

**EFFECT OF MARITAL PARTNERS' COPING STRATEGIES ON EACH
OTHER: IMPLICATIONS FOR AN INTEGRATED MODEL OF STRESS
REGULATION**

by

Lynne M. Robinson

B.Sc., University of Victoria, 1975

M.A., Simon Fraser University, 1985

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APPROVAL

Name: Lynne M. Robinson

Degree: Doctor of Philosophy

Title of Thesis: Effect of Marital Coping Strategies on Each Other: Implications for an Integrated Model of Stress Regulation

Examining Committee:

Chair: Dr. Paul Bakan, Professor
Department of Psychology

Dr. David Cox, Associate Professor
Senior Supervisor
Department of Psychology

Dr. Raymond Koopman, Associate Professor
Department of Psychology

Dr. Marilyn Bowman, Associate Professor
Department of Psychology

Dr. Adam Horvath, Associate Professor
Faculty of Education

Dr. Ronald Roesch, Professor
Department of Psychology

Dr. Daniel Perlman, Professor of
Family Science, Director School of
Family and Nutritional Sciences
University of British Columbia

Date Approved: March 17, 1992

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Effect of Marital Partners' Coping Strategies on Each Other:

Implications for an Integrated Model of Stress Regulation

Author:

(signature)

Lynne M. Robinson

(name)

April 8, 1992.

(date)

Abstract

Current models of coping have failed to take into account the interdependence of marital partners in their use of coping techniques, of coping and social support and of perceptions and behavior. It was hypothesized that both a respondent's own coping and that of the respondent's spouse would be related to the respondent's marital satisfaction, life satisfaction and psychological symptoms. In a sample of 104 couples, it was found that the respondent's own coping was related to all three of those outcomes, while the partner's coping was related to marital and life satisfaction, but not symptoms, for both men and women. Observations of the spouse's coping were more important than the spouse's own report. Coping by avoidance in the partner appeared to be particularly important for the marital and life satisfaction of women. It is argued that these findings imply that each spouse's use of coping strategies affects the amount of social support which both experience within the relationship.

Collateral analyses found that differences between spouses on coping and appraisals were relatively unimportant in accounting for the variance on the outcome measures. Appraisals were related to coping options for women but not for men. While observations of spouses' coping were moderately correlated with the spouses' own reports, the marital satisfaction and sex of the observer were related to disparity between observed and observer, suggesting that data from both spouses is complementary but that spouses cannot be considered unbiased observers of each other.

It is suggested that a complete understanding of stress regulation processes requires an integration of the concepts of coping and social support within relationships, with data collected from both members of a dyad, and that reciprocal marital coping is an important element of a good marital relationship as a source of support.

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I gratefully acknowledge the help of all the respondents who so kindly filled out and returned to me my very long questionnaires, in the midst of lives which are, to say the least, difficult. I hope that my research, in return, will be used to contribute to their well-being.

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Finally, I want to thank all MY sources of social support who kept me going when things got tough. Two of them are special. My friend and lover, Philip Bennett, who taught me persistence in the face of setbacks and then persisted himself in helping me to overcome those setbacks and also my dear friend of many years, Nancy Maloney. This work is dedicated to my daughter, Caitlin Agawa Jean, who did her delightful best to make sure that it would not be completed.

Thus, fair daughter, the prerogative among women has been bestowed on you to establish and build the City of Ladies. For the foundation and completion of this city you will draw fresh waters from us as from clear fountains, and we will bring you sufficient building stone, stronger and more durable than any marble with cement could be. Thus your city will be extremely beautiful, without equal, and of perpetual duration in the world.

Christine de Pizan (1982, p.11)

Constantly risking absurdity

and death

whenever he performs

above the heads

of his audience

the poet like an acrobat

climbs on rime

to a high wire of his own making ...

and all without mistaking

any thing

for what it may not be

Lawrence Ferlinghetti (1969, p. 312)

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Chapter 1

Introduction

Investigation of stress resistance has generated several very productive areas of research in an effort to understand why some individuals are more vulnerable than others to the effects of stress. Researchers have examined the effects of coping techniques, social support, and personality, usually concentrating on one area alone. While these investigations have been very fruitful, there has been little cross-fertilization of ideas between the areas. However, researchers in the areas of coping and of social support are now beginning both to combine research in these areas and to include the concept of the context in which coping takes place or social support is experienced.

1.1 Effect of coping on others

There is a crucial neglected question in the coping literature that bears on this 'new look' in research on stress resistance. This is the effect of coping strategies on significant others. Measuring the effect of one person's coping on another will likely have implications for understanding how social support networks and in particular, the most important source of social support, good marital relationships, are maintained. There are also implications for the measurement of coping. First, partners' reports of their own well-being may add another, potentially important, criterion for assessing the effect of coping. Second, using the technique of collecting partners' observations of each other's coping may provide another method for assessing the coping techniques used by an individual, partially correcting for the problem of the disparity between what subjects report and

what they actually do.

Coping may be effective both directly and immediately for the 'coper' but may also be effective in several ways, via the response of others. Effective coping may:

1. Solve one's own problems or reduce one's own distress
2. Reduce the partner's distress, allowing that person to cope more effectively
 - thereby reducing the effect of the partner's distress on the coper and
 - allowing the partner to actively change stressor
3. Change the partner's appraisal of stressor
4. Be effective indirectly and in a more long-term way by strengthening and increasing social bonds (i.e. social support).

As an example, suppose that the husband prefers to avoid rather than approach problems, while the wife prefers to approach. Given a stressor such as financial problems, the wife will repeatedly approach the husband to plan a budget. Since this coping style increases the husband's anxiety, he will repeatedly attempt to avoid the discussion, and if it occurs, will not carry out agreements that the couple have reached. (See Christensen and Heavey, 1990, for a review of this pattern.) This, in its turn will increase the wife's anxiety. The immediate effects may be

- failure to solve the problem
- an increase in distress both in the spouses and in the marriage
- changed coping efforts by one or both spouses.

The longer-term effect may be a lack of trust that the partner, the self, and the marriage can adequately manage stressful situations. Menaghan (1982) found that long-term effects of marital coping were different from short-term effects.

A process of feedback loops linking coping and outcomes probably takes place so that, for example, 'good' coping increases one partner's marital happiness which then increases his/her 'good' coping. Couples gradually develop a mutual expectation for behaviours and patterns of response to stresses and strains on the spouses and on the marriage. A consideration of interpersonal elements of coping becomes more important when one recognizes that many of the more important stressors for individuals are interpersonal in context (e.g. marriage, childbirth, death).

The question of how one person's coping affects another provides an important connecting link between the social support literature and the marital coping research. Research into social support has burgeoned as psychologists attempt to elucidate yet another element of the stress-health relationship. In general, it is agreed that a (good) marital relationship is the single most important source of social support for most people (Lieberman, 1986) and that such a relationship contributes strongly to a sense of well-being. Some studies, in fact, have operationally defined social support as marital satisfaction (e.g. Monroe, Bromet, Connell, & Steiner, 1986). The question of what constitutes a supportive marital relationship and how such a relationship is developed and maintained remains. Family therapists have suggested some important variables associated with such relationships (e.g. level of differentiation, complementarity, quid pro quo). Nonetheless, these are relatively global constructs and not immediately prescriptive of specific changes. Researchers in the area of marital coping have found that certain types of coping techniques are associated with increased distress in couples (e.g. Menaghan, 1982). What is as yet unclear is the importance of synergistic effects between spouses.

1.2 Coping

1.2.1 Overview

Coping is a process that has received increasing attention in recent years. This is in part due to attempts to account for low correlations between stress levels and functioning. It may also be impelled by the perception that, while stress levels, personality traits, and innate biological functioning are relatively resistant to change, better coping skills can be learned. Meichenbaum's Stress Inoculation Therapy (1985) is a good example of the implementation of this viewpoint. In order to teach better coping skills, therapists must first understand which coping techniques, if any, are better and under what circumstances they are better.

There are many definitions of 'coping'. One of the most important distinctions in the coping literature has been between a trait-oriented approach (e.g. Kobasa, Maddi, & Kahn, 1982) and a process-oriented approach exemplified by Folkman and Lazarus and colleagues (e.g. Lazarus & Folkman, 1984). While this distinction is breaking down to some extent, and personality is becoming incorporated into studies of coping (e.g. Bolger, 1990), the current study followed a process-oriented model.

Lazarus and Folkman (1984) use five major constructs in their discussion of stress regulation processes:

1. Stress
2. Appraisal
3. Coping
4. Person and environmental antecedents of stress and coping
5. Short and long-term adaptational outcomes.

They define psychological stress as

‘a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being’ (p. 19).

They define cognitive appraisal as

‘an evaluative process that determines why and to what extent a particular transaction or series of transactions between the person and the environment is stressful’ (p. 19).

Coping is defined as

‘the process through which the individual manages the demands of the person-environment relationship that are appraised as stressful and the emotions they generate’ (p. 19).

Folkman and Lazarus and colleagues have further differentiated between primary and secondary appraisal. Folkman, Lazarus, Gruen and DeLongis (1986), define ‘primary appraisal’ as the individual’s assessment of what is at stake in any situation requiring coping. This may be loss of self-esteem, concern for a loved one, or one of three other single item ‘stakes’. Secondary appraisal refers to the coping option(s) that the respondent sees as available. Using the Ways of Coping scale (Folkman & Lazarus, 1985), and the appraisal measure developed by this group, they found that personality, primary appraisal, and coping variables explained 43% of the variance on psychological symptoms (the adjusted R^2 was .36) but very little of the variance on self-reported health problems. Folkman, Lazarus, Dunkel-Schetter, DeLongis and Gruen (1986) also found that the type of coping used by respondents was associated with respondents’ reports on whether or not the outcome of coping was satisfactory. Other researchers have also

verified a relationship between coping and outcomes (e.g. Aldwin & Revenson, 1987; Folkman, Lazarus, Dunkel-Schetter, et al., 1986; Holahan & Moos, 1990; Rohde, Lewinsohn, Tilson, & Seeley, 1990). While the Ways of Coping Scale (Folkman & Lazarus, 1985) is probably the most commonly used measure of coping, there is a great deal of discussion over the validity of that measure and others, as well as over how coping should be measured (e.g. Endler & Parker, 1990).

1.2.2 Marital coping

A number of researchers have begun to examine coping with marital problems as a special case. Pearlin and Schooler (1978) did the seminal research in this area and found that coping efforts were most effective in the context of familial role-related distress (marital and parental). Other researchers have begun to specify the types of coping techniques, used in a marital context, that are predictive of distress.

