

An examination of the links between marital satisfaction, decoding accuracy and conflict

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Abstract

Marital satisfaction plays an important role in maintaining a healthy marriage. One of the major factors affecting satisfaction is communication, thus it is also important to understand the factors involved in communication like non-verbal decoding accuracy and conflict engagement that can affect spouses' satisfaction with their marriage. The associations between marital satisfaction, non-verbal behaviour decoding accuracy and conflict engagement develop a greater understanding of how these constructs work together to affect satisfaction. This will be examined using a sample of 50 heterosexual couples from the north-eastern states using a longitudinal within-subjects design. We expect dissatisfied couples would be less accurate decoders, leading to increased levels of conflict engagement, and thus lower satisfaction, while satisfied couples would be more accurate decoders, leading to stable levels of conflict engagement, and thus stable or increased satisfaction. The findings from this study will provide important and valuable information, which can be used to improve therapeutic services, like couples counselling.

Keywords: Communication, conflict, marital satisfaction;

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1. Introduction

Constructive and effective communication is an important aspect of all relationships and serves a particular importance in marital relationships. The importance of good communication skills for improving marital satisfaction and relationship quality has been consistently demonstrated throughout the literature (Eğeci & Gençöz, 2006; Johnson et al., 2005; Karahan, 2019; Li et. al, 2018). Additionally, negative interactions between partners are negatively associated with various measures of relationship quality and increase the risk of the potential for divorce (Stanley, Markman, & Whitton, 2002). A number of studies have also found that teaching and improving an individual's communication skills can positively impact marital satisfaction and quality. For example, reducing destructive communication methods, like criticism, contempt, defensiveness and stonewalling, has been shown to improve marital quality between distressed couples (Carroll, Hill, Yorgason, Larson, & Sandberg, 2013). In addition, the important role of constructive communication in a couple's overall marital satisfaction, conflict, more specifically, couple's engagement in and resolution of conflict, has been linked to marital satisfaction.

Much of the research examining the interaction between conflict and marital satisfaction has linked increased conflict and negative communication with lower levels of marital satisfaction in which findings in the literature suggest this association is unidirectional in nature (Li et. al, 2018; Lavner, Karney, & Bradbury, 2016). Additionally, studies examining the effects of intervention programmes meant to improve conflict resolution skills have found that improving such skills also improved marital satisfaction. One study, in which heterosexual couples took part in an intervention to improve communication skills, found that couples engaged in less unhealthy listening modes (superficial, selective, defensive and finger tapping), withdrawn behaviour, engaged in less conflict and improved men's ability to express emotions (Karahan, 2019). The findings from this study demonstrate the role of non-verbal communication, like some forms of unhealthy listening modes, and the effect it can have on marital relationship satisfaction.

1.1. The role of non-verbal communication in conflict and marital satisfaction

More often than not, when people think of communication they often default to thinking about verbal communication, or the sharing of information between individuals by using speech. While the importance of verbal communication between married couples cannot be denied, it is important to consider the effect non-verbal communication or non-linguistic transmission of information through visual, auditory, tactile or kinaesthetic channels. Non-verbal communication can include facial expressions, eye contact, touching, posture, tone of voice and even the way a person dresses. Two key components of non-verbal communication include encoding, which is the generation of information such as facial expressions, gestures and postures, and decoding, which is the interpretation of this received information.

In particular, the importance of accurate decoding of a spouse's non-verbal behaviour has been demonstrated throughout the literature. More specifically, the literature has shown that deficits in the ability to accurately decode a spouse's non-verbal behaviour predict lower levels of marital satisfaction (Koerner & Fitzpatrick, 2002; Yoo & Noyes, 2016). One study testing the effects of accurate facial recognition on relationships between couples found that the ability to recognise facial expressions of negative emotions was related to higher levels of relationship satisfaction (Yoo & Noyes, 2016). Another study found that, in particular, husbands' decoding of wives' non-verbal behaviour was more predictive of marital satisfaction than wives' decoding (Koerner & Fitzpatrick, 2002). These findings indicate that the ability to decode spouses' non-verbal behaviour

affects interpersonal communication between couples, which may lead to increases in couples' conflict engagement.

