



2016

PERCEPTIONS IN PREDICTING ACTOR AND PARTNER SEXUAL AND RELATIONAL SATISFACTION IN COUPLE RELATIONSHIPS

Lucia Novakova

University of Kentucky, lucilanovakova@gmail.com

Digital Object Identifier: <http://dx.doi.org/10.13023/ETD.2016.089>

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Recommended Citation

Novakova, Lucia, "PERCEPTIONS IN PREDICTING ACTOR AND PARTNER SEXUAL AND RELATIONAL SATISFACTION IN COUPLE RELATIONSHIPS" (2016). *Theses and Dissertations--Family Sciences*. 37. https://uknowledge.uky.edu/hes_etds/37

This Master's Thesis is brought to you for free and open access by the Family Sciences at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Family Sciences by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Lucia Novakova, Student

Dr. Nathan D. Wood, Major Professor

Dr. Hyungsoo Kim, Director of Graduate Studies

PERCEPTIONS IN PREDICTING ACTOR AND PARTNER SEXUAL AND
RELATIONAL SATISFACTION IN COUPLE RELATIONSHIPS

THESIS

A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in the
College of Agriculture, Food, and Environment
at the University of Kentucky

By

Lucia Novakova

Lexington, Kentucky

Director: Nathan D. Wood, Professor of Family

Sciences Lexington, Kentucky

2016

Copyright © Lucia Novakova 2016

ABSTRACT OF THESIS

PERCEPTIONS IN PREDICTING ACTOR AND PARTNER SEXUAL AND RELATIONAL SATISFACTION IN COUPLE RELATIONSHIPS

The present exploration of perceptual accuracy and bias in romantic relationships bridges a gap in the literature on the ability of partners to estimate one another's level of relational and sexual satisfaction, and its impact on their own and their partner's level of satisfaction. A sample of 50 couples, recruited internationally, in continuously monogamous relationships of at least six-months in length completed online assessments of their relationship. The degree of accuracy and bias of their perception was established by comparing actor's estimates of their partner's satisfaction with the partner's actual, self-reported satisfaction scores. The actor-partner interdependence model (APIM; Kenny, Kashy, & Cook, 2006) revealed significant partner effects (but no actor effects): the underestimation of perceived partner's sexual and relational satisfaction predicted an increase in partner's actual sexual and relational satisfaction. Overestimation of partner's satisfaction, on the other hand, predicted a decrease in partner's actual satisfaction. Authors hypothesize that under-perception of partner's satisfaction motivates corrective relationship behaviors, which, in turn, increases the experience of satisfaction of the relationship partner.

KEYWORDS: Perceptual Accuracy, Perceptual Bias, Interpersonal Perceptual Processes, Relationship Satisfaction, Sexual Satisfaction, Romantic Relationships

Lucia Novakova

April 20, 2016

PERCEPTIONS IN PREDICTING ACTOR AND PARTNER SEXUAL AND RELATIONAL
SATISFACTION IN COUPLE RELATIONSHIPS

By

Lucia Novakova

Nathan D. Wood, Ph.D.

Director of Thesis

Hyungsoo Kim, Ph.D.

Director of Graduate Studies

April 20, 2016

DEDICATION

“Adventures are great, especially when the person you love is your destination.”

– Unknown

I want to dedicate this thesis to my boyfriend, Michael, who has supported my decision to pursue my degree even though it meant a two-year-long distance from each other. The successful completion of this thesis would not have been possible without your unconditional love and support. I hope that it can serve as a reminder of the bond we will always share, regardless of the obstacles life will put between us. I love you, Michael!

TABLE OF CONTENTS

List of Tables	vii
List of Figures	viii
Chapter One: Introduction	9
Relational and Sexual Satisfaction	11
Perception of Partner's Relational Satisfaction	14
Perception of Partner's Sexual Satisfaction	17
Perceptual Accuracy in Romantic Relationships	20
Perceptual Bias in Romantic Relationships	22
Present Study	25
Chapter Two: Method	28
Participants	28
Measures	30
Demographic information	30
Relationship satisfaction	30
Positive and Negative Semantic Differential	30
Kansas Marital Satisfaction Scale	31
General Measure of Relationship Satisfaction	33
Sexual satisfaction	33
General Measure of Sexual Satisfaction	33
Bias	34
Accuracy	35
Procedure	36
Analysis	38
Chapter Three: Results	43
Preliminary Analysis	43
Hypothesis 1: Accuracy	46
Hypothesis 2: Predicting Sexual Satisfaction Based on Bias	48
Hypothesis 3: Predicting Relational Satisfaction Based on Bias	50
Additional Analysis	51
Chapter Four: Discussion	55
Accurate and Biased Perceptions of Sexual Satisfaction	58
Accurate and Biased Perceptions of Relational Satisfaction	60
Implications	62
Strengths and Limitations of the Study	65
Future Directions	67
Conclusion	68
Appendices	
Appendix A: Demographic Information	70

Appendix B: Positive and Negative Semantic Differential	72
Appendix C: Kansas Marital Satisfaction Scale	74
Appendix D: General Measure of Relationship Satisfaction	75
Appendix E: General Measure of Sexual Satisfaction	76
References	77
Vita	91

LIST OF TABLES

Table 2.1, Reliability Scores of the Study Measures	32
Table 3.1, Means and Standard Deviations of the Total Scores for Study Measures	44
Table 3.2, Estimates of Perceptual Bias (Underestimation/Overestimation).....	45
Table 3.3, Perceptual Accuracy Scores Estimated by Pearson Correlations	47
Table 3.4, Bias Effects (Unstandardized Path Coefficients).....	53

LIST OF FIGURES

Figure 2.1, Standard Actor-Partner Interdependence Model (APIM).....	40
Figure 3.1, Actor-Partner Interdependence Model for Bias and Sexual Satisfaction	49
Figure 3.2, Actor-Partner Interdependence Model for Bias and Relational Satisfaction..	52

Chapter One: Introduction

Marriage and family researchers have been investigating the substance of well-functioning couple relationships for decades (Fincham & Beach, 2010; Mark & Jozkowski, 2013). One avenue of increasing our understanding of the dynamics of intimate relationships is through exploring the impact of perceptual processes on one's relationship, distinguishing between one's own and partner's views of the relationship. An enduring debate about the benefits of accurate versus biased perceptions of partner's personality, characteristic of this line of research, has only recently been extended to the domain of perceptions of relationship processes, such as satisfaction.

For example, in terms of the perception of relational satisfaction in the context of intimate relationships, Fletcher and Kerr (2010) state that: "The prime motivating goal in intimate relationships for many people is to build and maintain high levels of commitment and judgments of relationship quality, which, in turn, bias relevant judgments in a positive direction" (p. 651-652). On the contrary, the accuracy hypothesis posits that accurate evaluation of partner's needs leads to correct anticipation of their partner's behavior, which fosters a sense of predictability and security in the relationship (Kenny & Acitelli, 2001).

A robust body of literature has explored individuals' perceptions of their romantic partner's personality traits (e.g., Decuyper, De Bolle, & De Fruyt, 2012) and attitudes (Overall & Fletcher, 2010). In the domain of perceived partner personality, the mutual coexistence and differential benefits of bias and accuracy (e.g., Fletcher & Kerr, 2010; Gagne & Lydon, 2004) have been well established. In contrast to the literature on social perception of a relationship partner's personality, substantially less research has been

done in terms of how each individual perceives his or her partner's satisfaction within the relationship (i.e., how Partner A perceives Partner B's satisfaction levels, and vice versa)¹. We extend this discussion to the exploration of relational and sexual satisfaction.

Specifically, a considerable amount of research on social cognition within intimate relationships has been conducted over the years, with the first published study on perceptual accuracy dating back to 1954 (Dymond's *Interpersonal perception and marital happiness*). The substantial length of the researchers' interest in social cognition has brought numerous advances, as well as numerous inconsistencies across the literature. These advances can be illustrated by the statement, "love is both blind and firmly rooted in the real world paradox" (Fletcher & Kerr, 2010, p. 628), which unified previously competitive and mutually exclusive debate about the benefits of bias versus accuracy for the sake of the relationships. The inconsistencies, on the other hand, mostly arise from differences in conceptualization and operationalization of the perceptual variables (accuracy and bias), which are too often blurred in the literature. For example, some authors have used the conceptualization of bias and accuracy as interchangeable, and thus disregarded the consensus about computing these perceptual indices (e.g. Bevan & Sparks, 2014; Carney & Harrigan, 2003; Segrin, Hanzal, & Domschke, 2009; Tucker & Anders, 1999).

Fletcher and Kerr (2010), building on the previous research (e.g., Fletcher & Boyes, 2008; Gagné & Lydon, 2004), and bridging the gaps between two seemingly

¹ This study explores how the individual's perception affects their own and their partner's relational and sexual satisfaction in intimate relationships. We recognize that there are diverse forms of intimate relationships and believe this topic is applicable to many relationship forms. However, given the potentially confusing nature of the study, we will use heterosexual relationship terms of husband/wife or female/male for the clarity of writing. The ordering of genders will be arbitrary.

exclusive concepts, were the first to organize the evidence of the co-occurrence of bias (or motivated cognitions) and accuracy (or rationality) into a systematic meta-analysis. To illustrate how such coexistence of both perceptual indices is possible, we adopt a frequently cited example provided by Fletcher (2002), who described a following scenario: Mary and John rated John's intelligence, warmth, attractiveness, and ambition on a scale ranging from 1 (*does not describe John well*) to 7 (*describes John very well*). Mary, who gives John a 4, 5, 6, 7 on these attributes, is positively biased (i.e., she is overestimating) because John's self-ratings on these same attributes are 3, 4, 5, 6. However, she is also accurate because her ratings track John's self-ratings well.

Thus, following Fletcher and Kerr's (2010) recommendation to include both bias and accuracy into the interpretation of overall perceptual accuracy, we employed their theoretical and conceptual distinction and used it as a conceptual basis to guide the present analysis. Perceived levels of a partner's sexual and relationship satisfaction were compared with the target's self-reports (used as a benchmark for these comparisons) to establish both bias and accuracy of perception.

Relational and Sexual Satisfaction

Whereas some theorists of relationship satisfaction have proposed that a satisfied relationship is characterized by the absence of dissatisfaction (Renaud, Byers, & Pan, 1997), others have argued for a two-dimensional model comprised of separate evaluations of the positive (satisfaction) and negative (dissatisfaction) aspects of the relationship (Fincham & Linfield, 1997). Still others have described relationship satisfaction in terms of specific characteristics, such as the frequency of conflicts, emotional closeness and distance from the partner, and feelings of being loved (Mark &

Jozkowski, 2013). For the purpose of this study, relationship satisfaction refers to the overall evaluation of one's romantic relationship (Mattson, Rogge, Johnson, Davidson, & Fincham, 2013).

Similar to relationship satisfaction, sexual satisfaction has been conceptualized in various ways, such as frequency of orgasms (Hurlbert, Apt, & Rabehe, 1993), feeling content with sexual aspects of relationships, and experiencing "good" sex (Joannides, 2006). For the purpose of this study, and consistent with the measures used for its assessment, sexual satisfaction was defined as follows: "the individual's subjective evaluation of the positive and negative aspects of one's sexual relationship, and his/her subsequent affective response to this evaluation" (Lawrance & Byers, 1992, p. 123). To highlight the complexity and wealth of research on sexual satisfaction, Sánchez-Fuentes, Santos-Iglesias, and Sierra (2014) conducted a systematic review of 197 scientific papers on sexual satisfaction published between 1979 and 2012. They concluded that even though sexual satisfaction was established as a key factor in individuals' sexual health and overall well-being, there is a lack of theoretical explanation of sexual satisfaction.

Although sexual satisfaction could intuitively be considered a part of a broader concept (i.e., relationship satisfaction), it has most commonly been conceptualized as a solitary construct that is highly correlated with relationship satisfaction (e.g. Byers, 2001; Yeh, Lorenz, Wickrama, Conger, & Elder, 2006). Some researchers have shown that sexual satisfaction plays a vital, if not central, role in creating and maintaining happy relationships (Christopher & Sprecher, 2000; Donnelly, 1993; Fields, 1983; Morokoff & Gilliland, 1993; Young, Denny, Luquis, & Young, 1998). More specifically, couples rated sexual satisfaction as one of the most important components of their marital

happiness and functioning (Fields, 1983; Henderson-King & Veroff, 1994). In addition, individuals who were less sexually satisfied were at higher risk of being in dissatisfying relationships and unstable marriages than sexually satisfied individuals (Yeh et al., 2006). Similarly, Morokoff and Gilliland (1993) showed that sexual satisfaction, perception of partner's sexual satisfaction, and frequency of sexual intercourse positively correlated with overall relationship satisfaction. Heiman et al. (2011) conducted a cross-cultural study on sexual and relationship satisfaction of couples in middle and late adulthood to explore long-term committed relationships. The results revealed following gender differences: while male relationship satisfaction was a product of their health, physical intimacy, and sexual functioning, the sole predictor of female relationship satisfaction was sexual functioning. Physical intimacy and sexual functioning were significant predictors of sexual satisfaction for both genders, while higher frequency of sexual activity, fewer lifetime partners, and longer relationship duration were significant predictors of relational and sexual satisfaction solely for men. In contrast, women in relationships of 20 to 40 years were significantly less likely than men to report relationship happiness (Heiman et al.).

Research was also conducted in the opposite direction—estimating predictive power of relationship satisfaction on couple's sexual satisfaction. Marital satisfaction was shown to be the most important contributor to sexual satisfaction (Young et al., 1998) and lower levels of marital satisfaction predicted higher probability of sexual inactivity and subsequent separation (Donnelly, 1993). Consequently, hardly anyone would argue that sexual and relationship satisfaction is not intertwined; however, considerably less consensus has been reached in terms of directionality or causality of the

two. A theorized bidirectional relationship (Henderson-King & Veroff, 1994)—relationship satisfaction causes sexual satisfaction and vice versa—was disconfirmed by Byers (2005), who indicated that the two constructs change concurrently (i.e., neither one of them is causing a change in the other).

Recent research has established that the link between sexual and relationship satisfaction is far less direct and a lot more mediated by multiple factors, such as communication (both sexual and nonsexual communication; Litzinger & Gordon, 2005; Mark & Jozkowski, 2013), sexual compatibility (both actual and perceived; Mark et al., 2013), attachment (Butzer & Campbell, 2008), emotional awareness (Croyle & Waltz, 2002), psychosocial well-being (Apt, Hurlbert, Sarmiento, & Hurlbert, 1996), and personality factors (Fisher & McNulty, 2008).

