Is Well-Being Illusory?
Examining the Benefits of Positive Illusions for Relationship Quality and Well-Being

by

Julia McNeil

A thesis submitted in conformity with the requirements for the degree of Master of Arts
Psychology
University of Toronto

© Copyright by Julia McNeil 2014
Is Well-Being Illusory?

Examining the Benefits of Positive Illusions for Relationship Quality and Well-Being

Julia McNeil

Master of Arts
Psychology
University of Toronto
2014

Abstract

Previous research has shown that positive illusions about a romantic partner are related to higher levels of relationship quality (Murray, Holmes & Griffin, 1996). Using model comparison, and a sample of 458 families (one student with two biological parents, N=1374), the direction of this effect was examined. Model fit favored partner-illusions predicting relationship satisfaction. With this model, several additional hypotheses about personality, self-enhancement, partner-enhancement, well-being and relationship quality were tested. Results revealed that personality had an effect on relationship quality, but this effect was fully mediated by partner-perceptions. This result suggesting that positive perceptions lead to better relationships, regardless of the perception being based on reality or illusions. Personality also significantly predicted well-being, with the effect being partially mediated by relationship quality. The model also allowed us to examine self-enhancement in personality ratings, which were found to be unrelated to the shared variance in well-being ratings.
Acknowledgments

I would like thank and express my sincerest appreciation to all those who supported and encouraged me throughout the year. Foremost, I would like to express my gratitude to my supervisor, Dr. Ulrich Schimmack, for his invaluable guidance, and for the support he has shown me this year. I would also like to thank my thesis committee, Dr. Emily Impett and Dr. William Cunningham for the their valuable comments and suggestions in regards to this project. Finally I would like to express my appreciation to the numerous research assistants that aided in collecting and entering the data for this project.
# Table of Contents

Acknowledgments........................................................................................................... iii
Table of Contents.............................................................................................................. iv
List of Tables .................................................................................................................... vi
List of Figures .................................................................................................................... vii
Chapter 1 Introduction ...................................................................................................... 1
  1.1 Measurement of Self- and Partner-Enhancement ..................................................... 3
  1.2 Self-Enhancement and Well-Being .......................................................................... 4
  1.3 Positive Illusions about Romantic Partner and Relationship Satisfaction .......... 6
  1.4 Personality, Relationship Quality and Well-Being .................................................. 7
Chapter 2 Methods ............................................................................................................ 9
  2.1 Participants and Procedure ....................................................................................... 9
  2.2 Materials .................................................................................................................. 10
    2.2.1 Personality ......................................................................................................... 10
    2.2.2 Relationship Quality ......................................................................................... 10
    2.2.3 Well-being ......................................................................................................... 11
  2.3 Model Overview ....................................................................................................... 12
    2.3.1 Model 1 ............................................................................................................. 14
    2.3.2 Model 2 ............................................................................................................. 14
    2.3.3 Model 3 ............................................................................................................. 14
Chapter 3 Results ............................................................................................................. 17
  3.1 Well-being Measurement Model ........................................................................... 17
  3.2 Relationship Quality Measurement Model .............................................................. 18
  3.3 Relationships and Well-being .................................................................................. 19
  3.4 Model Comparison ................................................................................................. 20
  3.5 Model results ........................................................................................................... 21
    3.5.1 Self-Enhancement ............................................................................................. 21
    3.5.2 Agreeableness .................................................................................................. 23
    3.5.3 Conscientiousness ........................................................................................... 24
    3.5.4 Extraversion ................................................................................................... 25
3.5.5 Neuroticism .................................................................................................................. 26
3.5.6 Openness to Experience ............................................................................................... 27

Chapter 4 Discussion ............................................................................................................. 28

4.1 Overview of Results ......................................................................................................... 28
4.2 Self-Enhancement and Well-Being .................................................................................. 29
4.3 Personality Effects ............................................................................................................ 30
4.4 Partner-Enhancement and Relationship Quality .............................................................. 31
4.5 Relationships and Well-being ......................................................................................... 31
4.6 Limitations ....................................................................................................................... 32
4.7 Conclusion ......................................................................................................................... 33

References .............................................................................................................................. 35
List of Tables

Table 1: Comparison of Model Fit................................................................. 21
Table 2: Self-Enhancement Effects on Well-Being ........................................ 22
Table 3: Correlation of Self-Reported Personality and Self-Reported Well-Being .... 23
List of Figures

Figure 1: Example of Expected Correlations for Model 1, Model 2 and Model 3 .......... 13
Figure 2: Structural Model with paths tested in Model 1, Model 2 and Model 3 .......... 16
Figure 3: Multi-Method Measurement Model of Well-Being .................................. 18
Figure 4: Multi-Method Measurement Model of Relationship Quality ....................... 19
Figure 5: Well-Being and Relationship Quality Model ........................................... 19
Chapter 1
Introduction

For centuries philosophers have debated the influence of illusions on well-being (for a review see Sumner, 1996). Prominent hedonistic theories of well-being assert that all feelings of pleasure increase happiness even if these feelings are elicited by illusory perceptions of reality. In contrast, true happiness theories of well-being require that only feelings based on accurate perceptions of reality contribute to well-being. Sumner’s (1996) theory of authentic happiness allows for illusions to influence happiness, if an individual prefers positive illusions to harsh reality. For example, a patient could benefit from not being informed about a terminal illness to enjoy the last days of her life. The possibility that positive illusions can contribute to well-being has many practical implications for public policy, physicians and therapists, parents, and individuals’ themselves. Thus, it is important to examine to which extent individuals’ well-being rests on evaluations of their actual lives and how much positive illusions contribute to well-being.

Empirical studies of the determinants of well-being emerged in the 1960s (Cantril, 1965; Diener, 1984). Since, numerous studies have examined the relationship between positive illusions and well-being. In a seminal review article, Taylor and Brown (1988) concluded that positive illusions are normative (i.e., most people tend to have overly positive perceptions of reality), and that positive illusions are beneficial for well-being and mental health. In a rebuttal, Colvin and Block (1994) challenged these conclusions and suggested that positive illusions can have negative consequences. So far, empirical studies have been unable to resolve this controversy due to problems in the measurement of illusions, problems in the measurement of well-being, and the lack of designs that are able to distinguish effects of illusions on well-being and effects of well-being on illusions. This study addresses these issues using a multi-method, round-robin design with families.
There are a variety of domains where people demonstrate positive illusions and different results may emerge for different types of illusions. In this study I focused on positive illusions about one’s own personality traits (self-enhancement) and illusions about a romantic partner’s personality (partner-enhancement). I examined self-enhancement and partner-enhancement concurrently because Kim Schimmack & Oishi (2012) demonstrated that self-enhancement and other-enhancement are positive correlated. That is, individuals with positive illusions about themselves also had positive illusions about close others. The positive correlation between these two types of illusions makes it difficult to draw inferences about the effect of self-enhancement and well-being in studies that measured only self-enhancement (e.g. Taylor, Lerner, Sherman, Sage & McDowell, 2003). A positive correlation between self-enhancement and well-being might be spurious and mask the benefits of other-enhancement. In fact, Murray, Holmes and Griffin (1996 a, b) provided evidence that other-enhancement predicts relationship satisfaction. Furthermore, relationship satisfaction, especially marital satisfaction, is a reliable predictor of overall life-satisfaction because marital satisfaction is chronically accessible domain when married respondents report on their well-being (Headey, Veenhoven, & Wearing, 1991; Heller, Watson & Hies, 2004; Schimmack & Oishi, 2005). Moreover, Wood, Harms, and Vazire (2010) found positive correlations between other-enhancement and well-being. It is therefore possible that the alleged benefits of self-enhancement are inflated in studies that fail to control for potential benefits of other-enhancement. To address this concern, I created an integrated structural equation model that made it possible for the first time to examine how self-enhancement and partner-enhancement are related to relationship quality and well-being of spouses. I tested this model in a sample of 458 married couples, along with their children as informants. Before describing the integrated model used in this study, I will review the literatures related to (a) the measurement of self-enhancement and other-enhancement, (b) the relationship between self-enhancement and well-being, (c) the influence of partner-enhancement on relationship satisfaction, and (d) the influence of personality on relationships and well-being.
1.1 Measurement of Self- and Partner-Enhancement

