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UNIVERSITY OF ALBERTA

THE ROLE OF ATTRIBUTIONS IN MARRIAGE: AN EXPERIMENTAL ANALYSIS

(C)

BY

SERENA WAI-JING LEUNG

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of MASTERS OF SCIENCE.

DEPARTMENT OF FAMILY STUDIES

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ABSTRACT

Attributions individuals make for their spouse's positive and negative behaviours were manipulated experimentally to examine their impact on the subsequent levels of marital satisfaction, positive feelings towards spouse, and love for spouse. One hundred and forty-one married individuals, 59 males and 82 females, were randomly assigned to either a Positive Attributions Condition and completed a questionnaire that was intended to lead them to make positive attributions for their spouse's behaviours, or a Control Condition and completed a questionnaire that allowed them to make attributions they normally would make for their spouse's behaviours. Three dependent measures, the Kansas Marital Satisfaction Scale, the Positive Feelings Questionnaire, and the Rubin's Love Scale were administered to measure the Individuals in the effects of the manipulation. Positive Attributions Condition were expected to score higher on the three dependent measures when compared to individuals in the Control Condition. As expected, an analysis of variance revealed significant main effect for initial levels of marital satisfaction. Individuals with higher initial levels of marital satisfaction scored higher on the Kansas Marital Satisfaction Scale, the Positive Feelings Questionnaire, and the Rubin's Love Scale. However, no significant main effect was found for the experimental treatment, nor were any interaction effects significant. explanations could have accounted for the nonsignificant findings in this study. Either the experimental manipulation was not successful in manipulating attributions for spouse's behaviours, or the experimental treatment may have been successful in altering attributions in the positive direction but the dependent measures were not sensitive enough to detect these changes. Explanations of each of the above possibilities Suggestions for improving on the were discussed. design to further test the relationship between attributions and marital satisfaction were presented. Lastly, implications of this research for marital therapy were discussed.

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CHAPTER 1

INTRODUCTION

Marital distress is a pervasive problem affecting many adults in their lifetime. In fact, it is one of the most common reasons adults seek psychological help (Veroff, Kulka & Douvan, 1981). Marital distress not only affects the emotional well-being of married individuals but also their physical health (Bloom, Asher, & White, 1978). To understand marital distress and the factors that contribute to marital problems, social scientists have long devoted themselves to examining a number of variables that are characteristic of distressed marriages. Researchers assume that acquiring an understanding of marital distress and building theories about the development and maintenance of marital dysfunction will generate knowledge and techniques that can be used to alleviate marital distress in clinical practice.

Early exploratory studies focused on examining a large number of factors believed to be important to the understanding of marital quality. Some of the variables examined included the length of marriage, age at time of marriage, number of children present in the marriage, personality factors, social status, education level, income, religion, role expectations, wife's employment outside of the home, and so forth (Bauman, 1967; Dyer and Luckey, 1961;

Gover, 1963; Hurley and Palonen, 1967; Hurvitz, 1965; Luckey and Bain, 1970; Monahan, 1961; Murstein and Glaudin, 1966; Orden and Bradburn, 1969). Age at marriage for both husbands and wives, higher occupational status, higher incomes and more education for husbands, and husband-wife similarities in socio-economic status, age, and religion, as well as affectional rewards such as esteem for spouse, sexual enjoyment, and companionship have all been identified as variables correlated with marital satisfaction. These early surveys, however, lacked an adequate conceptual framework. Only a small number of them were guided by well formed hypotheses. Moreover, the research also suffered from a lack of consistency in the definition of marital quality. The concept of marital quality was defined and operationalized in a variety of ways. Terms used to capture the concept of subjective state of the marital relationship ranged from "happiness", "success", and "satisfaction" to "adjustment". The numerous instruments used to measure marital quality or satisfaction often had questionable reliability and validity. Furthermore, each of the vast number of variables examined, when taken individually, at best only accounted for less than one-third of the variance in marital happiness (Hicks and Platt, 1970).

In the late 1960's and early 1970's, with the rise in the popularity of reinforcement theory and behaviorism, some researchers turned from doing general surveys of

isolated variables to studying overt behaviours of married couples. Interactional patterns, communication styles and conflict resolution styles were amongst the most frequently studied variables (eg., Gottman, Markman, & Noraruius, 1977; Vincent, Friedman, Nugent, & Messerly, 1979; Vincent, Weiss, & Birchler, 1975). In general, these studies found that maritally distressed couples, when compared to nondistressed ones, exhibited more negative communication, more negative non-verbal cues, higher levels of negative reciprocity, and that their behaviours were often more predictable to their partners (Gottman, Notarius, & Markman, 1977; Margolin & Wampold, 1981; Billings, 1979; Birchler, Weiss, & Vincent, 1975; Vincent, Friedman, Nugent, & Messerly, 1979; Vincent, Weiss, & Birchler, 1975). Although the study of overt behavioral variables in marriage provided valuable information in the understanding of communication patterns, conflict resolution styles, and other behaviours of couples, researchers began to realize the importance of examining other domains in marriage and subsequently expanded the study of marital satisfaction to covert concepts as well.

More recent studies on marital quality that have examined covert factors in marriage focused on affective, cognitive, and physiological factors such as moods, attributions, beliefs, and arousal patterns during marital interactions (Levenson and Gottman, 1983, 1985; Eidelson &

Epstein, 1982; Fincham & Bradbury, 1988b; Fincham, 1985a; Fincham, Beach & Nelson, 1987). Amongst these variables, cognitions have received the most attention.

In fact, five categories of cognitions have been identified as being significant to the understanding of marital dysfunction (Baucom, Epstein, Sayers, & Sher, 1989). The first category of cognition is the process of selective attention in the perception of marital events. Individuals in the same marriage often selectively register different aspects of the same events depending on their mood, needs and awareness. The second category of cognitions includes attributions or explanations concerning the cause of, and responsibility for, marital events. Spouses often seek to explain the reasons for events or behaviours in their marriage especially when the events and behaviours are unexpected, particularly unpleasant, or particularly pleasant. The third category of cognitions includes the beliefs individuals hold about what "should" and "should not" be happening in a marriage. Individuals entering marriage often bring with them beliefs regarding what a marriage and a spouse should and should not be like. beliefs are partly a result of experience with one's parents' marriage as well as social and cultural beliefs. The fourth category is the expectations or predictions of future marital events. Individuals often make predictions concerning what is going to happen based on past and present experiences. Lastly, the fifth category of cognition is the assumptions about correlations of marital events. Spouses often form hypotheses regarding what kind of behaviours are related to others as well as the nature of the relationship between events and behaviours.

Each of these five categories of cognitions is believed to be related to marital satisfaction (Baucom, Epstein, Sayers, & Sher, 1989). Individuals in distressed and non-distressed marriages differ in their cognitive patterns in terms of each of the five categories mentioned above (Eidelson & Epstein, 1982; Fincham & Bradbury, 1988a; Fincham, 1985a; Fincham, Beach & Nelson, 1987).

Among these five categories of cognitions, however, studies on attributions have generated the largest body of research and represent the most thoroughly investigated topic in marital cognitions. Research on attributions in marriage has focused mainly on causal explanations and responsibility attributions spouses make for events that occur in their marriage. Numerous correlational studies (eg, Epstein, Pretzer, & Flemming, 1987; Fincham & Beach, 1988; Baucom, Bell, & Duhe, 1982; Holtzworth-Munroe & Jacobson, 1985; Fincham, Beach, & Nelson, 1987; Fincham, Beach, & Baucom, 1987; Camper, Jacobson, Holtzworth-Munroe, & Schmaling, 1988) found that maritally distressed and non-distressed individuals differ in their causal attributions or explanations for marital events. Clear and distinct

patterns of causal and responsibility attributions have emerged from this research.

Specifically, individuals in distressed marriages have a tendency to make attributions that accentuate the destructive impact of negative marital events as well as attributions that discount or lessen the positive impact of positive marital events. Thus, negative partner behaviours tend to be viewed as intentional, stable and pervasive; whereas, positive behaviours are viewed as unintentional, unstable and rare by maritally distressed individuals. Individuals in non-distressed marriages, on the other hand, exhibit the opposite pattern of explaining marital events. These individuals tend to explain positive behaviours in a way that will enhance their positive impact and explain negative behaviours in a way that will lessen their negative impact. Thus, negative partner behaviours tend to be viewed as unintentional, unstable and rare; whereas, positive partner behaviours tend to be viewed as intentional, stable and pervasive. The distinct attributional patterns that characterize individuals in distressed marriages are referred to as distress-maintaining attributions or negative attributions. Whereas attributional patterns that characterize non-distressed individuals are referred to as relationship-enhancing attributions or positive attributions (Holtzworth-Munroe & Jacobson, 1985).

These distinct patterns of attributions for marital

events have not only been found repeatedly in empirical They have also been confirmed by the observations studies. of clinicians who work with distressed couples. Clinicians noted that couples seeking marital counselling often have rigid, distress-maintaining attributional patterns (Jacobson, 1984). Interestingly, these dysfunctional cognitive processes in distressed individuals are often autonomous and independent of the partner's behaviour (Holtzworth-Munroe & Jacobson, 1988a). Furthermore, these cognitive and perceptual processes often remain dysfunctional even with successful implementation of behavioral changes during therapy (Beach and Bauserman, These dysfunctional perceptual and cognitive processes interfere with changes in marital quality since the increase of positive behaviours during therapy may be attributed in a way that minimize their positive impact. Thus, numerous clinicians called for the integration of cognitive interventions (especially the modification of dysfunctional attributions) with traditional behavioral marital therapy (Beach and Bauserman, 1990; Berley and Jacobson, 1984; Epstein, 1982; Holtzworth-Munroe and Jacobson, 1988a; Jacobson, 1984; Schindler and Wollmer, 1984).

This emerging cognitive-behavioral approach to marital therapy combines a traditional behavioral approach with a focus on partner's cognitions in marriage. The goals in

such an approach include: 1) assisting the couple in acquiring behavioral skills (such as communication skills);
2) identifying unrealistic beliefs and expectations of one's partner and replacing these with more realistic ones; 3) altering the dysfunctional attributional patterns and helping couples make appropriate explanations for marital events; and, 4) assisting couples in evaluating the resources available to them to solve marital problems.

To modify dysfunctional or negative attributions, therapists employ techniques such as challenging the destructive attributions couples make by asking them to come up with alternative causes and exploring the possibility of each attribution (Berley and Jacobson, 1984). Therapists also reframe or relabel marital behaviours and present them in a more appropriate and positive context or encourage spouses to check out the validity of their interpretation of the event. A multiple causation model is emphasized so that the clients will realize that the attributions they hold for any particular event are not the only explanation available (Holtzworth-Munroe and Jacobson, 1988a). Role playing quided by the therapists is also used to allow couples to make attributions that they otherwise would not make. This provide a way for couples to experience the impact of making positive attributions in sessions (Berley & Jacobson, 1984) and hopefully will encourage them to generalize this behaviour to daily living. All these techniques operate on

the basic assumption that by altering attributions, individuals will view both their partners and their partners' behaviours in a more positive light resulting in an increase in their marital satisfaction.

Thus far, both researchers and clinicians have assumed that attributions in some way initiate, contribute to, or at least maintain marital distress and that by altering dysfunctional attributions, marital satisfaction will increase. And yet most of the studies conducted to date are only correlational in nature and can only provide support for the existence of an association between attributional patterns and marital satisfaction. The direction of the association, however, has not been adequately addressed in an empirical fashion. To date, only two published studies have directly examined the possibility that attributional patterns contribute to marital satisfaction in a causal relationship (Fincham & Bradbury, 1987b; Seligman, Fazio & Zanna, 1980). In an experimental study on dating couples, Seligman and his colleagues (Seligman, Fazio & Zanna; 1980) found that altering attributions about reasons for the existence of a dating relationship actually affected the amount of loving expressed for one's partner and the likelihood of the continuation of the relationship. In a longitudinal study of married couples, Fincham & Bradbury (1987b) found that wives' attributional patterns predicted their marital satisfaction 12 months later. These two

studies both provide some evidence that attributions are, in fact, responsible for influencing satisfaction within a close relationship.

Empirical support for the argument that attributions initiate, or contribute to marital distress still remains scarce. Yet evidence that such a causal relationship exists is critical to justify the practice of therapists using cognitive strategies to alleviate marital distress. To address the gap between research and practice, this research attempted to demonstrate in a carefully controlled laboratory setting that altering attributional patterns affects marital satisfaction and how positive one feels about one's partner. The present research employed an experimental design in which participants were randomly assigned to either a positive attribution condition or a control condition. In the positive attribution condition, participants were led to make exclusively positive attributions for their partner's behaviours. In the control condition, participants were allowed to make the type of attributions they normally would make for their partner's behaviours. Three dependent measures were then taken to examine the effect of the experimental treatment: 1) a global measure of marital satisfaction, 2) a measure of positive feelings towards their relationship and their spouse, and 3) a measure of the amount of love for their spouse. This research sought to determine if making

positive attributions within a marital context would lead to higher levels of marital satisfaction, more positive feelings towards one's spouse, and greater love for one's spouse. In addition, this research also sought to determine whether the experimental treatment might differentially affect husbands and wives and might differentially affect individuals depending on their initial levels of marital satisfaction.

This chapter addressed the state of the research in marital satisfaction from the beginning of survey studies to observational studies to the examination of covert cognitive, affective and physiological factors in marriage. Specific focus was put on the study of marital cognitions especially attributions in marriage and how this is related to marital satisfaction. Brief summaries of correlational research and clinical observations in attributional patterns of maritally distressed and non-distressed individuals were given. The inadequacy of evidence in assuming that altering attributions in the positive direction was then discussed and a brief proposal was presented to address this issue.

CHAPTER 2

THEORETICAL FRAMEWORK

To understand more about attributions in marriage and their role in marital distress, researchers have applied attribution theory, a social psychological theory, to explain why certain types of attributions are dysfunctional in marriage while others are functional. Attribution theory attempts to explain how individuals interpret things that happen around them, and especially how they perceive and infer the causes of their own as well as others' behaviours. Attributions serve not only as a way to understand the actions of others but also serve the important function of predicting others' behaviours and ultimately to be able to exert a certain degree of control over them (Heider, 1957; Kelly, 1967). For the purpose of this research, attributions was defined as the outcomes of the profess through which individuals seek to determine the causes of others' behaviours (Baron & Byrne, 1987).