1.2. The relationship between conflict and decoding accuracy

As evidenced in the literature, the ability to accurately decode spouses' non-verbal behaviour also has an effect on conflict engagement and behaviour. For the purpose of the current study, conflict engagement refers to the use of negative and destructive communication behaviours (e.g., criticism, withdrawal/avoidance and defensiveness) during interpersonal interactions. Couples who were accurate at recognising facial emotions used less conflict-engaging behaviours during conflicts, which related to greater relationship satisfaction (Yoo & Noyes, 2016). Another study, examining the effectiveness of emotion-focused couples' treatment, which addresses issues related to the inability to recognise emotions, demonstrated that improving these skills among couples led to decreases in marital problems and increases in marital satisfaction (Rostami, Taheri, Abdi, & Kermani, 2014). These results suggest that spouses' inability to accurately decode their spouses' may result in increases in marital conflict, consequently, leading to lower marital satisfaction overall.

Although findings from these previous studies, which are consistent with other similar findings, support the idea that non-verbal decoding abilities are predictive of later relationship satisfaction, some research has suggested that relationship satisfaction may also predict later decoding accuracy. In other words, being unsatisfied in a relationship, thus creating a negative perspective of the relationship, results in inaccurately decoding non-verbal behaviour more negatively and vice versa. For example, one study found that satisfaction predicted later accuracy, as opposed to accuracy predicted later relationship satisfaction (Noller & Feeney, 1994). Researchers have suggested that this finding, i.e., dissatisfaction leads to a decrease in decoding accuracy, may be due to distorted perceptions of the spouse's messages, which may be a by-product of the negative perception of intention and physiological arousal during conflict (Noller & Feeney, 1994). These two conflicting findings suggest that the relationship between decoding accuracy and marital relationship satisfaction may be bidirectional or even a cyclic relationship.

1.3. Decoding accuracy between intimate partners

Research has shown that people are better able and more accurate in decoding non-verbal behaviour of people they are close to rather than a stranger. One study, which examined the accuracy of reading non-verbal cues of emotion between close friends, less close friends and strangers, found that friends were more accurate than strangers at identifying the senders' emotions (Sternglanz & DePaulo, 2004). Similar findings have been observed in studies examining the ability for spouses, as opposed to a stranger, to more accurately decode their partner's non-verbal cues and behaviour. For example, one study, which examined non-verbal communication accuracy in married couples and also compared spouses and strangers' accuracy, found that the spouses did better than the strangers at decoding the facial expressions of their partners (Sabatelli, Buck, & Dreyer, 1982). These findings suggest that couples should be more accurate in decoding each one's non-verbal cues and behaviour; however, research has indicated that this accuracy is highly dependent on marital satisfaction and the level of marital distress. Being less satisfied in one's marriage and having higher levels of marital distress have been shown to affect couple's abilities to accurately decode their spouse's non-verbal behaviour.

Gottman et al. (1976) specifically demonstrated that marital satisfaction and distress appear to be affected by decoding abilities. In their study examined distressed and non-distressed couples

as they made decisions on high- and low-conflict tasks, Gottman et al. (1976) found that distressed couples were more likely to code their partner's behaviour more negatively than their partner had intended the behaviour to be and that distressed couples emitted more negative, rather than positive, behaviour. In another study, examining the relationship between the ability for spouses to understand each one's non-verbal behaviour and later marital satisfaction, Gottman and Porterfield (1981) found significant differences between husbands and wives. The findings from this study showed that dissatisfied heterosexual marriages have husbands who are less emotionally responsive to their wives, which consequently predicts her emotional behaviour (Gottman & Porterfield, 1981). An investigation of the positive and negative social reinforcement behaviours exchanged between distressed and non-distressed marital couples and strangers even found stranger dyads engaged in more positive interactions than did distressed marital dyads (Birchler, Weiss, & Vincent, 1975). Additionally, consistent with Gottman and Porterfield's (1981) findings, research also suggests that distressed couples may engage in less positive interactions, which may exacerbate or promote increases in conflict. For example, one study found that distressed couples may withdraw during conflicts (Stanley et al., 2002); this may result in unresolved conflict.