A major problem in empirical studies of self-enhancement and partner-enhancement is the measurement of illusions because individuals, by definition, cannot have insights into or report on their own biases (e.g., Are you less extraverted than you truly believe yourself to be extraverted?). As a result, it is necessary to measure self-enhancement indirectly by means of the discrepancy between self-ratings of personality, which reflect a rater’s beliefs about his or her own personality, and a valid criterion measure that reflects targets’ true personality (e.g., compare a self-report of weight with an objective measure of weight by means of a scale). Similarly, the measurement of partner-enhancement requires a valid measure of partners’ personality to reveal biases in ratings of partners-personality by a spouse (e.g., wife’s ratings of husbands’ personality). A major problem in the measurement of self-enhancement and other-enhancement in regards to personality is that objective validation criteria are difficult or impossible to obtain.

A common solution to this problem is to obtain personality ratings of the same target from multiple raters. Ratings by one rater are used as the validation criterion for ratings by the other rater. For example, to assess self-enhancement about cognitive abilities, Paulhus, Harms, Bruce, and Lysy (2003) regressed self-ratings of intelligence on informant ratings of intelligence and retained the residuals as a measure of self-enhancement. The reverse approach has been used to measure partner-enhancement. For example, Murray et al. (1996 a, b) obtained self-ratings and partner ratings of individuals in a romantic relationship and regressed ratings of the partner on partner’s self-ratings.

Ironically, the former approach assumes that informant ratings are valid and self-ratings are partially biased, whereas the latter approach makes the opposite assumption that self-ratings are valid and ratings of the partner are partially biased. In reality, multi-method studies suggest that self-ratings and partner-ratings are both partially valid and biased and that only about 40% of the variance in ratings by a single rater is valid (Connelly & Hülsheger, 2012; Schimmack, 2010). By using a biased validation criterion, the residual variance is no longer a pure measure of self-enhancement or partner-enhancement and
still contains valid variance that was not removed by regressing ratings on the validation criterion. To avoid this problem, I used a latent variable model. Latent variable models solve this problem by modeling the valid variance in personality traits as a latent variable that does not correspond directly to any particular measure of personality. With this approach, the observed variance in personality ratings by a single rater is divided into unobserved variances that represent the valid variance, which is shared with other raters, and the residual variance that reflects unique rating biases in a single rater. In a study with two raters, this model has three variance components: (a) the shared variance between raters, which is assumed to reflect actual variation in personality traits, (b) variance unique to self-ratings, which can reflect the influence of self-enhancement, and (c) variance unique to ratings of the other (e.g., a spouse), which can reflect the influence of other-enhancement. Thus, latent variable models make it possible to examine simultaneously the influence of self-enhancement and other-enhancement because they do not make the unrealistic assumption that self-ratings or partner-ratings are perfectly valid measures of true personality. However, models with two raters are limited because it is impossible to determine empirically whether self-ratings or partner-ratings are more valid (cf. Schimmack & Schneider, 2009). Moreover, the model would have to assume that all of the shared variance between self-ratings and partner-ratings is valid. However, it is possible that some of the shared variance reflects positive illusions that are shared by spouses. For example, self-ratings may be influenced by positive illusions of a spouse (e.g., a husbands’ rates himself as more agreeable than he actually is because his wife has a positive illusion about his agreeableness). To address this problem, I included ratings by a third rater. Specifically, adolescent children who were still living with their parents served as informants of their parents’ personality, relationship quality and well-being. Therefore, in this study true personality variance was defined as the shared variance among all three raters.

1.2 Self-Enhancement and Well-Being

Several review articles have suggested that self-enhancement predicts higher levels of well-being (Diener, Suh, Lucas & Smith, 1999; Murray et al., 1996 a,b; Taylor Lerner, Sherman, Sage, & McDowell, 2003; Taylor and Brown, 1988). This conclusion is based
on the finding that various self-enhancement measures predict self-ratings of well-being and adjustment. Unfortunately, the use of self-ratings of well-being as criterion raises concerns about the validity of the empirical finding (Kim et al., 2012; Paulhus et al., 2003). One possible explanation for this finding is that self-ratings of well-being are valid and that self-enhancement is beneficial for well-being. However, an alternative interpretation of these findings is that self-enhancement also inflates self-ratings of well-being. As happiness is desirable, it is possible that self-enhancers provide overly positive ratings of their well-being, just as they inflate ratings of other desirable characteristics such as intelligence or kindness.

To address this concern, some studies have used informant ratings of well-being and adjustment. Informants can provide valid ratings of well-being (Schneider & Schimmack, 2010; Zou, Schimmack, & Gere, 2013) even if they are aware that this happiness rests on positive illusions (i.e., the well known phrase ignorance is bliss). Studies with self-ratings and informant-ratings of well-being consistently replicate the finding that self-enhancement predicts self-ratings of well-being. At the same time, they show no significant correlation between self-enhancement and informant ratings of well-being (Kim et al., 2012; Kurt & Paulhus, 2008; Paulhus, Harms, Bruce, & Lysy, 2003).

One concern with the use of informant ratings of well-being is that these ratings can also be biased. For example, informants may dislike self-enhancing targets and rate their well-being negatively. One solution to this problem is to focus on the shared variance across raters (Zou, et al., 2013). A valid predictor of well-being should predict the shared variance in well-being ratings. It would be difficult to explain why a valid predictor of well-being predicts only the unique variance in self-ratings of well-being, but not the shared variance in well-being. Kim et al. (2012) found that self-enhancement and enhancement of a friends’ personality predicted only the unique variance in self-ratings of well-being, but not the shared variance in well-being ratings. This finding suggests that self-enhancement produces biases in self-report measures of well-being, but does not contribute to individuals’ well-being. I expected to find similar results in the present study of well-being in married couples.
1.3 Positive Illusions about Romantic Partner and Relationship Satisfaction

In parallel to the aforementioned research on self-enhancement, relationship researchers have examined biases in partner perceptions (partner-enhancement) and relationship satisfaction (Murray et al. 1996 a,b). A rather consistent finding has been that partner-enhancement is positively related to relationship satisfaction (Martz, Verette, Arriaga, Slovik, Cox, & Rusbult, 1998; Busby, Holman, & Niehuis 2009; Luo & Snider 2009; and Barelds, & Dijkstra, 2011). Importantly, this finding has been shown both for ratings of relationship satisfaction by the same rater (e.g., wife’s enhancement of her husbands’ personality predicts wife’s ratings of relationship satisfaction) as well as across raters (e.g., wife’s enhancement of her husbands’ personality predicts husband’s ratings of relationship satisfaction). The finding that partner-enhancement is related to both partner’s relationship satisfaction indicates that partner-enhancement is related to the shared variance in relationship satisfaction of both spouses. This shared variance is sometimes called relationship quality to indicate that it is an attribute of the dyad, whereas relationship satisfaction or well-being are attributes of individuals. Partner-enhancement has also been shown to predict other indicators of relationship quality such as commitment (Martz, Verette, Arriaga, Slovik, Cox, & Rusbult, 1998) and being more in love as newlyweds (Miller, Niehuis, & Huston, 2006).