Perception of Partner's Relational Satisfaction

Murray and colleagues (Murray, Holmes, & Griffin, 1996a, 1996b) were among the first ones to study positive illusions of intimate relationship partners. Since that time, a substantial body of literature gathered empirical evidence of the benefits of maintaining positive, even unrealistic, and idealized perceptions of relationship partners and romantic relationship (Fletcher & Kerr, 2010; Miller, Niehuis, & Huston, 2006; Murray et al., 1996a; Rusbult et al., 2000). In addition, perceiving a spouse more generously than objective observers or the spouse would themselves, was shown to predict increases in love (Miller et al., 2006), relationship quality and satisfaction (Barelds & Dijkstra, 2009; Murray & Holmes, 1997), and enhance the sense of security and commitment, and facilitate dismissal of alternative partners (Rusbult et al., 2000), thus promoting relationship longevity and stabilizing the long-term attachment bond (Murray, 1999).

Theory of motivated relationship cognitions posits that, with increasing length of the relationship, relationship partners start, little by little, experiencing more negativity and conflict. This negatively impacts feelings of security, as the suitability of one's partner becomes questioned (Murray, 1999). Typically, considerable investments into the relationship have been made at this point (Miller, Niehuis, & Huston, 2006), which creates a cognitive dissonance. Thus, in order to achieve cognitive resolution between the hopes and the doubts, and to enhance the sense of security, individuals tend to idealize their partners and view them more positively than, employing positive illusion (Barelds & Dijkstra, 2009; Murray et al., 1996a; Murray et al., 1996b).

Murray et al. (2011) conducted a longitudinal study of benefits of motivated over-perceptions within romantic relationships. They found a strong tendency, consistent with the past research, of marked satisfaction decline with increasing length of the relationship. However, their findings supported the motivated cognition's proposition in that seeing one's partner as a reflection of one's ideal buffered the corrosive effects of time on relationship satisfaction. Specifically, individuals who exhibited a high level of initial partner idealization experienced no decline in satisfaction (Murray et al., 2011).

Thus far, the previous literature has largely described the perception of various aspects of partner personality (e.g. actual and assumed personality similarity) and its impact on relationship satisfaction, used as a dependent variable. Tucker and Anders (1999) set the stage for expanding the research on interpersonal perceptual processes to focus on the perception of partner's feelings, cognitions, perceptions, etc., rather than personality or motivations. Specifically, Tucker and Anders focused their study of relationship satisfaction on exploring the mediating role of perceptual accuracy on the

association between attachment style and relationship satisfaction. They expected that participants high on attachment insecurity (i.e., more anxious and more avoidant individuals) would be less accurate in perceiving their partner's feelings about their relationship, which would lead to lower reported relationship satisfaction. Contrary to the predictions, however, the results showed that only males with more anxious attachment were less accurate in perceiving their partner's love, which resulted in reporting lower relationship satisfaction. In turn, relationship satisfaction among men was higher for those who were more accurate in perceiving their partner's love. They proposed that a plausible explanation could be the inherent sex differences in decoding ability.

Tucker and Ander's (1999) research is unique in that it does not draw on the perception of partner personality, but explores the mediation effect of perceptual accuracy on relationship satisfaction. Furthermore, the authors collected data from both partners in the dyad. However, their inclusion criterion of the length of the relationship was set to one month (with 25% of their sample having dated for less than 3 months, median length of 6 months), which poses considerable impediments to the generalizability of the results to other couples. Specifically, couples in committed long-term relationships, or married couples, could be more familiar with the cues provided by their partners and consequently exhibit different patterns of perceptual accuracy. Taking into consideration the fact that passionate love tends to shift to companionate love after about 2 years \pm 6 months (Tennov, 1979), and that attachment bonds are typically formed between one and a half to three years after the initiation of the relationship (Winston, 2004), Tucker and Ander's findings have a limited scope of applicability when it comes

to stable committed relationships.

Perception of Partner's Sexual Satisfaction

According to sexual script theory, sexual behavior, similar to other forms of social behavior, is guided by cultural scripts (Simon & Gagnon, 1986), which can be modified to better accommodate individual needs (Laumann, Gagnon, Michael, & Michaels, 1994). There is a natural tendency to adopt a personalized script, which makes the individual feel competent and comfortable, and which stabilizes over time (Simon & Gagnon). Metts and Cupach (1989) introduced the notion of dyadic sexual script, which accounts for the way couples personalize and adapt sexual scripts. The adaptation is based on the negotiations of individual preferences and willingness to compromise, in case these preferences differ. Communication—both general and sexual self-disclosure—contributes to sexual satisfaction by enhancing closeness, intimacy, and relationship satisfaction between the partners, which in turn positively influences sexual satisfaction.

In other words, in order to achieve a mutually satisfying sexual script, one needs to have an accurate perception of their partner's sexual behavior preference (Metts & Cupach, 1989). Miller and Byers (2004) and Simms and Byers (2009) studied sexual behavior preferences in partners and found that women significantly overestimated the perceived amount of sexual activity wanted by their partners. Men's perceptions of their female partner's preferences were less biased (i.e. male perceptions did not significantly differ from the female self-reports).

Researchers juxtaposed the findings on perceptual accuracy of partner's sexual behavior preferences to the perceptual accuracy of partner's sexual satisfaction. Fallis et

al. (2014) suggest that these two are different—albeit highly correlated—constructs. While sexual behavior preferences might stay unchanged, sexual satisfaction may change over time in response to multiple factors. Fallis et al. further emphasize the importance of studying perception of partner sexual satisfaction in addition to studying perception of sexual behavior preferences, as it has practical implications for partners. Namely, it allows them to take corrective actions, should their satisfaction level drop, and to revise the previously negotiated, but no longer satisfying dyadic sexual scripts.

Laumann et al. (1994), and Dunn, Croft, and Hockett (2000) indirectly explored the question of the accuracy of romantic partners in predicting their partner's sexual satisfaction. Lauman et al. operationalized sexual satisfaction as a frequency of orgasms and found that while women's perception of their male partner's sexual satisfaction was relatively unbiased, men tended to overestimate their partner's sexual satisfaction (i.e., orgasm frequency). The authors offered several explanations of the male tendency to overestimate: (a) men attempted to report a socially desirable outcome, (b) they were likely to misinterpret ambiguous cues as female orgasm, and/or (c) women occasionally fake orgasm. However, Haavio-Mannila and Kontula (1997) suggest that reducing sexual satisfaction to the frequency of orgasms results in leaving out a number of other significant factors (e.g., sexual frequency, oral-genital contact, partner characteristics, etc.). Dunn et al. examined levels of subjective sexual satisfaction and found the opposite to the findings of Laumann et al. Namely, men were more unbiased than women in estimating their partner's levels of sexual satisfaction, while women were more likely to overestimate. However, Fallis et al. (2014) critiqued the study for collapsing sexual satisfaction into a dichotomous variable, leading to simplified conclusions.

Contrary to Lauman et al. (1994) and Dunn et al. (2000), MacNeil and Byers (1997) found that couples tend to perceive their partner's level of satisfaction as comparable to their own, which is indicative of sexual satisfaction in romantic relationships. Nevertheless, data in all of these studies were collected on the individual as opposed to dyadic level. This limits the opportunity to compare partner perceptions to one's own self-reports, enabling only simple comparisons of male and female participants. De Jong and Reis (2014) found that partners perceived each other's sexual preferences with a considerable degree of accuracy and that these effects were greater than found in randomly assigned pseudo couples. However, de Jong and Reis focused on measurement of sexual preferences and typical sex behaviors rather than perception of sexual satisfaction.

Fallis et al. (2014) designed a study to overcome the shortcomings of the previous research. The authors sought to examine the accuracy of participants in estimating the level of their partner's sexual satisfaction and the factors that predict biased perception. The authors drew on sexual script theory, which suggests that individual sexual satisfaction is determined mainly by the individual's ability to predict partner's level of sexual satisfaction (Fallis et al.). In other words, the importance of the ability to accurately perceive the sexual satisfaction of one's partner lies primarily in the practical implications for long-term relationship maintenance. In order for the partners to take corrective actions against the decreasing levels of sexual satisfaction, they must be able to detect the decrease first. Such corrective actions can take the form of renegotiation and revision of dyadic sexual script to reestablish mutually satisfying sexual behavior between the partners (Fallis et al.). Furthermore, accurate perception of partner opinions

about various aspects of sexual relationships was found to be associated with greater sexual satisfaction (MacNeil & Byers, 2005; Mark, Milhausen, & Maitland, 2013). As a consequence, an accurate appreciation of partner's level of sexual satisfaction may reinforce the maintenance of the relationship and possibly increase sexual satisfaction over time (Fallis et al.).

Even though Fallis et al. (2014) found no significant gender differences in predicting partner sexual satisfaction, results showed that men were more likely to slightly underestimate their partner's sexual satisfaction whereas women were more likely to be unbiased in their estimates (i.e. they neither under- nor overestimated their male partner's levels of sexual satisfaction). The authors further found that the bias in prediction was alleviated by the quality of sexual communication in interaction with emotion recognition.

Perceptual Accuracy in Romantic Relationships

Luo and Snider (2009) list several practical implications for why an accurate perception of partner attributes is beneficial to both partners in the relationship: It (a) ensures accurate evaluation of partner's needs and leads to correct anticipation of their partner's behavior, which fosters a sense of predictability and security (Kenny & Acitelli, 2001); (b) facilitates coordination and reconciliation of conflicting goals which leads to harmonious interaction (Kobak & Hazan, 1991); and (c) enables the expression of feelings of validation, which creates the sense of intimacy in the relationship (Reis & Shaver, 1988). Accurate decoding of partner cues is also emphasized in the research on nonverbal communication. Gottman and Porterfield (1981) found that the ability of spouses to accurately decode each other's nonverbal cues is associated with greater

satisfaction. Furthermore, accurately perceiving relational partner's personality traits and preferences may bestow a variety of benefits for relationships (e.g., predictability of one's partner enables providing appropriate support and coordination of behavior; Finkenauer & Righetti, 2011).

Arguments on behalf of accuracy of partner perceptions go as follows: (a) partner understanding was shown to be a basic requirement for the optimal functioning of intimate relationships (Reis & Shaver, 1988), (b) accurate understanding of one another's self-concepts serves as a function of growing closer over time (Murstein, 1972), and (c) satisfied couples are more likely to report accurate perceptions of partner's working models of attachment (Kobak & Hazan, 1991) and dispositions (Ferguson & Allen, 1978). Recently, researchers brought evidence in support of partner's accuracy in perception of each other's attributes across various judgment domains (Fletcher & Kerr, 2010), attitudes and behaviors (Overall & Fletcher, 2010), personality traits (Decuyper, De Bolle, & De Fruyt, 2012), and preferences for food, movies, and consumer goods (Scheibehenne, Mata, & Todd, 2011). Furthermore, Finkenauer and Righetti (2011) suggest that perceptual accuracy makes the partners predictable and grants multiple benefits for the couple relationship (e.g., providing support and coordinating behavior). This line of research shows that the ability to accurately perceive the partner (yet accept him or her nevertheless) is a predictor of relationship happiness (e.g., Swann, De La Ronde, & Hixon, 1994). Also, it is critical to both the perceiver's (Kobak & Hazan, 1991) and the target's (Swann, De La Ronde, & Hixon, 1994) relationship satisfaction.

However, not all studies support the benefits of accuracy. Overall, past research on perceptual accuracy has yielded mixed results; some studies indicated positive

associations with relationship satisfaction (e.g., Gill & Swann, 2004), whereas others failed to find support for such association (e.g., Letzring & Nofle, 2010). Specifically, Fletcher and Kerr (2010) posit that with respect to tracking accuracy, a rather mixed evidence was delivered, with some studies reporting positive relationship (e.g., Kilpatrick, Bissonnette, & Rusbult, 2002), no relationship (Thomas & Fletcher, 2003), or negative relationship between tracking accuracy and relationship satisfaction (Sillars, Pike, Jones, & Murphy, 1984).

In terms of operationalization of accuracy, similar to exploration of bias, different approaches have been employed. Specifically, (a) the realistic approach examines the degree of correspondence (i.e., correlation) between a judgment and reality benchmark (e.g., Kenny & Albright, 1987; Fletcher, 2002; Fletcher & Kerr, 2010), while (b) the constructivist approach (Kruglanski, 1989) establishes accuracy when an agreement between two individuals is reached (i.e., when relationship partners' ratings of relationship are correlated). This approach is somewhat problematic as it does not utilize a benchmark for the comparison, and thus is less frequently used.

Perceptual Bias in Romantic Relationships

Historically, the accurate perception models were contrasted with the theories of the benefits of unrealistic but self-affirming inferences (motivated relationship cognitions) about one's partner. A human tendency to idealize partners (i.e., viewing the partner more positively than objective observers would, also known as positive illusion; Barelds & Dijkstra, 2011) has been found to be positively associated with relationship quality and satisfaction (Barelds & Dijkstra; Murray & Holmes, 1997), and to enhance relationship longevity (Murray & Holmes, 1997) by promoting perceiver's sense of

security and dismissal of alternative partners. In addition, the theory of motivated relationship cognitions (i.e., motivation to support idealized view of one's romantic partner; Murray, 1999) claims that the satisfaction and stability in close relationships is not a function of partner's accurate perception of each other (Finkenauer & Righetti, 2011), as much as it is a function of motivated over-perception in the service of relationship maintenance (Rusbult, Olsen, Davis, & Hannon, 2001). The practical implications of relationship-enhancing cognitions lie mostly in allowing partners to eliminate the dissonance stemming from a decision to commit oneself to a potentially imperfect partner, and to maintain a sense of safety and security (Murray & Holmes, 1997; Murray, 1999).

Another type of bias, the similarity bias, used to explain the dynamics of interpersonal perceptual processes in romantic relationships was described in terms of "egocentrically assimilating the partner to the self and assuming similarities that may not exist" (Murray, Holmes, Bellavia, Griffin, & Dolderman, 2002, p. 564). These findings indicate that perceived similarity is a critical component in maintaining relationship happiness. Montoya, Horton, and Kirchner (2008) found stronger association between perceived similarity and relationship satisfaction than between relationship satisfaction and actual similarity.

In addition to the largely correlational studies previously discussed, more complex path models were used to establish bias; conceptualized as the projection of self on the partner, when making partner judgments (e.g., Kenny and Acitelli, 2001). Kenny and Acitelli (2001) developed a conceptual model for the appraisal of perception of accuracy and bias effects occurring in close relationships. Typically, this projection,

conceptualized as an artifact or a heuristic that individuals use to attain accuracy, is statistically controlled for (Fletcher & Kerr, 2010). Kenny and Acitelli's (2001) path model had "actor" paths signify the extent to which both men and women project on a specific trait or dimension (i.e., bias effect), and the "partner" paths signify the accuracy. Accuracy effects are also referred to as "understanding" because such effects imply that spouses see partners in a way that is similar to how they see themselves. Bias effects are also referred to in the literature as "assumed similarity" because they indicate that spouses have a tendency to rate their relationship partners similar to how they rate themselves. Kenny and Acitelli found evidence of both accuracy and bias effects across a range of issues, such as closeness, sex, and equity.