Heider in his analysis of attributions (Heider, 1957) focused on four particular questions: 1) how individuals think and feel about others; 2) how they perceive and form expectations about others; 3) how they react to the actions of others; and 4) how they infer motivations and intentions of others. Since his focus was on everyday life events and was limited to the conscious level, his theory was labelled

as naive or common sense psychology. He proposed that psychological needs, emotional states and motivations often influence the way individuals infer causes of others' behaviours. Moreover attributions are often arrived at based on insufficient information. It is impossible for any individual to possess and process all the information available at a given moment to come up with a rational and accurate attribution. Thus it is common for attributions to be irrational or subjective in nature.

According to Heider, there are two general types of attributions. The first type of attributions is external attributions. Individuals can attribute other's behaviours to something that is external to the actor, such as physical or social circumstances or some stimulus in the environment, thus making an external attribution. Alternatively, individuals can make internal attributions, that is, they can attribute behaviours to something that is internal to the actor such as his or her abilities, motivations, attitudes, emotional states or personality. Applying Heider's analysis to marriage, a wife may consider her husband's non-responsiveness as a reflection of his reaction to something in his environment such as work demands (external attributions). In viewing attributions this way, perhaps it is easier to understand why certain types of attributions are detrimental to a marital relationship while others are beneficial. Behaviours attributed to internal

traits (personality factors) of the actor will likely be stable over time and will manifest in almost all situations. Whereas causes attributed to external factors (circumstances) will likely be temporary and may not influence all situations in a marriage.

Attributions are quite often made with only a limited amount of available data. This may result in biases or errors in the attribution process (Baron & Byrne, 1987). One of most common errors individuals make in attributions is the actor-observer bias (Jones and Nisbett, 1971). This is the tendency to view one's own behaviours as having external or situational causes and others' behaviours as having internal causes. For example, when an individual has a car accident, being the actor of the behaviour, he or she will likely attribute it to an external cause such as the road condition. On the other hand, when individuals observe another people in accidents, he or she, being an observer, will attribute the same behaviour to an internal cause such as the carelessness of the driver.

Another error individuals often make is the selfserving bias. Self-serving bias is the tendency to make
internal attributions for one's positive behaviours or
outcomes but to blame external causes for negative ones.
For example, when individuals do something positive, such as
doing well on a test, they tend to take credit for the
behaviour and to attribute the cause of the behaviour as

internal to themselves. However, when their actions are negative, they tend to attribute the cause as situational or external to themselves.

At first glance, attribution theory appears almost common sense. However, psychologists have been examining attributions systematically and have distinguished two distinct types of attributions: causal attributions and responsibility attributions. In addition, they have identified three dimensions along which causal attributions vary (Bradbury and Fincham, 1990). These three basic dimensions of causal attributions include the locus, the stability, and the globality of the cause. Locus refers to the perceived origin of the behaviour which can either be internal or external to the actor, not unlike the concepts described by Heider. Internal attributions are those that assign the cause as being intrinsic to the actor such as their personality. External attributions, on the other hand, are those that assign situations or circumstances as the cause of a behaviour. Stability, on the other hand, refers to how consistent the cause is across time. Stable attributions can be exemplified by the use of "always" and "never" when spouses refer to each others' behaviours. When a distressed wife says that her husband always comes home late, and never understands her feelings, she is implying that her husband's behaviour is stable over time. globality refers to the consistency of the cause across

different situations. Causes of behaviours can global, affecting other areas of marriage, or specific, that is, limited to one particular marital situation. A husband may think that his wife criticises him regardless of what he does, thus making a global attribution. On the other hand, he may think that his wife only criticises him in the area of tardiness, thus making a specific attribution.

Within the category of responsibility attributions, the dimensions of intentionality and blame have been identified. Behaviours can be seen as intentionally acted out with the purpose of hurting or pleasing others or can be seen as unintentionally acted out. For example, a wife may view her husband's being late as retaliation against her constant nagging (intentional) or, just as likely, she may think that it is simply due to a traffic jam (unintentional). Blame, on the other hand, simply refers to the perception of the actor as being blameworthy or praiseworthy. By applying attribution theory to empirical studies on attributions and marital distress, researchers have generated a significant body of literature that documents the correlation between attributional style and marital satisfaction. Individuals in satisfied marriages differ significantly from individuals in distressed marriages in the type of attributions they make for events that take place in their marriage. As mentioned in the previous chapter, it was found that individuals in distressed marriages have a tendency to view

negative partner behaviours as intentional, stable, global, blameworthy and intentional. Positive behaviours, on the other hand, are viewed as unintentional, unstable, specific, unintentional and not praiseworthy. The implications of such a view is that negative behaviours, being seen as caused by stable factors, is a characteristic of one's spouse and will likely persist in the marriage; while positive events took place only by accident and will unlikely be repeated deliberately. It is no wonder that these couples tend to feel less satisfied about their marriage.

In non-distressed marriages, however, individuals tend to explain positive behaviours in a way that will enhance their positive impact and explain negative behaviours in a way that will lessen their negative impact. That is, negative partner behaviours tend to be viewed as unintentional, unstable and rare; whereas, positive partner behaviours are generally considered intentional, stable and pervasive. Thus individuals in happy marriages view positive events as characteristic of their relationship and negative events as being occasional and accidental. Such a view, naturally, would be related to higher levels of satisfaction in marriage.

This chapter began with a discussion of Heider's early theory of attribution, and of the biases that can result from the process of making attributions. Then, the

expansion of Heider's work to account for different dimensions in marital attributions was discussed. Distinctions between causal and responsibility attributions were made and the concepts of locus, globality, stability, intentionality, and blameworthiness were presented with illustrations from marital situations. In the next chapter, a detailed account of the past research in marital attributions will be presented and research hypotheses derived from attribution theory as well as current empirical and clinical literature will be proposed.

CHAPTER 3

LITERATURE REVIEW

By the late 1970's, researchers began to use attribution theory to understand the way spouses explain each others' behaviours and to examine the relationship of particular attributional styles to marital satisfaction. This research can be categorized into one of four methodological approaches: correlational studies; clinical studies; longitudinal studies; and, experimental studies.

The correlational studies compared the attributional patterns made by maritally distressed individuals with those who are non-distressed and examined the distinct attributional patterns made by each of these groups. Clinical studies compared married individuals in different modalities of marital therapy, such as behavioral therapy, cognitive therapy, and non-specific support groups with individuals who are either on a waiting list or not in therapy at all. The levels of marital satisfaction both before after therapy were measured to allow researchers to compare the effectiveness of different therapeutic approaches. Amongst these studies, some focused on comparing the effectiveness of changing attributions in cognitive therapy with other types of therapy to determine the value of such an approach. In longitudinal studies, attributions and marital satisfaction have been measured at two or more points in time. By measuring the degree to

which the variables at different points in time predict one another, researchers can draw implications as to the direction of influence the variables have on each other. Finally, experimental studies have manipulated attributional patterns and observed their effect on some measure related to marital quality.

In this chapter, the key studies in each of these categories will be reviewed. The value of these studies, as well as their limitations, in understanding and describing the nature of the relationship between attributional style and marital satisfaction will be explored.

CORRELATIONAL STUDIES

A series of correlational studies conducted from 1981 to 1990 found distinct differences in the attributional patterns of distressed and happy couples. These correlational studies compared attributional patterns in clinical or distressed couples with those who were non-distressed. Patterns of attributions were examined by presenting individual spouses with either real or hypothetical marital events and asking them to rate the cause of the events as well as their partner's responsibility in the situation along several attributional dimensions (Baucom, Sayer, & Duhe, 1989; Camper, Jacobson, Holtzworth-Munroe, & Schmaling, 1988; Holtzworth-Munroe & Jacobson, 1988b; Fincham & Beach, 1988; Fincham, Beach &

Nelson, 1987; Fincham & Bradbury, 1987a). These dimensions of attribution included: the locus of event, the stability of the cause over time, the globality of the cause across situations, the intentions of the spouse, the assignment of blame, and the motivation of the partner. Locus of the event refers to where the cause of the behaviour is located. This can be either internal or external to the actor. Stability measures the perceived possibility of the same cause being responsible for future marital events. Subjects rated the cause as being unstable, meaning that they do not expect the same cause to be responsible for the same behaviour in the future, or as stable, meaning that they expect the cause to be responsible for future behaviours. In terms of globality, attributions are rated as global when spouses consider the causes as being influential in all or most marital events. Lastly, in attributing responsibility, spouses viewed their partner's behaviour as either intentional or unintentional, they assigned or did not assign blame or praise to their partner, and viewed the behaviour as motivated by selfish or unselfish concerns.

Findings indicate that the attributional dimension that most successfully distinguishes distressed couples from non-distressed couples is globality (Holtzworth-Munroe & Jacobson, 1985; Fincham, Beach & Nelson, 1987; Fincham, Beach, & Baucom, 1987; Baucom, Sayer, & Duhe, 1989; Camper, Jacobson, Holtzworth-Munroe, & Schmaling, 1988). Whether

individuals view their partner's behaviour as globally influential in all marital situations or as specific to only certain marital events is associated with the level of marital satisfaction. Interestingly, distressed couples, when compared to non-distressed ones, are more likely to view the causes of positive partner behaviours towards them as being specific to the marital situation it occurred in and to view negative partner behaviours as globally influential across marital situations (Baucom, Sayers, & Duhe, 1989; Camper et al., 1988; Fincham, Beach & Nelson, 1987). Two other dimensions, locus and stability, are also significant in differentiating between distressed and nondistressed couples (Baucom, Sayers, & Duhe, 1989; Camper et al., 1988; Fincham, Beach & Nelson, 1987). Maritally distressed individuals have the tendency to view the causes of their partners' negative behaviours as located in the partner and stable over time, and the causes of their positive behaviours due to outside circumstances and unstable over time. However, not all studies support this finding (Holtzworth-Munroe & Jacobson, 1988a; Fincham & Beach, 1988; Fincham & Bradbury, 1987).

Lastly, motivations (unselfish vs. selfish) and intentions (intentional vs. unintentional) attributed to the behaviour (Camper et al., 1988; Fincham, Beach & Nelson, 1987; Fincham, Beach & Baucom, 1987), as well as the blameworthiness of the partner's actions (Fincham, Beach &

Nelson, 1987; Fincham, Beach & Baucom, 1987) also differ for maritally distressed and non-distressed individuals.

Distressed individuals when compared with non-distressed individuals were more likely to consider partners' positive behaviours as unintentional, motivated by selfish concerns and less worthy of praise. Whereas their partners' negative behaviours were seen as intentional, motivated by selfish concerns and blameworthy (Fincham, Beach & Nelson, 1987; Fincham, Beach & Baucom, 1987).

Thus, it is clear from these studies that there does exist a relationship between attributions and marital satisfaction with some dimensions of attributions being more significantly associated with marital distress than others. High marital satisfaction is correlated with attributing positive partner behaviours to internal, stable, global reasons, being intentional, unselfishly motivated and praiseworthy, and attributing negative partner behaviours to external, unstable, specific reasons, being unintentional, not selfishly motivated, and not blameworthy. By contrast, low marital satisfaction is associated with attributing positive partner behaviours to external, unstable, specific reasons, being unintentional, selfishly motivated, and not praiseworthy; and attributing negative partner behaviours to internal, stable, global reasons, being intentional, selfishly motivated and blameworthy.

This multitude of studies clearly documents the existence of a relationship between attributional style and marital satisfaction, However, it is unclear from this research whether a causal relationship exists between attributional style and marital satisfaction and what type of causal relationship exists. It seems intuitively plausible that attributional style could affect marital satisfaction. And, indeed, there is an implicit assumption on the part of the cognitive therapists that the attributional pattern is one of the significant factors influencing the level of happiness experienced in a marriage. Such a relationship is depicted in Model 1 in Figure 1. Attributional patterns are portrayed as one of the contributing factors that influence marital satisfaction. Yet from correlational data, one could reasonably argue for a causal relationship in the opposite direction (Model 2). Marital satisfaction may be a contributing factor that affects attributional patterns. That is, depending on the level of marital satisfaction one experiences, one might be more inclined to make only certain types of attributions.

Still other relationships between the two variables are possible. For example, marital satisfaction and attributions could be mutually influential (Model 3). That is, the types of explanations made may, to a certain extent, determine the level of marital satisfaction and this in turn

may feedback to the cycle and perpetuate the types of attributions made. A fourth possibility is that attributions may affect marital satisfaction through some third intervening variable (Model 4). A possible intervening variable is the type of behaviours that occur in one's marriage. One experimental study (Fincham & Bradbury, 1988b) examined how attributions influence the behaviours of married couples. However, marital satisfaction was not examined as a dependent variable in this study.

FIGURE 1. MODELS OF THE RELATIONSHIP BETWEEN ATTRIBUTIONS AND MARITAL SATISFACTION

1.	A -> MS	Attributions as a Contributing Factor
2.	MS -> A	Marital Satisfaction as a Contributing Factor
3.	A <=> MS	Mutually Influential
4.	A -> ? -> MS	Intervening Variable
5.	MS -> ? -> A	Intervening Variable
6.	-> A	Spurious Relationship

(No Contribution)

A denotes Attributional Patterns MS denotes Marital Satisfaction

-> MS

-> denotes the Direction of Influence

? denotes a third unknown variable

Model 5 depicts the opposite of model 4. Marital satisfaction may influence an intervening variable, which in turn, affects attributional patterns. Finally, there may not be a causal relationship between the two variables at all. Instead, a third variable such as deposition could be influencing both marital satisfaction and attributions thus producing a spurious relationship (Model 6).

Given only correlational data, any of these models are possible. Thus it is necessary to examine studies that employed alternative methodological approaches to further understand the relationship between marital satisfaction and attributions.