The main problem in this line of research has been the interpretation of the positive correlation between illusions about the partner and relationship quality. Some authors suggest that positive illusions enhance relationship satisfaction (Murray et al., 1996 a,b), while others suggest that it is equally possible that high levels of satisfaction create an overly positive view of one’s partner (Barelds & Dijkstra, 2011). So far, this question has not been empirically examined because the simple bivariate correlation between partner-enhancement and relationship satisfaction is consistent with both interpretations. As explained in more detail below, the present study was able to test these competing predictions because these hypotheses make different predictions about the pattern of correlations of relationship quality and personality ratings by different raters.
1.4 Personality, Relationship Quality and Well-Being

Another limitation of previous studies of illusions is that these studies tended to ignore effects of personality on relationship satisfaction and well-being. The assumption was that it is possible to ignore these effects because illusion measures are independent of variance in actual personality. However, personality effects provide important information about the direction of relationships between illusions and well-being. For example, imagine that agreeableness is a desirable characteristic and that perceiving a spouse as agreeable contributes to relationship satisfaction (e.g., a wife believes that her husband is agreeable and this belief contributes to her satisfaction with her marriage). If beliefs about partners’ desirable characteristics contributed to relationship satisfaction, the valid variation in these characteristics should contribute to relationship satisfaction just as much as the variance due to positive illusions. Otherwise, the theory would have to assume that there is something fundamentally different between valid beliefs about a spouse’s personality and illusory perceptions of personality. However, perceivers cannot be aware of the distinction between valid and illusory perceptions. This line of reasoning implies that perceptions of partner’s personality act as mediators of personality effects on relationship satisfaction. That is, partner-perceptions are influenced by valid observations of behavior and illusions and both sources of variance in partner-perceptions contribute to relationship satisfaction. An alternative model assumes that relationship satisfaction leads to positive illusions in partner-perceptions. At the same time, partner-perceptions of personality also reflect valid variation in personality. In this model, actual personality is not necessarily a predictor of relationship satisfaction.

Numerous studies have examined the relationship between self-ratings of personality and measures of marital satisfaction. A meta-analysis showed that marital satisfaction was positively correlated with agreeableness, conscientiousness, and extraversion, and negatively correlated with neuroticism (Heller, Watson, & Hies, 2004). One problem with these studies is that shared method variance can account for this pattern of correlations. This problem is reduced in studies that correlated personality ratings of one spouse with relationship ratings by the other spouse (partner-effects). In two large national representative samples, Dyrenforth, Kashy, Donnellan, & Lucas (2010) found
partner effects for neuroticism (negative), extraversion, agreeableness, and conscientiousness. However, all effects were small (average $r = -.11$ for N, .11 for A, .08 for C, and .05 for E).

Finally, it is informative to consider effects of one spouse’s personality on their own well-being (actor-effects) and the other spouses’ well-being (partner effects). The most consistent finding in the literature is that neuroticism is a negative predictor of well-being when well-being is measured with self-ratings (Steel, Schmidt, Shultz, 2008) and when well-being is measured with informant ratings (Kim et al., 2012; Schimmack Oishi, Furr, & Funder, 2004). One explanation for this finding is that neuroticism is a disposition to experience more negative feelings and that frequent experiences of negative feelings reduce well-being (Schimmack, Diener & Oishi, 2002; Schimmack, Radhakrishnan, Oishi, Dzokoto, & Ahadi, 2002).

Other personality traits may have an instrumental influence on well-being (McCrae & Costa, 1991). For example, agreeableness may help to manage interpersonal conflicts and increase relationship quality. If this were the case, agreeableness should not only predict individuals’ own well-being, but also benefit partner’s well-being. Moreover, these effects should be mediated by relationship quality. In support of this model, Dyrenforth et al. (2010) found that agreeableness predicted well-being of both spouses. Similar results were obtained for conscientiousness, neuroticism, and extraversion. Based on these findings, I tested the hypothesis that partner-effects of personality on well-being are mediated by perceptions of partner’s personality and relationship quality. For example, husbands’ agreeableness predicts wives’ ratings of husbands’ agreeableness, which predicts relationship quality, which increases wives’ well-being.
Chapter 2
Methods

2.1 Participants and Procedure

Participants in this study were 458 family triads (N=1374), recruited from the University of Toronto. The triads were composed of students and their two biological parents. Out of the 458 students 321 were female and 133 were male, with ages ranging from 15 to 31 years of age (M_{age} = 19.45, SD = 2.38). The mother’s had an age range of 37 to 64 years (M_{age} = 48.3, SD = 5.59) and the father’s had an age range of 38 to 72 years (M_{age} = 51.8, SD = 6.22). Although the study did not include a measure of relationship length, the age of the student implies that the relationships were at least 15 years in length.

In order to participate in this study, it was a requirement that the students and their parents be living together. This requirement helped to ensure the family members had good knowledge about one another. 235 students came to the laboratory with their parents to complete the study and 223 students and their parents completed the study in their own homes.

Participants who came into the laboratory filled out consent forms, and were then separated in order to ensure the reports were filled out independently. The participants were then asked to complete a series of questionnaires asking about them and the two other members in their family. After completing the questionnaires participants were debriefed and thanked for their participation.

Participants who completed the questionnaires at home met with a researcher who gave them detailed instructions on completing the study and a copy of the questionnaire package. The participants were instructed to fill out the questionnaires in separate rooms and refrain from talking to one another about their responses until all members of the family completed the questionnaire. After completing the questionnaire participants were
asked to place it in an envelope and sign across the seal. Participants were debriefed and thanked when the envelopes were returned to the researchers.

In appreciation of their participation students received either $25 or course credit for completing the study; parents were each given $25 for their participation.

2.2 Materials

2.2.1 Personality

Personality was assessed using a brief Big Five questionnaire with three items for each personality dimension (Anusic, Schimmack, Pinkus, & Lockwood, 2009; Kim et al., 2012). Each item started with the statement “I tend to.” Similar scales were used to obtain informant ratings for the other family members by beginning each item with: My father tends to, My mother tends to, or My child tends to. Items were rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Research has shown that truncated scales correlate highly with scales that have more items (Donnellan, Oswald, Baird, & Lucas, 2006). To reduce the complexity of the structural equation model, the three items were averaged. This generated 30 personality items (5 traits x 3 raters x 2 targets). The three-item scales had moderate reliability (α range = .508 to .726). However, the main analyses were conducted at the level of latent variables, which corrects for unreliability.

2.2.2 Relationship Quality

The Network of Relationship Inventory- Social Provisional Version (NRI-SPV; Furman, & Buhrmester, 1985) was used a measure of relationship quality. The scale is comprised of 27 items and requires participants to respond on a 5-point Likert scale, ranging from 1 (little or none) to 5 (the most). The NRI-SPV is designed to have respondents rate a relationship on seven positive characteristics (affection, reliable alliance, enhancement of worth, intimacy, instrumental help, companionship, and nurturance of other), and two negative characteristics of relationships (conflict and antagonism). Each characteristic is assessed using three items from the scale. As an example, an item designed to assess affection would be “How much does this person really care about you?” Participants
were asked to rate their relationship with both members of their family. Informant ratings were obtained by using a modified version of this scale. The modified version replaced “you” in each item with: your mother, your father or your son/daughter, for example “How much does this person really care about your mother?”