As in the case with accuracy, different operationalization of bias has been used. Specifically, projecting an ideal onto relationship perceptions (i.e., bias as a projection process) can be calculated as a correlation between the perception and an idealized prototype (Kenny & Acitelli, 2001). On the other hand, the mean difference approach addresses bias in terms of relationship perceptions being distorted from reality, or as a systematic tendency to err in a particular direction (Fletcher, 2002). This approach has been employed in the present analysis for calculation of bias scores.

In summary, prior evidence was found in support of both perceptual accuracy and perceptual bias in predicting relationship satisfaction. Luo and Snider (2009) suggest that the long-standing debate over which one serves the most adaptive function within relationships makes the two constructs (accurate perception versus biased perception) seem to be mutually exclusive (i.e., if accuracy is beneficial than bias is not, and vice versa). However, a growing body of evidence in the intimate relationship literature

brings a resolution to this dilemma by suggesting that bias and accuracy are two constructs independent of each other. Thus, they not only co-exist in the evaluations partners make about their relationships (e.g., Kenny & Acitelli, 2001), but are conceptually, methodologically, and, moreover, empirically independent, which is a conclusion drawn from a meta-analysis, based on the findings of unrelated effect sizes (Fletcher & Kerr, 2010).

Gagné and Lydon (2004) suggest that “the degree of accuracy and bias is subject to the motivational demands of the situation at hand and the type of evaluation being made” (p. 322). Thus, Gagné and Lydon (2004) justified simultaneous occurrence of biased and accurate perceptions in the context of romantic relationships. They suggested that partners are a subject to at least two different motivations when making relationship evaluations: (a) a need to objectively and accurately understand relationships, a motive that is data driven and relatively impartial; and the same time, (b) a self-esteem need, which motivates people to enhance their perceptions of their relationships. Because these motivational states are independent, they can operate simultaneously (Gagné & Lydon).

Present Study

The purpose of this study is to determine the individual contribution of perceptual processes to enhancing actor’s (perceiver’s) and partner’s (target’s) sexual and relationship satisfaction. Perception of partner’s relationship and sexual satisfaction, in addition to the self-reported levels of relationship and sexual satisfaction, was examined. The estimated levels of relationship and sexual satisfaction were compared against the partner’s self-reported scores, an objective benchmark used as means to gauge perceptual accuracy. Thus, in order to overcome some of the shortcomings of previous

research on perceptual processes, the present study seeks not only to collect dyadic data from both partners in the intimate relationship, but following the recommendation of Kenny and Albright (1987), it also had each partner serve as both the “judge and target” (i.e., the perceiver and the perceived).

This study takes a novel approach to the relationship and sexual satisfaction literature in that it seeks to understand how accurately and how biased partners perceive one another’s levels of satisfaction in their current relationship. Accuracy has been defined in terms of correspondence with reality (Fletcher & Kerr, 2010). Fletcher and Kerr (2010) distinguished between two kinds of accuracy in social judgments: mean-level bias and tracking accuracy. In accordance with Fletcher and Kerr, we defined the bias as differences in mean levels across a sample of perception compared to a benchmark (partner’s self-report). Thus, the mean of relationship ratings could range from systematically more negative (an underestimate) to more positive (an overestimate) than the benchmark. A score of zero would indicate no bias. Furthermore, mean-level bias can be computed as an absolute or a full-range (i.e., positive/negative) value. In contrast, tracking accuracy has typically been operationalized as a correlation between a judgment and a relevant benchmark (e.g., Fletcher & Kerr, 2010; Gagné & Lydon 2004; Kenny & Albright, 1987), and assessed: (a) on one item across a sample (i.e., between-couple correlation), or (b) at the sample level (i.e., mean of the within-couple correlation).

Luo and Snider (2009) showed that accurate and biased perceptions of romantic partners are not mutually exclusive, but, rather, that accuracy and bias (e.g. positivity bias, similarity bias) complement each other and make independent contributions to predicting partner satisfaction. In other words, perceptual accuracy and bias both have

independent adaptive consequences for the partner's relationship satisfaction. Luo and Snider's note that "an important next step would be to specify and test the functions of each process" to determine how they individually contribute to enhancing perceiver's and target's sexual and relationship satisfaction (p. 1338).

Thus, based on the previous findings, the following hypothesis regarding accuracy was formed:

H_{1a}: Participants will demonstrate accuracy in perceiving their partner's satisfaction (i.e., the partner-perception of satisfaction will be significantly, positively correlated with partner's self-reported levels of satisfaction) for sexual satisfaction.

H_{1b}: Participants will demonstrate accuracy in perceiving their partner's satisfaction (i.e., the partner-perception of satisfaction will be significantly, positively correlated with partner's self-reported levels of satisfaction), for relational satisfaction.

Next, based on the sexual script theory (Metts & Cupach, 1989) and theory of motivated relationship cognitions (Murray, 1996a, 1996b), the following hypotheses regarding the benefits of bias for the perceiver's and target's satisfaction in relationship were formed:

H₂: Overestimation of partner's sexual satisfaction will predict actor's own and partner's sexual satisfaction.

H₃: Overestimation of perceived level of partner's relationship satisfaction will predict actor's own and partner's relationship satisfaction.

Chapter Two: Method

Participants

For the purpose of this study, 50 couples from the general public, who have been in a continuously monogamous relationship with their current partner for at least 6 months (i.e., in an exclusive relationship with the same partner consecutively without breaking up for a minimum of 6 months), were recruited online via social media sites (e.g. Facebook, LinkedIn, Subreddit SampleSize, Twitter). The 6 months requirement is in line with previous research on couple's satisfaction (e.g., Mattson et al., 2012). Regarding the justification of our sample size ($N = 50$), Iacobucci (2010) suggested that "SEM [structural equation modeling] models can perform well, even with small samples (e.g., 50)" (p. 92). SEM was used as a statistical method to estimate the actor-partner interdependence model (APIM) for the purpose of the present study. Furthermore, the nature of the data and the use of APIM allowed more lenient sample size requirements (Cook & Kenny, 2005; Kenny et al., 2006).

Out of the total number of 346 individual responses we received after commencing data collection, 246 responses were excluded from the current analysis because of the following reasons: (a) only one partner in the relationship participated in the survey, or (b) both partners participated but one or both responses were incomplete. Thus, the final sample resulted in a total of 50 couples. Women ($n = 50$) were on average 25.78 ($SD = 5.34$) years old. The majority of women self-identified as straight/heterosexual (90%), while the remainder of the female sample self-identified as bisexual (6%) or lesbian (4%). Men ($n = 50$) were on average 27.46 ($SD = 6.92$) years old. The majority of men self-identified as straight/heterosexual (96%), while the

remainder of male sample self-identified as bisexual (2%) or homosexual (2%). For both genders, the modal level of education attained was at the level of Master's degree.

Couples were recruited internationally; among the most commonly reported countries of origin were: US (36% of all participants), Europe (48%, specifically, Czech Republic, 21%; Slovakia, 16%; Spain, 3%; other European countries 8%), and Canada (3%), Australia (2%), other countries (11%). The majority of the sample was Caucasian (86% of men and 92% of women). Overall, participants described their physical health as great (49%) or good (47%), and 93% indicated no use of medication that could potentially affect their sexual functioning.

Out of the final sample, only 10 couples were married, while the remaining 40 couples were dating (20 couples reported cohabitation, 20 couples dated but did not cohabit). Dating couples have been in their current relationship for an average of 3.58 years ($SD = 2.60$). Married couples have been married on average for 6.17 years ($SD = 11.13$), and they dated before getting married on average for 3.89 years ($SD = 2.92$). Married and cohabitating couples lived together on average for 4.31 years ($SD = 6.67$). Out of all the participants, 94% of the individuals were childless.

Furthermore, the majority of participants (60% of males and 70% of females) reported that they typically (during the past 12 months) exchange gestures of physical affection more than once per day, 50% of the male (52% of the female) sample reported that they engage in sex two to three times per week, 24% of males (24% of the females) reported that they discuss sex with their partner about once per week (another 24% of females reported that discuss sex two to three times per week), and 54% of men indicated that there is a discrepancy between their levels of sexual desire (while 58% of females

reported that there is no discrepancy in the sexual desire between the partners).

Measures

Demographic information. Basic demographic information about the participants (e.g. gender, sexual orientation, age, income, educational level, health status) and information about the history of their relationship (e.g. marital status, relationship length, number of children, age of the children) were collected (see Appendix A).

Relationship satisfaction. Three short measures were used to assess relationship satisfaction. Due to the potential overlap and the common method variance between the General Measure of Relationship Satisfaction (GMREL) and General Measure of Sexual Satisfaction (GMSEX), relationship satisfaction was further assessed with the Kansas Marital Satisfaction Scale (KMS), discriminating between distressed and non-distressed couples (Schumm et al., 1986), and the 2-dimensional Positive and Negative Semantic Differential (PN-SMD), discriminating between ambivalence and indifference toward the relationship (Mattson et al., 2013). Named satisfaction scales were chosen in particular for their brevity to mitigate the potential exhaustion of the participants as they were asked to fill out each measure twice.

Positive and Negative Semantic Differential (PN-SMD; Mattson et al., 2013) was used to assess relationship satisfaction separately across positive and negative attitude dimensions. The PN-SMD consists of two 7-item subscales—seven items measure the positive (PSMD; e.g. interesting) and seven items measure the negative (NSMD; e.g. bad) semantic dimensions (see Appendix B). Higher numbers indicate higher perception of positive (negative) qualities in the relationship, and the response options range from *not at all* (0) to *completely* (7). Mattson et al. (2013) reported a coefficient to be .95 for

both the PSMD and NSMD. In the current sample, both PSMD ($\alpha = .89$ for women and $\alpha = .91$ for men) and NSMD ($\alpha = .80$ for women and $\alpha = .96$ for men) showed strong internal consistency (see Table 2.1). Participants in the present study completed two versions of the PN-SMD. The original version was administered with unchanged instructions, in order to assess self-reported relationship satisfaction. The second version's instructions were adjusted to have the participant evaluate the relationship and score the dimensions based on how they think their partner would have evaluated them.

Kansas Marital Satisfaction Scale (KMS; Schumm et al., 1986) is a brief marital satisfaction measure significantly correlated with other, widely used relationship satisfaction measures (Spanier's Dyadic Adjustment Scale [DAS], 1976; Norton's Quality Marriage Index [QMI], 1983). KMS consists of three items (e.g. "How satisfied are you with your marriage?") measuring marital satisfaction with a 7-point Likert scale, anchored by *extremely dissatisfied* (1) and *extremely satisfied* (7). Higher scores indicate higher relational satisfaction. For the purpose of this study, married participants completed the original version together with reworded items to assess partner's perception of their marriage. Non-married participants completed reworded version (e.g. marriage replaced with broader term relationship) to report on their self-perception and partner-perception (e.g. "How satisfied is your partner with your relationship?"; see Appendix C) of relationship satisfaction. The psychometric characteristics of KMS ($\alpha = .93$) are strong (Schumm et al., 1986), and in the current sample, internal consistency was adequate for women ($\alpha = .78$) and strong for men ($\alpha = .95$).

Table 2.1
Reliability Scores of the Study Measures

Scale	Cronbach Alpha (α)			
	Female		Male	
	Self-report	Partner-report	Self-report	Partner-report
PSMD	.89	.92	.91	.91
NSMD	.80	.87	.96	.96
KMS	.78	.77	.95	.95
GMREL	.92	.93	.94	.92
GMSEX	.95	.96	.97	.93

Note. $N = 50$ couples; *PSMD* Positive Semantic Differential, *NSMD* Negative Semantic Differential, *KMS* Kansas Marital Satisfaction Scale, *GMREL* General Measure of Relationship Satisfaction, *GMSEX* General Measure of Sexual Satisfaction. Asterisk indicates a significant difference between men and women.

General Measure of Relationship Satisfaction (GMREL; Lawrance, & Byers, 1992) is a brief measure of overall relationship satisfaction consisting of five 7-point dimensions: *good – bad, pleasant – unpleasant, positive – negative, satisfying – unsatisfying, valuable – worthless*, with the root question of “In general, how would you describe your overall relationship with your partner?” to assess self-perception, and for the purpose of present study, an added root question of “In general, how would your partner describe your overall relationship with you?” to assess partner perception (see Appendix D). The scores on each measure range from five to 35, with higher scores indicating higher relationship satisfaction. The GMREL has been shown to be reliable in multiple samples, with a Cronbach’s alpha of .95, and .96 (Byers, 2005). In the current sample, GMREL showed similarly strong internal consistency for women ($\alpha = .92$) and for men ($\alpha = .94$).

Sexual satisfaction. *General Measure of Sexual Satisfaction* (GMSEX; Lawrance & Byers, 1995) is a brief one-dimensional measure of overall (i.e., positive and negative) evaluation of sexual satisfaction, based on the interpersonal exchange model of sexual satisfaction (IEMSS). Participants to rate their sexual satisfaction on five 7-point dimensions (e.g., *good – bad*), with the root question of “In general, how would you describe your sexual relationship with your partner?” to assess self-perception, and “In general, how would your partner describe your sexual relationship with you?” to assess partner perception (see Appendix E). The scoring of the scales is additive (from five to 35), with higher scores indicating higher sexual satisfaction of the participants. Regarding the psychometric characteristics, the authors (Byers, 2005; Lawrance & Byers, 1995) showed high internal consistency of the measure across three different samples

(i.e., $\alpha = .96$ in long-term relationships and community sample, and $\alpha = .90$ in a student sample). Mark et al. (2014) found the GMSEX to (a) perform significantly better ($\alpha = .94$) in the test of internal consistency when compared with other widely used measures of sexual satisfaction (i.e., $\alpha = .91$ for New Sexual Satisfaction Scale-Short, NSSS-S; and $\alpha = .89$ for Index of Sexual Satisfaction, ISS), (b) show greater test-retest reliability ($r = .72$) than ISS ($r = .68$), (c) demonstrate significant convergent validity with the NSSS-S and ISS, and (d) be significantly positively correlated with the relationship satisfaction measures (e.g., GMREL). In the current sample, GMSEX showed strong internal consistency for women ($\alpha = .95$) and for men ($\alpha = .97$).

Bias. In order to operationalize the bias of partner satisfaction estimates, difference scores were computed. Specifically, female self-report was subtracted from male partner report (male perception of female) to determine male bias, and vice versa for female bias. This was done for each measure separately. The difference scores were interpreted in the following way: the closer to zero (e.g., male self-report was equal to the female partner report), the less biased the estimate. Thus, zero or a value significantly close to zero indicated no bias.