CLINICAL STUDIES

clinical research has compared the level of marital satisfaction of individuals before and after marital therapy. In general, clinical studies have an advantage over correlational studies in that they can measure changes in marital satisfaction especially for individuals undergoing therapy in which changes in attributions have been a goal.

The earliest study suggesting the effectiveness of altering attributions on marital satisfaction was conducted by Margolin and Weiss (1978). These researchers compared the levels of marital satisfaction of distressed couples seeking therapy who were in one of four groups: a control

group; a nonspecific supportive group; a skill modification group; or, a skill modification plus cognitive restructuring group. After two 2-hour sessions, individuals in the skill modification plus cognitive restructuring group reported significantly higher levels marital satisfaction than the other three groups. Thus, Margolin and Weiss claimed that changes in attributions are important for decreasing marital distress.

Unfortunately, more recent clinical studies have not produced clear results supporting the notion that altering the dysfunctional attributional patterns of maritally distressed individuals increases marital satisfaction any more than other therapeutic interventions. For example, a study by Epstein, Pretzer and Flemming (1982) compared the effectiveness of communication modification therapy with the effectiveness of cognitive restructuring therapy on increasing marital satisfaction. The goal of cognitive restructuring intervention was to change dysfunctional thoughts and attributions in maritally distressed individuals. Results revealed that, although the cognitive group was less likely to attribute marital problems to the intentional behaviour of their partners than was the communication group, the two groups did not differ in marital satisfaction at the end of treatment. In this research, altering attributions through therapy was not superior to modifying communications in increasing marital

satisfaction.

More recently, a study by Baucom & Lester (1986)
examined distressed couples seeking marital counselling in
the following groups: a waiting list control group; a 12session skill modification program that aim at improving
communications and problem solving; a 12-session cognitive
restructuring program that helps couples to alter
dysfunctional attributions and expectations. The mean level
of marital satisfaction of the three groups before and after
therapy was then compared. Relative to the control group,
marital satisfaction increased significantly more in the two
treatment groups. However, there was no difference in
marital satisfaction between the cognitive group and the
skill training group. This study demonstrated that therapy
directed at altering attributions worked at least as well as
skill training to alleviate marital distress.

The results from these clinical studies, on the whole, are inconsistent and indicate that the effectiveness of cognitive restructuring therapy is not particularly superior when compared with other modes of therapy. Although the single study by Margolin and Weiss (1978) supported the finding that cognitive modification in addition to skill training is more effective than skill training alone, we still cannot be certain that changes in attributions accounted for the higher level of marital satisfaction in that group. The finding of this study is unfortunately

confounded by the fact the cognitive treatment is combined with skills modification. Perhaps the increase in marital satisfaction in this case was a result of the combination of the two therapeutic interventions. Moreover, we cannot be certain that altering attributions actually accounted for the higher level of marital satisfaction in that group since attributional patterns were not measured directly either before or after therapy. The effectiveness of cognitive therapy may simply be due to factors other than cognitive restructuring. Thus, there is no clear evidence that changes in attributional patterns occurred over the course of therapy and, therefore, it is questionable to claim that attributional style is the factor responsible for the increase in marital satisfaction.

Other methodological problems also render the findings inconclusive. Random assignment of couples to control and treatment groups was not employed. Participants in the treatment groups and the control groups may have differed in terms of their initial level of marital satisfaction. Thus, post treatment differences may or may not be due to therapy alone. Furthermore, since participants were from rather distressed marriages, some or all of the increase in marital satisfaction may simply be due to regression to the mean. Although interesting results from clinical studies are inconclusive as to whether changing attributional styles is the factor accounting for increases in marital satisfaction.

LONGITUDINAL STUDIES

In longitudinal research, attributions and marital satisfaction are measured at two or more points in time. By measuring the degree to which the variables at different points in time predict each other, researchers can draw implications as to the direction of influence the variables have on one another.

A review of the literature revealed a single longitudinal study of this type. Fincham and Bradbury (1987b) had married couples individually report their level of marital satisfaction on the Marital Adjustment Test (Locke & Wallace, 1959). Then the researchers had couples report on the perceived cause of two real marital disagreements and three hypothetical marital events. cause of these real and hypothetical events were then rated in terms of three attributional dimensions: locus (internal or external); globality across different marital situations (global or specific); and, stability over time (stable or unstable). A third non-attributional cognitive measure dealing with unrealistic expectations was also taken to see if it plays a role in predicting marital satisfaction. These measures were taken twice at 12 months apart. The data were examined separately for husbands and wives using regression analyses to determine which of the three variables at Time 1 best predicted marital satisfaction at Time 2.

Results obtained revealed that marital satisfaction at Time 1 was the strongest predictor of marital satisfaction at Time 2. That is, marital satisfaction remained fairly stable during the 12 month period. For wives, however, when attribution scores at Time 1 were also included in the regression analysis, there was a significant increase in the power to predict marital satisfaction at Time 2. This suggests that attributions contribute to marital satisfaction for wives. The same result was not found for the husbands. Since marital satisfaction at Time 1 and 2 were highly correlated, the authors argue that it is impressive that attribution scores at Time 1, when considered together with marital satisfaction at Time 1, could improve over the ability of marital satisfaction at Time 1 alone to predict marital satisfaction at Time 2. This supports the notion c. a causal relationship between attributional patterns and marital satisfaction. Interestingly, marital satisfaction at Time 1 did not predict attributions at Time 2 for either husbands or wives. This suggests a uni-directional relationship with attributional style impacting on marital satisfaction rather than visa versa for wives.

EXPERIMENTAL STUDIES

The most powerful methodology to examine causal relationships is, of course, experimental. A review of the

published literature did not reveal a single experimental study that examined the effect of attributions on marital satisfaction. There was, however, one related study on dating couples.

Seligman, Fazio and Zanna (1980) examined the attributions college students made for the reasons they were dating their partner. Nineteen undergraduate dating couples who volunteered for the study were randomly assigned to one of three experimental conditions: intrinsic condition, extrinsic condition, or control condition. Both individuals in a couple were assigned to the same condition. intrinsic condition, participants were led to make intrinsic attributions for dating their partners. Intrinsic reasons for dating are those that are internal to the couple. For example, individuals go out with each other because they have a good time with each other, or because they like each others' personality. In the extrinsic condition, participants were led to make external attributions for dating their partners. External reasons included reasons such as dating a person so that others will think more highly of one, or because the partner knows a lot of important and influential people. Participants were led to make either external or internal attributions by rank ordering a list which included only external or only internal reasons for dating their partners. The remaining participants were assigned to a control group and were not

required to rank order any list. Rubin's Loving and Liking Scale (Rubin, 1973), and a single item assessing likelihood of marriage served as dependent measures.

Seligman, Fazio, and Zanna (1980) found that participants who were led to make internal attributions reported more love towards their partner on Rubin's Love Scale and were more likely to think that they would marry their partner than participants in either the extrinsic or the control conditions. There were, however, no significant differences among the levels of liking reported by the three groups.

This study is important since it demonstrated in a laboratory setting that the type of attributions one makes for the existence and continuation of a dating relationship influences the level of affect one feels towards their partner. However, since participants in this study had only been dating for 12 months or less, these findings may not be applicable to long term relationships such as marriages. Furthermore, the types of attributions made in this study were participants' personal reasons for the existence of their dating relationships and not for their partners' behaviours.

SUMMARY

Even considering all existing empirical research, the question of whether changing attributions can alter the

level of satisfaction in marriage remains to be addressed. Although correlational studies have documented a relationship between attributional patterns and marital satisfaction, they have not established the existence of a causal link. Clinical outcome studies, on the other hand, can be used to establish whether altering attributions can account for a change in marital satisfaction. Unfortunately, this research did not carefully measure and control for the changes in attributions and thus the increases in marital satisfaction witnessed in this research cannot be firmly accounted for by a change in attributions. Lastly, both longitudinal and experimental studies, while suggestive of a causal relationship between attributional style and marital satisfaction, need to demonstrate this specific causal relationship with a married population and need to identify if the relationship holds true for both genders.

Accordingly, the present research employed a carefully controlled laboratory study in which the attributional patterns of married individuals were manipulated in the positive direction and the impact on marital satisfaction, positive feelings, and love for partner were compared to those in a control condition where attributions were not altered. The major hypotheses derived theoretically and tested for in this study were:

- Overall, individuals in the Positive Attribution
 Condition (i.e., those who were led to make
 positive attributions for their partner's
 behaviours) will report higher levels of marital
 satisfaction on the Kansas Marital Satisfaction
 Sale than will individuals in the Control
 Condition.
- Overall, individuals in the Positive Attribution Condition will report more positive feelings about their relationship and their partners on the Positive Feelings Questionnaire than will individuals in the Control Condition.
- Overall, individuals in the Positive Attribution
 Condition will report more love towards their
 partners on the Rubin's Love Scale than will
 individuals in the Control Condition.

Since individuals in highly satisfied marriages were found in past research to make a large number of positive attributions for their partners' behaviours already, it was predicted that the experimental manipulation would not have as much of an effect for these individuals as it would have for those in less satisfied marriages. Accordingly, from findings in past research, it was predicted that:

- equally high levels of marital satisfaction on the Kansas Marital Satisfaction Scale in the Positive Attribution Condition and in the Control Condition; whereas, martially distressed individuals will report higher levels of martial satisfaction on the Kansas Martial Satisfaction Scale in the Positive Attribution Condition than in the Control Condition.
- equally high levels of positive feelings towards their spouse on the Positive Feelings

 Questionnaire in the Positive Attribution

 Condition and in the Control Condition; whereas, martially distressed individuals will report higher levels of positive feelings towards their spouse on the Positive Feelings Questionnaire in the Positive Attribution Condition than in the Control Condition.
- and Maritally non-distressed individuals will report equally high levels of loving towards their spouse on the Rubin's Love Scale in the Positive Attribution Condition and in the Control Condition; whereas, martially distressed

individuals will report higher levels of loving towards their spouse on the Rubin's Love Scale in the Positive Attribution Condition than in the Control Condition.

Moreover, since gender differences were found by

Fincham and Bradbury (1987b) in their longitudinal study on

marital satisfaction and attributions, gender was examined

as a separate variable in this research. Specifically they

found that attributions predicted later marital satisfaction

for wives only and not for husbands. Thus, based on this

past finding, it was predicted that:

- Husbands will report equally high levels of marital satisfaction on the Kansas Marital Satisfaction Scale in the Positive Attribution Condition and in the Control Condition; whereas, wives will report higher levels of martial satisfaction on the Kansas Martial Satisfaction Scale in the Positive Attribution Condition than in the Control Condition.
- 2) Husbands will report equally high levels of positive feelings towards their spouse on the Positive Feelings Questionnaire in the Positive

Attribution Condition and in the Control
Condition; whereas, wives will report higher
levels of positive feelings towards their spouse
on the Positive Feelings Questionnaire in the
Positive Attribution Condition than in the Control
Condition.

3) Husbands will report equally high levels of loving towards their spouse on the Rubin's Love Scale in the Positive Attribution Condition and in the Control Condition; whereas, wives will report higher levels of loving towards their spouse on the Rubin's Love Scale in the Positive Attribution Condition than in the Control Condition.

In this chapter, a detailed presentation of the past research in marital attributions was presented. Each of the four types of research in studying attributions and its relationship with marital satisfaction, namely correlational, experimental, longitudinal, and clinical research, were discussed in terms of their validity as well as inadequacies in answering the present research question. Hypotheses for this thesis research were then derived from this body of literature as well as from the attribution theory presented in chapter 2.

CHAPTER 4

METHODOLOGY

OVERVIEW

An experiment was conducted to investigate the effects of altering causal attributions for a spouse's behaviour on an individual's love for their spouse, positive feelings for their spouse and marital satisfaction. To determine the level of marital satisfaction of each participant prior to the experimental manipulation of attributions, all participants completed Spanier's Dyadic Adjustment Scale (DAS). Participants were then randomly assigned to either a Positive Attribution Condition or a Control Condition. Participants in both conditions were required to consider several hypothetical scenarios of their spouse engaging in positive or negative behaviours toward them. All participants were then asked what the most likely reason or explanation was for their spouses's behaviour. Causal attributions were manipulated in the Positive Attribution Condition using a paper-and-pencil questionnaire which led participants to make a positive attribution in each hypothetical situation by limiting participant's choices of an attribution for their partner's behaviour to a list of only positive causal attribution responses. The effects of this attributional manipulation on marital satisfaction, positive feelings, and feelings of love for spouse were then measured.

SAMPLE

Pilot Study

manipulation before proceeding to conduct the research with a large sample, 19 participants (7 males and 12 females) were recruited to participate in a pilot study. Random assignment of participants into conditions resulted in eight females and five males in the Positive Attribution Condition and four females and two males in the Control Condition. These participants were recruited solely through marriage student housing and were made up of students from graduate and professional programs at the University of Alberta. The mean Dyadic Adjustment Score for this sample was 118.8.

Full Scale Study

One hundred and forty-one individuals were recruited for the full scale study with thirteen of these individuals participating as part of a married couple. Thirty-six individuals of the whole sample were obtained from University married student housing. Since there was only a limited number of potential participants in the housing complex, a second strategy was employed to obtain participants. Two advertisements running two weeks apart were placed in a major local newspaper soliciting volunteers for the study. The advertisements described the purpose and nature of the study and included a contact number for

interested participants. A total of 105 married individuals were recruited through these advertisements.

The final sample consisted of 59 males and 82 females with an mean Dyadic Adjustment Scale score of 114.1, ranging from 45 to 149. The mean age for wives was 36.3 years, ranging from 23 to 68 years. The mean age for husbands was 41.5 years, ranging from 26 to 71 years. The average number of years married was 13.7 years, with a range of 3.5 months to 42 years. The average number of children present in the marriage was 1.9, varying from zero to seven. Both husbands and wives had an average of a college or university education.