P. Miller, Lefcourt, Holmes, Ware, and Saleh (1986) postulated two dimensions of marital interactions: engagement/avoidance and destructiveness. Engagement refers to the degree to which partners actively confront problems, express their positions clearly and take their partners' feelings into account. On the other end of the dimension, avoiders deny problems or feelings, are unclear on their positions, etc. This dimension is conceptually similar to the repressor-sensitizer dimension of Byrne (1961) and, more recently, the monitor-blunter dimension of S. Miller (1980). In general, the concept of an 'approach-avoidance' dimension to coping has long been of interest and has an intuitive appeal. Cohen and Roth (1984) argue for the centrality of this dimension in coping. The 'destructiveness dimension' P. Miller et al. postulate refers to the negativity spouses display towards each other. P. Miller et al. found that judges' ratings of couples' use of engagement were associated with judges' ratings of the quality of the couples' solutions to standardized marital coping tasks ($r = .60$). Destructiveness ratings were negatively

associated with solution quality ratings ($r = -.23$). Halo effects were controlled for.

Christensen and Heavey (1990), investigating somewhat similar concepts, found that the pattern of wives demanding and husbands withdrawing was more likely to occur than the opposite. However, Christensen and Heavey had husbands and wives discuss both issues important to the husband and issues important to the wife, and, overall, while husbands were more likely to be withdrawing than wives, wives were not more likely to be demanding. Wives' demanding and husbands' withdrawing (as observed by others) were negatively correlated with mean marital happiness for the couple.

Pearlin and Schooler (1978) found that using a greater variety of coping responses was associated with decreased stress and that, in the area of parenting and marital relationships, coping techniques in which an individual remains committed to the other partner are best.

Menaghan (1982) found four major coping factors in the responses of interviewees:

1. Attempts at negotiation and discussion
2. Optimistic comparisons of one's situation relative to the past and relative to one's peers
3. Selective inattention to unpleasant aspects and heightened attention to positive features of the situation
4. A conscious suppression of feeling and withdrawal from interaction ('resignation', p. 223).

She found that optimistic comparisons reduced distress concurrently while selective ignoring and resignation increased it, even when initial problems were controlled for. When initial levels of distress were controlled for, negotiation and optimistic comparisons significantly reduced later role problems. She distinguished between those coping techniques that are associated with immediate distress (selective ignoring and resignation) and those

that are associated with the reduction of later problems (negotiation and optimistic comparison) She also distinguished between marital problems and felt marital distress. It is helpful to have measurements at two time points, in order to distinguish between the effects of current marital satisfaction on reported coping and the effects of coping on current marital satisfaction. A partner who is currently unhappy in the marriage, for example, may begin to use more deleterious coping techniques or may begin to see the other's coping as more deleterious.

Rusbult, Johnson, and Morrow (1986) have developed a coping inventory for relationships using rational procedures. They examined the utility of four coping responses in explaining couples' distress:

1. Exit or withdrawal from the situation, threats to leave the relationship
2. Voice, or active attempts resolve the problems
3. Loyalty, or hoping that things would improve
4. Neglect, or refusing to discuss problems, insulting the partner, etc.

In a sample of dating couples, they found the use of exit and neglect to be associated with increased distress. Neglect seems to be akin to Menaghan's factor of selective ignoring but Rusbult et al.'s exit factor does not seem to have occurred in Menaghan's sample. The use of different populations may account for this. Rusbult et al.'s sample consisted of young, dating couples for whom leaving the relationship is a much more easily available response than for Menaghan's sample of couples married from one to 47 years. The 'voice' factor of Rusbult et al. appears similar to Menaghan's 'negotiation' factor.

Bowman (1990) has developed one of the few instruments specifically for assessing marital coping. She used empirical as well as rational methods. Bowman found five factors in the coping techniques included in her measure. These factors are:

positive approach: behaviours directed at 'emotional management' of the marriage.

conflict: essentially destructive acts directed towards the partner.

self-interest: an increase in activities outside of the marriage.

(introspective) self-blame: worrying and other symptoms.

avoidance: avoiding issues and (negatively loaded) active problem solving.

Many of the items on the self-blame scale consist of psychological or physical symptoms and thus the scale is confounded if used with outcome measures based on symptoms, such as was the case in the current study. The avoidance scale was not found to be strongly related to outcomes in Bowman's study and therefore neither self-blame nor avoidance were included in hypotheses about the relationship of coping to outcomes. Bowman found all coping techniques but positive approach to be associated with decreased marital satisfaction. While a problem-solving factor per se did not emerge from her data, positive approach consisted of active attempts to improve the emotional tone of the relationship (being more physically affectionate, doing favours, etc.).

In general, P. Miller et al.'s (1986) two dimensions may potentially be observed in these studies of marital coping. Menaghan's 'negotiation', Rusbult et al.'s 'voice', and Bowman's 'positive approach' can all be seen as engaged coping. Menaghan's 'inattention' and 'resignation', Rusbult et al.'s 'exit' and 'neglect', and Bowman's 'avoidance' can be characterized as avoidance. Menaghan's 'optimistic comparisons', and Rusbult et al.'s 'loyalty' seem to include elements of both denial (of some of the negativity of the situation) and attempts to improve the situation through changing the meaning of events. The destructiveness dimension can be seen in Rusbult et al.'s 'exit' and 'neglect' factors (as well as the avoidance dimension), and in Bowman's 'conflict' factor. Two of Bowman's factors raise the question of the focus of coping efforts. In 'self-blame', the

coping effort is engaged but is also destructive. The focus of the destructiveness is, however, the self not the relationship. In her factor 'self-interest', coping efforts are avoidant and also focused on the self.

Overall, active attempts at solving disagreements whether by negotiation or by doing pleasant things with the spouse are helpful in the marital context. In discussing marital coping, the concept of 'domains' of coping problems should be clarified. While individuals may have problems in many areas of life, problems stemming from different domains such as work or marital life appear to be qualitatively different (Pearlin & Schooler, 1978). Moreover, coping techniques within a domain are probably more similar than coping techniques used across domains. Folkman and Lazarus (1980) found that work related problems were associated with more use of problem-focused coping while health problems were associated with more emotion-focused coping. Family problems were associated with both problem and emotion focused coping. However, Bowman (1990), in her research within the domain of marital problems, found that the marital problem an individual was coping with was not related to the coping technique used.

Little research has been done examining marital coping as it actually occurs 'in the field'. Studies have tended to supply couples with ready made coping tasks (e.g. P. Miller et al., 1986; Rusbult et al., 1986) or examined limited marital problems (Menaghan, 1982). Several studies have looked at how families cope with specific stressors, but these have tended not to use standardized self-report inventories. Kupst et al. (1984) described the predominant coping patterns amongst parents of children with paediatric leukemia. They found that parents who reported open communication within the family tended to be rated by nurses and other raters as functioning better. Raters' ratings of mothers' functioning were related to mothers' ratings of their relationship with their spouse ($r = .43$). The study did not, however, address the issue of how parents maintained marital relationships specifically in the face of a severe stressor. Barbarin, Hughes, and Chesler

(1985) examined the relationship between the coping techniques used by both partners to handle the stress of a child with paediatric leukemia. They found that, for several coping techniques, whether or not both spouses used the same techniques was associated with perceptions of support and marital satisfaction. However, they found no direct effect of spouses' coping efforts on the other spouse. Bowman (1990), in some initial exploratory work, found that couples who had low marital satisfaction tended to be very disparate (differences greater than two standard deviations) in the coping techniques they used.

The question arises of how, precisely, the coping techniques reported by one person affect marital satisfaction in the relationship. It is suggested here that partners' coping efforts do affect each other. It seems probable, however, that for Person One's coping efforts to affect Person Two, Person Two must actually perceive that effort.¹ From this perspective, it would be important to measure each spouse's perception of the coping efforts of the other. It is also important to find out how satisfied each is with the efforts of the other. It may be that dissatisfaction with Person Two's coping will have a stronger effect on Person One than the coping efforts per se. While it is probable that coping efforts made by one spouse in any area have some effect on the other, if perceived by the other, the strongest effects probably occur when the target of the coping efforts is a problem of mutual concern to both partners and when disagreements occur. This suggests that measures of marital coping would be most useful in investigating the effects of one person's coping on another. Moreover, while studies of marital coping have searched for the effects of coping on marital happiness and family functioning occasionally examining life satisfaction, little information is available on whether marital coping also affects psychological functioning. Recent data suggest that marital unhappiness can affect health (Kiecolt-Glaser, Kennedy, Malkoff & Fisher, 1988, Kiecolt-Glaser, Fisher, Ogrocki, Stout, et al., 1987). Perhaps marital coping can affect psychological symptoms.

¹Hereafter, 'Person One' will be used simply to indicate a person of unidentified gender and 'Person Two' will be used to indicate the other person in the interaction in question.

Another question that has not yet been broached is whether appraisals are important in marital coping in the same way that they are hypothesized to be important in assessments of more general coping. Examination of the coping options and stakes in measures developed by Folkman, Lazarus and colleagues (Folkman, Lazarus, Dunkel-Schetter, et al., 1986), suggests that some may be important in determining marital coping as well. For example, an appraisal that one has to 'hold back' may be associated with using avoidance in marital coping. Interpreting a marital problem as 'a threat to self-esteem' or alternately 'a threat to a loved one's well-being' may have very different implications for the coping techniques one chooses to use. Moreover, it is possible that appraisals have a different relationship to marital coping than to other forms of coping. For example, appraising a stressful situation as requiring change is associated with positive outcomes in Folkman, Lazarus, Dunkel-Schetter et al. (1986) but appraising marital problems in such a way may be associated with increased marital conflict. On the other hand, it is possible that feeling one must hold back is useful in marriage, preventing a response of conflict and giving time for reflection although Folkman, Lazarus, Dunkel-Schetter et al. found this option to be associated with unsatisfactory outcomes.

A careful survey of married couples, incorporating open-ended questions as well as possible appraisals more suited to marital coping is the best way to answer this question. However, preliminary data on the relationship of Folkman and Lazarus' appraisal questions to marital coping could be helpful in directing future research.

Those familiar with the literature on attributions in marriage (e.g. Bradbury & Fincham, 1990) will perhaps wonder about the relationship between the research described here and research on attributions. The two areas are examining the same overall field (i.e. the relationship of cognitions in relationships to outcomes) but at different levels. An individual's perception of a partner's coping techniques is more molar than her/his explanations for *why* the partner behaves in a given way. Potentially, one could combine

coping techniques with attributions to ask 'what does your partner do when you have problems?' (coping techniques) and 'why does she or he do that?' (attributions). At this point, it is not at all clear which might be the more useful approach for any of a variety of purposes. Moreover, the concepts that will be tested in the current research are an addition to the body of literature on coping while the research on attributions is derived from a separate body of literature. Nonetheless, there are a number of overlaps in the two sets of information and changing attributions is often included as a coping technique.