In other words, if the perceiver's scores corresponded with perceived partner's self-reported scores, the perceiver was unbiased. On the contrary, the further the value was from zero in either direction, the greater the bias. Specifically, if male partner reports were grossly above female self-reports, the scores gained positive values, which indicated overestimation of partner's satisfaction. In contrast, if men's partner reports were grossly below women's self-reports, the bias scores lead to negative values, indicative of underestimation of partner's satisfaction. In other words, the further away

from the zero value of this difference, regardless of direction, the more erroneous or more biased the partner-report. Thus, the bias scores were either positive (indicative of overestimation) or negative (indicative of underestimation). We purposefully avoided using the absolute values of the bias as to retain the richness of information provided by the directionality of the bias scores, not only the magnitude of the bias (as would be conveyed by the absolute scores).

Accuracy. Two types of accuracy were used in the present study—overall sample-level accuracy, and dyad-level accuracy. First, we attempted to include the dyad-level accuracy scores, in addition to the bias scores, as predictor variable into our main APIM analysis. However, the nature of our data did not allow such analysis. Specifically, the lack of variance between partner reports and self-reports across our relatively short measures rendered impossible the calculation of Pearson correlations (only about half of the cases exhibited sufficient variance to enable calculation of separate correlation coefficients for both partners, which was insufficient to run the APIM). Thus, the dyad-level accuracy was excluded from the main analyses, which did not violate any theoretical assumptions, as bias and accuracy have been shown to be conceptually and statistically independent (e.g., Fletcher & Kerr, 2010).

In order to determine the accuracy of perceptions of partner's levels of satisfaction on the sample-level (and test Hypothesis 1), however, we calculated separate overall Pearson's correlation coefficients for men and women. Specifically, by correlating male perception of female with female's self-report, male accuracy was established. Likewise, female accuracy was established by correlating male perception of female with female's self-report, male accuracy was established. This was done for each

measure separately. Correlations ranged from -1 to 1, with higher correlations indicating greater accuracy.

Procedure

The survey link embedded in the study advertisement posted to social networking sites (e.g., Facebook, LinkedIn, Subreddit SampleSize) redirected potential participants to the Qualtrics survey website. To be eligible to participate in the study, participants had to meet the following criteria: be English-speaking (regardless of their nationality or mother tongue), minimally 18 years old, currently not pregnant, not given birth to a child during six months prior to the study, and the partner of the interested individual had to be willing to actively participate in the study as well. These criteria were imposed because of, respectively, the language of the survey, the sexual content of the survey, the possibly negative impact of pregnancy (Mark et al., 2014) or birth of a child (Ahlborg, Dahlof, & Hallberg, 2005) on sexual satisfaction, and the study's aim to collect dyadic data from both partners.

The use of a convenience sample recruited via the Internet resulted in necessary exclusion of participants without Internet connection and/or nonparticipating on the chosen social media sites. However, Mark and Jozkowski (2013) compiled a list of several benefits of using web-based procedure for data collection: (a) usefulness of web-based surveys in investigating sensitive issues such as sexuality (e.g., Carballo-Dieguez, Miner, Dolezal, Rosser, & Jacoby, 2006; Prause & Graham, 2007); (b) the comforts associated with study participation via the Internet, which is likely to increase the probability of couples participation and subsequently lower the response bias (Turner et

al., 1998); and (c) equal quality of data collected via Internet when compared with traditional methods of data collection in terms of psychometric properties (Tyron, 2003).

Incentive of being entered into a randomized drawing for one of ten \$25 gift cards was offered to participants for their involvement in the study. The main page of the survey outlined the conditions of being entered into drawing, brief introduction to the study, and informed consent, informing the participants of the potential benefits gained through completing the survey: (a) the possibility to learn about their satisfaction with their current relationship by receiving personalized feedback report on the interpretation of their rating of their own satisfaction (participants only received their own ratings, no partner scores were disclosed, however, should they want to compare their individual reports on their own, they had a free choice to do so), and (b) an executive summary of the overall study results to enable framing their results in the context of the sample average. In order to receive the reports, upon completion of the survey, the participants were asked if they choose to receive such feedback or not.

The final survey question invited all participants to enter their e-mail address to be utilized in case they chose to receive the personalized feedback and executive summary of the study results, and in case they won the incentive drawing. They were further asked to enter their partner's e-mail address to enable sending out an automated e-mail invitation to participate to their relationship partner. The two corresponding partners were linked via matching random digital code automatically generated by Qualtrics or by the matching e-mail addresses from both partners. To ensure the anonymity of the survey responses, upon collecting data from both partners and matching them together, the e-mail addresses were replaced with random digital codes and archived in a separate file.

In order to gain both types of scores (self and partner estimates), in the main survey, participants were asked to complete two versions of each measure. They completed one version of the measure to report on their own evaluations of their relationship, and the other version, as they believed their partner would have answered the same questions if they were asked themselves. Both versions of the survey were positioned side by side and clearly labeled, indicating that one is to assess the self-perception (e.g., “Overall, how would *you* describe your overall relationship with your partner?”) and the other is to assess the partner perception (e.g., “Overall, how would *your partner* describe your overall relationship with you?”), to avoid any potential confusion and to minimize the natural tendency of women (and LGBT men) to report on their partner’s satisfaction rather than their own, when asked about their sexual satisfaction (McClelland, 2011). This was to address McClelland’s finding of women’ and LGBT men’ tendency to anchor their satisfaction appraisal in their partner’s sexual satisfaction instead of their own, potentially influencing the validity of the self-reported data. Furthermore, female participants were shown to sublimate their own needs in an effort to ensure their partner’s sexual satisfaction (Nicolson & Burr, 2003), a trend likely reinforced by societal expectations and gender-specific norms. To avoid such phenomenon, each set of the present questionnaires was completed twice and preceded with clear self- and partner-specific instructions.

Analysis

The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000; Kenny, 1996; Kenny & Cook, 1999) was used to address the hypotheses in the present study. The indication for the use of APIM is the non-independent nature of dyadic data

(i.e., the scores of two relationship partners tend to be positively correlated; Kenny, 1996). Thus, to test the relative contribution of perceptual bias to self and partner's satisfaction, APIM was used to simultaneously analyze data from both relationship partners and thereby distinguish between the individual and dyadic influences of each perception variable on each partner's satisfaction. For example, a woman's perceptual accuracy may lead her to feel more satisfied in the relationship (an individual or actor effect) and/or it may lead to her husband's increased satisfaction in the relationship (a dyadic or partner effect).

Conceptually, the standard APIM consists of (a) four observed (i.e., measured) variables, X_1 and X_2 , which represent the causal or predictor variables of Partner A and Partner B in a dyad, and Y_1 and Y_2 , which represent the outcome variables for the two members, and (b) two latent error terms (see Figure 2.1). The two actor effects a_1 and a_2 are represented by horizontal arrows, while the two partner effects, p_1 and p_2 , are represented by diagonal arrows. The curved arrows represent the covariance between the two causal variables and the correlation between the two error terms, indicating covariance between dyad members due to unmeasured common causes (Kenny & Lederman, 2010).

We used mixed variables, which by definition demonstrate variance between and within dyads (i.e., the variables varied from dyad to dyad, and from person to person within each dyad; Kashy & Kenny, 2000). Other characteristics of our model were: the couple was the unit of analysis, and the dyad members were assumed to be distinguishable. Typically, equality constraints are imposed on the model to determine the distinguishability of the dyad members. However, in our case no test of

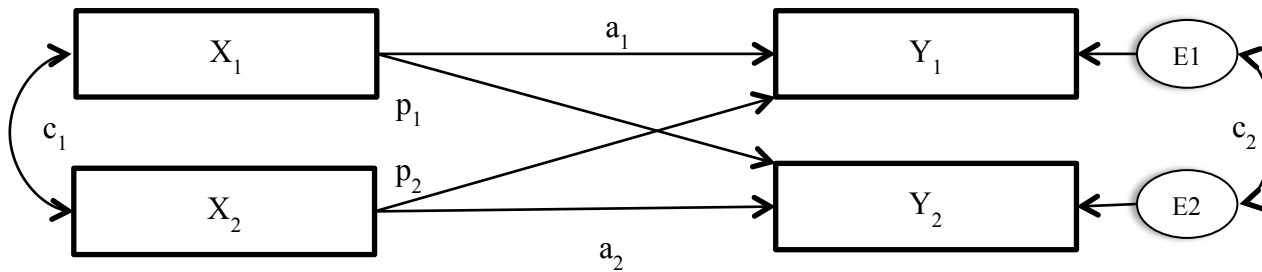


Figure 2.1. Standard Actor-Partner Interdependence Model (APIM). Model has four observed variables and two latent error terms (E_1 , E_2). Causal or predictor variables of perceptual accuracy are X_1 (Partner A bias) and X_2 (Partner B bias); outcome variables of satisfaction are Y_1 (Partner A satisfaction) and Y_2 (Partner B satisfaction). Two actor effects, a_1 and a_2 , are represented by horizontal arrows, while the partner effects, p_1 and p_2 , are represented by diagonal arrows. Curved arrows represent the covariance between the two causal variables (c_1) and the correlation between the two error terms (c_2).

distinguishability was performed, as the literature provides sufficient empirical evidence of gender differences in experiencing relational and sexual satisfaction among women and men. Thus, dyad members were treated as distinguishable both conceptually and empirically, based on the naturally meaningful distinctive factor—gender (Kenny et al., 2006). In line with Kenny and Cook’s (1999) recommendation of the statistical method suitable for this case, we used a fully saturated structural equation modeling (SEM) computed in AMOS22, which is equivalent to a two-pooled regression method (Anderson & Johnson, 2010). Our sample size was smaller than typically required for the SEM analysis. This did not violate the SEM assumption as all of our variables were manifest variables, estimated with the use of APIM, a case in which the sample size requirement is “more relaxed and rules of thumb associated with regression are applicable” (Anderson & Johnson, 2010, p. 227).

The significance of actor and partner effects was determined based on the unstandardized regression coefficients as recommended by Kenny et al. (2006). Because all 14 parameters of the standard APIM (i.e., mean and variance for each causal variable, intercept for each outcome variable, variance for each error, two actor effects and two partner effects, covariance between the independent variable, and covariance between the error terms) were estimated, the model was fully saturated or just-identified (i.e., chi square equaled to zero with zero degrees of freedom). Therefore, perfect fit was guaranteed and fit statistics of the model did not need to be reported (Kenny et al., 2006). Furthermore, because zero was a meaningful value of our predictor variable (zero indicated perfectly unbiased perception), the calculated raw scores were not centered for the purpose of the present analyses (Kenny et al., 2006).

In order to establish the degree of bias of the individual's perceptions, Partner B's self-reported scores (actual scores) were subtracted from Partner A's perception of Partner B's satisfaction scores. This was done for each sexual and relational measure separately. The bias score of partner A was then used as the predictor of partner A's satisfaction (actor effect) and partner B's satisfaction (partner effect; see the path diagram in Figure 1). Even though separate path models were used to estimate sexual and relational satisfaction, the models did not differ conceptually; bias scores of Partner A and Partner B were used as predictor variables to estimate actor and partner effects for the outcome variable—satisfaction (sexual or relational).

Lastly, the APIM model can be used to determine if there is a statistically significant difference between female and male partners by comparing the fit of a model in which (the two actors or the two partners) paths are set equal to the fit of the model in which the paths are free to vary (chi-square difference analysis). A non-significant value would then indicate no statistical difference in the coefficient, that is, no gender difference for that path (Kenny & Acitelli, 2001). This method was used to establish significance of gender differences in the proposed models.

Chapter Three: Results

Preliminary Analysis

Before conducting the primary analyses, mean scores and standard deviations of the study measures were examined (see Table 3.1). Overall, the sample reported relatively high relational and sexual satisfaction. Women showed consistently higher scores on every measure (i.e., they showed higher scores on measures of positive and overall satisfaction and lower scores on measure of negativity in satisfaction). A paired samples *t*-test was used to compare the means in order to determine the significance of the differences. Women's mean scores were significantly higher ($p < .05$) across most questionnaires, with the exception of no significant difference between men and women's score on sexual satisfaction.

Next, female and male mean bias scores were examined (see Table 3.2). To estimate the bias, we created the scores for men by calculating the difference between the male partner-report (i.e., perception) and the woman's self-report (i.e., actual score), and vice versa for the females. In order to determine whether participants demonstrated bias in their perception of their partner's satisfaction, a series of one-sample *t*-tests using a test value of zero were used. If the average scores of bias were different from zero (zero equals no bias), depending on the direction (i.e., positive or negative), participants were either underestimating or overestimating their partner's satisfaction. On average, women were more likely to slightly overestimate their partner's general relationship ($M = .92, SD = 4.28$) and sexual satisfaction ($M = .56, SD = 6.65$), while men were more likely to underestimate their partner's relational ($M = -.79, SD = 4.02$) and sexual satisfaction ($M = -.44, SD = 4.90$). However, the over- and under-perceptions did not significantly differ

Table 3.1
Means and Standard Deviations of the Total Scores for the Study Measures

Measure (Min – Max)	<i>M (SD)</i>		<i>t (p)</i>
	Men	Women	
PSMD(0 – 49)	46.06 (6.85)	49.10 (5.65)	-2.79 (.008)**
NSMD (0 – 49)	13.48 (9.83)	10.23 (4.15)	2.14 (.038)*
KMS (3 – 21)	17.23 (4.13)	18.85 (1.79)	-2.69 (.010)**
GMREL (5 – 35)	31.23 (3.95)	32.56 (3.59)	-2.22 (.032)*
GMSEX(5 – 35)	30.40 (6.12)	30.98 (5.04)	-.64 (.529)

Note. *N* = 48 couples; For simplification, one lesbian couple and one gay couple were excluded from all descriptive analyses (Table 2, 3, and 4) to allow for simple gender comparison, using paired *t*-tests, across means of study variables and perception scores, resulting in a total sample of 48 couples.

PSMD Positive Semantic Differential, *NSMD* Negative Semantic Differential, *KMS* Kansas Marital Satisfaction Scale, *GMREL* General Measure of Relationship Satisfaction, *GMSEX* General Measure of Sexual Satisfaction. Asterisk indicates a significant difference between women and men.

p* < .05. *p* < .01, two-tailed.

Table 3.2
Estimates of Perceptual Bias (Underestimation/Overestimation)

Measure	<i>M (SD)</i>		<i>t (p)</i>
	Men	Women	
PSMD	-2.40 (7.57)*	2.23 (7.38)*	-2.27 (.028)*
NSMD	3.29 (9.77)*	-3.50 (10.77)*	2.32 (.025)*
GMREL	-.79 (4.02)	.92 (4.28)	-1.51 (.137)
GMSEX	-.44 (4.90)	.56 (6.65)	-.80 (.426)
KMS	-1.73 (3.95)**	1.27 (4.29)*	-2.61 (.012)*

Note. $N = 48$ couples. Asterisk in the first two columns indicates if the mean score differs significantly from zero (based on one-sample t -test). If it does and the mean score is negative, it indicates underestimation; positive number with asterisk indicates overestimation for that specific scale. Asterisk in the third column indicates if the two mean bias scores differ significantly between genders (using paired-sample t -test).
 * $p < .05$. ** $p < .01$, two-tailed.

from zero, thus we can conclude that the average estimates were unbiased.