Preliminary analyses of these items revealed high convergent, but low discriminant validity for different scales. Therefore, in order to simplify the measurement model used in this study, I averaged scores on these scales to obtain a single score of perceived relationship quality. Additional analysis further showed high convergent validity and weak discriminant validity for ratings of husbands’ relationship with his wife and vice versa. This finding is consistent with the view of relationship quality being a dyadic construct that reflects the quality of the relationship. For this reason, indicators were further aggregated across targets, resulting in three indicators of relationship quality (one for each rater).

2.2.3 Well-being

Well-being was assessed using a combination of the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985) and five domain satisfaction questions. The five domains were assessed using a single-item indicator (I am satisfied with…). The five domains included: finances, work/academic life, health, recreational life, and friendship. These five items were chosen based on previous studies showing that these domains are rated as moderately important to very important to individuals (Schimmack, Diener, & Oishi, 2002). Again, when reporting on a family member, items were changed to reflect an informant report. For example, a student reporting on their mother’s life satisfaction would rate “My mother is dissatisfied with her life” on the 7-point scale.

The responses from these two scales were averaged because global life-satisfaction judgments and average domain satisfaction judgments have been found to be virtually interchangeable indicators of well-being (Zou et al. 2013). This resulted in six well-being measures (2 targets x 3 raters).
2.3 Model Overview

The measurement model of relationship quality and spouses’ well-being modeled the relationship among 9 observed variables (3 raters x 3 constructs) with three latent factors; one factor for relationship quality (dyadic) and two factors for husbands’ and wives’ well-being. The two well-being factors were allowed to correlate with each other because previous studies showed spouse have similar well-being (Bookwala & Schulz, 1996; Schimmack & Lucas, 2010).

As relationship quality is conceptualized as a variable at the dyadic level, a single factor was used. The model assumed that relationship quality is a predictor of well-being and the paths from relationship quality of well-being were constrained to be equal to increase power of the study. To allow for shared method variance between ratings by the same rater, residual variances in measures by the same rater were allowed to correlate with each other for all models.

To test theoretical predictions, I used separate models for each personality dimension. I used the shared variance in personality ratings of the same target as a measure of targets’ true personality. For example: student’s, father’s and mother’s ratings of father’s extraversion loaded on a factor that represents fathers’ extraversion. Factor loadings were freely estimated and no constraints across gender were imposed.

By using a latent factor of personality, the model separates valid variance in a personality rating, which is shared with all informed raters, from the variance unique to a rater, which reflects a bias in their reports. The unique variance in self-ratings was used to examine the influence of self-enhancement on relationship quality and well-being. The unique variance in partner-ratings was used to examine effects of partner-enhancement. The unique variance in student ratings remained independent of outcome factors.

For the empirical test of partner-enhancement effects on relationship quality, I compared three models that make different assumptions about the processes that link personality variables to relationship quality (see Figure 1). The distinctions between these models are detailed below.
Figure 1. An example of the expected pattern of correlations for Model 1, Model 2 and Model 3. REL = Shared variance from father, mother and students reports of relationship quality; T= Shared variance from father, mother and students reports of a personality trait; PR=Partner-report of a personality trait; SR=Self-report of a personality trait; IR=Informant-report of a personality trait. Open circles represent the residual variance unique to a rating.
2.3.1 Model 1

In model 1, partner-ratings of personality influence relationship quality. This model assumes that the personality trait would have a mediated relationship with relationship quality, since personality would influence the partners report, and the partners report would influence relationship quality. With this path a strong correlation between partner-reports of personality and relationship quality would be observed. In addition to this correlation, a weaker correlation between relationship quality and the other ratings of personality would also be expected. These weaker correlations would exist because personality would influence reports from all raters, and this common factor would result in an indirect relationship between the other reports and relationship quality.

2.3.2 Model 2

In model 2, relationship quality influences partner-reports. Similar to model 1 this would create a correlation between partner-reports and relationship quality. However, relationship quality would be unrelated to personality ratings by the other two raters (student ratings, self-ratings) in this model. Thus, model fit depends on the magnitude and direction of four covariances between personality ratings and relationship ratings, namely students’ rating of personality and spouse’s ratings of relationship quality, self-ratings of personality and students and partner’s ratings of relationship quality. If these covariances are close to zero, Model 2 provides a better fit to the data. If these covariances are different from zero and consistent with the sign of the correlation for partner-ratings of personality, Model 1 has a better fit to the data.

2.3.3 Model 3

Model 3 assumes that personality influences relationship quality, but that this effect is not mediated by partner-perceptions of personality. This model makes similar predictions as Model 1. The main difference is that Model 1 assumes that partner-perceptions of personality share unique variance with relationship quality because partner-perceptions are influenced by positive illusions and positive illusions contribute to relationship quality. As a result, covariances between partner-ratings of personality and relationship measures would be stronger than covariances for students’ and self-ratings of personality.
Model 3 does not make this assumption, and instead assumes that only the valid variance in partner-report of personality is related to relationship quality. Therefore, Model 3 would predict the covariance between between partner-reports of personality and relationship quality would not be significantly different than covariances for students or self-ratings of personality.

In theory, it would be possible to test all three models within a single model. However, the identification of parameter estimates in this model would require very large samples and in smaller samples results may be unstable. Therefore, I decided to test the three models against each other. Based on the literature review, I expected Model 1 to be most consistent with the data because prior studies found correlations between measures of partner-enhancement and relationship satisfaction within and across partners and personality traits show actor and partner’ effects on relationship satisfaction and well-being. The full structural model used is shown in Figure 2.
Figure 2. The structural model showing the paths tested in Model 1, Model 2 and Model 3. Each of the three models was tested independently. FWB= Shared variance from reports of the father’s well-being; MWB= Shared variance from reports of the mother’s well-being; REL = Shared variance from father, mother and students reports of relationship quality; T= Shared variance from father, mother and students reports of a personality trait; PR=Partner-report of a personality trait; SR=Self-report of a personality trait; IR=Informant-report of a personality trait. Open circles represent the residual variance unique to a rating. The rater reports for both the trait factors and well-being factors were omitted in this figure. Correlations for the same rater were also omitted in this figure.
Chapter 3
Results

For the analyses, model fit was assessed using standard criteria of acceptable fit: comparative fit index (CFI) > .95, root-mean-square error of approximation (RMSEA) < .06, and standardized root-mean-square residual (SRMR) < .08 (Schermelleh-Engel, Moosbrugger, & Muller, 2003). Model comparisons were carried out using Bayesian information criterion (BIC), with lower BIC values indicating a better fitting model. A decrease in BIC values of 5 was seen as good evidence in favor of a model, and a 10 point difference was seen as strong evidence in favor of the better fitting model (Raferty, 1995).

3.1 Well-being Measurement Model

To examine the validity of the informant reports of well-being, I began by conducting simple correlations on the six well-being items. The results showed correlations for the same target ranging from $r=0.43$ to $r=0.53$. These correlations are consistent with a meta-analysis of self-informant agreement in well-being ratings of well-acquainted individuals (Schneider & Schimmack, 2010). Following this, I constructed a well-being factor for both the mother and father by using a multi-method measurement model, shown in Figure 3. The model used the shared variance in all the three informant reports to represent the targets well-being. The model also allowed for correlated ratings by the same rater, which reflects a shared rater effect.

Initially, I allowed the ratings to freely load onto each well-being factor, which produced acceptable model fit, with RMSEA above the desired level (RMSEA= 0.095, CFI= 0.98, SRMR= 0.048, BIC=11010.042). However, the factor loadings by different raters showed very similar loadings on well-being. Therefore, I constrained the loadings for the raters to be equal, implying that each rater was an equally valid informant. This constraint resulted in improved. Additionally, the correlated ratings from the same rater, showed a similar pattern across the three raters. Based on this I further constrained these correlations to be
equal. Finally, constraining the variances for the mothers and fathers also resulted in an improvement in model fit.