Research has also found that distressed couples' inaccuracies in decoding non-verbal behaviour may be rooted in their inclination to judge their spouse's non-verbal behaviour more negatively and engage in more destructive behaviours during interactions, as well as the presence of gender differences. Koerner and Fitzpatrick (2002) examined the relationship between accurate non-verbal decoding of positive and negative emotions attributed to either relational (i.e., they reflect on the partner and the relationship) or non-relational (i.e., they reflect on factors unrelated to the relationship) factors and spouses' marital adjustment. The findings suggested that accurate decoding of relational positive emotions and non-relational negative emotions was associated with greater marital satisfaction, especially when this allowed partners to maintain a positive image of the relationship (Koerner & Fitzpatrick, 2002). The husband's ability to accurately decode emotions and their response was found to be particularly predictive of marital success (Koerner & Fitzpatrick, 2002). Faure, Righetti, Seibel, and Hofmann (2018) further demonstrated these negative partner judgements through longitudinal study examining the short-term effects of implicit, unconscious, partner evaluations on behaviour. The findings indicated that implicit evaluations are positively correlated with marital satisfaction and greater conversation satisfaction, which is mediated by couples' engagement in more constructive non-verbal behaviour (Faure et al., 2018). Birchler et al (1975) also found that distressed married couples engaged in more daily aversive and avoidance behaviour and significantly more daily conflict than non-distressed couples.

These findings suggest that couples with a tendency to inaccurately judge their partner's non-verbal behaviour negatively may then communicate less constructively and engage in less positive dyadic behaviours, consequently resulting in more marital conflict, and thus leading partners to make even more inaccurate judgements of their partners' non-verbal behaviour over time. In other words, marital dissatisfaction causes inaccurate decoding of spouses' non-verbal increases in negative dyadic behaviour, thus leading to increases in conflict and greater marital dissatisfaction. This pattern then creates a maladaptive and a destructive marital relationship.

1.4. Patterns of decoding of non-verbal behaviour and marital satisfaction over time

Previous literature indicates that there may be an observable pattern of behaviour that develops between married couples, in which differences in individual decoding accuracy and

marital satisfaction separate satisfied couples from dissatisfied couples. Evidence has suggested that patterns of non-verbal behaviours, between married couples, may affect subsequent partner interactions (Sabatelli et al., 1982). These patterns of behaviour also appear to be even more predictive of later behaviours between married couples than the amount of time couples have been cohabitating together (Sabatelli et al., 1982). For example, more positive unconscious evaluations of spouses' non-verbal behaviour were found to be related to increases in constructive behaviour towards the spouse, which was related to higher levels of marital satisfaction (Faure et al., 2018). Regarding decoding abilities over time, relationship satisfaction has been shown to be a much greater predictor of later accuracy, as opposed to accuracy being predictive of later satisfaction (Noller & Feeney, 1994). This link may be the result of dissatisfaction leading to distorted perceptions of the spouses' messages (Noller & Feeney, 1994). The findings from these studies further suggest, in correspondence with other findings, that dissatisfied couples may be more prone to negatively judge each one's non-verbal behaviours, resulting in increases in conflict and increases in feelings of dissatisfaction in which the cycle then repeats itself.

1.5. The current study

Although previous literature has demonstrated the existence of a pattern of behaviour between married couples, in which marital satisfaction or dissatisfaction may affect non-verbal decoding accuracy, which then affects conflict engagement and thus affecting satisfaction or dissatisfaction, from which the cycle repeats, no previous research has examined this phenomenon directly. The current study will investigate this pattern through a longitudinal examination, in three waves, of satisfied and dissatisfied couples' decoding accuracy, conflict engagement and later satisfaction. It is expected that satisfied couples, at some time, will be more accurate in decoding their spouse's non-verbal behaviour, resulting in lower levels of conflict engagement and the same or increased satisfaction in later waves; satisfied couples will also remain relatively stable in their ability to accurately decode their spouse's non-verbal behaviour. It is expected dissatisfied couples, at some time, will be worse at accurately decoding their spouse's non-verbal behaviour, thus engaging in more conflict and increased feelings of dissatisfaction in later waves; these couples' decoding accuracy will likely decline over time as increased dissatisfaction further increases the tendency for spouses' perceptions of their spouses' non-verbal messages to be distorted.