Likewise, using paired *t*-test, no gender differences on either (GMSEX, GMREL) measure were found. However, men were more likely to significantly underestimate their partner's positivity (PSMD) and their partner's satisfaction as measured by KMS, and overestimate their negativity (NSMD). In contrast, women were more likely to significantly overestimate their partner's positivity (PSMD) and satisfaction as measured by KMS, and underestimate their negativity (NSMD). Gender differences reached statistical significance for the measures of PSMD, NSMD, and KMS.

Hypothesis 1: Accuracy

First, we predicted that participants would be generally accurate in perceiving their partner's levels of relational and sexual satisfaction. In order to determine the accuracy, we correlated separate Pearson's correlations for women and men. Consistent with Hypothesis 1, the results indicated that men's perceptions of their female partner's sexual satisfaction (GMSEX) were positively correlated with female self-reported sexual satisfaction ($r = .531, p < .01$) and women's perceptions of their male partner's sexual satisfaction were significantly correlated with male self-reported sexual satisfaction ($r = .397, p < .01$). No significant gender differences were found when the correlations were compared ($z = 0.81, p > .05$). Conversely, women ($r = .484, p < .01$) exhibited higher accuracy scores when estimating their partner's general relational satisfaction (GMREL) than men ($r = .343, p < .05$). Again, no statistical gender difference was discovered ($z = 0.81, p > .05$). With one exception, no significant correlations were found across the additional measures (PSMD, NSMD, KMS), indicating that accuracy might be domain-specific across different relational measures (see Table 3.3). Overall, correlations were

Table 3.3
Perceptual Accuracy Scores Estimated by Pearson Correlations

Measure	Men	Women	<i>z</i> (<i>p</i>)
PSMD	.264	.365*	.53 (.596)
NSMD	.097	.012	.40 (.689)
GMREL	.343*	.484**	.81 (.418)
GMSEX	.531**	.397**	.81 (.418)
KMS	.185	.167	.09 (.928)

N = 48 couples. Asterisk in the first two columns indicates the significance of correlations. Last column displays *z* scores, results of the correlation comparison. **p* < .05. ***p* < .01. ****p* < .001, two-tailed.

weak to moderate, with highest correlations found for the accuracy of sexual satisfaction.

Because we wanted to be inclusive of all forms of relationships (i.e., same-sex and other-sex relationships), we run into difficulties with categorization of the limited number of same-sex relationship in the analysis. For the simplification purpose, partners in the lesbian and gay couple were randomly assigned to Group 1 (males) or Group 2 (females). The path analyses were run separately using all couples ($N = 50$) and heterosexual couples only ($N = 48$), to rule out any potential differences in the main analyses. Because no differences in the statistical significance were discovered for none of the models used, the results of all pairs of couples ($N = 50$) were reported for further discussion and to avoid potential confusion, referred to as male or female group.

Hypothesis 2: Predicting Sexual Satisfaction Based on Bias

We predicted that overestimation would be associated with increased sexual satisfaction for both the perceiver and their partner. Contrary to Hypothesis 2, however, the relationship between perceptual bias and one's own sexual satisfaction was not significant for women ($B = .024$, $SE = .098$, $p > .05$) or for men ($B = .095$, $SE = .149$, $p > .05$), even though the actor effects were of expected direction. Nevertheless, we found that men's biased estimation of their partner's sexual satisfaction was positively related to their female partner's sexual satisfaction (see Figure 3.1). Specifically, both partner effects were negative suggesting that as the perceiver underestimates their partner's sexual satisfaction, the predicted value of their partner's reported sexual satisfaction increases. This effect was found for the path from men to women ($B = -.541$, $SE = .132$, $p < .001$), and a corresponding significant partner effect was established for the path from women to men ($B = -.488$, $SE = .111$, $p < .001$). Next, post-hoc power analysis was run

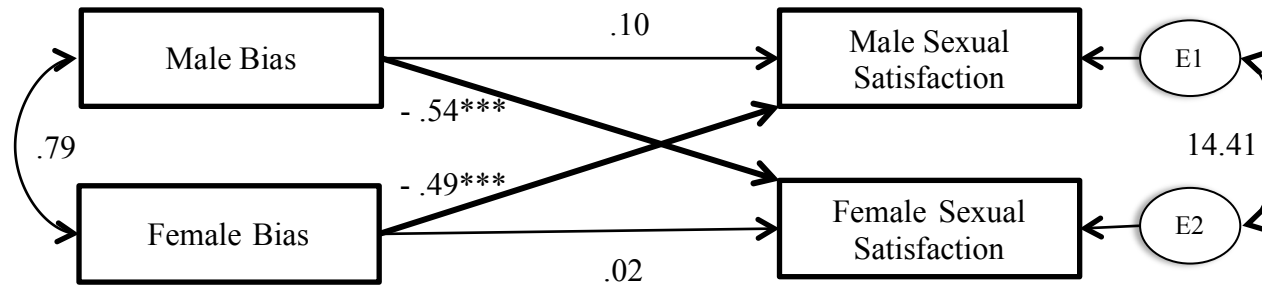


Figure 3.1. Actor-Partner Interdependence Model for Bias and Sexual Satisfaction. Values are unstandardized regression coefficients. Both bias and satisfaction scores were measured by General Measure of Sexual Satisfaction (GMSEX). $N = 50$ couples. *** $p < .001$, two-tailed.

utilizing the APIMPowerR software for APIM power analysis (Ackerman & Kenny, 2016). The power to detect actor effects was low for male (.092) and female partners (.056); however, the power to detect partner effects was robust for male (.978) and female partners (.986).

Because SEM allows for placement and testing of model constraints (Kenny et al., 2006), we tested if the partner effects significantly differed for men and women. In order to do so, partner effects were constrained to be equal, and the chi-square test with 1 degree of freedom indicated that this constraint did not significantly worsen the model fit, $\chi^2(1) = .101, p = .740$, thus, the partner effect did not significantly differ for women and men.

Hypothesis 3: Predicting Relational Satisfaction Based on Bias

Similarly, contrary to Hypothesis 3, we found no evidence supporting the actor effect for general relationship satisfaction (i.e., biased estimation of partner's relational satisfaction did not impact one's own relational satisfaction) for the men ($B = .031, SE = .205, p > .05$) or for the women ($B = .190, SE = .152, p > .05$), even though both effects were of expected positive direction. The link between male biased estimation of female relational satisfaction and female actual relational satisfaction (partner effect from men to women), however, reached statistical significance ($B = -.383, SE = .162, p < .05$). The corresponding partner effect from women to men (female bias predicting actual male relational satisfaction) closely approached but did not reach statistical significance ($B = -.366, SE = .192, p = .057$). Again, contrary to our expectation, both estimates of partner effects were negative, indicating that as the perceiver underestimates the target's relational satisfaction, the predicted value of target's actual relational satisfaction

increases. Respectively, the overestimation of perceived partner's relational satisfaction predicted decrease of partner's self-reported relational satisfaction. Unstandardized coefficients are visually depicted in the path model (see Figure 3.2). Next, post-hoc power analysis was run utilizing the APIMPowerR software for APIM power analysis (Ackerman & Kenny, 2016). The power to detect actor effects was low for male (.052) and female partners (.185); however, the power to detect partner effects was robust for male (.518) and female partners (.460).

Again, we constrained the partner effects to be equal in order to enable the estimation of gender differences, which resulted in a chi-square difference of $\chi^2(1) = .014, p = .905$. Thus, constraining the model did not significantly worsen the fit, indicating no significant difference between the partner effects for women and men.

Additional Analyses

Next, we replicated the APIM models for bias with the remaining relational measures (PSMD, NSMD, KMS), to estimate whether the effects would generalize across all relational satisfaction models (e.g., bias in PSMD would predict self and partner's score on the PSMD scale). Again, no actor effects for either gender were found to be significant across models. Furthermore, the coefficients of all significant partner effects were negative, highlighting the trend of underestimation of perceived partner satisfaction in predicting the increase of actual self-reported satisfaction of the partner (see Table 3.4).

Similar to the main models of the study, whenever there was a significant partner effect, gender differences between paths were also tested. Partner effects differed significantly for women and men on the NSMD, $\chi^2(1) = 38.658, p < .001$, and KMS

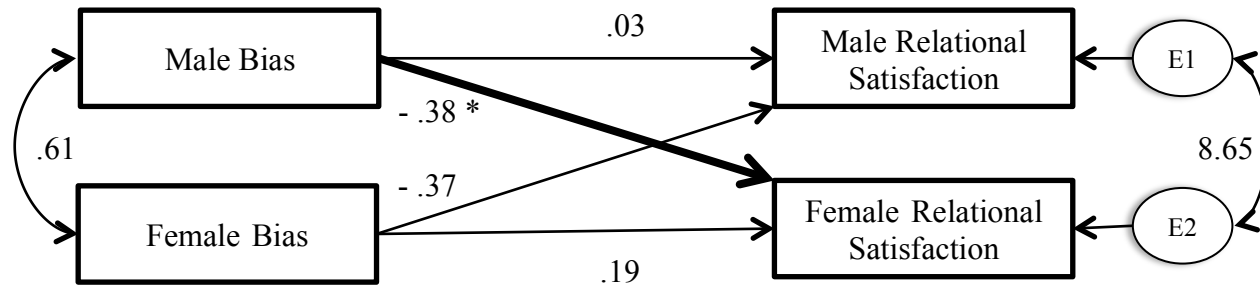


Figure 3.2. Actor-Partner Interdependence Model for Bias and Relationship Satisfaction. Values are unstandardized regression coefficients. Both bias and satisfaction scores were measured by General Measure of Relationship Satisfaction (GMREL).

$N = 50$ couples. $*p < .05$

Table 3.4
Bias Effects (Unstandardized Path Coefficients)

Measure	Actor effect (B)		Partner effect (B)	
	Men	Women	Me n	Women
PSMD	.049	.106	-.306 *	-.534 **
NSMD	.137	.135	.001	-.712 ***
GMREL	.031	.190	-.383*	-.366
GMSEX	.095	.024	-.541***	-.488***
KMS	.243	-.057	-.170	-.655 ***

Note. $N = 50$ couples. Asterisk indicates the significance of the effects.

* $p < .05$. ** $p < .01$. *** $p < .001$, two-tailed.

scale, $\chi^2 (1) = 24.574, p < .001$, but not on the PSMD, $\chi^2 (1) = 2.922, p > .05$.

In summary, based on the results of the present analysis, we can conclude that even though perceptual bias (specifically, underestimation of perceived partner's satisfaction) seems to be an important contributor to partner's relational and sexual satisfaction, it does not significantly predict one's own satisfaction (regardless of the sexual or relational nature of satisfaction).

Chapter Four: Discussion

The present study focused on determining the degree of accuracy and bias to which people perceive their partner's satisfaction within romantic relationships. We built on the previous research concerned with the perception of romantic relationship by utilizing dyadic data on self-perception and partner-perception, resulting in a comprehensive set of variables relative to the domain of sexual and relational satisfaction. We assessed perceptual processes by examining how closely perceptions of partner satisfaction correspond with a recommended objective benchmark (Fletcher & Kerr, 2010), namely, self-reported satisfaction across a number of relational constructs.

Our results indicated that people are generally (slightly to moderately) accurate when estimating their partner's relational and sexual satisfaction. However, the correlation (i.e., accuracy) between the perceiver's perception of partner satisfaction and the partner's actual satisfaction, depending on the measure, ranged from zero (positivity and negativity in relationship), to weak (general relationship satisfaction), to moderate correlation (sexual satisfaction). Thus, accuracy seems to be domain-specific, and especially important for estimating partner's sexual satisfaction.

However, no gender effects in exhibited accuracy of perception were found. In other words, the correlations between male perception and their partner's self-report were not significantly different from female perception and their partner's self-report. This runs contrary to Kenny and Acitelli's (2001) expectation of women being less accurate, because "male targets are more difficult to understand than women" (p. 441). It is also inconsistent with previous research, which found higher accuracy of male perceivers and explained it in terms of female's greater expressivity and thus being easier to read (Hall,

1984). The present finding can be due to (a) methodological differences in calculating the accuracy scores (i.e., Kenny & Acitelli used projection of self on the partner in their perception model), (b) employing international sample, and/or (c) side-by-side exposure of the measures when assessing self-perception and partner-perception in order to tease out their confounding influence on each other. They are consistent, however, with Fallis' et al. (2013) findings of males and females being equally accurate in perceiving their partner's sexual satisfaction. Furthermore, Hyde (2005) argues that the difference model, assuming innate psychological disparities between females and males, popularized largely by media, is inferior to the gender similarity hypothesis. Hyde, based on a comprehensive review of 46 meta-analyses, found evidence supporting gender similarity across a range of psychological variables. The variance of variables was largely explained by the differences in age and context in which the measurements occurred. Thus, it seems that accuracy of partner-perception is informed and better explained by the gender similarity hypothesis, rather than by gender differences.

Next, despite the fact that we did not make any assumptions about gender differences in perceptual bias, it is interesting to note that women and men both exhibited relatively unbiased perceptions of their partner's relationship satisfaction (GMREL) and sexual satisfaction (GMSEX; even though women were inclined to slightly overestimate while men were inclined to underestimate their partner's satisfaction). In addition, women were more likely to overestimate their partner's positivity and underestimate their partner's negativity. Men, on the other hand, showed a converse pattern in that they were more likely to underestimate their partner's positivity and satisfaction as measured by KMS, and overestimate their negativity. This finding is consistent with earlier studies,

which reported evidence that women are more prone to exhibit positive bias (i.e., overestimate) when perceiving their partner's experience than men, especially in dating relationships (Gagné & Lydon, 2003). Furthermore, Fletcher and Kerr (2010) found that desire to protect and enhance the relationship was a stronger motivator for women than men. Collectively, this evidence suggests that gender may be important moderating variable when it comes to bias of perception.

By definition, the presence of a partner effect implies a relational quality of the measured construct, as part of the variance in one's own score is accounted for by a measured characteristic of their partner (Kenny et al., 2006). We found evidence of partner effects in predicting relational and sexual satisfaction across different measures. Even more interesting, however, is the interpretation of the valence of the effects. Negative coefficients on these paths indicate that when an individual underestimates their partner's satisfaction, there is an associated increase in their partner's self-reported satisfaction.