1.3 Social support

In a body of literature parallel to the coping literature, researchers have examined the construct of social support as an intervening variable between stress and functioning. Procidano and Heller (1983) suggest that research into social support has focussed either on social network characteristics (with structural and functional dimensions) or on perceived social support. The social support literature originally focused on the structural features of a social network (e.g. size of the network). Other theorists distinguish between various 'provisions' or functions of social support. Weiss (1974) has suggested six possible types of support that one might obtain. He suggests that each is most often obtained from a particular type of relationship but more than one may be obtained from the same person. Of most interest here are the provisions of 'attachment' usually obtained from a spouse or lover and of 'alliance' (the assurance that one can rely on others), usually obtained from family.

Kessler, Price, and Wortman (1985), in a review article, point out that the evidence suggests emotional support and the perception that one potentially has a broad range of support are especially important in protecting individuals from stress. Many researchers are now moving to a consideration of such issues as the meaning of social support to the

individual. Researchers now tend to agree that it is the perception of social support that is important rather than any objective relationships (Coyne, Aldwin, & Lazarus, 1981; Heller, Swindle, & Dusenbury, 1986). This perspective is similar to the assumption made by Lazarus and Folkman (1984) that an individual's appraisal of a given situation rather than objective characteristics of the situation *per se* determine its stressfulness. The focus in both cases is on the phenomenological experience. B. Sarason, Shearin, Pierce, and Sarason (1987) found that this perception of social support can be conceptualized as the feeling that one is loved and accepted. They and others (e.g. Heller et al.) argue that the effect of this perception is to give the individual a sense of being valued, to support self-esteem. The Sarasons and co-workers have recently begun to conceptualize social support as an extension of attachment theory. They suggest that early attachment experiences determine the lifetime ability to obtain social support (I. Sarason, Sarason, & Pierce, 1990).

Another issue in the social support literature is the question of whether social support only has effects during a stressful episode (the buffering hypothesis) or whether it has a cumulative effect. Heller et al. argue that it has both types of effects. It may be that social support has its cumulative effects by increasing self-esteem, thus decreasing emotional reactivity to events, and allowing more effective coping when necessary.

Social support has been shown to have health benefits. Alternatively, unhappy marriages can have health costs (Verbrugge, 1979). Recently, Kiecolt-Glaser et al. (1987, 1988) reported the results of a study of the immunological consequences of marital distress and divorce on men and women. They found that poor marital quality and divorce were associated with poorer responses on several functional immunological measures for both men and women compared to matched controls. Musante et al. (1990) found that husbands' perceptions of family functioning were related to wives' blood pressure and vice versa. Wives' perceptions of family functioning were also related to their own blood

pressure. This suggests that marital coping and perceptions of partners can have a significant relationship, not only to marital happiness, but also to physical and perhaps psychological well-being. However, it should be noted that Foorman and Lloyd (1986) have suggested that it is important to ask whether causality runs from social support to symptoms or the reverse. It is possible that individuals with symptoms receive less social support than others.

1.4 Stress

1.4.1 Overview

There are two traditions in the stress literature, one of objective measurement of stressors and one of subjective measurement. The first approach, epitomized by Holmes and Rahe (1967) is based on the assumption that, by averaging over many appraisals of the stressfulness of a situation, a useful general measure of its stressfulness can be derived. The second tradition, articulated most completely by Lazarus and Folkman (1984) focuses on the subjective meaning of an event to each individual. Each approach has a different scope and utility. Kessler, Price, and Wortman (1985) have identified some of the problems with each approach. They suggest theoretical work is needed to identify the elements of events that are stress-provoking, and that data that capture the rich contextual features of life events needs to be gathered. Stone and Neale (1984) have suggested using spouses as informants while Lazarus et al. (1984) argue that there is no way to adequately avoid the confounding of stressors and the appraisal of stressors because these are inherently confounded in nature.

Certain events are so powerful that almost everyone would experience them as stressful (e.g. surviving a fire or other disasters, the illness of a child, etc.). Nonetheless, the event probably has special meaning for each partner in a relationship (e.g. loss of particularly valued mementoes, feelings of guilt, etc.). In essence, it is assumed that each individual

is dealing with a different subjective event. Focusing a study on a single source of stress for all subjects however ensures substantial similarity in the objective properties of the event. It does not preclude variability in the subjective properties of the event.

In the current study, the focus is on intra-subject experiences. Even though subjects were asked about others' behaviours, it was always in terms of their own experience. In reality, any event that impinges on a couple's life is different for each spouse. This is the essence of Lazarus and Folkman's (1984) concept that it is the subjective meaning of the event that is important.

Several types of stressors have been examined in the literature. These include: role strain, a condition of ongoing strain as a function of the individual's social role(s) (e.g. Pearlin & Schooler, 1978); life events, relatively delimited conditions in which some change occurs in the individual's life (e.g. Holmes & Rahe, 1967); and daily hassles, minor daily annoyances (e.g. DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982). Kessler, Price, and Wortman (1985) suggest that chronic stress is a potentially important area of investigation. They point out that there is evidence that chronic stress is 'more strongly associated with nonspecific distress in community surveys than are life event surveys' (p. 539). Brown and Harris (1978) suggest that ongoing strain results in an increased susceptibility to life events that may become overwhelming in the context of an existing 'stress overload'. However, as Quittner, Glueckauf, and Jackson (1990) point out, there is little research on the effects of chronic stress. They found that, while a measure of life stress was not well correlated with psychological symptoms, measures of chronic stress were. These findings suggest that individuals under chronic strain may be a particularly fruitful source of information about stress and coping, and moreover, may particularly benefit from such information.

1.4.2 Chronic strain: families with handicapped children

Coping with a handicapped child results in chronic strain, coupled with intermittent stressful life events (e.g. new medical problems, failures in school, etc.), for a relatively large group of people. There is relatively little information on the marital relationships of such couples. Most research has focused on the relationships of the parents and siblings with the child. The consensus in the scanty literature is that there is an increase in problems amongst such parents but little is known about how they actually cope.

McAndrew (1976) found relatively few marital problems amongst this group of parents. Waisbren (1980) however, found no differences in marital satisfaction between two matched groups of parents, one group being parents of developmentally delayed infants. On the other hand, Cummings (1976) found differences between parents of mentally retarded children and parents of normal children in a number of areas. The former showed increased depression and, for fathers, decreased satisfaction with the spouse. Gath (1977) found an increase in marital problems in these couples. Friedrich and Friedrich (1981) found that, compared to parents of non-handicapped children, a matched group of parents of children with motor problems and/or mental retardation reported more stress and less marital satisfaction, social support, psychological well-being, and religiosity. Sabbeth and Leventhal (1984), reviewing 36 papers on the effect of chronic illness in a child on marital adjustment, found higher levels of marital distress, but not higher divorce rates. Levy-Shiff (1986) found that among parents of retarded children the ratio of child to non-child related interchanges between parents was 4:1 compared to 1:1 among normal families. While this primarily represented an increase in child related interchanges rather than a decrease in the sharing of non-child related issues, Levy-Shiff suggests that this may have a deleterious effect on the marital bond, since so much energy is invested in the retarded child. Crnic, Friedrich, and Greenberg (1983) suggest that the difference

between the Waisbren and Friedrich studies may be due to age differences in the children in the two studies, and hypothesize that marital satisfaction decreases over time in families with handicapped children.

There is some other evidence that problems increase in these families. Mothers of hearing impaired children have reported significantly more stress from parenting and were more depressed, anxious, and hostile than mothers of non-handicapped children (Quittner, Glueckauf & Jackson, 1990). Friedrich, Wiltturner, and Cohen (1985) found that, over an eight month period, there was a significant increase in depression and family problems reported by 104 mothers of retarded children. Dunst, Trivette, and Cross (1986) found that problems were increasingly likely to be reported with increasing age of handicapped children, among families with little social support. On the other hand, Korn, Chess, and Fernandez (1978) found that, in their sample of children with congenital rubella, 73% of the children who were less than 60 months old had families characterized as distressed while only 34% of those 60 months and over had distressed families.

Marital happiness and social support are related to problems in families of handicapped children. Wallender, Varni, Babani, DeHaan, Wilcox, and Banis (1989) found that family resources, consisting of marital happiness, support from mother's family, and other supports accounted for variance on the mother's mental and physical health beyond that accounted for by other resources and by the child's adjustment and at a significant level. Dunst et al. (1986) found that parents who reported more satisfaction with their support networks also reported having fewer physical and emotional problems, particularly parents of male children. Friedrich found marital satisfaction was the most significant predictor of family problems (1977) and of maternal coping (1979) in his sample. Using the same measure of family problems as an outcome measure, Friedrich,

Wiltner, and Cohen (1985) found marital happiness and good family relations accounted for a small but significant amount of variance. Moreover, change in marital happiness over an eight month period was significantly related to change in family problems and maternal depression.

Characteristics of the handicapped child are also important in explaining family problems. Friedrich et al. (1985) found severity of disability of the child to be related to problems, although no better as a predictor than coping resources. Crnic, Friedrich, and Greenberg (1983) suggest severity of handicap, age, and sex of the child may also be related to marital problems. Korn, Chess, and Fernandez (1978) found increased distress in families where the handicapped child was male. In fact, however, as Crnic et al. have pointed out, we know very little about how such families function.

1.5 Measurement Issues

Collecting information from both participants in a stressful situation permits exploration of two important issues for the measurement of any behaviour: the question of appropriate criteria for outcomes of coping efforts, and the question of reliability of self-reports of coping. As Goldfried and D'Zurilla (1969) indicate, in their discussion of criterion analysis, the decision about which behaviours are effective is a difficult one. In fact, Wiggins (1973) has pointed out that 'the criterion problem' is one of the thorniest in assessment.

Traditionally, studies of coping have tended to rely on three broad classes of outcome measures in order to evaluate the effectiveness of coping. These are: an a priori, theory-based hierarchy of coping techniques (e.g. Haan, 1982); an assessment of physical and/or mental functioning, with better functioning assumed to be attributable to coping efficacy (e.g. Holahan & Moos, 1986); and a subjective evaluation of one's own coping efforts (e.g. George, 1984). Studies of couples coping with marital stress have generally used some measure of marital satisfaction as an outcome measure. This may be considered

a subset of the second type of criterion given above. It is possible also to evaluate the adequacy of coping by the use of ratings by trained observers. This is properly a subtype of the theory-based evaluation, save that the models used by observers may be implicit rather than explicit. An evaluation of coping based on how well it matches the stressful situation and the options available is possibly a fourth class of outcome, but this could be accommodated within the group of theory-based evaluations. Each of these methods has advantages and disadvantages, depending on the purpose of the assessment and the nomological net into which the analyses are being fitted. Assessing the effectiveness of coping via its effects on important others falls somewhere between the 'objective' evaluations of either external judges or symptom checklists and the 'subjective' evaluations of the copier.