2. Methods

The methodology for the proposed study has been chosen to in order to acquire information and demonstrate a pattern linking marital satisfaction, spousal decoding accuracy and conflict engagement over time. Past research has examined the links between these constructs in pairs, but has not examined how marital satisfaction, decoding accuracy and conflict engagement all work together. Additionally, past research has only examined these constructs at one time point, while the proposed study will examine these constructs at three separate time points. The proposed study has two main hypotheses based on the literature, which indicates the following: marital satisfaction may impose unconscious biases when judging non-verbal behaviour; inaccurate decoding of spouses' non-verbal behaviour causes increases in conflict engagement; and conflict engagement leads to greater marital dissatisfaction.

Hypothesis One: (1a) At time 1, satisfied couples will make more accurate judgements of their spouses' non-verbal behaviour, which will result overall in lower levels of conflict engagement

compared to dissatisfied couples; (1b) satisfied couples, at time 1, will report decreases or stability in conflict engagement and their levels of satisfaction will remain stable or increase over time.

Hypothesis Two: (2a) At time 1, dissatisfied couples will make less accurate judgements of their spouses' non-verbal behaviour, which will result in higher levels of conflict engagement compared to satisfied couples; (2b) dissatisfied couples, at time 1, will report increases in conflict engagement and their levels of satisfaction will decrease over time.

2.1. Participants

A minimum of 50 married, heterosexual couples were recruited for this study from north-eastern U.S. states. Participants in the proposed study were recruited via personal approach or through various websites and social networks. Inclusion criteria for this study include participants have been cohabiting for no more than 2 years. Although previous research found that cohabitation length did not affect decoding accuracy (Sabetelli et al., 1982), this study could not discern individual differences because it used a between-subject design; however, the within-subject design of the proposed study will. Participation compensation began at \$20 after the first collection of data, and increased by \$20 for each subsequent data collection, due to the longitudinal nature of the study.

2.1.1. Attrition

Due to the longitudinal nature of the proposed study and the involvement of married couples, it is likely some attrition will be present due to the divorce of couples and will not be further included in the data collection for study. It is expected that these couples will be identified as dissatisfied couples at time 1. Thus, if possible, the researchers would collect and document reasons for dropping out of the study.

2.2. Measures

2.2.1. Locke–Wallace Short Marital Adjustment Test

Couples' level of marital satisfaction or dissatisfaction was assessed using the Locke–Wallace short marital adjustment test, which has been shown to successfully discriminate between happily married and troubled or divorced couples (Sabatelli et al., 1982).

2.2.2. Marital Communication Scale

Non-verbal accuracy was assessed on three occasions using the marital communication scale, a set of ambiguous messages sent by spouses to each other in a standardised situation (Noller & Feeney, 1994). This scale comprises two sets, one designed for husbands to send and one for wives, of 10 ambiguous messages (see Table 1 for an example). Based on these messages, a description of the situation in which the couple is to imagine themselves, and the intention (positive, neutral or negative) the encoder is supposed to convey, spouses will be required to send 30 communications using words set by the researchers. For each word, one spouse must encode, while the other decodes for one of three possible intentions, based on the non-verbal behaviour accompanied, the words are capable of communicating. For example, the phrase 'What are you doing?' could be perceived as meaning either (a) I'm just interested to know what you are doing (neutral intention), (b) How many times have I asked you not to do that? (negative intention) or (c) I am really pleased to see you doing that (positive intention). This measure will enable researchers to examine the couple's abilities to accurately decode each one's non-verbal behaviour.