A possible explanation of this finding could be connected to motivation for relationship repair and maintenance. Once a person perceives their partner's satisfaction is decreasing, it might motivate them put forth more effort into the relationship, which, in turn, might be perceived by the partner as gratifying and hence increase his or her experienced satisfaction. In a similar vein, if the same person perceives their partner as being satisfied with the relationship (which may, in fact, be an erroneous assumption, i.e., they might overestimate partner's actual satisfaction), they may be less likely to invest as much into the relationship as if they thought that the relationship was being threatened (if they underestimated partner's satisfaction). This may result in the decrease of the actual

satisfaction of the partner.

We found support for the proposed explanation in Fletcher and Kerr (2010), who suggest that if one overestimates interaction traits (i.e., traits involving connection between the self and the partner), it might lead to “complacency and lack of effort in building a more secure relationship” (p. 637). Fletcher and Kerr built their argument on the error management theory (Haselton & Buss, 2000), which acknowledges different roles of positive and negative judgment biases, based on the type of attributions made (individual-level vs. interaction-level judgments). In other words, perceiving a partner as more attractive as they actually are (individual-level bias) has different (considerably less negative) consequences than perceiving the partner to love the perceiver more or less than they actually do (interaction-level bias). Thus, the bias seems to be domain-specific (Fletcher & Kerr).

Accurate and Biased Perceptions of Sexual Satisfaction

Similar to the findings of Fallis et al. (2013), we found that both women and men were fairly accurate in estimating their partner’s sexual satisfaction. In other words, on average, people were generally aware of their partner’s levels of sexual satisfaction. This is in line with the sexual script theory (Simon & Gagnon, 1986), which suggests that accurate perception of partner sexual satisfaction is important for the maintenance of their sexual scripts. It did not, however, contradict our next finding (in line with our previous discussion of independent coexistence of accuracy and bias in perception), which replicated Fallis et al.’s (2013) findings of women’s unbiased perceptions of sexual satisfaction. Fallis et al. found that men significantly underestimated female’s sexual satisfaction. Our findings indicated that men trended toward underestimation, but since it

did not significantly differ from zero, we conclude that men, as well as women, neither underestimated nor overestimated partner's sexual satisfaction.

Our expectations of overestimation benefiting one's own and one's partner's sexual satisfaction, however, were not confirmed. Specifically, even though we found a positive relationship between overestimation and perceiver's own sexual satisfaction, none of the actor effects were significant. Thus, the role of perceptual bias in predicting perceiver's own sexual satisfaction was unconfirmed for the current sample. Present results are, thus, in line with de Jong and Reis's (2014) finding of accurate knowledge of partner's sexual preferences as being unrelated to one's own sexual satisfaction.

As expected, significant partner effects of biased perceptions of partner's sexual satisfaction were found for both women and men. Regarding the direction of the effects, however, our finding of a negative relationship between perceptual bias and partner's sexual satisfaction was inconsistent with our predictions. Thus, it seems more plausible that the association between under-perception of partner's sexual satisfaction and predicted increase in partner's actual sexual satisfaction can be explained in terms of renegotiation and subsequent revision of the sexual scripts.

On the other hand, the overestimation of partner's sexual satisfaction indicated decrease in partner's actual sexual satisfaction, which can be due to the erroneous assumption of partner's satisfaction with current sexual practices, resulting in a failure to revise and adopt them to partner's current needs. Thus, it seems plausible that both accurate and biased perceptions of partner's sexual satisfaction have practical implication for changing one's sexual routines.

Accurate and Biased Perceptions of Relational Satisfaction

Because we employed multiple measures of relationship satisfaction, a more complex picture was created in terms of the perception processes within the relationship satisfaction domain. Overall, we found less persistent evidence of perceptual accuracy than in the case of sexual satisfaction. It was previously established that tracking accuracy tends to increase with more information and longer acquaintance (Letzring, Wells, & Funder, 2006), and is typically higher in married and dating samples than among friends or strangers (Beer & Watson, 2008; Watson, Hubbard, & Wiese, 2000). It is therefore possible that we found less evidence of accuracy due to the characteristics of our sample, which consisted largely of dating couples of relatively short relationship duration, and that it might have been higher if we recruited more married couples with longer mutual history. We further found a more gender-diverse evidence of the degree of bias with which people tend to perceive their partners.

Specifically, Hypotheses 3 tentatively predicted that biased perception would play an important role in predicting actor's own and partner's relational satisfaction. Instead, only the partner effect was confirmed. Again, our predictions related to the directionality of the effects did not hold. As in the case of sexual satisfaction, the underestimation of perceived partner's satisfaction predicted an increase in relationship satisfaction for the partner, while the overestimation indicated decrease in relationship satisfaction.

This finding stands contrary to the theory of motivated relationship cognitions (Murray, 1999), which claims that the satisfaction in relationships is a function of motivated over-perception serving the relationship maintenance (Rusbult, Olsen, Davis, & Hannon, 2001). According to this theory, positive illusions should allow partners to

eliminate the dissonance stemming from a decision of committing oneself to a potentially imperfect partner (Murray & Holmes, 1997; Murray, 1999). However, because motivated relationship cognition theory is concerned with actor effect (how the perception impacts perceiver's own satisfaction level) and because we found no actor effects for the current samples, it seems that plausible that theory of motivated cognition is not the most useful framework for explaining our findings.

A more informative framework, applicable to revealed partner effects could be the interdependence theory (Kelley & Thibaut, 1978). The interdependence theory posits that partners, when faced with interdependence dilemmas (e.g., when they perceive their partner's relationship satisfaction as declining), endure costs and exert effort to ensure the repair of the relationship (e.g., they become more attentive to their partner's needs, ultimately leading to increase of partner's satisfaction). This can be achieved through the behavioral maintenance acts, which were characterized as attempts to focus one's behavior on the goal of enhancing couple's well-being (Rusbult, et al., 2001). Fletcher and Kerr (2010) hypothesize that: "The reason for this [motivation for repair behavior] may be that the failure to notice and react appropriately to such partner behavior is likely to have deleterious effects on the relationship." (p. 646). Conversely, when partner's level of satisfaction is overestimated, it might be deemed unnecessary to exert excessive effort into purposeful enhancement of relational partner's happiness. It is possible, though, that such relationship enhancing behavior is present only in highly committed couples, where alternative, more destructive responses (e.g., exit from the exit-voice-loyalty-neglect typology of responses to dissatisfaction in everyday interaction; Rusbult, Zembrodt, & Gunn, 1982) are employed less frequently. According to Rusbult's et al.

(2001) investment model of commitment processes, high relationship satisfaction is closely associated with low regard of alternatives and high investment. Thus, given the high levels of self-reported satisfaction of the current sample, it is not unreasonable to assume that the sample would rate their commitment as equally high. Subsequently, the underestimation of perceived satisfaction may, because of high commitment to the partner and to the relationship, lead to repair and maintenance behavior, rather than to relationship dissolution, which might be a characteristic course of action in less satisfied or clinically distressed couples. In summary, a perceived decrease of relationship satisfaction might motivate the repair behavior in order to improve and retain the relationship, resulting in actual increase of partner-reported satisfaction.

Interestingly, even though not all of the used relationship satisfaction measures (PSMD, NSMD, GMREL, KMS) yielded the same results, which points to the differences underlying the conceptualization of each relationship satisfaction measure. Nevertheless, the general trend was present across all measures, underlying the robustness of the present findings.

Lastly, it is interesting to note that the majority of our sample consisted of international population, whereas the reviewed literature used largely empirical data on American population. This, on the top of the methodological and conceptual confounds in the literature on perceptual processes, could have potentially contributed to the found differences in our results.

Implications

The current findings contribute to the understanding of perceptual processes within romantic relationships, specifically, to preserving relational and sexual

satisfaction. Having utilized the actor-partner interdependence model, our findings illustrate how intrapersonal (satisfaction) and interpersonal factors (perception) interact to affect relationship outcomes. In addition, the present study underlines the finding that satisfaction within relationship is a relational phenomenon and should not be operationalized and measured as an individual construct. Contrary to some previous research done within the field, the present study highlights the urgent need to collect dyadic data, and to break down global perceptions of satisfaction within intimate relationships to separate relational and sexual domain. Thus, our findings carry important (a) theoretical implications for research on couples satisfaction and (b) practical implication for couples therapy and healthy relationship education. In both contexts, in order to capture the dynamics of satisfaction within a relationship, clinicians, program developers, and family educators must include the reports and perceived reality of both partners. Respectively, in order to achieve improvement of couple's relationship quality in the context of therapy, one must directly work with both partners.

On the intimate relationship level, the dyadic nature of couple's satisfaction indicates the importance of sharing one's experience of the relationship with the relational partner. Frequent "check-ups" with one another in the form of an open dialogue about one's experience and the overall state of the relationship not only offer reassurance and positive reinforcement to the partners, but also a "reality check" and an opportunity to revise one's perception and thus behavior. Replacing the mind reading and assumptions (potentially flawed with a variety of perceptual errors) with such relationship check-ups can thus avoid satisfaction decline and emotional disengagement over the time.

From the clinician's standpoint, simultaneous assessment of both partners' satisfaction and perception of their partner's satisfaction might be important at identifying couple at-risk for marital discord and relationship dissolution. Specifically, as indicated by our results, unrealistic overestimation of partner's satisfaction should be a red flag for the clinician, as it might contribute to actual decline of partner's satisfaction. Underestimation, on the other hand, seems to have a positive, self-less relational quality in that the individual is more occupied with how their partner's feelings and possible improvement of their partner's relational well-being, rather than being preoccupied with one's own satisfaction. It is, however, possible that this relationship enhancement motivation can be found solely in highly satisfied couples, whose negativity threshold is low and sensitivity towards partner's cues is high. This allows them to recognize partner's feelings and motivates the corrective actions. Unhappy couples with low commitment levels might react differently and thus effects of underestimation versus overestimation might be opposite relative to happy couples (i.e., underestimation of partner's satisfaction can lead to further relationship deterioration and ultimately to relationship dissolution). Alternatively, not all couples are characteristic by both partners sharing the same levels of satisfaction. Assessing partner perception can further have important implications for identification of mixed-agenda couples (i.e., when one partner wants to save the relationship, while the other wants to end it) and possibly their treatment with the use of discernment therapy (Doherty, 2011). The "leaning-in" partner might overestimate their partner's satisfaction when it is not the case. Assessing partner perception of the relationship in such couple would give the clinician important insight into the relationship and prepare him or her for an important task of achieving clarity

about whether to try and restore the relationship or move towards its dissolution.

Strengths and Limitations of the Study

Among the strengths of the present study is unarguably the use of dyadic data from both partners, namely, comparing partner-reports of perceptions against the self-reports (used as a benchmark), to establish the accuracy and bias of perceptions. Thus, we strictly adhered to the interpersonal (i.e., dyadic) quality of satisfaction within romantic relationships. The richness of our data stems from the collection of: (1) self-reported satisfaction of Partner A, (2) Partner A's perception of satisfaction of Partner B, (3) Partner B's self-reported satisfaction, (4) Partner B's perception of Partner A's satisfaction. Furthermore, we employed several validated measures of relationship satisfaction of multi-item nature, which allows for uncovering differences when comparing and contrasting the results across distinct measures. We further sought to overcome some statistical deficiencies of previous studies (e.g., individual data, inappropriate statistical techniques failing to account for interdependence of dyadic data, etc.) in our research design. The use of actor-partner interdependence model estimated through structural equation modeling naturally accommodated the interdependence of our data.

Furthermore, the geographical diversity of the couples included for the analysis provided a rich variety of couples' background. Unfortunately, no conclusions could have been made based on the geographical diversity because of the sample size limitations. The relatively small size of the sample (50 couples) poses some limitations on the generalizability of the data beyond the current sample. Informed by our power analysis, future research should utilize larger sample size in order to be able to reliably

detect actor effects when estimating partner perception with the use of APIM. In a similar vein, despite the fact that no limitations were placed on the sexual orientation and preference of the couples, only four individuals reported being in same-sex relationships. Thus, we made no conclusions in this regard. It would be interesting to see if described associations would alter or remain the same in the same-sex relationships.

Likewise, our couples were recruited online. The convenience sample necessarily results in certain selection bias and poses further limitations to the generalizability of results. It is likely that the self-nomination of the couples into participation (and the requirement of dyadic participation) lead to the exclusion of less satisfied couples. Thus, the characteristics of our relatively homogenous sample (i.e., relatively young, highly educated, highly satisfied, with reported high frequency of engagement in physical affection, sex, and sexual communication, childless, mostly unmarried couples of relatively short relationship duration) should be taken into consideration. Further limitations stem from the study's utilization of self-reported measures (possibly leading to biased reports) and its cross-sectional design. Because of these limitations, we urge the reader to interpret the results with a certain level of caution.

Besides the limitations associated with the sample size, international population (and possible lack of English language fluency), recruitment strategy, and self-reported nature of the data, some might add a conceptual limitation stemming from the exclusion of perceptual accuracy in the predictor variables. It has been well established that social perception is influenced by both accuracy and error (i.e., bias) and thus should not be treated as entirely correct or incorrect (Kenny & Albright, 1987; Kenny & Acitelli, 2001). To account for this, we calculated the accuracy scores, however, we were not able to

include them into the main analysis, due to the nature of the data. Lastly, no moderator variables beyond gender were considered in the present analyses, despite high likelihood of accuracy and bias being moderated by a number of various factors (e.g., demographic and relational variables). These accommodations were not made because of economic reasons (study's length limitation) and in order to simplify an already complex issue.

Future Directions

Marriage and family researchers have been investigating the question of what a well-functioning couple relationship looks like for decades (Fincham & Beach, 2010; Mark & Jozkowski, 2013). It appears that one avenue for increasing our understanding of the dynamics underlying the complex nature of intimate relationships is through exploring how perceptual processes impact one's own and partner's level of relationship happiness.

Our used models of relational and sexual satisfaction were predictive, rather than causal, indicating that the perceptual bias and the actual self-reports can be mutually interactive rather than exclusive (Kenny & Acitelli, 2001). It is therefore possible that if a person feels more or less satisfied (our outcome variable used as a predictor), a corresponding change will be found in the level of their bias (our predictor used as the outcome). In other words, it is possible that satisfaction drives perception rather than the other way around. An important avenue for the future research of the perceptual processes within romantic relationships will be employment of longitudinal, rather than cross-sectional analysis, to bring more definite answers regarding the directionality and causality of the relationship between satisfaction and perception.

Furthermore, we did not specify the means by which people accrue and maintain

accurate and biased perception of their partner's sexual (e.g., sexual communication) and relational (e.g., emotion recognition, emotional expressivity) satisfaction. Future studies can help us better understand the mediating factors that underlie the nature of social perceptions in romantic relationships.