PROCEDURE

I) RECRUITING PARTICIPANTS

Potential participants who lived in University married student housing were contacted through a personal letter (see Appendix Ia) which explained that the study was investigating the way beliefs, expectations and feelings in marriage affected happiness in marriage. Involvement in the study was described as completing several questionnaires. The letter informed participants that their participation would include completing an enclosed questionnaire titled "Evaluating Your Marriage" at home. (This questionnaire was Spanier's Dyadic Adjustment Scale). The contact letter

clearly stated that participants were to complete this questionnaire individually without consulting with their spouse. The letter explained that participants would then be asked to come to campus to complete three other questionnaires that asked about their beliefs, expectations and feelings in marriage. The letter indicated that the oncampus session would take approximately 45 minutes. These potential participants were then contacted by telephone within three days of receiving a letter and were invited to participate in the study. A date and time was then set up for participants to complete the second part of the study on campus. Participants were reminded to bring the completed Dyadic Adjustment Scale.

Participants recruited through newspaper advertisements contacted the researcher by telephone to set up a date and time for participation in the study. A similar letter (Appendix Ib) was then sent to each of these participants along with a copy of the Dyadic Adjustment Scale and instructions for completion.

2) RANDOM ASSIGNMENT AND OBTAINING CONSENT

During the on-campus experimental sessions, small groups of approximately three to six participants met with the experimenter at the same time. Half of the participants were randomly assigned to the Positive Attribution Condition and the other half to the Control Condition. The complete

study included 33 males and 39 females in the Positive Attribution Condition and 26 males and 43 females in the Control Condition.

A brief verbal introduction (see Appendix III for a copy of these instructions) was then presented to the participants describing the study as a thesis research project that was examining behaviours, beliefs, and feelings in marriage and their relationship to marital happiness. It was then explained that they had already completed the first part of the study by completing the questionnaire on "Evaluating Your Marriage" at home. They were informed that they would be filling in three more questionnaires during the session. The participants were then given two copies of the consent form (see Appendix IV for a copy of the consent form). The experimenter read through this consent form orally with the participants and addressed any questions that the participants had. Participants signed the consent form before continuing on with the study.

A package containing three questionnaires was then given to each participant. Participants were instructed to complete the questionnaires in the order in which they were presented and were asked to read the instructions on each questionnaire carefully before responding to them. The package contained the following: 1) the questionnaire for manipulating attributions; 2) a questionnaire labelled the Marital Feelings Questionnaire which included the Kansas

Marital Satisfaction Scale, the Positive Feelings
Questionnaire, and the Rubin's Love Scale and a page with
several demographic questions; and, 3) the Beck Depression
Inventory¹ (refer to Appendix V, VI, VII and VIII for a copy
of these questionnaires). The participants were then told
to turn their package face down after completion, and were
instructed not to go back over and change any of their
responses. They were asked to wait until everyone had
finished completing their questionnaires so that the
experimenter would have the opportunity to tell them more
about the study and to answer any questions they might have.

4) MANIPULATING ATTRIBUTIONS

The manipulation of attributional style was accomplished through a paper-and-pencil questionnaire. Two versions of this questionnaire were employed in the study, one version for participants in the Positive Attribution Condition and another version for those in the Control Condition. Both versions of the questionnaire presented participants with eight hypothetical marital events.²

Participants in both conditions were instructed to imagine themselves in these eight different situations. In the Control Condition, participants were provided with an openended version of the questionnaire that allowed them to fill in their own attributions or explanations for each event (see Appendix V). No attempt was made to lead the

participant into making attributions of any specific type.

In the Positive Attribution Condition, participants were presented with a close-ended version of the questionnaire (Appendix VI). This version included the same eight hypothetical marital events as used in the Control Condition. However, after each hypothetical scenario, a list of three positive attributions for their spouse's behaviour was provided. Participants were instructed to choose the one alternative that they believed best explained their spouse's behaviour from the list. The alternatives for each hypothetical event were designed to reflect only positive attributions for their partner's behaviour by manipulating the four attributional dimensions of locus, globality, stability and intentionality. The alternatives for the positive events reflected internal, stable, global and intentional attributions for their partner's behaviours. Whereas the alternatives for negative events reflected external, unstable, specific and unintentional attributions. By limiting participants in the positive condition to only positive attributional alternatives for their partner's behaviours, it was hoped that the participants' attributional patterns would be temporarily altered in the positive direction. The procedure for manipulating attributional patterns followed a similar methodology employed by Seligman et al. (1980). The rationale behind such a procedure is that when participants were called to

respond to questionnaires they usually base their responses on two basic sources: 1) information available in the immediate situation; and, 2) memories of past situations (Salancik and Conway, 1975). By presenting participants with the immediately available information of a list of attributions that were exclusively positive it was likely that they would be led to make only positive attributions. Moreover, past marital situations involving positive attributions might be selectively recalled thus strengthening the experimental treatment.

The rationale behind the attributional manipulation was that it mimicked the process employed in cognitive marital therapy where maritally distressed individuals are encouraged to make more positive interpretations for their spouses' behaviours. Since cognitive therapeutic interventions that attempt to alter attributional patterns involve long periods of involvement in therapy, it was anticipated that the effects of altering attributional patterns in the present study would be only temporary.

5) COMPLETING THE DEPENDENT AND OTHER MEASURES

Immediately following the experimental manipulation, participants completed the Kansas Marital Satisfaction Scale, the Positive Feelings Questionnaire, and the Rubin's Love Scale (which together were called the Marital Feelings Questionnaire for the purpose of participants), a page of

demographic questions, and lastly, the Beck Depression Inventory.

6) DEBRIEFING

After the completion and collection of the questionnaires, participants were debriefed as to the purpose and design of the study (see Appendix IX for a copy of the debriefing). The experimenter first summarized what the participants had done during the session. questions were asked concerning the participants' reaction to the experimental manipulation in order to informally assess the effectiveness of the manipulation. participants were then informed of, and shown, the two different versions of the attributions questionnaire and the fact that they were randomly assigned the version they received. Participants in the positive condition were asked if they had found the alternatives in their version to be just of one particular type or not, thus giving the experimenter some idea whether participants suspected the manipulation. The experimenter then addressed the purpose of the manipulation and the importance of not revealing the true purpose of the study before participation. Lastly, the experimenter answered any questions that the participants had regarding the study. A thank you letter (Appendix X) was then presented to each participant providing them with a reference to a self-help book titled "Love is Never Enough"

by Aaron T. Beck on improving their marriage as well as a list of names of counselling agencies.

INDIVIDUAL DIFFERENCE MEASURES

Dyadic Adjustment Scale (DAS)

To categorize participants as distressed or non-distressed, all participants completed Spanier's Dyadic Adjustment Scale, a measure of marital satisfaction (see Appendix II). The Dyadic Adjustment Scale was chosen to distinguish between maritally distressed and non-distressed individuals since it is the most commonly used measure in attributional research (Baucom, Bell, & Duhe, 1982; Holtzworth-Munroe & Jacobson, 1985; Jacobson, McDonald, Follette, & Berley, 1985; Fincham, Beach, & Baucom, 1987; Camper, Jacobson, Holtzworth-Munroe, & Schmaling, 1988; Holtzworth-Munroe & Jacobson, 1988b).

The instrument is a self report measure containing 32 items with four subscales (Dyadic Consensus, Dyadic Cohesion, Affectional Expression and Dyadic Satisfaction). The scale has a internal consistency reliability of 0.96 (Spanier, 1976). Content validity was evaluated by experts and criterion-related validity was established by correlating scores with the external criterion of marital status (married or separated). The instrument also correlates highly with other measures of marital adjustment

such as the Locke-Wallace Marital Adjustment Scale (r=0.87) thus supporting its construct validity.

Demographics

Information regarding the characteristics of the participants was collected. This included: 1) the number years participants had been married, 2) the number of children present in the marriage, 3) the ages of any children, 4) the participants' highest level of education, 5) whether they were currently enroled as a student, 6) their program of study, 7) their gender, and 8) their age (Appendix VIII).

DEPENDENT MEASURES

1) Kansas Marital Satisfaction Scale (KMS)

To measure possible effects of the manipulation on global marital satisfaction, the Kansas Marital Satisfaction Scale (see Appendix VII, Part I, items 1 to 3) was used as a dependent measure. The Kansas Marital Satisfaction Scale is a three-item questionnaire that measures global marital satisfaction of married individuals (Schumm et al., 1986). The scale is highly correlated with the Dyadic Adjustment Scale (r=0.83) and is capable of distinguishing between maritally distressed and non-distressed individuals (Schumm et al., 1986).

2) Positive Feeling Questionnaire (PFQ)

To assess the amount of positive feelings participants feel towards their partners after the manipulation, Part one of O'Leary's Positive Feeling Questionnaire was used (Appendix VII, Part I, items 4 to 11). While the Kansas Marital Satisfaction Scale assessed general marital satisfaction, the Positive Feelings Questionnaire measured the affective domain of marital satisfaction.

On the Positive Feelings Questionnaire, participants were instructed to rate on a 7-point scale how positive or negative they feel about eight areas concerning their spouse and their marriage. Some of these areas included the future of the marital relationship, feelings concerning having married one's spouse, the degree of understanding one's spouse has, as well as the ability of one's spouse to put one in a good mood.

The Positive Feelings Questionnaire is a 17-item questionnaire constructed for assessing the overall level of positive affect an individual feels toward his or her spouse (O'Leary, 1987; O'Leary, Fincham & Turkewitz, 1983; Turkewitz & O'Leary, 1981). The instrument was originally designed to assess affect in distressed couples as well as changes in positive feelings during marital therapy. The instrument was found to be sensitive to and predictive of changes in positive feelings during marital therapy for women but not for men. A test-retest reliability of 0.93

with an interval of 1-3 weeks was reported with a sample of 43 participants (Spanier, 1976). The instrument correlates highly with Locke and Wallace's Marital Adjustment Test (r=0.86 for married respondents and r=0.88 for divorced respondents) (Spanier, 1976). In addition, a contrasted group comparison between clinical and non-clinical participants yielded significant differences (O'Leary, Finchem, & Turkewitz, 1983).

Only part I (8 items) of the questionnaire was used in this study since part II of the questionnaire measures the physical aspect of marriage such as feelings regarding touching, kissing, or having sexual relations with one's spouse. This part of the questionnaire was considered irrelevant to the present research and was therefore omitted as a dependent measure. A single item measuring the extent to which one's spouse makes one feels good about oneself was added to the Positive Feelings Questionnaire since this component was missing from the questionnaire.

3) Rubin's Love Scale

To measure possible changes in the degree of romantic love in marriage after the manipulation of attributions, the short version of Rubin's Love Scale was included as the third dependent measure (Rubin, 1973). This is a 9-item questionnaire in which respondents were instructed to rate the extent to which they agreed with 9 statements. This

measure was constructed for dating couples, and has been found to be sensitive to attributional changes in previous experimental research using a dating sample (Seligman, Fazio, & Zanna, 1980).

ETHICAL CONSIDERATIONS

The researcher employed the following steps in ensuring the confidentiality and rights of the participants. First, proposed research was submitted to the ethical review the committee in the Faculty of Home Economics to obtain ethical clearance. Second, potential participants were informed about the nature of the study in the initial contact letter (Appendix Ia & Ib), during telephone contact to schedule an on-campus session, and again at the beginning of the on-campus session prior to signing the consent form (Appendix IV). The purpose of the experimental treatment, however, was not disclosed to the participants before their participation since this might have influenced the impact of the treatment on the dependent measures. Written informed consent (Appendix IV) was obtained before participants proceeded to the second part of the study. Participants were informed of their option to withdraw from the study at any point in time. Anonymity of participants' responses was assured since participants were not required to identary themselves on any of the questionnaires. A numerical code

on the questionnaires served as the only way to match questionnaires completed by the same respondent, however, there was no way to match a name to the numerical code. Lastly, after collection of questionnaires, participants were debriefed as to the manipulation of attributions and the necessity for not disclosing this part of the study before participation (see Appendix IX for a copy of the debriefing). Concerns regarding participation in the study were addressed immediately after debriefing. No adverse effect was expected from the experiment since the attempted change in attributional patterns was only in a positive direction and was expected to be temporary.

LIMITATIONS OF STUDY

The purpose of this study was to investigate whether attributional patterns could influence global marital satisfaction, the level of positive feelings towards one's partner and love an individual has for his or her partner in an experimental situation. Thus, the study was not concerned with external validity in terms of claiming generalizability beyond laboratory situations to natural marital interactions. Another limitation was the selection of sample. The study employed a volunteer sample which may or may not be representative of the whole population. Some characteristics of the sample that may not represent those of the population may be the general level of marital

satisfaction, the extent of interest in marital research, the level of education, and the social economic status. Analyses of demographic factors revealed that the sample had a high level of marital satisfaction with less than 20% of the sample scoring as maritally distressed. The majority of the participants had a Dyadic Adjustment Score clustered around 110 to 120. Since the hypotheses predicted that the experimental treatment would have more effect on maritally distressed individuals, the under-representativeness of distressed individuals reduced the likelihood of finding an effect for the manipulation. The average level of education attained by participants in the sample was a college or university degree. Compared to the general population, this sample had a very high level of education, which, according to the claim by therapists that cognitive therapy has more effect on more highly educated individuals, would increase the likelihood of finding an effect for the manipulation. Lastly, since participation in the study is on a volunteer basis, almost all participants were highly motivated and interested in the research.

This chapter presented a detailed account of the research methodology including an overview of the design, the nature of the sample, procedures followed, specific instruments used, ethical considerations as well as the limitations of the study. In the following chapter, the results of this study will be presented.

Footnotes

¹The Beck Depression Inventory was included for other research purposes and was not part of the present study.

These events were adapted from the Spouse Observation Checklist (Weiss, Hops & Patterson, 1973) and were reconstructed into eight scenarios. Half of the eight hypothetical situations were positive events while the other half were negative events. The eight hypothetical marital events were similar to those in the two established instruments for measuring marital attributions namely, the Marital Attributional Style Questionnaire (Fincham, Beach & Nelson, 1987) and the Dyadic Attribution Inventory (Baucom, Sayers & Duhe, 1989).

CHAPTER 5

RESULTS

PILOT STUDY

Results from the pilot study revealed no significant difference on the initial level of marital satisfaction on the Dyadic Adjustment Scale between those individuals randomly assigned to the Control Condition (M=116.67) and those randomly assigned to the Positive Attribution Condition (M=115.15), $\pm(17)=0.50$, ns. Thus equal groups were created in terms of initial levels of marital satisfaction.