2.2.3. Conflict and Problem-Solving Scale

Conflict engagement will be assessed on three occasions using the conflicts and problem-solving scale, used by Li et al. (2018) to assess constructive and destructive conflict resolution strategies. Constructive and destructive strategies are assessed using a series of subscales in which partners are asked to indicate how often they engage in specific conflict resolution behaviours on a 4-point Likert scale ranging from 1 (never) to 4 (often). Constructive strategies will be assessed using the 8-item collaboration subscale (e.g., 'Try to reason with the other person'). Destructive strategies will be assessed using the following subscales: avoidance (e.g., 'Try to ignore the problem'); stalemate (e.g., 'Sulk, refuse to talk and give the silent treatment'); verbal aggression (e.g., 'Name-calling, cursing or insulting'); and physical aggression. This measure will indicate each couple's level of conflict engagement.

2.3. Procedure

A researcher will meet with each married couple in their home one time to collect the data at times 1, 2 and 3, which will occur approximately 2 years apart. Meeting within the couple's home will allow the researcher to observe the participants within a more natural setting and will hopefully reduce overall attrition of the study. Upon the first arrival at the participants' home, the researcher will go over and have each participant sign the informed consent form.

The following procedures were the same for all three time points. First, participants were asked to complete the Locke–Wallace short marital adjustment test. Next, participants were seated facing each other in a chair and were given verbal instructions on how to complete the marital communication scale by the researcher. Participants were given the appropriate materials and asked to complete the task, which the researcher observed. Lastly, participants completed the conflict and problem-solving scale. The researcher then provided the participants with their compensation before leaving.

3. Expected results

Data were analysed using two statistical analyses. First, repeated measures analysis of variance was conducted to compare mean changes over time. Second, an independent samples *t*-test determined the group differences between couples identified as satisfied or dissatisfied at time 1.

Table 1. Example of cards used by encoders and decoders (Noller, 1980).

Section	Content
Encoding card	
Situation	You and your husband are sitting alone on a winter evening. You feel cold.
Intention	(a) You wonder if it's only you who are cold or if he is cold too.
Statement	I'm cold; aren't you?
Decoding card	
Situation	You and your husband are sitting alone in your living room on a winter evening. You feel cold.
Alternatives	(a) You wonder if it's only you who are cold or if he is cold too. (b) You want him to warm you with physical affection. (c) You're feeling that he is being inconsiderate in not having turned up the heat by now and you want him to turn it up straight-away.

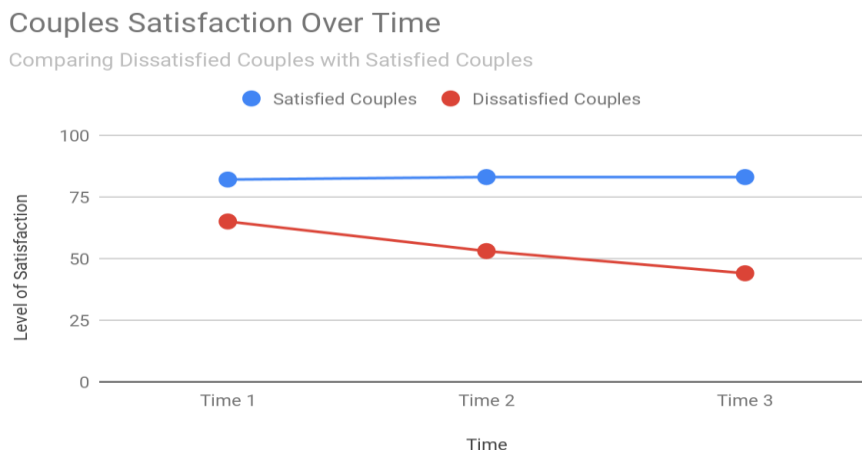


Figure 1. Levels of marital satisfaction in satisfied and dissatisfied couples over time

Regarding satisfied couples, compared with dissatisfied couples, the researchers anticipated the following results from the proposed study: higher levels of decoding accuracy and lower levels of conflict engagement at time 1; and stability in levels of decoding accuracy and conflict engagement at times 2 and 3. Overall, the researchers predict that satisfied couples’ levels of satisfaction will remain stable or increase over time (Figure 1).