The second issue concerns the reliability of self-reports of coping. Significant others may be considered, as participant-observers, to have a unique perspective on the outcome of coping efforts, offering two types of information. As observers, McCrae and Costa (1986) suggest that they may provide another method for measuring such variables as use of coping techniques and outcomes of coping for the copier. As participants, they are able to report on their own responses to actions by others.

These two functions may, however, be incongruent, and discrepancies between observer and observed may be difficult to resolve. Spouses are not unbiased observers of each other, and Person One's perception of Person Two may not be simply an addition to other sources of information about Person Two. Person One's perception of Person Two may affect both individuals involved. As observers of each other's behaviour, spouses do add something to simple self-report.² McCrae and Costa (1986) point out that 'ratings by friends or spouses may provide a better index of actual coping' than individuals themselves (p. 402). However, it is difficult to know how to interpret the inevitable divergence

²'spouse' and 'husband' and 'wife' are used in the current study to mean persons of the opposite sex who usually share the same residence and who have committed themselves to continue to reside together.

between self-report and spouse's report. A number of studies have examined the convergence between husband's and wife's reports of events in the marriage. Sullaway and Christensen (1983), reviewing 24 studies that compared verbal reports from each member of a couple, found that in general agreement between spouses is modest and is highest when the items presented to couples are most objective and most molecular. They note that there is some evidence that agreement is higher among satisfied couples than unsatisfied couples. Jacobson and Moore (1981), using the Spouses Observation Checklist (Patterson, 1976), found that the mean agreement between spouses on this checklist was 48% (ranging from 31% to 79%). They found differences in consensus between distressed and non-distressed couples but these differences largely disappeared when the tendency of non-distressed couples to report a higher frequency of positive behaviours was controlled for. Bradbury and Fincham (1987b), reviewing spousal consensus, found that spouses disagreed on more than 50% of a set of behaviours occurring on a given day.

While there are many difficulties in having spouses observe each other's behaviours, especially when these behaviours include internal events such as coping by 'looking on the bright side', it is worthwhile exploring whether this method adds anything to self-observation. The possible advantages are that

- spouses are in a position to make observations in a naturalistic setting
- denial by one spouse may be corrected for by the other
- the degree to which spouses agree on each other's behaviour may be informative in itself.

Discrepancies between spouses' reports may mean different things, depending on the type of discrepancy. Person Two can add a coping technique that Person One did not mention, or fail to mention a coping technique that Person One reported. In the former case, it is probable that Person One has failed (through denial, forgetfulness, etc.) to record a

coping technique that she or he did indeed use. In this case Person Two's information is a useful adjunct to Person One's information and can be considered an additional coping technique used by Person One. If Person Two fails to mention a coping technique that Person One reports, it can be assumed that this is because she or he did not know about it and Person One's report of this coping technique is accepted. This issue can be conceived of from a measurement perspective or from a systems theory perspective. It is a tenet of psychometrics that the best measurement of behaviour utilizes several different methods that provide converging information (Campbell & Fiske, 1959). On the other hand, marital partners frequently do not perceive events in the family in the same way (Olson & Cromwell, 1975) and from the point of view of a family therapist, there is no one correct view of events within the family (Fine & Turner, 1991; Haley & Hoffman, 1967).

Collecting information from both spouses in a relationship allows for investigation of several collateral questions:

1. How well do spouses' reports agree on the coping techniques that each is using
2. Are unhappy spouses more likely to disagree on the coping techniques that each is using?
3. Are men and women equally good observers of each other's coping?

1.6 A unified model of coping and support

1.6.1 Problems with current models

In the areas of both social support and coping the mainstream research has focused on measurement of the individual and has considered the 'outcome' of stress management efforts only in terms of that person. This research fails to take into account the interdependence of coping and social support, of the individual and those around him/her,

and of perceptions and behaviour. It is becoming clear however that we now need to investigate the relationship between coping and support (Kessler, Price, & Wortman, 1985) and between the stress management behaviours of both partners in a relationship.

1.6.2 Interaction of coping and support processes

Dunkel-Schetter, Folkman, and Lazarus (1987) outline several ways in which coping and social support may be related. They suggest that coping may affect the social support received or social support may affect the way that a person copes and argue that both are probably true, with coping behaviours eliciting various amounts and kinds of social support and vice versa. Heller, Swindle, and Dusenbury (1986) suggest that social support and coping may be mutually influential but that each may also have independent effects on health. Furthermore, close examination of measures of coping and social support reveals that in fact these behaviours can overlap. Folkman and colleagues identify 'seeking social support' as a form of coping (Folkman, Lazarus, Dunkel-Schetter, et al., 1986). One may cope by providing support to another. Coping in marriage is particularly relevant to the latter case (e.g. Bowman's 'positive approach', 1990). Within dyads, coping and responses to coping can be supportive. Coyne and Bolger (1990) suggest that coping with one's own problems in a way that adequately reduces one's own distress is probably as beneficial as providing support to one's spouse. Similarly, a positive response to another's coping may be a kind of social support.

Coping may elicit social support by providing cues regarding the individual's needs or wishes for support, by facilitating or inhibiting others' ability and or desire to provide support, or by eliciting social support that is intended to reduce coping strategies that are aversive to the support provider. Coyne and DeLongis (1986) point out that poor marital support may be secondary to how people cope. Dunkel-Schetter et al. (1987) examined the relationship of person predispositions, appraisal patterns and methods of coping with

receipt of social support. Of the three sets of factors examined, coping (utilizing the Ways of Coping scale, Folkman & Lazarus, 1985) had the strongest association with the social support received. As in previous research, it was also found that there was specificity in the ways that various factors were associated with different types of support. Silver and Wortman have recently combined their work on coping with their work on social support. They found that, using an experimental design, supposed victims who presented positive or balanced coping strategies received more favourable responses from others (Silver, Wortman, & Crofton, 1990).

On the other hand, social support may affect coping. Thoits (1986) suggests that social support is useful primarily as coping assistance. Information giving may increase an individual's ability to problem-solve, for example. Social support may allow one to explore coping options or to obtain feedback (Schaefer, Coyne & Lazarus, 1982) or may limit maladaptive coping (Cohen & Wills, 1985). Marriage in particular may limit maladaptive coping (Coyne & DeLongis, 1986). Manne and Zautra (1989) found that the perception of the spouse as supportive was associated with better coping, while the direct effect of perceived support on adjustment was not significant after accounting for the effect of coping.

1.6.3 Contextual features of coping and of social support

Most family therapists agree that every individual can be seen as embedded in the context of a system (typically the family) (e.g. Minuchin and Fishman, 1981) as well as being an individual qua individual. While coping and social support may be seen as complementary processes, it is also possible to look at the individual as embedded in the context of social relationships, and at the effect each partner in a relationship has on the other's stress level, coping responses and sense of support. Being in an intimate relationship has more complex effects than simply having a source of emotional support,

and bad marriages can be sources of stress (Coyne & Bolger, 1990). On the other hand, individuals may choose relationships that reflect their own ability to manage stress, and thus having a source of support may be secondary to personal characteristics (Coyne & DeLongis, 1986). On a more molecular level, there is substantial evidence that the stresses that one spouse is experiencing have an impact on the other spouse (Krausz, 1988). One spouse's coping may affect the other's well-being, a partner's responses to coping efforts may shape coping patterns. Overall, there is a recent and growing consensus that the provision of support is interactional (Hobfoll & Freedy, 1990, Melamed & Brenner, 1990).

McCubbin, Joy, Cauble, Comeau, Patterson, and Needle (1980) pointed out that the coping of family members can cause stress to the family by making changes in the family that are maladaptive; by using personal coping techniques, such as drinking, which are stressful for others; or by coping in a way that prevents the family from adapting to stress (e.g. by denying illness in a child). Note that they focused on the effects of both personal and family coping on the family as a unit, rather than on effects on members of the family. Coyne, Ellard, and Smith (1990) suggest that it is necessary to extend the model of coping to include the effects of coping not only on the 'coper' but on those in close relationships with the coper, especially spouses. Coyne found that wives of husbands with myocardial infarctions who protected their husbands from worries, improved the husbands' well-being but damaged their own (reported in Coyne, Ellard, & Smith, 1990). Coyne and DeLongis (1986) further suggest that whether coping is effective or not may depend on others' responses to the coping effort. Stern and Pasquale (1979) found 'denial' in post-myocardial infarction patients to be associated with anxiety and depression in their spouses. DeLongis (1988) has also found that spouses' coping affected each other's mood, on a daily basis. Expectations for a partner's responses are probably most important. Rusbult et al. (1986) asked 68 dating couples to give coping responses to

a series of hypothetical coping tasks. All respondents were asked to give their response, their expectation of what their partner would do, and their response to their partner's hypothetical response to a hypothetical solution. Rusbult et al. found that the first two types of responses predicted (using multiple regression) 41 to 61% of the variance on distress in the relationship. The last variable explained 29 to 38% of the variance.

The effectiveness of coping has been measured by researchers in several ways. 'Objective' measures of the adequacy of problem solutions based on the physical or emotional well-being of the coper or on judgements of the adequacy of problem solution by researchers have been used, as have 'subjective' measures of the coper's sense of satisfaction with the solution. These outcomes may also be used by copers themselves to determine whether coping is adequate for the situation and whether further coping is necessary. However, copers probably also use information about the response of others to their coping. Coping techniques that are reinforced by significant others will tend to increase while those that are responded to negatively or ignored will tend to decrease. It is probable that two factors (at least) influence the salience of this type of information: the type of problem being coped with and the importance of significant others to the coper. Solutions to problems with a large interpersonal component (e.g. marital disagreements) would seem logically to require the approbation of the significant other in order to be fully effective. On the other hand, effective solutions to problems that tend to be largely impersonal (e.g. tiresome commuting) may depend more on the subjective evaluation of the coper or on elements that can be consensually validated. Nonetheless, it appears probable that in the most effective solutions these elements (the subjective, objective, and participant-observer) tend to converge. In other words, the solution that is satisfactory to oneself and the important others involved will probably be the one that is viewed as most satisfactory by other observers, whether the criteria used by the observers are derived from psychoanalytic theory or from behavioural measures of physical

and emotional functioning.