Effects of manipulating attributions

Marital Satisfaction. To determine the effects of manipulating attributions on general marital satisfaction, a \underline{t} -test for differences between the Control Condition and Positive Attribution Condition was conducted on the Kansas Marital Satisfaction Scale scores. Results indicated that participants in the Positive Attribution Condition reported significantly more marital satisfaction on this dependent measure (\underline{M} =19.00) than did participants in the Control Condition (\underline{M} =17.83), \underline{t} (17)=2.25, p<.05.

Positive Feelings Questionnaire. To determine the effects of manipulating attributions on the level of positive feelings in marriage, a \underline{t} -test for differences between the Control and Positive Attribution Conditions was conducted on scores on the Positive Feelings Questionnaire. Results indicate that participants in the Positive Attribution Condition reported more positive feelings toward their spouse (\underline{M} =55.66) than did participants in the Control Condition (\underline{M} =49.33), \underline{t} (17)=2.02, p<.05.

Rubin's Love Scale. To determine the effects of manipulating attributions on the amount of loving in marriage, a t-test for differences between the Control Condition and Positive Attribution Condition was conducted on scores on Rubin's Love Scale. Results indicate that participants' reports of degree of love for spouse in the Positive Attributions Condition (M=52.69) was not significantly different from participants' reports of degree of love for spouse in the Control Condition (M=49.00), t(17)=1.33, ns.

In sum, participants in the Positive Attribution

Condition scored significantly higher on the Kansas Marital

Satisfaction Scale and on the Positive Feelings

Questionnaire when compared to participants in the Control

Condition. The results of this pilot test were interpreted

as evidence of an effective experimental manipulation. Thus, a full scale study was conducted.

FULL SCALE STUDY

Random Assignment

To determine whether random assignment of participants to conditions in the full scale study successfully created two groups with equal levels of marital satisfaction, a test on the Dyadic Adjustment Scale scores between participants in the Control Condition and the Positive Attribution Condition was conducted. The analysis showed that there was no significant difference in marital satisfaction between the participants in the two experimental conditions, t(139)<1, ns. The average DAS score was 113.29 for the Control Condition and 114.89 for the Positive Attribution Condition.

Classifying Participants According to Levels of Initial Marital Satisfaction

To be compatible with past research and to compare possible differential effects of the manipulation for participants with different levels of marital satisfaction, the Dyadic Adjustment Scores of the sample were examined to determine the appropriate cut off scores for categorization.

Past research in the area of attributions in marriage (e.g., Holtzworth-Munroe and Jacobson, 1985; Jacobson, Mcdonald, Follette, & Berley, 1985; Fincham, Beach, & Baucom, 1987; Baucom, Sayers, & Duhe, 1989; Holtzworth-Munroe and Jacobson, 1988b) used either an individual score of less than 100 on the DAS, or a husband-and-wife combined score of less than 200 on the DAS as a criterion for distressed marriages. Originally, it was planned to classify individuals as maritally distressed or non-distressed by classifying all individuals scoring below 100 on the DAS as maritally distressed and all those scoring 100 and above as maritally non-distressed. However, since only 17% of the sample scored below the usual cut off score for being maritally distressed (DAS < 100), a median split was used instead to categorize participants for the purpose of analysis. Participants scoring 117 or below were categorized as being maritally less satisfied and those scoring 118 and above were considered maritally more satisfied. This split resulted in 72 participants in the less satisfied group and 69 participants in the more satisfied group.

Effects of manipulating attributions

Marital Satisfaction. To assess the effects of manipulating attributions on general marital satisfaction,

participants' scores on the Kansas Marital Satisfaction Scale were entered into a 2X2X2 (Experimental Condition X Initial Marital Satisfaction X Gender) analysis of variance. The analyses revealed no significant main effect for the experimental treatment, \underline{F} < 1, \underline{ns} . Participants in the Positive Attribution Condition did not report higher levels of marital satisfaction than those in the Control Condition. Not surprisingly, there was a main effect for level of Initial Marital Satisfaction, $\underline{F}(1,139)=45.09$, $\underline{p}<.001$. Participants with higher levels of Initial Marital Satisfaction (\underline{M} =19.94) scored higher on the Kansas Marital Satisfaction Scale than those with lower levels of Initial Marital Satisfaction (\underline{M} =16.33). No significant main effect was found for gender, \underline{F} <1, \underline{ns} . No significant interactions emerged from the analysis, F's<1, ns (refer to Appendix XI for means on the Kansas Marital Satisfaction Scale).

Positive Feelings Questionnaire. To assess the effects of manipulating attributions on positive feelings towards one's partner in marriage, participants' scores on Part I of the Positive Feelings Questionnaire were entered into a 2X2X2 (Experimental Condition X Initial Marital Satisfaction X Gender) analysis of variance. The analysis of variance on the 9-item questionnaire did not reveal a significant main effect for experimental treatment, F< 1, ns. Participants in the Positive Attribution Condition did not report higher

levels of positive feelings than those in the Control Condition. Again, there was an expected main effect fof Initial Marital Satisfaction F(1,139)=45.22, p<.001. Participants with high levels of Initial Marital Satisfaction scored higher on the Positive Feelings Questionnaire (M=58.19) than those with lower levels of Initial Marital Satisfaction (M=50.17). No significant main effect was found for gender, F<1,ns. Lastly, no significant interactions emerged from the analysis, F's<1,ns (refer to Appendix XII for means on the Positive Feelings Questionnaire).

Rubin's love scale. To assess the effects of manipulating attributions on the amount of love one feels toward their marital partner, participants' scores on t'e Rubin's Love Scale were entered into a 2X2X2 (Experimental Condition X Initial Marital Satisfaction X Gender) analysis of variance. The analysis revealed no significant main effect for the experimental treatment, F< 1, ns, or gender, F(1,139)=2.78, ns. As expected, there was a main effect for level of Initial Marital Satisfaction F(1,139)=14.80, p<.001. Participants with higher level of Initial Marital Satisfaction scored higher on the Rubin's Love Scale (M=55.45) than those with lower levels of Initial Marital Satisfaction (M=50.50). No significant interactions emerged from the analysis, F's< 1, ns (refer to Appendix XIII for

means on the Rubin's Love Scale).

This chapter presented the results from the analyses of the data. Specifically, the results from the pilot study indicated significant differences in marital satisfaction and positive feelings towards their spouse on the Kansas Marital Satisfaction Scale and the Positive Feelings Questionnaire respectively. The data from the full scale study, however, failed to provide support for such positive findings. The reasons for the non-significant findings will be discussed in the following chapter with a discussion as to improvement of the research and possible implication in terms of marital therapy.

CHAPTER 6

DISCUSSION

Although the findings from the pilot study supported the proposed hypotheses that individuals in the Positive Attribution Condition would report higher levels of marital satisfaction on the Kansas Marital Satisfaction Scale and would report more positive feelings towards one's partner on the Positive Feelings Questionnaire, results from the fullscale study failed to confirm these hypotheses. No significant main effect were found for the experimental treatment in the full-scale study. Individuals in the Positive Attribution Condition and individuals in the Control Condition did not differ significantly in terms of their subsequent levels of marital satisfaction, positive feelings towards their spouse, or love for their spouse. addition, analyses did not reveal any interactions between the experimental treatment and gender, level of initial martial satisfaction or education. Thus the full-scale study did not find support for any of the hypotheses. Why would the pilot test indicate that the experimental manipulation was effective and confirm predictions when the full-scale study found absolutely no evidence of any impact of the experimental manipulation on any of the dependent measures?

One reason might have been the nature of the sample. Participants in the pilot study were all students from graduate and professional programs at the University of Alberta and thus were highly educated. Since cognitive therapy is more effective with educated couples, this sample might have exaggerated the effect of the experimental manipulation. The full scale study, on the other hand, was made up of individuals recruited through the newspaper as well as students in married student housing. It is possible that individuals recruited through the newspaper with lower levels of education decreased the effectiveness of the manipulation which could have contributed to nonsignificant findings. An alternative explanation for the discrepancy in results between the pilot study and the fullscale study is that the findings from the pilot study was simply a statistical error. With a small sample, this is a possibility.

Given that the literature clearly points to a relationship between marital satisfaction and attributional patterns, with results from longitudinal studies suggesting a causal relationship, it was surprising that no support was found for the proposed hypotheses in this study. However, several reasons could have accounted for the lack of support for the hypotheses in the full-scale study.

Explanations for the present non-significant findings could be because: 1) the experimental treatment was <u>not</u>

successful in manipulating attributions for spouse's behaviour; or, 2) the experimental treatment was successful in altering attributions in the positive direction, however, other factors account for the non-significant findings. Each of these possibilities will be discussed in some detail.

Unsuccessful Experimental Manipulation

One explanation for the absence of any difference between the Control and Positive Attribution Conditions is that the experimental manipulation using the paper-andpencil questionnaire did not produce a change in attributions. Since no manipulation check was employed to check on the effectiveness of the manipulation, the possibility that the manipulation was unsuccessful must be considered. First, since hypothetical events were used in the manipulation, it may be that these events poorly reflected the behaviours of the participants' past experience with their spouse. If this was the case, then participants who had never experienced events similar to the hypothetical ones might have found them difficult to relate to and may not have been able to imagine themselves in the hypothetical situation. Thus even though they went through the process of selecting one of the positive attribution alternatives, the process itself might not have enough of an impact to alter their usual attributional pattern.

Secondly, perhaps the cognitive process of making attributions does not immediately and directly result from the observation of an event. Bradbury and Fincham (1990) in their model relating attributions, behaviours, and marital satisfaction, proposed that primary processing needs to occur subsequent to the observation of one's own behaviours as well as spouse's behaviours before making attributions concerning these behaviours. Since the experimental manipulation used in this study simply presented participants with a description of the events and then immediately asked them to choose from a list of three attributions without allowing for primary cognitive processing to occur, the manipulation might not have allowed the cognitive processing that occurs in reality to actually produce changes in attributional patterns.

Lastly, since an open-ended questionnaire was used for the Control Condition, there might have been a tendency for participants to answer in a socially desirable manner and thus provide positive attributions for their spouse's behaviours. If participants in the Control Condition did make more positive attributions than they would naturally due to a social desirability bias, the resulting lack of a true control condition could be responsible for the absence of significant difference between conditions.

Successful Experimental Manipulation Resulting in No Experimental Differences

If the manipulation of attributions was successful, several specific explanations could have accounted for the absence of differences on the dependent measures between the Positive Attribution Condition and the Control Condition. First, the most straight forward reason could be that there is no causal relationship between attributions and marital satisfaction. That is, altering attributions does not affect marital satisfaction, positive feelings toward one's spouse, or love for one's spouse.

Secondly, if the participants were indeed led to make positive attributions in the Positive Attribution Condition, another plausible explanation for the lack of difference between the two groups may be that there needs to be an intervening variable between attributions and the dependent measures for the changes in attributions to have an effect on marital satisfaction, positive feelings, and love towards one's spouse. Attributional patterns may not have a direct, straight forward effect on marital satisfaction. Perhaps for attributions to influence marital satisfaction, positive feelings, or love towards one's spouse, the change in attributional patterns need to have a chance to exert an effect on some other factor first. Changes in this factor in turn may then exert an effect on marital satisfaction,

positive feelings, or love. As discussed in the model presented by Fincham and Bradbury (1990) in their review article on attributions in marriage, one example of such and intervening variable may be behaviours. The behavioral interactions may be a crucial factor in the link between attributions and marital satisfaction. According to their model, attributions feed back to affect both one's own and spouse's behaviours which in turn affect attributions before influencing marital satisfaction. Since in the experimental treatment, no time lag was provided for interactions between spouses for attributions to have an effect on behaviours, the altered patterns of attributions might not have had as much of a chance to influence marital satisfaction.

A third explanation for the non-significant difference between the Control Condition and Positive Attribution Condition could be the non-representativeness of the sample. When compared to other studies on attributions (Baucom, Bell, & Duhe, 1982; Holtzworth-Munroe & Jacobson, 1985; Jacobson, McDonald, Follette, & Berley, 1985; Fincham, Beach, & Baucom, 1987; Camper, Jacobson, Holtzworth-Munroe, & Schmaling, 1988; Holtzworth-Munroe & Jacobson, 1988), the present study's sample had a much higher level of marital satisfaction prior to experimental treatment. According to the Dyadic Adjustment Scale Scores, only 17% of the sample (24 out of 114 participants) scored below the usual cut off score for being maritally distressed (DAS < 100). The mean

score on the Dyadic Adjustment Score for the whole sample was 114.11 and the median score was 117. These scores were comparable only to the mean for the non-distressed groups in other research on attributions in marriage (Holtzworth-Munroe and Jacobson, 1985; Jacobson, McDonald, Follette, & Berley, 1985; Fincham, Beach, & Baucom, 1987; Baucom, Sayers, & Duhe, 1989; Holtzworth-Munroe and Jacobson, 1988b). For example, the mean scores on the Dyadic Adjustment Scale for the non-distressed group alone in these studies ranged from 111.5 to 118.5 and the mean scores for the distressed groups ranged from 81.5 to 85.2. Thus on the whole, these studies employed participants with mean Dyadic Adjustment scores ranging from 96.5 to 101.8 for the whole sample. Thus, compared to other studies, the sample recruited for this study vastly under-represented individuals in distressed marriages.

The absence of a truly distressed group in the experimental design severely diminished the chances of observing a difference in the dependent measures due to the experimental treatment. Due to the self-selective nature of the sample, most participants were from non-distressed marriages. These individuals already make primarily positive attributions for their spouses' behaviours and leading these individuals to make positive attributions could not be expected to alter their usual pattern of behaviour due to a ceiling effect. In addition,

participants in the Control Condition (most of whom also were not in distressed marriages) would be expected to naturally make positive attributions. Thus, due to their high levels of Initial Marital Satisfaction, no significant differences would be observed between the two conditions by comparing the already positive attributions made by individuals in both conditions.