As a result, these constraints produced a model that maintained good model fit, while minimizing BIC (RMSEA= 0.068, CFI= 0.975, SRMR= 0.057, BIC= 10978.595). The parameter estimates for the model including these constraints are shown in Figure 3.

An interesting result of this measurement model is that it provides the first multi-method estimate of spousal similarity in well-being. The parameter estimate showed substantial similarity in spouse’s well-being ($r = .64, SE= 0.04$).

![Figure 3. Multimethod measurement model of well-being. Numbers are standardized parameter estimates. F-WB = Shared variance between father’s self report and informant reports of his well-being; M-WB= Shared variance between mother’s self report and informant reports of her well-being; F=father’s report, C=child’s report, M=mother’s report. Open circles represent residual variance.](image)

### 3.2 Relationship Quality Measurement Model

Relationship quality was represented by a single shared factor, shown in Figure 4. Correlations among the three raters were strong and similar to correlations among spouses’ ratings of relationship quality in other studies (ranging from $r=.52$ to $r=.53$). Following this I modeled the shared variance in these ratings in order to create a relationship quality factor, with all raters constrained to be equal. The resulting model
had good fit (RMSEA= 0.000, CFI=1.000, SRMR= 0.028, BIC= 6206.907). The parameter estimates for this model are shown in Figure 4.

![Figure 4](image)

**Figure 4.** Multimethod measurement model of relationship quality. Numbers are standardized parameter estimates. REL = Shared variance from father, mother and students reports of relationship quality. F= Fathers rereports of the relationship quality; M=Mothers report of the relationship quality; C=Childs report of relationship quality. Open circles represent residual variance.

### 3.3 Relationships and Well-being

These two measurement models were then combined. Following this combination, relationship quality was used as a predictor of the mother’s well-being and father’s well-being. The combined model produced acceptable fit for all indicators (RMSEA= 0.036, CFI=0.992, SRMR= 0.036, BIC= 16849.327). The theoretically relevant parameter estimates for this model are shown in Figure 5. A noteworthy finding of this model is that the correlation between spouses well-being remained even after including relationship quality as a predictor ($r= 0.49$, SE= 0.05).

![Figure 5](image)

**Figure 5.** Well-being and relationship quality model. Numbers are standardized parameter estimates. F-WB = Shared variance between father’s self report and informant reports of his well-being; M-WB= Shared variance between mother’s self report and informant reports of her well-being; REL = Shared variance from father, mother and students reports of relationship quality. Rater reports for each factor and correlations for same raters were omitted in this figure.
3.4 Model Comparison

In order to conduct the model comparisons a personality factor was added to the model. For each personality trait I tested the three models and recorded model fit: Model 1 assumed that partner-perception influences relationship quality and well-being; Model 2 assumed that relationship influences partner ratings of personality, and Model 3 assumed that personality has a direct effect on relationship quality and well-being. For all three of these models, effects for the mother and father were constrained to be equal to increase the power of the study and reduce confidence intervals of theoretically important parameter estimates.

The results of these models were then compared in terms of the Bayesian Information Criterion (the results of these model comparisons are shown in Table 1). Across all five personality factors, model fit favored Model 1 according to the BIC values. It is important to mention that since each model used a single parameter to link personality ratings to the outcomes, all models have the same degrees of freedom and the comparison of models is not distorted by differences in parsimony. As a result, comparisons would produce the same pattern of results using other fit indices such as the Akaike Information Criterion. These results suggest that positive illusions about a partner’s personality would contribute to relationship satisfaction and well-being in marriages.
Table 1.

Comparison of Model Fit

<table>
<thead>
<tr>
<th>Personality</th>
<th>BIC</th>
<th>RMSEA</th>
<th>CFI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>24384.824</td>
<td>0.044</td>
<td>0.979</td>
<td>0.049</td>
</tr>
<tr>
<td>Model 2</td>
<td>24403.738</td>
<td>0.051</td>
<td>0.972</td>
<td>0.064</td>
</tr>
<tr>
<td>Model 3</td>
<td>24405.073</td>
<td>0.051</td>
<td>0.971</td>
<td>0.051</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>24002.503</td>
<td>0.045</td>
<td>0.976</td>
<td>0.051</td>
</tr>
<tr>
<td>Model 2</td>
<td>24012.936</td>
<td>0.049</td>
<td>0.972</td>
<td>0.068</td>
</tr>
<tr>
<td>Model 3</td>
<td>24005.508</td>
<td>0.045</td>
<td>0.977</td>
<td>0.046</td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>25285.813</td>
<td>0.034</td>
<td>0.987</td>
<td>0.038</td>
</tr>
<tr>
<td>Model 2</td>
<td>25296.199</td>
<td>0.039</td>
<td>0.983</td>
<td>0.047</td>
</tr>
<tr>
<td>Model 3</td>
<td>25292.929</td>
<td>0.038</td>
<td>0.985</td>
<td>0.039</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>25495.677</td>
<td>0.036</td>
<td>0.985</td>
<td>0.044</td>
</tr>
<tr>
<td>Model 2</td>
<td>25514.434</td>
<td>0.045</td>
<td>0.978</td>
<td>0.056</td>
</tr>
<tr>
<td>Model 3</td>
<td>25503.478</td>
<td>0.040</td>
<td>0.982</td>
<td>0.046</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>24729.516</td>
<td>0.029</td>
<td>0.989</td>
<td>0.044</td>
</tr>
<tr>
<td>Model 2</td>
<td>24732.543</td>
<td>0.031</td>
<td>0.988</td>
<td>0.053</td>
</tr>
<tr>
<td>Model 3</td>
<td>24754.304</td>
<td>0.042</td>
<td>0.978</td>
<td>0.049</td>
</tr>
</tbody>
</table>

Note. The model with best fit based on BIC values is shown in bold.

3.5 Model results

3.5.1 Self-Enhancement

The results obtained with model 1 will be detailed below, and organized based on personality trait. However, I will not individually detail results for the relationship between self-enhancement and well-being, since none of these paths were significant at the 95% confidence interval (results shown in Table 2). These results indicate that the effect size of self-enhancement would be small even if a more powerful study would reveal a statistically significant effect. Consistent with previous studies, the data does replicate a strong correlation between self-reports of personality and self-ratings of well-
being, with the one exception of the mother’s self ratings of extraversion (shown in Table 3). Thus, the data is fully consistent with previous mono-method studies of self-enhancement and well-being. However, the results are also consistent with other studies that self-enhancement is not related to informant ratings and as a result also unrelated to the shared variance between self-ratings and informant ratings (Kim et al., 2012; Paulhus et al., 2003).