Similarly, in the area of social support, researchers are beginning to move beyond the concept of social support as something that is provided to a passive recipient and talking of it as an interpersonal process embedded in a matrix of past history, current interactions, and individual cognitions, behaviours, and affects. Coyne and DeLongis (1986) have pointed out that it is important to look at the individual who is (or is not) receiving social support and why. Melamed and Brenner (1990) recognize that 'helping relationships are reciprocal and mutual in the development and maintenance of patterns of helpful communications' (p. 105). Hobfoll and Freedy (1990) state that 'social support is a product of complex personal, social, and environmental factors' (p. 91). Most cogently, Coyne and Bolger (1990) argue that we need to ask how relationships foster adaptation. As in the research on coping behaviour, theorists are beginning to postulate that feedback from recipients shapes the support others provide, and expectancies develop for others' behaviour (Melamed & Brenner, 1990).

1.6.4 Behavior and perceptions of that behaviour

A further old theme given a new twist in the literatures on stress resistance is the dialectic between 'objective' and 'subjective' measures of behaviours. Examples of past concerns are the alternatives of judges' ratings of marital coping vs. self-reports (e.g. P. Miller et al., 1986; Bowman, 1990), averaged ratings of stressful life events vs. individual ratings of stressfulness (e.g. Holmes & Rahe, 1967, and Lazarus & Folkman, 1984) and measurement of the structure of social networks vs. perceived social support (e.g. Stokes, 1983, and I. Sarason et al., 1990). Most recently, researchers examining social support have suggested that partners in supportive transactions do not always agree on the meaning of the transactions. Fincham and Bradbury (1990) argue that cognitive processes, including attributions, determine whether a spouse experiences the partner's

behavior as supportive. Bolger, Kessler, and Schilling (in manuscript) found that supportive behaviours reported by providers but not by recipients were more effective than behaviours noticed by recipients. Spouses have a low level of consensus on whether given behaviours are supportive (Melamed & Brenner, 1990).

Theorists are now suggesting that we have to go beyond self-reports in examining interpersonal transactions. Coyne and Bolger (1990) suggest using reports from intimates. Fincham and Bradbury (1990) point out that in supportive transactions we need information both about what the recipient of support perceives and about the behaviour of the provider of support. Furthermore, the relationship of differences in perceptions of support behaviours to the functioning of both provider and recipient of support needs to be examined (Melamed & Brenner, 1990). Once more, the same reasoning can be applied to coping in the context of a relationship. Do spouses have consensus on how each copes? What effect do differences in perceptions have on the well-being of each? The implications of these questions go well beyond the relatively simple problem of assessing reliability of self-reports. Collecting data from both participants in a stressful situation provides an important context for the behaviour of each. Such data can address the complex question of how perceptions are related to behaviour in intimate relationships and the effects of disparities between spouses. In the research outlined above, evidence has been found that coping and support are interrelated and that spouses' coping and support efforts affect each other.

1.6.5 Additional considerations

While researchers in the field of stress, coping and social support are again including personality as a predictor of stress resistance, (e.g. Bolger, 1990; McCrae & Costa, 1986), it can be argued that personality too is usefully viewed in a relational context. Caspi and Harbener (1990) found that individuals tended to be married to others who had similar

personalities, and that subjects whose personalities were more stable over a period of ten years were also more likely to be married to similar others. They suggest that assortative marriage on the basis of personality tends to maintain the stability of personality traits. In a similar vein, I. Sarason et al. (1990) suggest that early experiences with attachment are replicated by the individual in his/her relationship choices in later life. While I. Sarason et al. (1990) are focusing on stability, based on the individual's continued choice of situations that replicate early experience, the corollary is that new experiences that do not replicate earlier ones offer the potential for change. It is interesting to note that this has long been a tenet of psychodynamic therapists, who refer to the phenomenon with such terms as 'corrective emotional experience' (Alexander & French, 1946).

The final element to be taken into account in developing a model of stress management is change and stability over time. Menaghan (1982) points out that effects of coping may depend on the time at which outcome is measured. The immediate results of coping efforts may be good, while long-term results are negative, or vice versa. Antonucci and Jackson (1990), adopting a reciprocity model, have suggested the concept of a 'support bank' (p. 178) in close relationships. Individuals 'put support in' by providing it to others and, over the long term, receive an equivalent amount of support themselves. This suggests that expectations for support are a crucial element of close relationships. available when specific stressors arise. future needs for support and by building up or decreasing the other's willingness to provide support. The concept of quid pro quo from marital therapy is similar to these concepts. The assumption in quid pro quo is that in relationships what each partner gives and what each receives from the relationship is roughly equal.

1.6.6 A unified model

Consideration of the reciprocal effects of coping and provision and utilization of support within a relationship over time permits an integration of the concepts of social support and coping into a unified model. A unified model would aid in clarifying the way that these two important, parallel constructs are related and the way that each develops. A number of the trends in each area of research have simultaneously evolved in the other (e.g. the focus on the meaning of events) and an explicit cross-fertilization of ideas would probably be beneficial to both (e.g. use of the technique of collecting data from both partners in a dyad). In this model, coping patterns, including the mutual exchange of support, and expectancies for behaviour, would be seen as evolving over time in the context of a relationship with others. (See Figure 1).³ Much of current research has focused on the major pathways between personality and stress; personality and coping; stress, coping, and health; and social support and health. Very little information is available on the pathways between coping and experienced social support; the response of others, coping, and experienced support; and the support that respondents provide and that they receive. Evaluation of these elements of the model would aid in exploring the questions of how an individual develops a repertoire of coping techniques and how she or he develops a sense that others are available if needed.

Simply put, how you cope affects the people you are involved with and thus their ability to provide you with support when you need it. An example of this kind of feedback loop would be a mother responding to continued complaints about her child's behaviour by sitting down with her husband to plan a consistent way to deal with the problem. This approach increases her husband's sense that they have a good marriage, relieves his feelings of anxiety about their child, and gives him the sense that he is in

³In figure 1, the representation of persons is not symmetrical to indicate that this is a simplified schematic and the representation of each side could be expanded to include all elements of the other side.

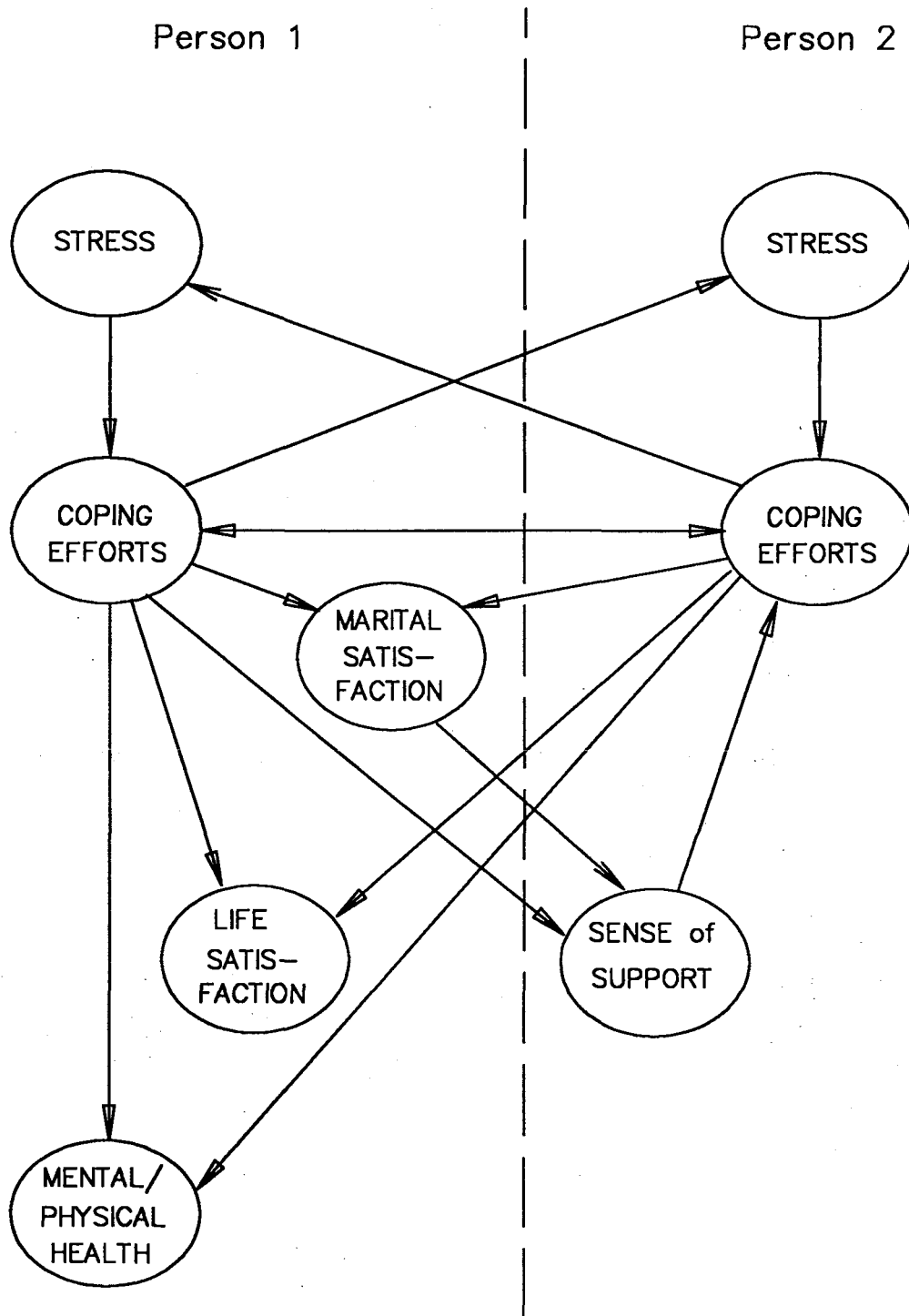


Figure 1: A model of interdependence in couples of coping and social support

control of events in their family life. In return, the husband responds positively, thus encouraging her to continue to cope this way, while both of them feel supported by each other and confident in their marital relationship.

If an individual's coping does affect his or her spouse's well-being, how might this happen? There are four possible ways that one spouse's coping might affect the other, using the example of a wife as Person One and a husband as Person Two.⁴ First, the husband's coping, *as he sees it*, might be sufficient to predict his wife's well-being. Second, the husband's coping, *as his wife sees it*, may be a more important predictor of her well-being. It is also possible that the situation is more complicated and that what each does, or says he or she does, to cope is less important than some combination of information from both of the spouses. The third possibility is that simple differences between spouses are related to well-being. The difference could be between the self-reports of the husband and of the wife or between the wife's self-reports and her reports on the husband.⁵ Finally, the fourth possibility is that specific combinations of coping techniques are important, such as one partner using conflict a great deal and the other using avoidance.