A fourth explanation for the non-significant difference between the Control and Positive At ribution Conditions given that the manipulation had its intended effect is that the dependent measures were inadequate to detect the difference between the groups. The dependent measures could have been inadequate in several ways. First, descriptive statistics on the Kansas Marital Satisfaction Scale, Positive Feelings Questionnaire, and Rubin's Love Scale, revealed that scores tended to be skewed toward the higher range for individuals in both the Control Condition and the Positive Attribution Condition. The clustering of scores around the maximum may, in part, be due to the overly high initial marital satisfaction of the sample. The presence of such a ceiling effect severely limits the possibility of finding any differences between the Control Condition and the Positive Attribution condition. If the participants in the Control Condition were already scoring high on the measures, then any increase due to the manipulation, if present, would not be detected, since participants could not score any higher on these dependent measures.

Yet another reason the dependent measures used may not have been sensitive enough to detect the changes produced by the experimental manipulation may be because the dependent measures were global and stable measures which could not detect small and transient changes in attributional style produced by a paper-and-pencil manipulation. In particular, the Kansas Marital Satisfaction Scale was designed to measure the overall level of satisfaction with one's marriage, one's husband or wife as a spouse, and one's relationship with one's spouse. Such concepts seem to be stable, trait-like, long term ones, perhaps consequences of the transient feelings generated and accumulated over time through positive attributions. The Positive Feelings Questionnaire, on the other hand, was developed in a clinical setting particularly to be use with distressed couples in marital therapy. The primary purpose of this instrument is the prediction and detection and of changes during marital therapy (Turkewitz & O'Leary, 1981). Since the sample employed in this study is non-clinical in nature, it may not be an appropriate measure to employ with nonclinical populations.

Finally, perhaps the experimental treatment did have an influence on some factors in marriage other than marital satisfaction, positive feelings towards one's spouse, or the amount of love towards one's partner. It is quite possible

that the manipulation had an effect on some more transient and more easily altered factors such as moods, immediate feelings towards one's partner, or feelings about self as a result of making positive attributions. Thus, other dependent measures, tapping more immediate or transient feelings, may have been more appropriate for measuring changes due to the experimental treatment.

In sum, two possibilities could been responsible for the non-significant findings between the control and positive groups: either the manipulation did not alter attributions in the positive direction, or the experimental manipulation had its intended effects but did not produce the expected influence on the dependent measures used in this study. Since a manipulation check was not employed in the study to make sure that attributional patterns were indeed altered, both possibilities are possible. Very likely, the absence of a true maritally distressed group in the sample contributed to limiting the possibility of observing the effects of the manipulation even though the manipulation did change attributional patterns. Moreover, the pencil-and-paper manipulation at best would be a weak manipulation and may have been inadequate in creating a reality to produce changes in the cognitions one holds for their spouse's behaviours. Finally it is likely that changes in attributions within this experimental setting would be best measured using an instrument sensitive to

transient, short-term changes. It may have been unrealistic to expect changes on global stable measures of martial satisfaction and amount of love for one's spouse within the context and time frame of the experimental session. Most likely, all three of the above reasons contributed to the non-significant findings in this study and all three need to be addressed in future research.

Directions for Future Research

Given that, within the limitations of this study, no significant results were found to support the notion that marital satisfaction, positive feelings, and love were affected by the manipulation in this study, where should researchers go from here to address the relationship between attributions and marital satisfaction? If one were to further purgue the research question using the experimental approach, several methodological modifications would be recommended based on the knowledge gained from this study. First, it is crucial to have an instrument that clearly alters attributions. To accomplish such a task in a laboratory setting may require more than simply a questionnaire. Perhaps a setting involving actual behavioral exchanges between a husband and a wife followed by manipulation of attribution for the behaviour such as that used in the study by Fincham and Bradbury (1988b) may have more of an impact. One member of the couple can be

coached to perform certain behaviours and the other member of the couple can be led by the experimenter to make certain kinds of attributions for the behaviour, much like the process in marital therapy. Secondly, to ensure that the experimental treatment had its intended effects, a manipulation check to measure attributional style both before and after the treatment would be needed. For example, after the interaction that allows for manipulation of attributions, either the experimenters can ask questions that detects changes in attributions, or that an open-ended questionnaire (such as that used in the Control Condition of this study) can be used to allow participants to make their own attributions. However, care should be taken that the manipulation check does not neutralize the effect of the experimental treatment itself. Most importantly, a representative sample that includes participants with distressed marriages is critical in providing a fair test of Sampling strategies the effects of altering attributions. that ensure including individuals covering the full-range of marital satisfaction must be employed.

Taking the above improvements into account, an ideal study using the experimental method to examine the same question may be as follows. Starting with a clinical population as the sample, a questionnaire could be used to collect scenarios in which married individuals make the

highest number of negative attributions. Using these scenarios, participants in the Positive Attributions Condition are then coached to come up with alternative positive attributions for these scenarios with the assistance of a clinician / experimenter. Standardized coaching can be employed following a combination of techniques suggested by Albert Ellis in "Rational-Emotive Couples Therapy" and Aaron Beck in "Love is never Enough". Participants in the Control Condition, on the other hand, are allowed to continue to invest interest in the negative attributions they have made until dependent measures are taken. Following this treatment, the clinician / experimenter will have a reasonable estimation as to whether the participant altered their attributional pattern for the given scenarios. This could serve as a manipulation check for the treatment. To assess resulting differences between groups due to treatment effect, the Positive Feeling Questionnaire would be a valid instrument to measure changes since the sample is made up of distressed couples. Moreover, data from this instruments can be compared to global measures of marital satisfaction since it is highly correlated with the Marital Adjustment Test (r=.70) (O'Leary, Fincham, and Turkewitz, 1983). Other measures which tap into transient mood changes could also be Although the experimental approach is an included. effective and conclusive methodology to establish support

for causal relationships between attributional patterns and marital satisfaction, perhaps the limitations of such an approach are too great too address such an issue. Attributional patterns may perhaps be too stable to allow for changes within the short time span available in an experimental session. It is quite possible that after years of making the same type of attributions within a marriage there is a certain resistance to altering these habitual patterns. Moreover, even if attributions were to be altered temporarily in the laboratory setting, the concept of marital satisfaction may be too global and stable to be altered immediately thus rendering the establishment of a causal relationship within an experiment difficult. Relatively less stable, and more transient variables such as how individuals feel towards their spouse during the process of the interaction and making attributions may be more effective as dependent measures to pick up changes as a result of altering attributions. Finally perhaps other methods of approaching the question of whether attributional patterns result in increased marital satisfaction need to be Some of these methodologies are discussed below.

Although clinical studies of couples in therapy tend to be confounded with factors other than changing attributions, perhaps it still has value in addressing the present research question. Compared to experimental research, clinical studies allow for a longer time period where

couples can have an opportunity to be exposed to alternative ways of thinking, to try out more positive attributions in their daily lives, and finally to practice and establish these attributions as part of their habitual attributional This process, in turn, may allow for gradual changes in perceived marital satisfaction. A study involving the clinician as the researcher using distressed couples in therapy is likely to be the most effective method. The clinician could conduct assessments of attributional and behavioral patterns, and other factors both in the beginning and at the end of therapy. Standard measures such as the Marital Attributional Style Questionnaire (Fincham, Beach & Nelson, 1987) or the Dyadic Attribution Inventory (Baucom, Sayers & Duhe, 1989) could be used to provide objective measures of attributional patterns. Other measures such as the Primary Communication Inventory (Navran, 1967) or the Relationship Beliefs Inventory (Eidelson & Epstein, 1982) could be used to monitor behavioral patterns or cognitive changes other than attributions. The limitations of clinical studies still exist as with experimental studies. Thus clinical studies alone may not provide conclusive evidence for the research question.

Longitudinal approaches measuring both attributional patterns and marital satisfaction over time may provide evidence that could converge with that obtained through clinical studies. Future longitudinal research with

multiple and varying intervals between assessments with couples of varying levels of initial marital satisfaction would further add to the existing knowledge in the area. Given that gender differences have been found in past research, it is an issue that needs to be further explored. A study employing both clinical samples of distressed couples from therapy and waiting lists as well as nontherapy samples with non-distressed couples needs to be carried out for at least a period of three years. At intervals of approximately six months, questionnaires that allow participants to make their own attributions as well as measures of both short and long term marital satisfaction could be sent to participants to be completed. The data could then be analyzed using regression analysis to examine the patterns and direction of predictions the variables have on each other. However, it is important in such a study to avoid test-retest effects. Participants working on the questionnaire for the third or fourth time may respond from memory or purposely differently. Thus, several reliable versions of the measures for attributions need to be used. The same may have to be done with measures of marital satisfaction.

Since experimental, clinical, and longitudinal approaches provide different information (natural vs. laboratory vs. therapy setting, short vs. long time span, real vs. contrived events) it is important that evidence

from all three methodologies be integrated to provide a complete picture of the relationship between attributions and marital satisfaction.

Finally the issue of attributions in marriage needs to be taken one step further to be examined in conjunction with other variables in marriage. Factors such as behaviours and affect needs to be integrated with the cognitive process of attributions. The proposed model by Bradbury and Fincham (1990) called for the examination of primary processing that occurs between the observation of behaviours and the actual attributions. Examination of how attributions affect both one's own and spouses' behaviours need to be integrated into a comprehensive model that addresses attributions and marital satisfaction. Farhaps certain behaviours in marriage, such as those that are unusual or unexpected, may increase the likelihood or intensity of attributional processing, while other everyday life behaviours simply result in a minimal amount of processing. Attributions with regards to unusual, unexpected behaviours may be the ones that are more salient in affecting marital satisfaction. Affect, a crucial but less stable dimension in marriage than marital satisfaction, may be a mediating factor between attributions and marital satisfaction. Certain types of attributions may result in affects such as anger, resentment, or frustration while others may be associated with happiness, reassurance, or feelings of being loved.

These emotions may in turn play a role in affecting subsequent short term marital satisfaction, these may then accumulate to form one's perception of long term marital satisfaction.

In sum, attributions need to be examined from a variety of perspectives using a variety of methodologies in order to provide a more comprehensive picture with regards to marital satisfaction. Furthermore, the role of attributions and other cognitions in marriage must be examined in relation to other factors in marriage such as behaviours and affect to provide an integrative model that allows understanding of the role cognitions, behaviours, and affect play in marriage. This knowledge may then be applied to clinical settings.

Implications for Marital Therapy

Taking into account the methodology for altering attributional patterns as well as the results of the present studies, several implications may be drawn in terms of marital therapy. Firstly, the use of single presentations of attributional patterns for each scenario in the manipulation may have been too weak to counteract the longstanding beliefs held by individuals for their partner's behaviours. Attributions for particular events in marriage may be so familiar and automatic that by presenting individuals with alternate attributions once may not have

any effect of altering attributions at all. Thus it may be crucial for couples in therapy to repeatedly work on their attributional process and think through different attributions in each session rather than simply being presented with alternate attributions once only.

Secondly, it is worth noting that the attributions in the manipulation of this study were presented to individuals rather than being generated by the participants themselves. This process, however, may be ineffective in producing a change in attributional patterns since individuals did not come up with the attributions themselves. Perhaps it is more appropriate, therefore, for couples in marital therapy to generate their own alternate attributions for their partner's behaviours and for clinicians to refrain from providing them with the alternatives.

Lastly, couples seeking marital therapy may have to deal with more immediate issues that produce hostility or extreme negative affect in the marriage before working on attributional patterns. Common examples of such issues are physical amd emotional abuse in marriage. Without first addressing such issues in therapy, it is hard to foresee positive changes in the marital relationship even if the couples had successfully altered their attributional patterns.

In sum, three suggestions can be made for marital therapy. Clinicians and couples working on attributional

patterns need to repeatedly practice making alternate attributions in each session in order to reinforce new causes assigned to spousal behaviours. Moreover, couples need to generate alternate attributions by themselves rather than having these presented to them by the clinician.

Lastly, it is important to address any issues that generate extreme negative affect in the relationship before working on attributional processes.

Footnote

Scores on the Kansas Marital Satisfaction Scale can range from 3 to 21. In this study, participants had an overall mean of 18.0, and a median of 19.00. Scores on the Positive Feelings Questionnaire can range from 24 to 56. In this study the participants had an overall mean of 54.05 and a median of 56.00. The scores on the Rubin's Love Scale had a range from 30 to 70. The participants in this study had an overall mean of 52.92 and a median of 54.00.

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APPENDIX IA CONTACT LETTER TO POTENTIAL PARTICIPANTS (RECRUITED THROUGH MARRIED STUDENT HOUSING)

Dear Fellow Student,

Are you married? If you are, you can participate in our study on marital relationships.

Marriage is one of the most important relationships in our lives. Most of us desire to experience a loving, happy and satisfying marriage. Some relationships are plagued with problems and difficulties while others are very harmonious and satisfying. What are the factors that determine whether our relationships work out or not?

Recent research has found that our beliefs and feelings towards our spouse affects happiness in marriage. We are conducting a study to determine just how these factors affect marital happiness.

We are inviting you to participate in this significant study. If your marriage is important to you and you would like to help others improve their relationships, please participate. Your spouse may also participate if ne or she wishes.

The study involves filling in several questionnaires. A copy of the first questionnaire on **Evaluating Your Marriage** is enclosed. Please complete this questionnaire and do <u>not</u> put your name on it. If your spouse wishes to participate, he or she should also complete a copy of the questionnaire. I will send an additional copy in the mail.

The second part of the study involves two questionnaires that examine beliefs and feelings concerning your marriage. These will require approximately 20 minutes to complete. All your responses will be anonymous as you will not be required to identify yourself on any of the questionnaires.

If you have any questions about the study or your participation, please feel free to telephone me at 432-0255, or Dr. Skrypnek at 492-0192. I will be calling you within the next few days to check on your interest and to arrange a time for you to come into the Department of Family Studies on campus to complete the second part of the study.

Your contribution in this study is extremely valuable to the understanding of marriage.

Thank you for your participation.

Sincerely,

Serena Leung B.Sc

Graduate Student

Dr. Berna J. Skrypnek

Assistant Professor

Department of Family Studies

Encl.