Table 2

<table>
<thead>
<tr>
<th>Personality</th>
<th>Enh-&gt; WB (β)</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.03</td>
<td>0.04</td>
<td>p=0.42</td>
</tr>
<tr>
<td>Father</td>
<td>-0.04</td>
<td>0.04</td>
<td>p=0.42</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.05</td>
<td>0.04</td>
<td>p=0.20</td>
</tr>
<tr>
<td>Father</td>
<td>-0.05</td>
<td>0.04</td>
<td>p=0.20</td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.06</td>
<td>0.05</td>
<td>p=0.24</td>
</tr>
<tr>
<td>Father</td>
<td>-0.07</td>
<td>0.06</td>
<td>p=0.24</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.01</td>
<td>0.05</td>
<td>p=0.81</td>
</tr>
<tr>
<td>Father</td>
<td>0.01</td>
<td>0.05</td>
<td>p=0.81</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.01</td>
<td>0.04</td>
<td>p=0.78</td>
</tr>
<tr>
<td>Father</td>
<td>-0.01</td>
<td>0.05</td>
<td>p=0.78</td>
</tr>
</tbody>
</table>

Note. Enh=enhancement bias measured by the residuals in self reports of personality; WB=the shared variance in well-being from the mother, father and student.
Table 3.
Correlation of Self-Reported Personality (SR) and Self-Reported Well-Being (S.WB)

<table>
<thead>
<tr>
<th>Personality</th>
<th>SR &lt;-&gt; S.WB (r)</th>
<th>SE</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.28</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Father</td>
<td>0.24</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.22</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Father</td>
<td>0.22</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.08</td>
<td>0.07</td>
<td>p=0.30</td>
</tr>
<tr>
<td>Father</td>
<td>0.22</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-0.17</td>
<td>0.09</td>
<td>P&lt;.05</td>
</tr>
<tr>
<td>Father</td>
<td>-0.34</td>
<td>0.09</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.26</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Father</td>
<td>0.23</td>
<td>0.06</td>
<td>p&lt;.001</td>
</tr>
</tbody>
</table>

3.5.2 Agreeableness

Our results showed that the mother’s agreeableness was a significant predictor of the father’s ratings of her personality ($\beta = 0.61$, 95% CI [.49, .73]), and the father’s agreeableness was a significant predictor of the wife’s ratings of his personality ($\beta = 0.66$, 95% CI [.61, .71]). The mother’s perception of the father’s agreeableness ($\beta = 0.39$, 95% CI [.36, .42]) and the father’s perceptions of the mother’s agreeableness ($\beta = 0.37$, 95% CI [.34, .40]) were both found to significantly predict relationship quality.

Using the model indirect function in Mplus I was further explored this relationship. Consistent with the literature, agreeableness was found to be a predictor of relationship quality for both partners. However, building on previous work, the results show that the effect of agreeableness on relationship quality was fully mediated by partner perceptions of agreeableness. For example, the mother’s agreeableness lead to the father seeing her as
more agreeable, which increased relationship quality ($\beta = 0.22$, 95% CI [.19, .25]). Similarly, the father’s agreeableness lead to the mother seeing him as more agreeable, which resulted in a better relationship ($\beta = 0.26$, 95% CI [.23, .29]). These results suggest that it is the perception of a partner that is most important for the relationship, regardless of that perception being valid or being an illusion.

Since relationship quality is a predictor of well-being, I also observed an indirect effect for agreeableness on a target’s well-being (M.AGR->REL->M.WB $\beta = 0.09$, 95% CI [.07, .11]; F.AGR->REL->F.WB $\beta = 0.07$, 95% CI [.05, .09]). Since relationship quality is a shared factor, these indirect effects were also shown to influence the partner’s well-being (M.AGR->REL->F.WB $\beta = 0.06$, 95% CI [.04, .08]; F.AGR->REL->M.WB $\beta = 0.11$, 95% CI [.09, .13]). Both of these indirect effects for the actor and partner were fully mediated by partner perceptions of agreeableness.

In addition to these indirect effects, I observed a significant direct effect for an actor’s agreeableness on their own well-being (M.AGR->M.WB $\beta = 0.23$, 95% CI [.19, .27]; F.AGR->F.WB $\beta = 0.34$, 95% CI [.28, .40]). These effects suggest that the effect of agreeableness is not fully mediated by relationship quality or partner perception, as has been suggested previously (McCrae & Costa, 1991). Instead the trait has both an effect on relationships, as well as a unique effect on well-being that is independent of the relationship. Combined, the direct and indirect effects showed agreeableness had a moderate effect on well-being for both the mothers ($\beta = 0.30$, 95% CI [.26, .34]) and the fathers ($\beta = 0.36$, 95% CI [.31, .41]).

### 3.5.3 Conscientiousness

Similar to agreeableness, conscientiousness was found to be a significant predictor of both partner’s ratings of personality (F.CON->mothers report of father’s personality $\beta = 0.67$, 95% CI [.61, .73]; M.CON->father’s report of mother’s personality $\beta = 0.58$, 95% CI [.50, .66]). Partner reports were also found to significantly predict relationship quality (mothers report of father’s personality->REL $\beta = 0.32$, 95% CI [.28, .36]; father’s report of mother’s personality->REL $\beta = 0.27$, 95% CI [.24, .30]).
Again the results showed that the effect of conscientiousness on relationship quality was fully mediated by partner perceptions. With the mother’s continuousness leading to the father seeing her as more conscientious, which resulted in a stronger relationship ($\beta = 0.15, 95\% \text{ CI} [.12, .18]$) and the father’s continuousness leading to the mother seeing him as more conscientious, which resulted in a better relationship ($\beta = 0.21, 95\% \text{ CI} [.18, .24]$).

The shared factor of relationship quality again produced an indirect effect of the target’s conscientiousness on their well-being (M.CON->$\text{REL}$-$\text{M.WB}$ $\beta = 0.08, 95\% \text{ CI} [.06, .10]$; F.CON->$\text{REL}$-$\text{F.WB}$ $\beta = 0.07, 95\% \text{ CI} [.05, .09]$). Since relationship quality is a shared factor, these indirect effects were also shown to influence the partner’s well-being (M.CON->$\text{REL}$-$\text{F.WB}$ $\beta = 0.05, 95\% \text{ CI} [.04, .06]$; F.CON->$\text{REL}$-$\text{M.WB}$ $\beta = 0.11, 95\% \text{ CI} [.09, .13]$). Again these effects were fully mediated by partner perceptions of agreeableness.

Conscientiousness also showed a significant direct effect on the actor’s well-being, for both the wives (M.CON->$\text{M.WB}$ $\beta = 0.16, 95\% \text{ CI} [.12, .20]$) and the husbands (F.CON->$\text{F.WB}$ $\beta = 0.24, 95\% \text{ CI} [.17, .31]$). The total effect of conscientiousness on well-being was ($\beta = 0.18, 95\% \text{ CI} [.14, .22]$) for the mothers and ($\beta = 0.29, 95\% \text{ CI} [.23, .35]$) for the fathers. These effects suggesting that conscientiousness plays a role in promoting well-being, beyond the effects it has on relationship quality.

### 3.5.4 Extraversion

Once again extraversion was found to be a significant predictor of both partner ratings of personality (F.EXT->mothers report of father’s personality $\beta = 0.72, 95\% \text{ CI} [.68, .76]$; M.EXT->father’s report of mother’s personality $\beta = 0.71, 95\% \text{ CI} [.67, .75]$). These reports from partners were also found to significantly predict relationship quality (mothers report of father’s personality-$\text{REL}$ $\beta = 0.21, 95\% \text{ CI} [.16, .26]$; father’s report of mother’s personality-$\text{REL}$ $\beta = 0.18, 95\% \text{ CI} [.14, .22]$). Partner reports were again found to fully mediate the effect of personality on relationship quality for both the mother’s extraversion leading to the father seeing her as more extraverted, which resulted in a stronger relationship ($\beta = 0.13, 95\% \text{ CI} [.10, .16]$) and the father’s extraversion
influencing the mother’s perceptions, which resulted in a better relationship ($\beta = 0.15, 95\% \text{ CI } [.11, .19])$.