Furthermore, it is possible that the sex of the respondent has an effect on whether differences are more or less important. Each of these types of information about coping in the relationship may be additive to the others, so that information about differences adds to information about observations of the partner, which adds to information about the partner's self-reports.

Similarly, differences between spouses in the kinds of coping that they see as possible may affect well-being. If both partners see the same option as available, this may prevent

⁴This example could be reversed with the husband as Person One and the wife as Person Two.

⁵It is also possible to look at differences between the respondent's self-report and the other's observations of the respondent. It should be pointed out that in the case mentioned above, one respondent is reporting on two different people, the self and the other, whereas in this case, two respondents are reporting on the same person. The latter case is a kind of inter-rater reliability and was described in the earlier section on measurement issues. A further possible difference is between the respondent's observations of the other and the other's observations of the respondent. This comparison was felt to be so remote from the experience of respondents as to be of no importance.

conflict over solutions. Alternatively, differences might be helpful, with spouses helping each other to see alternative solutions to problems or taking necessary steps that their spouses don't. For example, if one feels the need to 'hold back on doing anything', it might be helpful for the other to 'find out more', in terms of the coping options identified by Folkman and colleagues, (Folkman, Lazarus, Dunkel-Schetter, et al. 1986, Folkman, Lazarus, Gruen & DeLongis, 1986).

In general, the overall question is whether spouses tend to be the same in their management of stress or different, and whether 'sameness' or 'differentness' of stress management in couples is a useful construct for exploring relational effects of stress resistance. This contrast is the same as that identified by systemic family therapists as complementary vs. symmetrical family styles (Nichols, 1984). While combining data from two individuals results in a complex pattern of possible effects and therefore requires a very careful and specific examination of alternatives, at this initial exploratory stage it is useful to simply examine some general possibilities.

In order to disentangle the effects of coping and provide prescriptions for change, it is necessary to know to what extent each of the four possible types of information about coping in dyads noted earlier is associated with outcome. There is, however, no inherent contradiction in the possibilities and it is probably true that each contributes to some extent to the outcome. In fact, each succeeding possibility is an elaboration on the preceding one, (e.g. perception of the other's coping is to a certain extent dependant on what coping behaviour the other uses). Perhaps this relationship could best be conceptualized as a pool of behaviours emitted by Person One and Person Two, some overt, some covert. Person One and Person Two each observe some but not all of the other's behaviours, some but not all of their own behaviours, and make some comparisons between what the self and the other seem to be doing. For spouses, one would expect a reasonably high correlation between the four types of measure given above, since both

Person One and Person Two's observations of Person Two's coping are based on the same sets of behaviours. However, as each succeeding possibility is more complicated and time consuming to obtain as a measure, it is important to explore whether more complex measurement adds anything to prediction of outcome.

Rusbult et al. (1986) have shown that partners' expectations for each other are associated with distress in the relationship. Moreover, Bradbury and Fincham (1987a) suggest that, overall, studies of distressed versus non-distressed couples show that there is an increased tendency for messages in distressed couples to have a greater negative impact than intended. They argue that in distressed marriages there is a cognitive bias towards perceiving negativity. Fincham, Beach, and Baucom (1987) found that differences between the attributions that spouses made for their own behaviour and attributions that they made for their partner's behaviour were related to marital satisfaction.

In general, it is probably the case that what you think your partner is doing is more important for your well-being than what the partner thinks he or she is doing. From the point of view of systems theory, this should be the case. It is a common practice within family therapy to assume that each family member interprets events within the family somewhat differently and that it is important to know the interpretation each member of the family places on events (e.g. Virginia Satir, interviewed in Haley and Hoffman, 1967). In this thesis, the relationship between three possible measures of the partner's coping and the respondent's well-being will be examined; the partner's coping as observed by the respondent, as reported by the partner, and the difference between the respondents' observations of their partner's coping and their own coping.

1.7 Plan of the current study

1.7.1 Overview

The primary aim of this research was to investigate a core feature of the heuristic model outlined above, namely the effect of spouses' coping on each other. While several studies have shown such effects, most have been limited by the measures they have used (often ad hoc or focusing on a limited set of coping techniques), by use of laboratory conditions, or by collecting data from only one partner in a dyad. As well as avoiding these limitations, the data in the current study were collected within the context of an overall model of stress resistance by couples.

While the model was thought to be generally true for couples, it was decided to specifically study marital coping in parents of handicapped children. Marital coping was chosen for a number of reasons. The way that spouses cope with marital problems is more likely to affect each other than other types of coping. Marital coping can be considered as being directly concerned with maintaining what Lieberman (1986) suggests is the single most important source of social support, a marriage. Many of the most important issues of life occur as marital problems: financial concerns, sex, raising of children, etc. Finally, despite this importance, marital coping is a relatively understudied aspect of coping,

The research was done with parents of handicapped children in order to avoid laboratory conditions which are artificial, have low external validity, and a low degree of emotional impact. Furthermore, other researchers have indicated the importance of using respondents who are actually going through stressful situations (e.g. Coyne, Ellard, & Smith, 1990), and have suggested the importance of chronic stress (Kessler, Price & Wortman, 1985). Parenting a handicapped child was felt to put a particularly strong strain on the marital coping of both parents. Coping with children comprises an important aspect of marital coping. Emery, Joyce, and Fincham (1987) found parenting

behaviour to be a common and important source of conflicts in couples, as did Bowman (1990). Finally, parenting concerns, perhaps more than any other issues, impinge on both partners in a marriage more or less equally, and ensures that they are reporting on roughly equivalent problems. Therefore the impact of the stressor and of coping by the self and the other should be roughly equivalent for each.

Practically, a source of support is very important for relieving strain, and yet, paradoxically, strain may weaken that support system. It was felt that it would be of practical help for couples if more was known about how they maintain their relationship under difficult conditions.

Measurements were taken at only one point in time in order to simplify the research problem although the question of direction of causality was recognized. An examination of coping techniques and outcomes at one point in time does not elucidate whether current functioning is affecting coping techniques used (or observed to be used) or vice versa. This problem is the same whether an individual is reporting on his/her own coping or on his/her spouse's coping. In fact, there is good reason to believe that this entanglement is not artifactual but rather an inherent property of the systems in question. It is probably particularly true in close relationships that as individuals function better and have a better marital relationship, they will cope better and that as they cope better they will function better and have a better marital relationship in upward (or downward) spiralling feedback loops. The 'causality' of coping is of concern primarily because 'coping' is something that can potentially be taught.

This was an exploratory study, intended to provide an initial test of a new model but also to suggest the usefulness of several avenues of research before more detailed studies are done. Moreover, because this sample was rather unique in having both spouses responding to the same questions, it was important to make most efficient use of the

opportunity. Finally, because the current research used a specialized section of the population, it was of interest to compare findings from this sample with those of a previous sample. Therefore, a number of interesting but subsidiary issues were also investigated. There was no reason to expect results in one direction rather than another and therefore the research questions for these issues were phrased as 'analyses' rather than as 'hypotheses'.

The first analysis consisted of the correlations between the global variables of satisfaction and the emotional support provided by the partner and with the partner's coping and the self's marital and life satisfaction. These correlations were calculated because it was suspected that these variables would be quite highly related and in order to determine to what degree they measured similar constructs.

A second planned analysis was done in order to evaluate the specific effects of three important variables which were thought to be related to well-being and in order to ensure that a failure of these variables to contribute to the variance explained was not due to the techniques of analysis used (variables entered regression equations in groups or 'sets').

The relationships between self reports and other's observations was examined for two purposes. The first, and simplest, was to examine the methods issue of how good spouses are as observers of each other's behaviours. The second purpose was to further understand the findings. If observations are relatively similar to others' reports, then it can be argued that the partner's behaviour is related to the respondent's outcomes, albeit filtered through perceptions. If observations and other's reports are poorly related, then it is not partner's behaviour but essentially some aspect of the respondent that is related to the respondent's well-being.

Two more analyses were carried out in order to examine the relationship of appraisals to coping. Appraisals have been found to be useful predictors in coping research yet use of appraisals has not been explored in marital coping. It was felt that these analyses

would both explore the usefulness of appraisals in coping and help to further elucidate why respondents used the coping techniques which they did.

Finally the two last analyses were carried out in order to determine how similar respondents in this sample were to respondents in a previous sample of randomly selected couple from the general population. To the degree that the samples were similar, the results of this study would be generalizable to other populations.

1.7.2 Goals of the study

A. The major goal of the current study was to test hypotheses derived from a unified model of stress resistance in which coping and support processes are integrally related via the relational context in which they are imbedded. Three assumptions from the model were tested. The first is that marital coping affects three areas of well-being: marital satisfaction, life satisfaction, and psychological symptoms. The second is that, in marital dyads, one spouse's marital coping affects the other spouse's well-being. The third assumption is that the perceptions that a respondent has of the spouse's coping are more important for predicting the respondent's well-being than the spouse's own reported coping. Hypotheses one to seven, and analyses one and two test these assumptions.

B. The second goal of this project was to test the possibility that differences between spouses in their coping and in their appraisals are related to their own and their partners' well-being (hypotheses eight to ten).

C. The final goal was to conduct a variety of planned analyses exploring other aspects of marital coping (analyses 3-7).

1.7.3 Hypotheses

The hypotheses were that:

1. Use of the coping techniques of conflict, self-interest, and positive approach as

reported by Person 1 would be related to marital satisfaction, life satisfaction, and symptoms for Person 1.

2. Use of the coping techniques of conflict, self-interest, and positive approach as reported by Person 2 would be related to marital satisfaction, life satisfaction, and symptoms for Person 1.

3. Use of the coping techniques of conflict, self-interest, and positive approach by Person 2, as observed by Person 1, would be related to marital satisfaction, life satisfaction, and symptoms for Person 1.

4. Use of the coping techniques of conflict, and self-interest would be negatively related to marital and life satisfaction and positively related to symptoms.

5. Use of the coping technique of positive approach would be positively related to marital and life satisfaction and negatively related to symptoms.

6. Person 2's self-reported coping would account for variance on Person 1's marital and life satisfaction and symptoms in addition to that accounted for by Person 1's self-reported coping.

7. Person 1's observations of Person 2's coping would account for variance on Person 1's marital and life satisfaction and symptoms in addition to that accounted for by Person 1's self-reported coping and Person 2's self-reported coping. When the predictor sets of observed coping and Person 2's self-reported coping were rotated, observations would explain more variance than others' reports.

8. Highly asymmetrical use of coping techniques by partners would be associated with decreased marital and life satisfaction, and increased symptoms.

9. Differences between Person 1's self-reported coping and observations of Person 2's coping would account for variance on Person 1's marital and life satisfaction and symptoms in addition to that accounted for by Person 2's self-reported coping.

