximizers less happy than satisficers? Because they maximize positive and negative outcomes. *Journal of Behavioral Decision Making*, *23*(2), 179–190. https://doi.org/10.1002/bdm.647

Purvis, A., Howell, R. T., & Iyer, R. (2011). Exploring the role of personality in the relationship between maximization and well-being. *Personality and Individual Differences*, *50*(3), 370–375. https://doi.org/10.1016/j.paid.2010.10.023

Richardson, C. M., Ye, H. J., Ege, E., Suh, H., & Rice, K. G. (2014). Refining the measurement of maximization: Gender invariance and relation to psychological well-being. *Personality and Individual Differences*, *70*, 229–234. https://doi.org/10.1016/j.paid.2014.06.048

Rim, H. B., Turner, B. M., Betz, N. E., & Nygren, T. E. (2011). Studies of the dimensionality, correlates, and meaning of measures of the maximizing tendency. *Judgment and Decision Making*, *6*(6), 565–579. https://doi.org/10.1037/t01588-000

Rubin, Z. (1970). Measurement of romantic love. *Journal of personality and social psychology*, *16*(2), 265–273. https://doi.org/10.1037/h0029841

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, *5*(4), 357–387. https://doi.org/10.1111/j.1475-6811.1998.tb00177.x

Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, *67*(6), 1063–1078. https://doi.org/10.1037/0022-3514.67.6.1063

Schwartz, B. (2000). Self-determination: The Tyranny of freedom. *American Psychologist*, *55*(1), 79–88. https://doi.org/10.1037/0003-066X.55.1.79

Schwartz, B. (2004). The paradox of choice: Why more is less. Harper Perennial.

Schwartz, B., Ward, A., Lyubomirsky, S., Monterosso, J., White, K., & Lehman, D. R. (2002). Maximizing versus satisficing: Happiness is a matter of choice. *Journal of Personality and Social Psychology*, *83*(5), 1178–1197. https://doi.org/10.2307/2393222

Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, *55*(5), 818–831. https://doi.org/10.1177/0013164495055005017

Shiner, R. L. (2015). Maximizers, satisficers, and their satisfaction with and preferences for reversible versus irreversible decisions. *Social Psychological and Personality Science*, *6*(8), 896–903. https://doi.org/10.1177/1948550615595271

Simon, H. A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics*, *69*(1), 99–118. https://doi.org/10.2307/1884852

Simon, H. A. (1957). Models of man, social and rational: Mathematical essays on rational human behavior. Wiley.

Solomon, D. H, & Knobloch, L. K. (2004).A model of relational turbulence: The role of intimacy, relational uncertainty, and interference from partners in appraisals of irritations. *Journal of Social and Personal Relationships*, *21*(6), 795–816. https://doi.org/10.1177/0265407504047838

Sparks, E. A., Ehrlinger, J., & Eibach, R. P. (2012). Failing to commit: Maximizers avoid commitment in a way that contributes to reduced satisfaction. *Personality and Individual Differences*, *52*(1), 72–77. https://doi.org/10.1016/j/paid/2011.09.002

Turner, B. R., Rim, H. B., Betz, N. E., & Nygren, T. E. (2012). The maximization inventory. *Judgment and Decision Making*, *7*(1), 48–60. https://doi.org/10.1037/t45865-000

Weaver, K., Daniloski, K., Schwarz, N., & Cottone, K. (2015). The role of social comparison for maximizers and satisficers: Wanting the best or wanting to be the best? *Journal of Consumer Psychology*, *25*(3), 372–388. https://doi.org/10.1016/j.jcps.2014.10.003

Weinhardt, J. M., Morse, B. J., Chimeli, J., & Fisher, J. (2012). An item response theory and factor analytic examination of two prominent maximizing tendency scales. *Judgment and Decision Making*, *7*(5), 644–658. https://doi.org/10.1037/t01588-000