The indirect effects of personality on well-being were also replicated with extraversion, with all paths being mediated by partner perceptions (M.EXT->REL->M.WB $\beta = 0.07, 95\% \text{ CI } [.05, .09]$; F.EXT->REL->F.WB $\beta = 0.06, 95\% \text{ CI } [.04, .08]$). The indirect effects on the partner’s well-being were also replicated (M.EXT->REL->F.WB $\beta = 0.05, 95\% \text{ CI } [.04, .06]$; F.EXT->REL->M.WB $\beta = 0.08, 95\% \text{ CI } [.06, .10]$).

In contrast to both agreeableness and continuousness, extraversion was not found to have a significant direct effect on well-being for the mothers ($\beta = 0.08, 95\% \text{ CI } [.03, .13]$) or for the fathers ($\beta = 0.11, 95\% \text{ CI } [.04, .18]$). However, the total effect of extraversion was consistent with other studies for both the fathers ($\beta = 0.12, 95\% \text{ CI } [.09, .16]$) and mothers ($\beta = 0.10, 95\% \text{ CI } [.07, .13]$).

3.5.5 Neuroticism

Like the other personality factors, neuroticism was a significant predictor of both partner ratings of personality (F. NER ->mothers report of father’s personality $\beta = 0.73, 95\% \text{ CI } [.68, .78]$; M. NER ->father’s report of mother’s personality $\beta = 0.54, 95\% \text{ CI } [.49, .59]$). Partner-perceptions of neuroticism were found to be a negative predictor of relationship quality, meaning the more neuroticism was reported the worse the relationship (mothers report of father’s personality->REL $\beta = -0.26, 95\% \text{ CI } [-.30, -.22]$; father’s report of mother’s personality->REL $\beta = -0.24, 95\% \text{ CI } [-.28, -.20]$). The effect of neuroticism on relationship quality was fully mediate for both the mothers ($\beta = -0.13, 95\% \text{ CI } [-.15, -.11]$) and the fathers ($\beta = -0.19, 95\% \text{ CI } [-.22, -.16]$).

There was also a negative indirect effect of neuroticism on well-being, which was mediated by partner perceptions (M.NER->REL->M.WB $\beta = -0.06, 95\% \text{ CI } [-.07, -.05]$; F. NER ->REL->F.WB $\beta = -0.07, 95\% \text{ CI } [-.09, -.05]$). Significant indirect partner effects were also observed (M. NER ->REL->F.WB $\beta = -0.05, 95\% \text{ CI } [-.06, -.04]$; F. NER ->REL->M.WB $\beta = -0.09, 95\% \text{ CI } [-.11, -.07]$).
In addition to these findings, neuroticism was also shown to have a moderate direct effect for the fathers ($\beta = -0.35, 95\% \text{ CI } [-.41, -.29]$) and the mothers ($\beta = -0.33, 95\% \text{ CI } [-.40 -.26]$). These effects suggesting that neuroticism does have a negative effect on well-being, beyond the effect it has on the relationship quality. In total neuroticism had a moderate effect on well-being, when combining the indirect and direct relationships for the mother ($\beta = -0.40, 95\% \text{ CI } [-.45, -.35]$) and father ($\beta = -0.42, 95\% \text{ CI } [-.47, -.37]$).

### 3.5.6 Openness to Experience

Finally openness to experience shows a similar pattern to the other personality traits. Like the other personality traits, openness was a significant predictor of both partner ratings of personality (F. OPEN ->mothers report of father’s personality $\beta = 0.64, 95\% \text{ CI } [.57, .71]$; M. OPEN ->father’s report of mother’s personality $\beta = 0.47, 95\% \text{ CI } [.41, .53]$). These perceptions were also shown to have an effect on relationship quality (mothers report of father’s personality->REL $\beta = 0.28, 95\% \text{ CI } [.24, .32]$; father’s report of mother’s personality->REL $\beta = 0.24, 95\% \text{ CI } [.21, .27]$). Openness was also shown to have a mediated relationship with relationship quality, with partner perceptions fully mediated the effect of the mother’s openness ($\beta = 0.11, 95\% \text{ CI } [.09, .13]$) and the father’s openness ($\beta = 0.18, 95\% \text{ CI } [.15, .21]$).

Once again an indirect relationship was also observed between openness and well-being, with openness influencing partner reports, which influence relationship quality, which then influenced well-being. These effects were shown for both the actor’s well-being (M.OPEN->REL->M.WB $\beta = 0.06, 95\% \text{ CI } [.05, .07]$; F. OPEN ->REL->F.WB $\beta = 0.07, 95\% \text{ CI } [.05, .09]$) and for the partner’s well-being (M. OPEN ->REL->F.WB $\beta = 0.05, 95\% \text{ CI } [.04, .06]$; F. OPEN ->REL->M.WB $\beta = 0.09, 95\% \text{ CI } [.07, .11]$).

However, openness at the trait level was not found to have a direct effect on an actor’s well-being for the mothers ($\beta = 0.06, 95\% \text{ CI } [.00, .12]$) or the fathers ($\beta = 0.06, 95\% \text{ CI } [.00, .12]$). However, openness was shown to have a small, but significant total effect on well-being for the mothers ($\beta = 0.11, 95\% \text{ CI } [.07, .15]$) and the fathers ($\beta = 0.10, 95\% \text{ CI } [.05, .15]$). These effects are consistent with the literature, which suggest openness has the weakest effect on well-being (Steel at al., 2008; Dyrenforth, et al., 2010).
4.1 Overview of Results

In the present study, I tested several structural equation models that linked personality, well-being, and relationship quality. Using three informants I used the shared variance in these reports to separate valid variance from variance related to bias. This separation then allowed me to examine the effects self-enhancement bias had on well-being and the relationship between partner-enhancement and relationship quality. The results of these models provided several important findings, which may influence existing theories of illusions and well-being.

First, I provided a strong test of the hypothesis that self-enhancement increases well-being. Our large sample and multi-method approach made it possible to obtain rather precise quantitative estimates of the benefits of self-enhancement. Our main finding was that self-enhancement had no significant benefits for well-being. Importantly, this finding cannot be attributed to unique characteristics of the design or sample. We did replicate prior findings that self-enhancement was strongly correlated with self-ratings of well-being. However, self-enhancement was not a predictor of well-being when well-being was measured in terms of the shared variance among multiple raters. This result demonstrates the importance of using a multi-method approach in the assessment of well-being because mono-method studies are unable to control for rating biases in the measurement of well-being (Kim et al., 2012).

Second, I tested three different models of the relationship between partner-ratings of personality and relationship quality. The model with the best fit modeled partner-perceptions as a predictor of relationship quality. This model fit best because partner-perceptions mediated effects of personality on relationship quality. Although this finding does not prove causality, it does provide some support for the direction of this relationship, which currently has been unexamined in previous work. This finding also
supports Murray et al.’s (1996, a,b) theory that positive illusions about a partner are beneficial for relationships.

Our model also provided several novel insights into the relationships between personality, relationship quality and well-being. Although many studies have shown a correlation between personality and relationship quality (Heller et al., 2004; Malouff et al., 2010), the results suggest that partner-perception’s fully mediates this relationship between personality and relationship quality.

Furthermore, I demonstrated for the first time that partner-perceptions have both actor and partner effects on well-being. This effect is the result of partner-perceptions influence on relationship quality and the effect of relationship quality on both partners’ well-being.

This result support previous studies suggesting other-enhancement is beneficial for well-being (Wood et al., 2010).

Our third major finding relates to the effects of personality on well-being. This is the first study that examined actor and partner effects using a multi-method approach to measure personality and well-being. Of the big five, agreeableness, contentiousness and neuroticism were all statistically significant predictors of well-being which is consistent with previous work (Steel et al., 2008; Dyrenforth, et al., 2010). A novel finding was that actor effects had a significant effect on well-being while controlling for effects of relationship quality. This finding suggests that personality influences well-being by shaping people’s lives in other life-domains. In contrast, partner-effects were fully mediated by relationship quality. This novel finding shows that the effects of one spouse’s personality on the other spouse’s well-being are explained by effects on personality on the relationship.