Regarding dissatisfied couples, compared with satisfied couples, the researchers anticipated the following results: lower levels of decoding accuracy and higher levels of conflict engagement at time 1; and decreases in levels of decoding accuracy and increases in levels of conflict engagement at times 2 and 3. Overall, the researchers predict dissatisfied couples’ levels of satisfaction will continue to decrease over time (Figure 1).

3. Discussion

It is intended that the proposed study’s findings will contribute to the understanding of how marital satisfaction affects non-verbal decoding accuracy and conflict engagement in married couples. This study will elaborate on previous findings, which found dissatisfaction between married heterosexual couples led to a decrease in decoding accuracy (Noller & Feeney, 1994). Consequently, this may lead to an increase in couples’ conflict engagement, as demonstrated in one study which showed couples who inaccurately decoding their spouses’ non-verbal behaviour engaged in more conflict (Yoo & Noyes, 2016). As a result of this increase in conflict, dissatisfied couples may report greater dissatisfaction (Yoo & Noyes, 2016). Using a longitudinal within-subjects design will allow researchers to eliminate individual differences and follow couples over multiple years. This will enable researchers to examine how marital satisfaction, decoding accuracy and conflict work in a cycle to affect each other. Another strength of the proposed study, will be able to reduce attrition rates due to couples’ inability to travel to the laboratory themselves, by having a researcher conduct the study within the couples’ home.

Despite the strengths of the proposed study, there are a number of limitations. The proposed study’s sample will only be drawn from Northern U.S. states, thus the results may not be generalisable to populations residing outside of this region. This study will also only include heterosexual couples, due to limitations of the measures chosen for this study, in which the results will not be generalisable

to homosexual couples. The researchers suggest that future research replicates this study with these populations. Another limitation will be attrition; however, this is likely inevitable due to the longitudinal nature of the study.

Regardless of the limitations, the findings from this study will provide valuable information for therapeutic services, like couples therapy and intervention programmes, aimed at improving relationship satisfaction and communication. This study will increase practitioners' knowledge and understanding about how the mechanisms of relationship satisfaction, decoding accuracy and conflict engagement, which will allow them to appropriately address these issues with couples. The proposed study also highlights the importance of studying the links between relationship satisfaction, decoding accuracy and conflict engagement in a more diverse population, like regions outside the north-east and homosexual couples.

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Appendix A

Lock-Wallace Short Marital Adjustment Test

1. Check the dot on the scale line below which best describes the degree of happiness, everything considered, of your present marriage. The middle point, "happy," represents the degree of happiness which most people get from marriage, and the scale gradually ranges on one side to those few who are very unhappy in marriage, and on the other, to those few who experience extreme joy or felicity in marriage.

0	2	7	15	20	25	35
•	•	•	•	•	•	•
Very Unhappy	Happy				Perfectly Happy	

State the approximate extent of agreement or disagreement between you and your mate on the following items. Please check each column.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
2. Handling family finances	5	4	3	2	1	0
3. Matters of recreation	5	4	3	2	1	0
4. Demonstrations of affection	8	6	4	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	15	12	9	4	1	0
7. Conventionality (right, good, or proper conduct)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with in-laws	5	4	3	2	1	0
10. When disagreements arise, they usually result in: husband giving in 0, wife giving in 2, agreement by mutual give and take 10.						
11. Do you and your mate engage in outside interests together? All of them 10, some of them 8, very few of them 3, none of them 0.						
12. In leisure time do you generally prefer: to be "on the go" —, to stay at home —? Does your mate generally prefer: to be "on the go" —, to stay at home —? (Stay at home for both, 10 points; "on the go" for both, 3 points; disagreement, 2 points.)						
13. Do you ever wish you had not married? Frequently 0, occasionally 3, rarely 8, never 15.						
14. If you had your life to live over, do you think you would: marry the same person 15, marry a different person 0, not marry at all 1?						
15. Do you confide in your mate: almost never 0, rarely 2, in most things 10, in everything 10?						