APPENDIX 1b CONTACT LETTER TO POTENTIAL PARTICIPANTS (RECRUITED THROUGH NEWSPAPER ADVERTISEMENT)

August 1,1991.

Dear Participants,

Thank you very much for your interest in our study on Beliefs, Feelings and Moods in Marriage. The purpose of our study is to examine how beliefs, moods and feelings towards our spouse affect happiness in marriage and the study involves filling in several questionnaires.

Enclosed is the first questionnaire on **Evaluating Your Marriage**. Please complete this questionnaire **before** your appointment and do <u>not</u> put your name on it. If your spouse is also participating in the study, he or she should complete a **separate** copy.

The second part of the study will take place at the Department of Family Studies at the University of Alberta. It will involve filling in three questionnaires and will take approximately 30 minutes of your time. Your responses on all the questionnaires will be completely confidential and you will not be required to identify yourself on any of them.

Enclosed also is a map that will assist you in locating us. Please call us at 432-0255 or 492-5771 as soon as you can to arrange for an appointment to complete the second part of the study. When you come in for your appointment, please Bring your First Questionnaire. Do <u>not</u> mail this questionnaire back to us.

If you have any questions concerning the study, please do not hesitate to call us at 432-0255 or 492-5771.

Your contribution to the study is extremely valuable to the understanding and improvement of marital quality.

Thank you once again for your participation.

Sincerely,

Serena Leung B.Sc.

Graduate Student

Dr. Berna J. Skrypnek Assistant Professor

Department of Family Studies

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APPENDIX II DYADIC ADJUSTMENT SCALE

EVALUATING YOUR MARRIAGE

Most married couples have agreements and disagreements in their relationships. Below is a list of areas to which you and your spouse may or may not agree. Please indicate the extent of agreement between you and your spouse by CIRCLING THE BEST NUMBER.

If your spouse is also completing a copy of this questionnaire, it is <u>very</u> important that you complete them <u>independently</u>. Do not share answers or compare responses until after each of you has completed the questionnaire and do not change the responses after completion.

question	nnaire and do not change the responses an		,				
		5	4	3	2	1	0
		Always Agree	Almost Always Agrae	Occassion- ally Disagree	Frequently Disagree		Disagree
	Headling Comily Finances	5	4	3	2	1	0
1.	Handling Family Finances	5	4	3	2	1	0
2.	Matters of Recreation	5	4	3	2	1	0
3.	Religious Matters	5	4	3	2	1	0
4.	Demonstration of Affection	5	4	3	2	1	0
5.	Friends	5	4	3	2	1	0
6.	Sex Relations	5	4	3	2	1	0
7.	Conventionality (correct or proper behaviours)			3	2	1	0
8.	Philosophy of L. 3	5	4		2	1	Ö
9.	Ways of Dealing with Parents or In-Laws	5	4		2	1	Ö
10.	Aims, Goals and Things Believed Importan	nt 5	4			1	Ö
11.	Amount of Time Spent Together	5	4		2	4	0
12.	Making Major Decisions	5	4	3	2	1	0
13.	Household Tasks	5	4	3	2	1	
14.	Leisure Time Interests and Activities	5	4		2	1	0
15.	Career Decisions	5	4	3.	2	1	0
		O All the Til	1 Most				4 5 Rarely Never
16.	How often do you discuss or have you considered divorce, separation, or terminating your relationship?		0	1 8	2 3	4	5
17.	How often do you or your mate leave the house after a fight?		0	1	2 3	4	5
18.	In general, how often do you think that things between you and your partne are going well?	ſ	0	1	2 3	4	5
19.	Do you confide in your mate?		0	1	2 3	4	5
20.	Do you ever regret that you married?		0	1	2 3	4	
21.	How often do you and your partner qual	rrel?	0	1	2 3	4	5
22.	How often do you and your mate "get on each other's nerve"?		0	. 1	2 3	4	5

		Every Day	Almost Every Day	occa- sionally	Rarely	NeveI
23.	Do you kiss your mate?	4	3	2	1	0
24.	Do you and your mate engage in	All of Them	Most of Them	Some of Them	Very few of Tem	None of Them
	outside interests together?	4	3	2	1	0

How often would you say the following events occur between you and your mate?

		Never	Less than Once a Month	Once or Twice a Month	Once or Twice a Week	Once a Day	More Often
25.	Have a stimulating exchange of ideas	0	1	2	3	4	5
26.	Laugh together	0	1	2	3	4	5
20. 27.	Calmly discuss something	0	1	2	3	4	5
28.	Work together on a project	0	1	2	3	4	5

These are some things about which couples sometimes agree or disagree. Indicate if either item below cause differences of opinions or were problems in your relationship during the past few weeks. (Circle the number that corresponds to yes or no)

		Yes	No
29.	Being too tired for sex.	0	1
30.	Not showing love.	Q	1

The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness in most relationships. Please circle the number which best describes the degree of happiness, all things considered, of your relationship.

0	i	2	3	4	5	6
Entremely	Fairly	A little	•	Very	Extremely	
Unhappy	Unhappy	Unhappy	Happy	Happy	Happy	Perfect

- 32. Which of the following statements best describes how you feel about the future of your relationship?
 - I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
 - I want very much for my relationship to succeed, and will do all I can to see that it does.
 - 3 I want very much for my relationship to succeed, and will do my fair share to see that it does.
 - It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
 - It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
 - My relationship can never succeed, and there is no more that I can do to keep the relationship going.

APPENDIX III VERBAL INTRODUCTION TO PARTICIPANTS

First of all I want to thank you for taking the time to participate in our study on marital relationships.

This study is a part of a research project conducted within the Department of Family Studies that examines BEHAVIOURS, BELIEFS, and FEELINGS in marriage and how these affect marital happiness. The present study is a part of my thesis research. My own area of study is in marital quality and how to improve it. I am mainly interested in marital therapy and plan to pursue it as my career after graduation. Therefore, findings from this study will not only contribute to the general understanding of marital happiness but will also be valuable to the improvement of marital quality in therapy.

You have already completed the first questionnaire on Evaluating Your Marriage. In today's session you will participate in the second part of the study which involves filling in three questionnaires and will take approximately 30 minutes of your time. Responses on all the questionnaires will be completely anonymous. You cannot be identified in any way by any of the data collected.

Your package contains 3 questionnaires. At the beginning of each of questionnaire there are detailed instructions as to how to respond to that particular questionnaire. Please read the instructions carefully before responding to any of the questions. If you have any questions concerning any part of the questionnaires, please feel free to ask me at any time.

After completing the questions please turn your package face down. Do not go over and change any of your responses. When everyone has completed their questionnaires I will collect them. Please wait until everyone has finished completing their questionnaire. At that time I will tell you a little more about the study and ask for your feedback on the study as well as give you information about how to obtain the results from this study. However, during the study, if for any reason you decide that you no longer wish to participate, you are free to leave at any time.

Before we proceed to the questionnaires, I need to have you sign an informed consent form. This form ensures that I, the researcher, have explained the purpose of the study to you, that I have told you what the study involves, and that I have described the measures taken to ensure anonymity as well as your rights as a participant.

(Distribute and explain consent form and request participants' signature)

(Collect consent form)

Let's proceed to the questionnaires.

(Give out package containing the 3 questionnaires)

There are 3 questionnaires in your package.

Please read the instructions to each questionnaire carefully before you proceed to respond. After you have finished, turn your package face down and Do not go over your responses again. Please wait until every one has finished. At that time I will tell you more about the study and ask for your feedback on the study.

If you have any questions at any point in time, please feel free to ask me.

Any questions?

You may begin now.

APPENDIX IV INFORMED CONSENT FORM

in Marriage conduc	ed within the Department of Fan	sipate in the study Behaviours, Belief nily Studies at the University of Albert d feelings about marriage and their et	a. The purpose
participate in the sebelaviours, and my	cond part of the study by filling	Evaluating Your Marriage and am g in three additional questionnaires of my marriage. I understand that these	on my partner's
responses will never researcher to match analyzed and report	or be identified by name. A nument of question in the completed by the desired and in the form of group average and the complete of the comple	questionnaires will be completely an aber code is used on the questionnaire the same individual. The data from the erages rather than individual responsions of the expension of	res to enable the this study will be ses. A summary
deciding on my pa study, I can direct consent form have freely volunteered	rticipation in this research. If I them to Serena Leung at 432-0 theen provided for me. One is to	uestions I had concerning the study have any further questions after pa 255 or Dr. Skrypnek at 492–0192. To me to keep. My signature below ind I understand that I have the right without prejudice.	rticipating in the wo copies of this icates that I have
	Signature of Participant	Date	
_	Signature of Researcher	Date	

(CONTROL VERSION)

BELIEFS ABOUT SPOUSE'S BEHAVIOURS

Instructions:
We constantly seek reasons for the behaviours of people around us, especially for those who are important and close to us. How often do you wonder why your husband behaves in a particular way towards you?
Sometimes, we may think that our spouse acts intentionally to show us that he loves and cares about us or perhaps intentionally to irritate or annoy us. Other times, we may think that his behaviour is due to a temporary state such as excitement, tiredness, anxiety or disappointment. Still other times, we may attribute our partner's behaviours to his personality or simply the way he feel about us, or even some unusual circumstances.
Each item below is a hypothetical marital event that may or may not have taken place in your marriage. For each item, first Take a Few Minutes to IMAGINE YOURSELF IN THE SITUATION . Next, think about the your husband behaved the way he did and write down quickly the first reason that occurs to you.
Please be honest in your responses. All your answers will be anonymous and no one will be able to sdentify them with you. It is Very Important to write down truthfully the reasons that occur to you.
Imagine that you've had a wonderful day. Something very exciting has happened to you and you can't wait to share it with your husband. At the end of the day you finally see each other. When you start to tell him about your exciting news, he seems distant and uninvolved and does not appear to be listening to you.
What might be the explanation for his behaviour?

	r the occasion. When you are about to leave for the restaurant, he compliments you our appearance.
Wha	t might be the explanation for his behaviour?
lma with	gine that recently you notice that your husband begins to spend more and more time his friends without you.
Wha	at might be the explanation for his behaviour?
_	
	the second composition from your husband
W	agine that after a long, stressful day you want some comforting from your husband nen you get together at the end of the day, you tell him that you want to cuddle and he sponds positively.
WI	nat might be the explanation for his behaviour?
_	

Nha	it might be the explanation for his behaviour?
1001	gine that your husband has to make a decision that might affect both your lives. ead of making the decision independently without consulting you, he comes to you and so for your opinions and suggestions on the matter.
V#	at might be the explanation for his behaviour?
yo	agine that you had asked your husband in the morning at breakfast to do an errand for u during the day. This errand is quite important to you and has to be done on that rticular day. He promises to do the errand. However, at the end of the day when you e your husband again, you find out that he has not done the errand.

8.	Imagine that at the end of a long tiring day you find an unexpected gift sitting on the coffee table for you. Your husband has bought you a special gift, something that you have wanted for a long time.
	What might be the explanation for his behaviour?

APPENDIX VI ATTRIBUTIONS QUESTIONNAIRE (POSITIVE ATTRIBUTION VERSION)

BELIEFS ABOUT SPOUSE'S BEHAVIOUR

Instructions:
We constantly seek reasons for the behaviours of people around us, especially for those who are important and close to us. How often do you wonder why your husband behaves in a particular way towards you?
Sometimes, we may think that our spouse acts intentionally to show us that he loves and cares about us. Other times, we may think that his behaviour is due to a temporary state such as excitement, tiredness, anxiety or disappointment. Still other times, we may attribute our partner's behaviour to his personality, the way he feels about us, or even some unusual circumstances.
Each item below is a hypothetical marital event that may or may not have taken place in your marriage. For each item, first Take a Few Minutes to IMAGINE YOURSELF IN THE SITUATION . Then carefully consider each of the three possible reasons below. Could these be the reasons for your husband's behaviour?
After considering all three explanations, check off the one that <u>best</u> explains the action of your husband. We realize that these explanations are <u>not</u> exhaustive, that is, there may some other reasons that are not listed. However, we are particularly interested in these ones only, so please try to choose the most likely explanation .
Imagine that you've had a wonderful day. Something very exciting has happened to you and you can't wait to share it with your husband. At the end of the day you finally see each other. When you start to tell him about your exciting news, he seems distant and uninvolved and does not appear to be listening to you.
Which of the following <u>best</u> explains his behaviour? Check ONE only.
He is listening to me but is simply too tired after a long hard day to show much enthusiasm.
He is probably still preoccupied with something about his own work.
He is distracted by something important on the news.

2.	up for the	that you are going out for a special dinner with your husband and you both dress e occasion. When you are about to leave for the restaurant, he compliments you appearance.
	Which o	t the following <u>best</u> explains his behaviour?
		He thinks highly of me most of the time and takes the chance to compliment me to let me know that he appreciates my appearance.
		His complimenting me is a way to let me know how much he cares about me.
		He wants to make me feel good about myself and my appearance and is therefore reassuring me that I look especially nice on this occasion.
3.	with his	e that recently you notice that your husband begins to spend more and more time s friends without you. of the following best explains his behaviour?
		He realizes that it is good for us to spend time with our own friends as well as with each other.
		One of his friends is going through a tough time recently and needs someone to be with.
		He knows that my work has piled up and that I need some extra time to catch up, therefore he is going out with his friends to keep himself busy and to avoid distracting me from my work.

4.	Imagine that after a long, stressful day you want some comforting from your husband. When you get together at the end of the day, you tell him that you want to cuddle and he responds positively.						
	Which of the following best explains his behaviour?						
	He is caring and considerate of my needs most of the time.						
	He is sensitive and responsive to my feelings and therefore responds positively to my suggestion.						
	Our relationship is a priority for him and he makes an effort to maintain it most of the time.						
5.	Imagine that you have agreed to meet your husband at a certain time to go out together at the end of the day to a movie. However, you are delayed in a traffic jam. You finally arrive 45 minutes late. Your husband is extremely upset and criticises you severely for being late without giving you a chance to explain.						
	Which of the following best explains his behaviour?						
	He really cares about me. He has been worrying for 45 minutes about my safety and probably thought that I had been in an accident. His reaction is a release of worry, not anger.						
	He has been looking forward to spending time with me and was disappointed and upset when I didn't showed up on time and that we missed the movie.						
	He usually does not get this upset. He's been under a lot of pressure lately and wants to relax tonight. Instead my being late stressed him out even more.						