10. Couples who were similar on the appraisals of coping options which they made

would have higher marital satisfaction, lower symptoms, and higher life satisfaction as a couple than couples who were dissimilar on the coping options they reported.

1.7.4 Planned analyses

The planned analyses were that:

1. The matrix of correlations between satisfaction with the emotional support provided by the partner, with the way the partner handled problems, and the self's marital satisfaction and life satisfaction would be examined.

2. The relationship between coping techniques used and outcome would be examined for socio-economic status, length of relationship, and severity of child's handicap.

3. The agreement between how respondents saw the spouse and how spouses saw the self on marital coping (i.e. between observer and observed) would be examined, with the following comparisons planned: Women as observers vs. men as observers, for each coping technique, for couples with high marital satisfaction vs. low marital satisfaction.

4. The matrix of correlations between appraisals and coping techniques reported would be examined in order to discern the relationship of appraisals to marital coping used.

5. Similarly, the relationship between agreement between partners on their appraisals and agreement on their use of coping techniques would be examined.

6. The coping techniques used by parents of handicapped children would be compared to those used by other couples (using data from previous research done by Bowman).

7. The coping techniques men report using would be contrasted with those women report using.

Chapter 2

Method

2.1 Subjects

Subjects were married couples who responded to solicitation through two organizations for families with handicapped children. A broad sample of parents with handicapped children was used in order to avoid any coping patterns particular to specific groups or stages in the growth of these families. The inclusion criteria for subjects were:

- subjects were married or living as if married,
- each couple had at least one handicapped child,
- the child was less than 19 years old,
- the child was living with the family on a permanent basis.

Subjects were therefore not limited by the age or nature of the handicap of the child or by any other demographic characteristics. A total of 232 subjects returned their questionnaires. Of this group, 24 husbands did not return a questionnaire, leaving 104 cases for which data from both partners was available (208 respondents). Data from a further two couples was eliminated from the study because, in one case, the husband's questionnaire was too incomplete, and, in the other case, the parents were short term foster parents. The final N was 102 couples (204 subjects).

The two sources of participants in this study were the Family Focus Society, a British Columbia-wide self-help group for parents of handicapped children, and the Lower Fraser

Valley Cerebral Palsy Association, an umbrella organization providing services to handicapped children and their families in the Lower Mainland area of British Columbia. Subjects were recruited by letter and personal contact. Members of the Family Focus Society who registered for the 1989 conference received a letter describing the study with conference materials. The letter requested interested parents to pick up a questionnaire at the conference. A table was then set up at the conference and any passers-by solicited for participation. Registrants for a second Family Focus Society conference in 1990 were informed with their registration materials that the study was continuing and participation was again solicited at the conference in a similar manner. The Lower Fraser Valley Cerebral Palsy Association included a letter soliciting participation with their newsletter. Interested parents were requested to return a postage paid card in order to receive a questionnaire package. All potential participants were informed that the study 'examines the way in which couples with a challenged child maintain their marital relationship'.

This form of recruitment makes it difficult to estimate a true response rate for the sample because the agencies had no record of which recipients of the letters were in fact eligible for participation (e.g. recipients could also be single parents, professionals, temporary foster parents, etc.). Moreover, a strategy was taken of encouraging anyone interested in the study and eligible for inclusion to take a questionnaire package without requiring a commitment to the research. A very small monetary inducement (a \$1.00 donation per couple to the sponsoring organization for completed questionnaires) was offered. Of those who accepted a questionnaire package, 232 respondents returned their questionnaire, for a total response rate of 56%. The percentage of couples who returned both of their questionnaires was lower (53%) since a number of men did not return their questionnaires.

2.2 Measures

2.2.1 Introduction

Three criteria were chosen for this study in order to determine which, if any, of a number of major areas of well-being were related to one's own and one's partner's coping. The three areas on which criteria were based were marital happiness, life satisfaction, and psychological symptoms. Marital satisfaction was an obvious criterion for the effects of marital coping and has been used by other researchers in the field (e.g. Bowman, 1990; Fincham & Bradbury, 1987; P. Miller et al., 1986). Since this study was also intended to explore aspects of an integrated model of stress and coping, marital satisfaction was useful in addition as a measure of the emotional support received from the spouse. Life satisfaction is a more general measure of well-being than marital satisfaction and has been used for measuring the outcome of marital coping (e.g. Bowman, 1990) and of social support and family resources (e.g. Pittman & Lloyd, 1988). Studies of coping have often included psychological symptoms as an outcome measure (e.g. Folkman, Lazarus, Gruen & DeLongis, 1986). It was felt that marital coping, and the partner's coping in particular, would also be related to symptoms since research has found a relationship between marital distress and immunological and physiological effects (Kiecolt-Glaser et al., 1987, 1988 and Musante et al., 1990).

This was an exploratory study using the techniques of regression and therefore a large number of predictors were used in order to reduce the possibility that variables other than those included in the study might have a stronger relationship with the outcome measures. Marital coping and appraisals were included as predictors since these variables were the subject of the current research. The other variables chosen were based on those included in the literature on stress, coping, social support, and parents of handicapped children. The rationale for including specific categories of predictors is given at the appropriate

place in the following discussion.

- Criteria:** Dyadic Adjustment Scale (Spanier, 1976)
Brief Symptom Inventory (Derogatis 1975)
Delighted-Terrible Scale (Andrews & Withey, 1976)
- Predictors:** Coping Inventory (Marital) (Bowman,1990)
a) self-report
b) report on partner
Appraisal Scale (Folkman, Lazarus, Dunkel-Schetter,
DeLongis & Gruen, 1986)
Life Event Schedule (Brief)(Krause, 1985)
Global evaluations of coping, questions about stress,
characteristics of the handicapped child,
social support, demographic characteristics
- Control:** Social Desirability Scale (Krause, 1985)

See Appendix A for the complete questionnaire and Appendix B for the list of questionnaire items corresponding to each variable.

2.2.2 Dyadic Adjustment Scale

This scale (the DAS) is a widely used measure of marital satisfaction. Spanier and Thompson (1982) report that over 300 researchers have contacted the developer for permission to use the test and that many published studies have used it. The scale consists of 32 items and is usable either in a paper and pencil format or by interview. Spanier (1989) reports internal consistencies for the total DAS, using Cronbach's coefficient alpha, ranging from .84 to .96. The test-retest correlation over an 11 week period was .96 (Stein, Girodo, & Datzenroth, 1982). Over a 12 month period, including childbirth, Belskey, Spanier, and Rovine (1983) found a test-retest correlation of .82 for women and

.69 for men for the total DAS. The overall reliability of the scale is good. In terms of constructs measured, Spanier (1976) reported finding four factors: consensus, satisfaction, cohesion, and affectional expression. Spanier and Thompson (1982) conducted a confirmatory factor analysis and found continuing evidence for the first three factors, which were substantially related to each other. The last factor, affectional expression, had a number of items with significant loadings that did not relate well to the construct. Sharpley and Cross (1982) found a one-factor solution most appropriate. Their first factor accounted for 73% of the variance and they suggest that this factor represents 'general dyadic adjustment' (p. 741). Most of the items on the DAS significantly discriminated between those scoring above the mean and those scoring below the mean. Items 8, 10, 11, 25, 27, and 28 contributed most to discriminating these groups and item 31 alone correlated .86 with the total scale. It might be possible to use a subset of the scale items with almost the same results as using the full scale. The present study used the scale as the global measure it was developed to be and thus the factor structure is of less importance. Fincham and Bradbury (1987), in their critique of the measurement of marital quality, note that the DAS is 'among the best available' (p. 807) measures.

2.2.3 Brief Symptom Inventory

The Brief Symptom Inventory (BSI) is the brief form of the Symptom Checklist-90-R, which in turn was derived from the Hopkins Symptom Checklist. The BSI consists of 53 items in a self-report format that takes approximately ten minutes to complete. Separate norms are available for both men and women in a non-patient population. It yields the same nine symptom dimensions and three global indices as the SCL-90-R and is quite highly correlated with it (correlations on similar symptom dimensions range from .92 to .99). The three global indices are: a global severity index, a positive symptom distress index, and a positive symptom total. The global severity index is simply the mean

of all items on the BSI and is reported to be the 'most sensitive single indicator of the respondent's distress level, combining information on numbers of symptoms and intensity of distress' (p. 30, Derogatis & Spencer, 1982). The test-retest reliability of this scale across a two-week interval is .90.

Some researchers have found that a large percentage of variance on these scales is accounted for by the first factor that can be considered a global distress factor (depression) (Clark & Friedman, 1983; Hoffman & Overall, 1978; Holcomb Adams, & Ponder, 1983). In this study the measure was treated as a global measure of distress and only the global severity index was used.

2.2.4 Delighted-Terrible Scale

Andrews and Withey (1976) developed the Delighted-Terrible Scale as a means to measure affective evaluations of quality of life. This scale was used in the current study as a seven point scale as follows:

'I feel: Delighted 7....6....5....4....3....2....1 Terrible' .

Andrews and Withey also included three off-scale categories (neutral, doesn't apply, and I never thought about it) which were not included in the scale as used in the present study. They did a thorough investigation of the construct validity of this scale, using multiple methods and constructs and found that using the scale to measure any of a wide variety of aspects of perceived well-being results in approximately 65 percent valid variance. Approximately eight percent of the total variance is attributable to methods effects. These results were substantially replicated across three independent analyses. By combining several items, one can increase the validity of a scale and Andrews and Withey estimate that a measure based on three items would have a validity of .79.

Andrews and Withey used the Delighted-Terrible Scale as the response format for a question about global quality of life: 'How do you feel about your life as a whole?'

They asked the same question twice in the course of an interview and used the mean of the answers to provide a summary measure of well-being. There was a correlation of .68 between this question and the same question asked 10 to 20 minutes later. The mean of the two answers correlated more highly with a set of core global well-being measures than either of the original responses, and, within those core items, had the highest average correlation with other core items. Andrews and Withey regarded this measure as 'one of our best measures of global well-being' (p. 107-108).

In the current study, the quality of life question, with the Delighted-Terrible Scale used as the answer format, was asked at two points in the questionnaire, once near the beginning and again near the end. The mean of the two responses to the question was used as a measure of life satisfaction.

2.2.5 Coping Inventory (Marital)

The Coping Inventory (Marital) or CI(M), was recently developed using empirical and rational techniques (Bowman, 1990). The entire sample on which test development was based consisted of 368 subjects. A large selection of coping items was administered to an pilot sample of married couples. Those that best met psychometric properties were combined into the final form, a 64 item scale using this five point Likert scale:

'5 never....4 rarely....3 sometimes....2 often....1 usually'.