If replicated by future, longitudinal, randomized study designs of observational nature, our results of perceptual accuracy and bias as playing an important role for maintaining partner relational and sexual satisfaction could be applicable to general, and subsequently, special populations. An important next step will be to recruit clinically distressed samples serviced by couple counselors and therapists, to reliably address the phenomenon of the “marital discord taxon”, which posits that underlying mechanisms of couple satisfaction are qualitatively different in highly satisfied as compared to clinically distressed samples (Whisman, Beach, & Snyder, 2008).

Conclusion

To conclude, when individuals in highly satisfied, committed relationships underestimate their partner's sexual and relational satisfaction, self-reported sexual and relational satisfaction of their partner is more likely to increase. Overestimation of perceived partner's satisfaction, on the other hand, predicted decrease in partner's actual satisfaction. It is plausible that couples, which exhibit high levels of love and commitment, are overly sensitive to perceived decrease of partner's satisfaction (perhaps reading too much into small-scale negative events such as conflicts, arguments or partner's complaints, and evaluating them as overly damaging). They might then perceive such events as a threat to the relationship and invest extra efforts into pleasing their partner and engaging in corrective relationship behaviors, which, in turn, enhances

the experienced level of satisfaction of their relational partner. On the level of sexual satisfaction, such extended energy focused into pleasing one's partner might not only result in increased partner satisfaction, but possible also in revision of couple's sexual script and thus maintaining the sexual satisfaction long-term.

In summary, MacNeil and Byers (1997) characterized a balanced, well-functioning relationship as one, in which similar levels of satisfaction are present in both partners. The present study extended the exploration of dyadic satisfaction to the perceptual processes and their mutual impact on relational partners' satisfaction. Our findings indicate that underestimating partner's satisfaction is beneficial for partner's self-reported satisfaction, as the individual shifts the focus of attention from their own satisfaction to the satisfaction of their partner. By becoming the object of evaluation and subsequent heightened attempts at improving their relational happiness, the partner benefits in terms of increased actual experienced satisfaction. Thus, this study underlines the power of perception in the context of couple relationship and should be used to help us increase our theoretical understanding of perceptual processes, and guide clinical work with couples in distress.

Appendix A
Demographic Information

Personal History:

Gender: Female Male Other _____

Sexual orientation: Heterosexual Homosexual Bisexual Asexual Cisgender
(You are comfortable in the gender you were assigned at birth) Transgender (You are
not comfortable in the gender you were assigned at birth) Other _____

Age: _____

Race/Ethnicity: White Black Hispanic Asian Multiracial Other _____

Nationality: (drop-down menu)

What country do you currently live in? _____ In which country were you born? _____

Educational level: less than high school high school diploma/equivalent some
college associate's degree bachelor's degree master's degree doctoral degree

Yearly gross income: Yearly gross income: (drop-down menu of numbers and currency)

How would you describe your physical health? great good fair poor

How would you describe your mental health? great good fair poor

Are you currently taking any medication that would affect your sexual functioning? yes
 no

If yes, what medication? _____ If yes, how long have you been on this medication? ____

Relationship Information:

Partner's gender: Female Male Other _____

Partner's sexual orientation: Heterosexual Homosexual Bisexual Asexual

Cisgender (They are comfortable in the gender you were assigned at birth) Transgender
(They are not comfortable in the gender you were assigned at birth) Other, please
specify: _____

Current relationship status: Single, not married or currently partnered → [filtered out of
survey, not eligible] Married, living with spouse Married, not living with spouse
Partnered, living with partner Partnered, not living with partner Separated

Divorced, not remarried or currently partnered → [filtered out of survey, not eligible]

Widowed, not remarried or currently partnered → [filtered out of survey, not eligible]

Other, please specify: _____

If divorced, are you remarried? _____ If yes, how many times? _____

If married, how long? (Please indicate in months): _____

How long did you date prior to marriage? (Please indicate in months): _____

If not married, how long have you been in the current relationship? (Please indicate in
months): _____

Do you live: alone with parents with romantic partner with non-romantic
roommate

If living with a romantic partner, how long have you been living together? (Please
indicate in months): _____

If living with a romantic partner, how long have you been dating before moving in
together? (Please indicate in months): _____

Partner's age: _____

Number of children with current partner: _____

Number of children from previous relationship: _____
Age (ages) of the children: _____

On average (during the past 12 months), how often do you typically exchange physical affection (e.g., cuddles, hugs, kisses) with your current partner? A few times per year About once per month A few times per month About once per week 2-3 times per week Almost every day Every day More than once per day No response

On average (during the past 12 months), how often do you typically engage in sex (e.g., vaginal sex, anal sex, oral sex) with your current partner? A few times per year About once per month A few times per month About once per week 2-3 times per week Almost every day Every day More than once per day No response

On average (during the past 12 months), how often do you typically discuss sex with your partner? Not at all A few times per year About once per month A few times per month About once per week 2-3 times per week Almost every day Every day More than once per day No response

Do you think there is a discrepancy (a difference) between your level of sexual desire and your partner's level of sexual desire? Yes No Unsure No response

Appendix B
Positive and Negative Semantic Differential (PN-SMD; Mattson et al., 2013)

* self-perception:

Considering only the *positive qualities* of your relationship and *ignoring the negative ones*, evaluate your relationship on the following qualities:

My relationship is...

	Not at all 0	A tiny bit 1	A little 2	Some what 3	Mostl y 4	Very 5	Extre mely 6	Comp letely 7
Interesting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Full	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sturdy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hopeful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Considering only the *negative qualities* of your relationship and *ignoring the positive ones*, evaluate your relationship on the following qualities:

My relationship is...

	Not at all 0	A tiny bit 1	A little 2	Some what 3	Mostl y 4	Very 5	Extre mely 6	Comp letely 7
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lonely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discouraging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fragile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Miserable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* partner perception:

Considering only the *positive qualities* of your relationship and *ignoring the negative ones*, evaluate your relationship on the following qualities based on how you think ***your partner would evaluate it***:

My partner thinks our relationship is...

	Not at all	A tiny bit	A little	Some what	Mostl y	Very	Extre mely	Comp letely
	0	1	2	3	4	5	6	7
Interesting	0	0	0	0	0	0	0	0
Full	0	0	0	0	0	0	0	0
Sturdy	0	0	0	0	0	0	0	0
Enjoyable	0	0	0	0	0	0	0	0
Good	0	0	0	0	0	0	0	0
Friendly	0	0	0	0	0	0	0	0
Hopeful	0	0	0	0	0	0	0	0

Considering only the *negative qualities* of your relationship and *ignoring the positive ones*, evaluate your relationship on the following qualities based on how you think **your partner would evaluate it**:

My partner thinks our relationship is...

	Not at all	A tiny bit	A little	Some what	Mostl y	Very	Extre mely	Comp letely
	0	1	2	3	4	5	6	7
Bad	0	0	0	0	0	0	0	0
Lonely	0	0	0	0	0	0	0	0
Discouraging	0	0	0	0	0	0	0	0
Boring	0	0	0	0	0	0	0	0
Empty	0	0	0	0	0	0	0	0
Fragile	0	0	0	0	0	0	0	0
Miserable	0	0	0	0	0	0	0	0

Appendix C
Kansas Marital Satisfaction Scale (KMS; Schumm et al., 1986)

- 1 = Extremely Dissatisfied
- 2 = Very Dissatisfied
- 3 = Somewhat Dissatisfied
- 4 = Mixed
- 5 = Somewhat Satisfied
- 6 = Very Satisfied
- 7 = Extremely Satisfied

* version for married participants, self-perception:

- 1. How satisfied are you with your marriage?
- 2. How satisfied are you with your husband/wife as a spouse?
- 3. How satisfied are you with your relationship with your husband/wife?

* version for married participants, partner perception:

- 4. How satisfied is your spouse with your marriage?
- 5. How satisfied is your spouse with you as a husband/wife?
- 6. How satisfied is your spouse with his/her relationship with you?

* version for non-married participants, self-perception:

- 1. How satisfied are you with your relationship?
- 2. How satisfied are you with your partner?
- 3. How satisfied are you with your relationship with your partner?

* version for non-married participants, partner perception:

- 4. How satisfied is your partner with your relationship?
- 5. How satisfied is your partner with you as a partner?
- 6. How satisfied is your partner with his/her relationship with you?

Appendix D
General Measure of Relationship Satisfaction (GMREL; Lawrance, & Byers,

1992)

* self-perception:

Overall, how would you describe your relationship with your partner?

Very Bad (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Good
Very Unpleasant (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Pleasant
Very Negative (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Positive
Very Unsatisfying (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Satisfying
Worthless (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Valuable

* partner perception:

Overall, how would your partner describe their relationship with you?

Very Bad (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Good
Very Unpleasant (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Pleasant
Very Negative (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Positive
Very Unsatisfying (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Satisfying
Worthless (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Valuable

Appendix E
General Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995)

* self-perception:

Overall, how would you describe your sexual relationship with your partner?

Very Bad (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Good
Very Unpleasant (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Pleasant
Very Negative (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Positive
Very Unsatisfying (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Satisfying
Worthless (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Valuable

* partner perception:

Overall, how would your partner describe their sexual relationship with you?

Very Bad (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Good
Very Unpleasant (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Pleasant
Very Negative (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Positive
Very Unsatisfying (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Satisfying
Worthless (1) — (2) — (3) — (4) — (5) — (6) — (7) Very Valuable

References

- Ackerman, R. A., & Kenny, D. A. (2016, April). APIMPowerR: An interactive tool for Actor-Partner Interdependence Model power analysis [Computer software]. Available from <https://robert-a-ackerman.shinyapps.io/APIMPowerRdis/>
- Ahlborg, T., Dahlof, L.-G., & Hallberg, L. (2005). Quality of the intimate and sexual relationship in first-time parents six months after delivery. *Journal of Sex Research, 42*, 167–174. doi:10.1080/00224490509552270
- Anderson, S. R., & Johnson, L. N. (2010). A dyadic analysis of the between-and within-system alliances on distress. *Family Process, 49*, 220–235. doi:10.1111/j.1545-5300.2010.01319.x
- Apt, C., Hurlbert, D.F., Sarmiento, G.R., & Hurlbert, M.K. (1996). The role of fellatio in marital sexuality: An examination of sexual compatibility and sexual desire. *Sexual and Marital Therapy, 11*, 383–392.
- Barelds, D. P. H., & Dijkstra, P. (2011). Positive illusions about a partner's personality and relationship quality. *Journal of Research in Personality, 45*, 37–43. doi:10.1016/j.jrp.2010.11.009
- Beer, A., & Watson, D. (2008). Personality judgment at zero acquaintance: Agreement, assumed similarity, and implicit simplicity. *Journal of Personality Assessment, 90*, 250–260. doi:10.1080/00223890701884970
- Bevan, J. L., & Sparks, L. (2014). The relationship between accurate and benevolently biased serial argument perceptions and individual health perceptions. *Communication Research, 41*, 257–281. doi: 0.1177/0093650212438391

- Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15*, 141–154. doi:10.1111/j.1475-6811.2007.00189.x
- Byers, E. S. (2001). Evidence for the importance of relationship satisfaction in women's sexual functioning. *Women and Therapy, 20*, 23-26. doi:10.1300/J015v24n01_04
- Byers, E. S. (2005). Relationship satisfaction and sexual satisfaction: A longitudinal study of individuals in long-term relationships. *The Journal of Sex Research, 42*, 113–118. doi:10.1080/00224490509552264
- Carballo-Diequez, A., Miner, M., Dolezal, C., Rosser, B. R., & Jacoby, S. (2006). Sexual negotiation, HIV-status disclosure, and sexual risk behavior among Latino men who use the Internet to seek sex with other men. *Archives of Sexual Behavior, 35*, 473–481. doi:10.1007/s10508-006-9078-7
- Carney, D. R., & Harrigan, J. A. (2003). It takes one to know one: Interpersonal sensitivity is related to accurate assessments of others' interpersonal sensitivity. *Emotion, 3*, 194–200. doi:10.1037/1528-3542.3.2.194
- Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage and the Family, 62*, 999–1017. doi:10.1111/j.1741-3737.2000.00999.x
- Croyle, K.L., & Waltz, J. (2002). Emotional awareness and couples' relationship satisfaction. *Journal of Marital and Family Therapy, 28*, 435–444. doi:10.1111/j.17520606.2002.tb00368.x
- Decuyper, M., De Bolle, M., & De Fruyt, F. (2012). Personality similarity, perceptual accuracy, and relationship satisfaction in dating and married couples. *Personal*

- Relationships*, 19, 128–145. doi:10.1111/j.1475-6811.2010.01344.x
- Doherty, W.J. (2011). In or out: Treating the mixed-agenda couples. *Psychotherapy Networker*, 58(60), 45–50.
- Donnelly, D. A. (1993). Sexually inactive marriages. *The Journal of Sex Research*, 30, 171–179. doi:10.1080/00224499309551698
- Dunn, K. M., Croft, P. R., & Hackett, G. I. (2000). Satisfaction in the sex life of a general population sample. *Journal of Sex and Marital Therapy*, 25, 141–151. doi:10.1080/009262300278542
- Dymond, R. (1954). Interpersonal perception and marital happiness. *Canadian Journal of Psychology*, 8, 164–171. doi:10.1037/h0083611
- De Jong, D. C., & Reis, H. T. (2014). Sexual kindred spirits: Actual and overperceived similarity, complementarity, and partner accuracy in heterosexual couples. *Personality and Social Psychology Bulletin*, 40, 1316-1329. doi:10.1177/0146167214542801
- Fallis, E. E., Rehman, U. S., & Purdon, C. (2014). Perceptions of partner sexual satisfaction in heterosexual committed relationships. *Archives of Sexual Behavior*, 43, 541–550. doi:10.1007/s10508-013-0177-y
- Ferguson, L. R., & Allen, D. R. (1978). Congruence of parental perception, marital satisfaction, and child adjustment. *Journal of Consulting and Clinical Psychology*, 46, 345–346. doi:10.1037/0022-006X.46.2.345
- Fields, N. S. (1983). Satisfaction in long-term marriages. *Social Work*, 28, 37–41. doi:10.1093/sw/28.1.37
- Fincham, F. D., & Beach, S. R. H. (2010). Marriage in the New Millennium: A Decade in