6.	Instead	magine that your husband has to make a decision that might affect both your lives. nstead of making the decision independently without consulting you, he comes to you and asks for your opinions and suggestions on the matter.						
	Which	of the following best explains his behaviour?						
	_	He respects and values my opinions and therefore consults me even though he can make the decision himself.						
	_	He is considerate of the implications his decisions have on our lives and views me as an important part of his decision making.						
		He treats me as an equal partner in our marriage and therefore includes me in decisions that can potentially affect me.						
7.	you di	ne that you had asked your husband in the morning at breakfast to do an errand for uring the day. This errand is quite important to you and has to be done on that ular day. He promises to do the errand. However, at the end of the day when you our husband again, you find out that he has not done the errand.						
	Which	n of the following <u>best</u> explains his behaviour?						
	_	Something very important must have come up today and he did not have the time to do the errand.						
		He probably did not realise the urgency and importance of my request and was planning on doing the errand at some later time.						
		He is usually so reliable, he must have been so busy today that he forgot about the errand.						

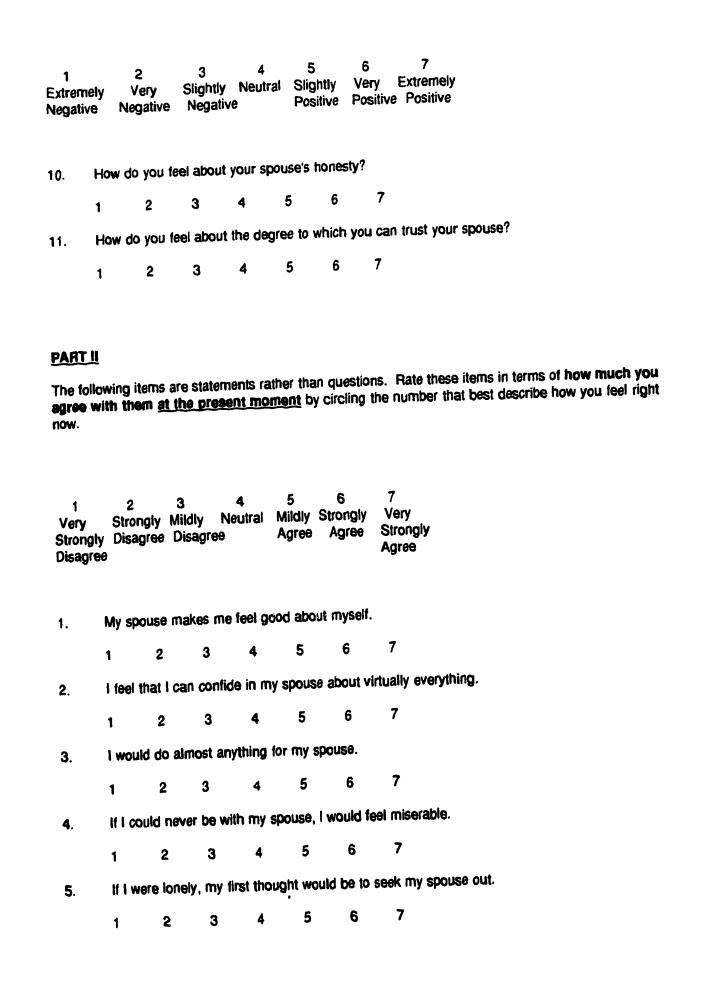
8.	coffee 1	e that at the end of a long tiring day you find an unexpected gift sitting on the table for you. Your husband has bought you a special gift, something that you anted for a long time.
	Which	of the following <u>best</u> explains his behaviour?
		My husband cares about me and wants to let me know how much he cares by doing this pleasant unexpected thing for me.
		My husband knows that I have been feeling down recently and bought me the gift to cheer me up.
		My husband is always doing considerate things for me.

APPENDIX VII MARITAL FEELINGS QUESTIONNAIRE

PARTI

Below is a list of questions about various feelings between married people. Answer each one by considering how you feel <u>right now</u> and circle the number that best describes your present feelings.

1 Extreme Negative	•	2 Very legative		4 Neutra ive	5 al Slig Pos	htly V	6 /ery 'ositive	7 Extremely e Positive
1.	How	satisfied o	do you f	eel about	your n	narriage	€?	
	1	2	3	4	5	6	7	
2.	How	satisfied o	do you f	eel abou	t your t	nusband	1/wife	as your spouse?
	1	2	3	4	5	6	7	
3.	How	satisfied (do you 1	ieel abou	t your 1	relations	w qina	vith your spouse?
	1	2	3	4	5	6	7	
4.	How	do you fe	el abou	t your sp	ouse a	s a frier	nd to y	you?
	1	2	3	4	5	6	7	
5.	How	do you fe	el abou	it the futu	ire of y	our mai	rital re	elationship?
	1	2	3	4	5	6	7	
6.	How	do you fe	eel abou	ut having	marrie	d your :	spous	se?
	1	2	3	4	5	6	7	
7.	How smil	do you fe	eel abou	it your sp	ouse's	ability to	o put y	you in a good mood so that you can laugh and
	1	2	3	4	5	6	7	•
8.	How	do you f	eel abo	ut your s	pouse's	ability	to har	ndle stress?
	1	2	3	4	5	6	7	
9.		v do you f erstands ;		ut the de	gree to	which	you sp	pouse
	1	2	3	4	5	6	7	7



1 Very Strong Disagr	lly Disa	ngly Mi			5 Mildly S Agree		
6.	One o	of my pr	imary co	ncerns	is my sp	ouse's w	elfare.
	1	2	3	4	5	6	7
7.	l wou	ld forgiv	re my sp	ouse fo	r practica	aliy anyti	ning.
	1	2	3	4	5	6	7
8.	i feel	respons	ible for	my spoi	jse's wel	l-being.	
	1	2	3	4	5	6	7
9.	l wou	ıld great	ily enjoy	being o	onfided	in by my	spouse.
	1	2	3	4	5	6	7
10.	It wo	uid be h	ard for 1	me to g	et along	without	my spouse.
	1	2	3	4	5	6	7

APPENDIX VIII DEMOGRAPHICS

The following questions are information about you that will assist us in describing the characteristics of all the participants in this study. Data collected will **not** be reported on an individual basis and will **not** be used for identification purposes.

Check (one of the responses or fill in the answer that best describe you.
1.	This is my 1st marriage 2nd marriage 3rd marriage other, please specify
2.	I have been married for years.
3.	The number of children I have is
4.	The ages of my children are
5.	What is the highest level of your education?
	Junior high or less Some high school High school diploma Some post secondary education Technical / Trade certificate College diploma / certificate Undergraduate University degree Graduate / Professional degree
6.	Are you currently a student?
7.	What is your program of study?
8.	I am Male Female
9.	I am years old.

APPENDIX IX DEBRIEFING

In this second part of the study you have filled in 3 questionnaires concerning your marriage and your spouse.

The <u>first questionnaire</u> is a list of marital activities that you and your spouse may or may not have engaged in during this week. (Hold up copy)

- What did you think about when you were completing this questionnaire?
- How did you feel after completing the questionnaire?
- When filling in this questionnaire, did memories of these activities with your spouse occur to you?
- Was it easy or hard to come up with these memories?
- What other things did these statements make you think about?
- (Did you possibly wonder why these activities occurred? or the reasons behind these activities?)

Whereas the first questionnaire asked you to check off a variety of marital events that you experienced this past week, the <u>second questionnaire</u> provides you with 8 hypothetical activities or event that could occur in a marriage. This second questionnaire asks you to imagine that these hypothetical events have occurred in your marriage and to think about why they have occurred. You were asked to select an explanation from a list of alternatives that could best explain your partner's behaviour. That is, out of the alternatives provided you were asked to select the alternative that is the most likely explanation for your partner's behaviour.

BOTH GROUPS

- What were your reactions or thoughts when you were working through the second questionnaire?
- How hard or easy was it to imagine yourself in these hypothetical events?
- Did you find the explanations provided easy or hard to relate to?
- Did you feel more positive about your spouse after completing this questionnaire or did you feel just as positive or neutral as you did before filling in this questionnaire?

There are two versions of this questionnaire. Half of you received one version and half of you received the other version. The particular version you received was simply due to chance. One version contains exclusively of positive explanations for the hypothetical event, while the other version (allows you to make your own explanation without alternatives provided) or (contains both positive and negative explanations).

- Who had all positive alternatives?
- Did it lead you to think more positively or neutral about your spouse?

CONTROL GROUP

- (Was it hard or easy to come up with an explanation?)
- (Did you find it difficult or easy to write down the explanation that cocurred to you?)
- Those of you who had some positive and some neutral or negative explanations were you aware that some alternative seemed more positive than others?
- Did you choose some positive, some neutral and some negative? or did you choose all one type of explanations?

The third questionnaire is the one on marital feelings. It attempts to measure how happy people are in their relationship and how they feel about their partner.

Past research has found that people in happy marriages make explanations for their spouses' behaviours that are distinctly different from people in less happy marriages.

Happily married couples tend to make explanations that enhances their relationships such as those in the positive version of the second questionnaire. They tend to interpret their spouses behaviour in a more positive light and assume positive motivations of their spouse, and their explanations suggests a lot of trust in their spouse.

On the other hand, less happy couples or couples in distressed relationships tend to explain their spouses' behaviours in a destructive way that will likely lead them to think negatively about their marriage. These couples assume selfish or ulterior motives to their spouse, show less trust and generally interpret their spouses' behaviours in a negative light.

Marital therapists observed that couples seeking therapy frequently make a lot of negative interpretations of their spouses' behaviours. Therefore one method of marital therapy is to encourage distressed couples to interpret each other's behaviours in a more positive light and hoping that this would increase their marital happiness.

Therefore the main goal of the study is to gather empirical support for this practice. That is to examine whether making positive explanations about our spouses' behaviours would indeed lead to more positive feelings towards our marriage and our spouse.

If the results are in the predicted direction, that is, if the positive group have more positive feelings towards their marriage and their spouse than the control group, then we can say that making more positive explanations for spouses' behaviours can indeed increase the level of marital happiness. This will contribute greatly to the marital therapy. Therapists will be able to confidently use this technique of changing negative explanations to positive ones to improve the quality of marriages.

For those of you whose spouse or friends may be interested in participating or will be participating in the study, please do not tell them about the design of the study and what the predicted findings are since that will severely distort the results of the study. You may, however, describe the study to them as I have described it in the contact letter I have sent you. If you have friends or relatives who may be interested in participating in this study please ask them to call me at 432–0255 or Dr. Skypnek at 492–0192.

And Thank You once again for your contribution in this important study.

APPENDIX X THANK YOU LETTER TO PARTICIPANTS

Dear Participant,

Thank you for your contribution to our study on the Quality of Marriage. You have helped us to advance our understanding of martial quality and the ways in which we can improve it. The findings in this study will not only add to our knowledge of marital relationships, but also have important practical implications on marital therapy.

If you have any further questions or concerns about study, please feel free to contact either of us at the Department of Family Studies, 492–5771 or 492–0192. If you have further interests in the subject of our research, the book, "Love is Never Enough" by Aaron T. Beck, M.D., published by Harper & Row Publishers is an excellent resource and is available at Greenwoods and other local bookstores.

If by any chance you feel that you would like professional help in your marriage, you can contact one of the following counselling agencies:

- 1) Student Counselling Services on Campus, 492-5205 (Free of charge for students)
- 2) Family Service Association of Edmonton, 423-2831 (Sliding Fee Scale)
- 3) Lousage Family Institute, 488-7679, Dr. Carroll Ganam or Dr. Bev Edwards-Sawatzky (Private practice, standard fee-for-service charges)

A summary of the research findings will be available to you some time during Fall, 1991. If you would like a copy, please contact us at the above number and we will send one to you as soon as we can.

Thank you once again for your participation in this study. Your contribution has been extremely valuable to the understanding of marriage.

Sincerely,

Serena Leung B.So Graduate Student Dr. Berna J. Skrypnek Assistant Professor

Department of Family Studies

APPENDIX XI MEANS ON THE KANSAS MARITAL SATISFACTION SCALE AS A FUNCTION OF THE EXPERIMENTAL CONDITION, INITIAL MARITAL SATISFACTION, AND GENDER

	Experimental Condition					
Gender	<u>ū</u>	Control Condition	n Att	ositive ribution ondition		
	Mo	re Satisfied DA	S Score >=	118		
Males	14	20.43	17	19.29		
Females	15	19.60	23	20.35		
	Le	ss Satisfied DA	S Score =<	:117		
Males	12	16.50	16	16.88		
Females	28	16.39	16	15.56		

APPENDIX XII. MEANS ON THE POSITIVE FEELINGS QUESTIONNAIRE AS A FUNCTION OF THE EXPERIMENTAL CONDITION, INITIAL MARITAL SATISFACTION, AND GENDER

Experimental Condition

58.27

Gender	<u>ū</u>	Control Condition	ņ	Attri	itive bution dition
	1	More Satisfied DAS	Score	>=118	
Males	14	58.79	17		57.24

Females 15 58.60 23

	Less Satisfied DAS Score =<117					
Males	12	51.7	16	50.8		
Females	28	50.50	16	48.9		

APPENDIX XIII. MEANS ON THE RUBIN'S LOVE SCALE AS A FUNCTION OF THE EXPERIMENTAL CONDITION, INITIAL MARITAL SATISFACTION, AND GENDER

Gender	Experimental Condition				
	<u>n</u>	Control Condition	<u>n</u>	Positive Attribution Condition	
	Mon	e Satisfied DAS	Score	>=118	
Males	14	56.57	17	54.59	
Females	15	55.27	23	55.52	
	Le	ss Satisfied DA	S Score	=<117	
Males	12	51.42	16	54.2	
Females	28	49.36	16	48.0	