4.2 Self-Enhancement and Well-Being

Positive thinking is often regarded as beneficial for well-being, health, and productivity. It may initially seem counterintuitive that having positive views about one’s self wouldn’t have some benefit. However, one possibility is that unrealistic self-views can lead to disappointment. For example, Robins and Beer (2001) found that positive illusions at the beginning of college were related to a decrease in well-being over time, presumably
because students had to face the reality that their actual achievements did not meet their inflated expectations. Despite the results, there may be individual cases where false beliefs could improve well-being, for example, someone may hide an affair and live happily from then on with their partner. Our results simply suggest that such instances are rare and limited to specific cases that make a negligible contribution to the variance in well-being. Therefore the results suggest that it is time to revisit positive thinking about related to the self as a path to happiness.

4.3 Personality Effects

A person’s actual personality was shown to be a better predictor of well-being than self-perceptions of personality. Importantly, the present study showed that personality influences well-being at the latent variable level and not just self-ratings of well-being. The total actor effect each personality traits had on well-being, which includes both the direct effect and indirect effect through relationship satisfaction, largely replicated previous findings (Dyrenforth, et al., 2010). All five traits were found to have an effect on well-being with the largest effects observed for agreeableness, conscientiousness and neuroticism. The most notable difference in our sample was that agreeableness and neuroticism had larger effect on well-being in our sample. This discrepancy could be unique to our sample, or it is also possible that it is the result of our model correcting for unreliability in both reports of well-being and personality, which would lead to a more accurate estimate in effect sizes.

Another important finding was that personality effects were partially mediated by relationship quality and partially due to direct effects; that is, mediated by unmeasured aspects of people’s lives. Although all five traits showed indirect effects through relationship quality, only agreeableness, conscientiousness and neuroticism were all shown to have significant direct effects on well-being. Interestingly, it has been suggest previously that agreeable people are simply nice to be around, and this disposition would result in better relationships, which could explain the effect of agreeableness on well-being (McCrae & Costa, 1991). The indirect path of agreeableness through relationship quality to well-being is consistent with this theory. In addition, the present study shows
that this effect also produces effects of partners’ agreeableness on well-being. However, relationship quality did not fully mediate the effect of individuals’ agreeableness on their own well-being. Future research needs to examine whether these effects are due to other social relationships or whether agreeableness also influences well-being in other ways. For example, disagreeable individuals may find it harder to give up on futile goals.

4.4 Partner-Enhancement and Relationship Quality

In contrast to the effect of self-enhancement, the results suggest that having overly positive views of close others is beneficial to both relationships and to well-being. This study strengthens the evidence in support of this hypothesis by demonstrating that an alternative model that assumes effects of relationship quality on partner-enhancement did not fit the data as well as a model that assumes positive effects of partner-enhancement on relationship quality. Moreover, this study demonstrated that these effects on relationship quality also lead to an increase in overall well-being.

Our model suggests that positive illusions are beneficial because having a partner with positive qualities is desirable. The benefits of illusions may occur because individuals cannot distinguish between reality and illusions. As a result, it is equally beneficial to have a spouse who actually possesses desirable characteristics or to merely believe that a spouse possesses desirable characteristics that he or she actually does not have. One interesting question for future research is how individuals in married couples maintain positive illusions about each other. One possibility is that married couples rely on each other to validate their perceptions of each other. If this were the case, partners should share positive illusions with each other.

4.5 Relationships and Well-being

Although not a major focus of this study, the study finds additional evidence that relationship quality is a strong predictor of well-being (Headey et al., 1991; Heller et al., 2004; Schimmack & Oishi, 2005). Similar to other studies, I also showed that spouses show a great deal of similarity in terms of that well-being (Bookwala & Schulz, 1996; Schimmack & Lucas, 2010). Our model shows that relationship quality partially accounts for spousal similarity in well-being. However, I also found substantial correlation in
spouses’ well-being that is unrelated to relationship quality. Moreover, the model also shows that actor-partner effects of personality do not explain this similarity. That is, if neuroticism has an actor effect on well-being and a partner-effect on spouses’ well-being, it acts as a third variable that produces spousal similarity in well-being. Although neuroticism, agreeableness, and conscientiousness do show actor and partner effects, these effects are too weak to account for the high spousal similarity in well-being. Future research needs to examine why spouses are similar in well-being.

4.6 Limitations

One limitation to the study is that structural equation modeling assumes linear relationships between latent factors. It is possible that enhancement bias is only beneficial to a certain point, and afterwards the relationship may weaken or disappear. Further research is needed to examine if this assumption is warranted. However, influential articles on positive illusions have also assumed or tested linear relationships and come to the conclusions that self-enhancement is beneficial for well-being. Our results reveal some major shortcomings in these studies because they failed to control for ratings biases in the measurement of well-being or failed to provide evidence that illusions are a cause rather than a mere correlate of relationship quality and well-being. Our study addressed these limitations in previous studies. However, future research needs to examine non-linear relationships between positive illusions and well-being.

Another limitation to the results is that the correlational design means I can only make limited inferences about causality. The lack of random assignment and manipulation limits the claims that can be made about the causality of these effects, similar to all correlational studies. This concern is less relevant for the results regarding self-enhancement and well-being. In the absence of a positive relationship, it is most likely that there is no causal relationship between two constructs. However, partner-enhancement was related to relationship quality and well-being and it remains possible that the model of this relationship is false. However, this limitation is shared with previous studies that had several additional limitations. At present, the integrative model
presented in this article is the model that is consistent with the evidence obtained in previous studies and it provided the best fit in the analyses.

An additional limitation is that the model assumes that only the shared variance between raters is valid variance. Some authors have suggested that self-ratings of well-being, for example, provide a gold-standard because well-being is by definition subjective. Thus, if an individual rates his or her well-being highly, there is no external validation criterion that can question the validity of this claim. In contrast, informants may be unaware of relevant information that contributes to targets’ well-being. However, Zou, Schimmack, and Gere (2013) showed similar self-informant agreement for life-satisfaction and average satisfaction with life domains that are likely to be known to informants (e.g., health, financial satisfaction). Our measure of well-being included satisfaction with these domains. Yet, self-enhancement continued to predict the unique variance in self-ratings of satisfaction in these domains. It is difficult to explain how self-enhancement can influence the valid variance in self-ratings that is not shared with informant ratings, but be unrelated to the valid variance in self-ratings that is shared with informant ratings. It is more plausible that shared method variance produces a relationship that is limited to the unique variance in self-ratings. Future research should aim to use objective measures as a validation criterion but objective measures are difficult to obtain and are often limited to a specific domain (Robins & Beer, 2001).

In conclusion, the study has limitations, but it advanced research on illusions, relationships and well-being by addressing limitations of previous studies that have remained neglected for decades.

4.7 Conclusion

In conclusion, the most important contribution of the work was to provide new insights into the effects of different types of enhancement bias. Our results suggest that it is not positive thinking itself that leads to higher levels of well-being. At least in close romantic relationships, it is more beneficial to think positively about a partner than to think positively about one’s self. At the same time, the same benefits can be obtained from having spouses who actually poses these positive characteristics. This finding has
obvious implications for mate selection, but it can also motivate individuals to alter their real behaviors to increase relationship quality and well-being.
References


personality and social psychology, 102(4), 856.


personality and social psychology, 84(4), 890.