- Review. *Journal of Marriage and Family*, 72, 630–649. doi:10.1111/j.1741-3737.2010.00722.x
- Fincham, F. D., & Linfield, K. J. (1997). A new look at marital quality: Can spouses feel positive and negative about their marriage? *Journal of Family Psychology*, 11, 489–502. doi:10.1037/0893-3200.11.4.489-502
- Finkenauer, C., & Righetti, F. (2011). Understanding in close relationships: An interpersonal approach. *European Review of Social Psychology*, 22, 316–363. doi:10.1080/10463283.2011.633384
- Fisher, T.D., & McNulty, J.K. (2008). Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology*, 22, 112–122. doi:10.1037/0893-3200.22.1.112
- Eletcher, G. J. O. (2002). *The new science of intimate relationships*. Maiden, MA: Blackwell.
- Fletcher, G. J. O., & Boyes, A. D. (2008). Is love blind? Reality and illusion in intimate relationships. In J. P. Forgas & J. Fitness (Eds.), *Social relationships: Cognitive, affective, and motivational processes* (pp. 101–114). Hove, England: Psychology Press.
- Fletcher, G. J. O., & Kerr, P. S. G. (2010). Through the eyes of love: Reality and illusion in intimate relationships. *Psychological Bulletin*, 136, 627–658. doi:10.1037/a0019792
- Gagné, F. M., & Lydon, J. E. (2004). Bias and accuracy in close relationships: An integrative review. *Personality and Social Psychology Review*, 8, 322–338. doi:10.1207/s15327957pspr0804_1

- Gottman, J. M., & Porterfield, A. L. (1981). Communicative competence in the nonverbal behavior of married couples. *Journal of Marriage and the Family*, *43*, 817–824. doi:10.2307/351339
- Hall, J. A. (1984). *Nonverbal sex differences: Communication accuracy and expressive style*. Baltimore, MD: John Hopkins University Press.
- Haavio-Mannila, E., & Kontula, O. (1997). Correlates of increased sexual satisfaction. *Archives of Sexual Behavior*, *26*, 399–419. doi:10.1023/A:1024591318836.
- Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology*, *78*, 81–91. doi:10.1037/0022-3514.78.1.81
- Heiman, J. R., Long, J. S., Smith, S. N., Fisher, W. A., Sand, M. S., & Rosen, R.C. (2011). Sexual satisfaction and relationship happiness in midlife and older couples in five countries. *Archives of Sexual Behavior*, *40*, 741–753. doi:10.1007/s10508-010-9703-3
- Henderson-King, D. H., & Veroff, J. (1994). Sexual satisfaction and marital well-being in the first years of marriage. *Journal of Social and Personal Relationships*, *11*, 509–534. doi:10.1177/0265407594114002
- Hurlbert, D. F., Apt, C., & Rabehi, S. M. (1993). Key variables to understanding female sexual satisfaction: An examination of women in nondistressed marriages. *Journal of Sex and Marital Therapy*, *17*, 154–165. doi:10.1080/00926239308404899
- Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist*, *60*, 581–592. doi:10.1037/0003-066X.60.6.581

- Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology, 20*, 90–98.
doi:10.1016/j.jcps.2009.09.003
- Joannides, P. (2006). *The guide to getting it on* (4th ed.). Waldport, OR: Goofy Foot Press.
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451–477). New York: Cambridge University Press.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York, NY: Willey
- Kenny, D. A. (1996). Models of non-independence in dyadic research. *Journal of Social and Personal Relationships, 13*, 279–294. doi:10.1177/0265407596132007
- Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology, 80*, 439–448. doi:10.1037/022-3514.80.3.439
- Kenny, D. A., & Albright, L. (1987). Accuracy in interpersonal perception: A social relations analysis. *Psychological Bulletin, 102*, 390–402. doi:10.1037/0033-2909.102.3.390
- Kenny, D. A., & Cook, W. L. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal Relationships, 6*, 433–448. doi:10.1111/j.1475-6811.1999.tb00202.x
- Kenny, D. A., & Ledermann, T. (2010). Detecting, measuring, and testing dyadic patterns in the actor–partner interdependence model. *Journal of Family Psychology, 24*,

359–366. doi:10.1037/a0019651

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York, NY: Guilford Press.

Kobak, R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology*, *60*, 861–869. doi:10.1037/0022-3514.60.6.861

Kruglanski, A. W. (1989). The psychology of being "right": The problem of accuracy in social perception and cognition. *Psychological Bulletin*, *106*, 395–409. doi:10.1037/0033-2909.106.3.395

Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.

Lawrance, K., & Byers, E. S. (1992). Development of the interpersonal exchange model of sexual satisfaction in long-term relationships. *Canadian Journal of Human Sexuality*, *1*, 123–285.

Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, *2*, 267–285. doi:10.1111=j.1475-6811.1995.tb00092.x

Letzring, T. D., Wells, S. M., & Funder, D. C. (2006). Information quantity and quality affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology*, *91*, 111–123. doi:10.1037/0022-3514.91.1.111

Litzinger, S., & Gordon, K. C. (2005). Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *Journal of Sex and Marital Therapy*,

31, 409–424, doi:10.1080/00926230591006719

- Luo, S., & Snider, A. G. (2009). Accuracy and biases in newlyweds' perceptions of each other: Not mutually exclusive but mutually beneficial. *Association for Psychological Science, 20*, 1332–1339. doi:10.1111/j.1467-9280.2009.02449.x
- MacNeil, S., & Byers, E. S. (1997). The relationships between sexual problems, communication, and sexual satisfaction. *Canadian Journal of Human Sexuality, 6*, 277–283.
- MacNeil, S., & Byers, E. S. (2005). Dyadic assessment of sexual self-disclosure and sexual satisfaction in heterosexual dating couples. *Journal of Social and Personal Relationships, 22*, 169–181. doi:10.1177/0265407505050942.
- Mark, K. P., Herbenick, D., Fortenberry, J. D., Sanders, S., & Reece, M. (2014). A psychometric comparison of three scales and a single-item measure to assess sexual satisfaction. *Journal of Sex Research, 51*, 159–169.
doi:10.1080/00224499.2013.816261
- Mark, K. P., Milhausen, R. R., & Maitland, S. B. (2013). The impact of sexual compatibility on sexual and relationship satisfaction in a sample of young adult heterosexual couples. *Sexual and Relationship Therapy, 28*, 201–214.
doi:10.1080/14681994.2013.807336
- Mark, K. P., & Jozkowski, K. N. (2013). The mediating role of sexual and nonsexual communication between relationship and sexual satisfaction in a sample of college-age heterosexual couples. *Journal of Sex and Marital Therapy, 39*, 410–427. doi:10.1080/0092623X.2011.644652

- Mattson, R. E., Rogge, R. D., Johnson, M. D., Davidson, E. K. B., & Fincham, F. (2013). The positive and negative semantic dimensions of relationship satisfaction. *Personal Relationships, 20*, 328–355. doi:10.1111/j.1475-6811.2012.01412.x
- McClelland, S. I. (2011). Who is the “self” in self reports of sexual satisfaction? Research and policy implications. *Sexual Research and Social Policy, 8*, 304–320. doi:10.1007/s13178-011-0067-9
- Metts, S., & Cupach, W. R. (1989). The role of communication in human sexuality. In K. McKinney & S. Sprecher (Eds.), *Human sexuality: The societal and interpersonal context* (pp. 139–161). Westport, CT: Ablex Publishing.
- Miller, S. A., & Byers, E. S. (2004). Actual and desired duration of foreplay and intercourse: Discordance and misperceptions within heterosexual couples. *Journal of Sex Research, 41*, 301–309. doi:10.1080/00224490409552237.
- Miller, P. J., Niehuis, S., & Huston, T. L. (2006). Positive illusions in marital relationships: A 13-year longitudinal study. *Personality and Social Psychology Bulletin, 32*, 1579–1594. doi:10.1177/0146167206292691
- Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and Personal Relationships, 25*, 889–922. doi:10.1177/0265407508096700
- Morokoff, P. J., & Gilliland, R. (1993). Stress, sexual functioning, and marital satisfaction. *The Journal of Sex Research, 30*, 43–53. doi:10.1080/00224499309551677
- Murray, S. L. (1999). The quest for conviction: Motivated cognition in romantic relationships. *Psychological Inquiry, 10*, 23–34. doi:10.1207/s15327965pli1001_3

- Murray, S. L., Griffin, D. W., Derrick, J. L., Harris, B., Aloni, M., & Leder, S. (2011). Tempting fate or inviting happiness? Unrealistic idealization prevents the decline of marital satisfaction. *Psychological Science, 22*, 619–626. doi:10.1177/0956797611403155
- Murray, S. L., & Holmes, J. G. (1997). A leap of faith? Positive illusions in romantic relationships. *Personality and Social Psychology Bulletin, 23*, 586–604. doi:10.1177/0146167297236003
- Murray, S. L., Holmes, J. G., Bellavia, G., Griffin, D. W., & Dolderman, D. (2002). Kindred spirits? The benefits of egocentrism in close relationships. *Journal of Personality and Social Psychology, 82*, 563–581. doi:10.1037/0022-3514.82.4.563
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996a). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology, 71*, 1155–1180. doi:10.1037/0022-3514.71.6.1155
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996b). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*, 79–98. doi:10.1037/0022-3514.70.1.79
- Murstein, B. I. (1972). Physical attractiveness and marital choice. *Journal of Personality and Social Psychology, 22*, 8-12. doi:10.1037/h0032394
- Nicolson, P., & Burr, J. (2003). What is “normal” about women’s (hetero) sexual desire and orgasm? A report of an in-depth interview study. *Social Science and Medicine, 57*, 1735–1745. doi:10.1016/S0277-9536(03)00012-1

- Overall, N. C., & Fletcher, G. J. O. (2010). Perceiving regulation from intimate partners: Reflected appraisal and self-regulation processes in close relationships. *Personal Relationships, 17*, 433–456. doi:10.1111/j.1475-6811.2010.01286.x
- Prause, N., & Graham, C. A. (2007). Asexuality: Classification and characterization. *Archives of Sexual Behavior, 36*, 341–356. doi:10.1007/s10508-006-9142-3
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S.W. Duck (Ed.), *Handbook of personal relationships* (pp. 367–389). New York, NY: Wiley.
- Renaud, C., Byers, E. S., & Pan, I. (1997). Sexual and relationship satisfaction in mainland China. *Journal of Sex Research, 34*, 399–410.
doi:10.1080/00224499709551907
- Rusbult, C. E., Olsen, N., Davis, J. L., & Hannon, P. A. (2001). Commitment and relationship maintenance mechanisms. In J.H. Harvey & A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement* (pp. 87–113). Mahwah, NJ: Lawrence Erlbaum.
- Rusbult, C. E., Van Lange, P. A. M., Wildschut, T., Yovetich, N. A., & Verette, J. (2000). Perceived superiority in close relationships: Why it exists and persists. *Journal of Personality and Social Psychology, 79*, 521–545. doi:10.1037/0022-3514.79.4.521
- Rusbult, C. E., Zembrodt, O. M., & Gunn, L. K. (1982). Exit, voice, loyalty, and neglect: Responses to dissatisfaction in romantic involvements. *Journal of Personality and Social Psychology, 43*, 1230–1242. doi:10.1037/0022-3514.43.6.1230
- Sánchez-Fuentes, M. M., Santos-Iglesias, P., & Sierra, J. C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology,*

14, 67–75. doi:10.1016/S1697-2600(14)70038-9

Segrin, C., Hanzal, A., & Domschke, T. J. (2009). Accuracy and bias in newlywed couples' perceptions of conflict styles and the association with marital satisfaction. *Communication Monographs, 76*, 207–233.

doi:10.1080/03637750902828404

Scheibehenne, B., Mata, J., & Todd, P. M. (2011). Older but not wiser—Predicting a partner's preferences gets worse with age. *Journal of Consumer Psychology, 21*, 184–191. doi:10.1016/j.jcps.2010.08.001

Schumm, W. R., Paff-Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., & Bugaighis, M. A. (1986). Concurrent and discriminant validity of the Kansas Marital Satisfaction Scale. *Journal of Marriage and Family, 48*, 381–387. doi:10.2307/352405

Simms, D. C., & Byers, E. S. (2009). Interpersonal perceptions of desired frequency of sexual behaviours. *The Canadian Journal of Human Sexuality, 18*, 15–25.

Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior, 15*, 97–120. doi:10.1007/BF01542219.

Swann, W. B., De La Ronde, C., & Hixon, J. G. (1994). Authenticity and positivity strivings in marriage and courtship. *Journal of Personality and Social Psychology, 66*, 857–869. doi:10.1037/0022-3514.66.5.857

Tennov, D. (1979). *Love and limerence: The experience of being in love*. New York, NY: Stein and Day.

Tucker, J. S., & Anders, S. L. (1999). Attachment style, interpersonal perception accuracy, and relationship satisfaction in dating couples. *The Society for*

Personality and Social Psychology, 25, 403–412.

doi:10.1177/0146167299025004001

Turner, C. F., Ku, L., Rogers, S. M., Lindberg, L. D., Pleck, J. H., & Stonenstien, F. L. (1998). Adolescent sexual behaviour, drug use, and violence: Increased reporting with computer survey technology. *Science*, 280, 867–873.

doi:10.1126/science.280.5365.867

Tyron, G.S. (2003). A therapist's use of verbal response categories in engagement and nonengagement interviews. *Counseling Psychology Quarterly*, 16, 29–36.

doi:10.1080/0951507021000050168

Watson, D., Hubbard, B., & Wiese, D. (2000). Self–other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity.

Journal of Personality and Social Psychology, 78, 546–558. doi:10.1037/0022-3514.78.3.546

Whisman, M. A., Beach, S. R. H., & Snyder, D. K. (2008). Is marital discord taxonic and can taxonic status be assessed reliably? Results from a national, representative sample of married couples. *Journal of Consulting and Clinical Psychology*, 76,

745–755. doi:10.1037/0022-006X.76.5.745

Winston, R. (2004). *Human*. London, England: Dorling Kindersley.

Yeh, H. C., Lorenz, F. O., Wickrama, K. A. S., Conger, R. D., & Elder, G. H. (2006).

Relationships among sexual satisfaction, marital quality, and marital instability at midlife. *Journal of Family Psychology*, 20, 339–343. doi:10.1037/0893-

3200.20.2.339

Young, M., Denny, G., Luquis, R., & Young, T. (1998). Correlates of sexual satisfaction

in marriage. *The Canadian Journal of Human Sexuality*, 7, 115–127.

Vita
Lucia Novakova

EDUCATIONAL INSTITUTIONS

M.A., Psychology, 2013
Masaryk University
Brno, Czech Republic

Erasmus Exchange, Psychology, 2009-2010
Aarhus University
Aarhus, Denmark

PROFESSIONAL POSITIONS HELD

Research Assistant, University of Kentucky, 2014-2016
Intern Therapist, University of Kentucky Family Center, 2015-2016
Intern Therapist, Garden Springs Elementary School, 2015
Intern Therapist, Leestown Middle School, 2015-2016
Recruitment Coordinator, Menlo Logistics, Prague, CR, 2014
Production Lead, Menlo Logistics, Prague, CR, 2013
Intern, Translation.ie, Dublin, IR, 2012

SCHOLASTIC AND PROFESSIONAL HONORS

Alice P. Killpatrick fellowship, University of Kentucky, 2016
Red Diploma honors (Summa Cum Laude equivalent), Masaryk University, 2013