In order to prevent response bias, the response items were reversed randomly. The final form was then administered to a second group of respondents. Analyses of the responses yielded the following five factors or scales (also described in introduction):

positive approach: behaviours directed at 'emotional management' of the marriage.

conflict: essentially destructive acts directed towards the partner.

self-interest: an increase in activities outside of the marriage.

(introspective) self-blame: worrying and other symptoms.

avoidance: avoiding issues and (negatively loaded) active problem solving.

Internal consistencies of the scales ranged from .77 to .88. These results compare favourably with those obtained by Folkman and Lazarus (1985) who found internal consistencies ranging from .56 to .85 on their Ways of Coping scale. There is also support for the validity of the CI(M). Multiple regression of a measure of marital happiness on the five coping factors accounted for 30% of the variance (Bowman, 1990).

The scales of interest in the current study included only positive approach, conflict, and self-interest because the self-blame scale was confounded with outcome and in Bowman's research the avoidance scale was not strongly related to outcomes. The items from these scales were included in administration of the overall coping measure in this study.

In the current study, each member of a couple was required to describe any recurring marital problems she or he had that had occurred within the past two weeks. This format was used in order to elicit respondents' typical marital coping over a period of time, while still using a short enough period that respondents would be able to remember specific coping events. The respondent then rated the degree to which she or he had used each of the coping items on the coping inventory in dealing with those problems. Next, each was asked to rate the degree to which the partner was observed to have used each item to deal with those problems. There were, then, four measures of coping for a couple:

1. the woman's coping as observed by herself
2. the woman's coping as observed by her partner
3. the man's coping as observed by himself
4. the man's coping as observed by his partner

This yielded three measures of coping for each respondent:

1. the respondent's coping as observed by the respondent (coping: self)
2. the partner's coping as observed by the respondent (coping: observed)
3. the partner's coping as reported by the partner (coping: other)

When Bowman coded the kinds of marital problems reported by her respondents, she found the following categories: problems with children, with money, with communication, and with health, as well as other less common problems (1990). When an initial subset of responses from the current study was examined, the same categories were evident, with two exceptions. Problems with health (i.e. the respondent's health) were not common, but problems with time were, perhaps not surprisingly in this group of parents. As a result of this initial review, the categories used to code marital problems in the current study were: children, money, communication, time, and other problems. A maximum of two problems were coded for each individual, since individuals who reported more than two problems tended to report many more. Each marital problem category was dummy-coded 1 or 0 for respondents, depending on whether or not the respondent had reported it. A separate dummy code was used to note whether a respondent reported no marital problems or two problems. For example, a respondent might be coded 1 (item present) for child problems, communications problems, and two marital problems.

2.2.6 Appraisal Measures

Appraisal questions were taken from work done by Folkman, Lazarus and colleagues (Folkman, Lazarus, Gruen, & DeLongis, 1986 and Folkman, Lazarus, Dunkel-Schetter, et al., 1986). They identified two areas in which individuals evaluate the effect of a stressful situation on themselves and called these primary and secondary appraisal. Primary appraisal refers to the individual's assessment of what is at stake in a situation. The 13 'stakes' items were derived from the previous literature and from subjects' responses

to open-ended questions in previous research by the authors. In their study, each of 150 subjects were administered the appraisal questions at five different times and the resultant data were factor analysed, resulting in two factors, threats to self-esteem and threats to a loved one's well-being. The remaining four items did not load on either factor. The six kinds of stakes are:

- threats to self-esteem
- threats to a loved one's well-being
- threats to one's own physical well-being
- failure to achieve an important goal in one's work
- a strain on financial resources
- losing respect for someone else.

The mean coefficient alpha over all five administrations was .78 for threats to self-esteem, and .76 for threats to a loved one.

Secondary appraisal refers to the individual's assessment of what coping options are open to him/her. Folkman, Lazarus and colleagues (Folkman, Lazarus, Gruen, & De-Longis, 1986; Folkman, Lazarus, Dunkel-Schetter, et al., 1986) have identified four coping options:

- changing the situation
- accepting the situation
- needing to know more before acting
- having to hold back.

The intercorrelations among these four items range from .00 ('had to accept' with 'needed to know more') to -.49 ('could change' with 'had to accept').

The items on the appraisal measure are responded to on a five point Likert scale. Both primary appraisal and secondary appraisal were significantly related to the coping techniques respondents reported using (Folkman, Lazarus, Dunkel-Schetter, et al., 1986). Folkman, Lazarus and colleagues also included a question at the end of each of the primary and secondary appraisal scales asking, if more than one of the appraisal items applied, which one applied the most (Folkman, Lazarus, Dunkel-Schetter et al., 1986). These questions were included in the current study but were not used for several reasons. First, a substantial number of respondents did not use these scales. Second, the answers to the items themselves are ordinal, providing more information than nominal data about which item of the appraisal questions applies most.

2.2.7 Global ratings of satisfaction with coping

Two global questions were asked concerning how satisfied the respondents were with their own coping and their partner's coping. It was possible that simple ratings of satisfaction would be as strongly related to outcomes as the lengthier measure of marital coping. In other words, the important feature of coping might be not what the respondent or the spouse did, but rather how satisfied the respondent was with what was done. The stress management model described in this thesis suggests that the coping of marital partners is related and that coping is related to sense of support. Therefore it was of interest to determine whether spouses who were satisfied with their own coping were also satisfied with their partner's coping, and whether satisfaction with one's own and with one's partner's coping were related to sense of support in the relationship.

2.2.8 Measures of Stress

Three brief measures of stress were included. Because of the already considerable length of the questionnaire, brevity was considered to be very important in these additional questions. However, it was considered important to capture both objective and subjective elements of stress, and to capture both elements specific to having a handicapped child and general to all persons.

Krause (1985) reported on a brief checklist of stressful life events that he had developed from work by Ruch (1977). Ruch conducted a smallest space analysis of the Holmes and Rahe (1967) Social Readjustment Rating Scale. He found three dimensions on the scale; degree of life change; desirability of change; and area of life change. Krause took 11 items from Ruch's undesirable life event dimension and added one more item on deterioration of financial status. Only undesirable items were used because the preponderance of evidence suggests that desirable life events are not as stressful as undesirable events. For each item, subjects were asked to indicate whether or not it had occurred in the previous year, checking either yes or no. Since all subjects in this study would have a spouse, the three items pertaining to loss of a spouse were eliminated and the remaining nine items used. The sum of the 'yes' answers formed the variable 'life events'. In order to fully capture recent life stresses respondents were also asked whether any problems not associated with the handicapped child had occurred in the previous two weeks and to specify the problem. This item (answered yes or no) was treated as a single variable ('other problems').

Respondents were also asked to give an overall rating of the stress that they had experienced in the previous two weeks, using a seven-point scale. This question was inserted in order to capture the subjective appraisal element of stressfulness. Respondents were also asked to estimate the degree of stress which the partner had experienced in the last two weeks, using the same scale, for use if the partner failed to answer this question.

They were then asked to indicate which spouse had experienced most stress in the time period.

2.2.9 Characteristics of the handicapped child

In order to assess the influence of aspects of the child on outcomes, 15 questions about the handicapped child and his/her place in the family were asked. These questions were gleaned from reading the literature on families with handicapped children and represented areas that have been reported as causing problems for these families (Friedrich, Wiltturner & Cohen, 1985). Respondents were asked to report how many children they had. They also indicated the birth order of the handicapped child using a scale from one to six. A final category, 'later', was included in the scale to record any families with more than six children. The sex and date of birth of the child was requested. It was felt that whether or not the handicapped child was a product of the current union might affect outcomes and therefore parents were asked to indicate this. Respondents were asked how many times the child had been admitted to the hospital in the previous year, whether or not the handicap had been noticeable at birth (an indication of the severity of the handicap), and whether or not any of a list of seven problems had occurred for the child in the previous two weeks (yes or no). The number of yes responses to seven problems were summed to create a variable 'number of child's problems' (range 0-7). In an open-ended question, respondents were asked to indicate the nature of their child's handicap. The responses were categorized as follows: Down's syndrome, mental handicap or developmental delay, cerebral palsy, spina bifida, other (including a wide array of chromosomal abnormalities, learning disabilities, and sensory deficits), and not reported. A maximum of two handicaps were coded. If two handicaps were reported the more encompassing one was treated as the handicap and dummy-coded. The second handicap was invariably either mental handicap or 'other'. A second set of dummy codes

indicated whether the respondent reported only one handicap, more than one handicap or more than one handicapped child. For example, a report that a child had cerebral palsy and was developmentally delayed would have cerebral palsy dummy coded as '1', and more than one handicap coded also coded as '1'.

2.2.10 Social support

A short set of questions about social support were asked in order to evaluate the contribution that support might make to well-being in this sample. The measurement of social support is a contentious issue, with a number of strategies currently in use. Vaux (1990) distinguishes between the measurement of support networks, supportive behaviours by others, and subjective appraisals. The respondent's perception of support rather than any report on the receipt of supportive behaviours was used, since it is the former that seems to be most strongly associated with well-being (B. Sarason et al., 1987). Measures of perceived support from the partner and from others were obtained using a short set of questions.

Moreover, since marital satisfaction was an important outcome variable and since marital satisfaction has been treated as an aspect of social support (Coyne & DeLongis, 1986), this variable provided one lengthy measure of support. Fincham and Bradbury (1990) note that while the two concepts of marital satisfaction and social support may well be related and influenced by some of the same variables, it is important not to assume that one can be replaced by the other. They suggest that marital satisfaction, based on 'an overall evaluation of the marriage...includes, but is not limited to, consideration of spousal support' (p. 32). Therefore it was thought useful to ask one question solely about the degree of emotional support experienced from the partner (again, using a 1 - 7 rating scale).

The number of sources of support outside of the marriage were also estimated. There

are a number of instruments available to measure support (B. Sarason et al., 1987, Pearson, 1986). They all have the drawback of length. For example, the SSQ requires respondents to list up to nine supports for each of 27 items, then indicate satisfaction with each (I. Sarason, Levine, Basham, & Sarason, 1983). Based on findings that perceived support is most strongly associated with well-being, that the core element of perceived support is the feeling that one is loved and esteemed, and that a scale intended to measure different social support functions had few differential effects, (B. Sarason et al., 1987), respondents were simply asked about sources of emotional support other than the spouse. Procidano and Heller (1983) found differences between support from friends and from family. The research of B. Sarason et al., (1987) also supports this distinction. Respondents were given a list of three sources of emotional support: friends, family and professionals, plus the category of no support other than the spouse. Respondents checked any sources of support they currently experienced. Professionals were included as a source of support because of the large role they play in the lives of parents of handicapped children. The number of sources endorsed was then summed, resulting in a variable ranging from zero (no source of support except spouse) to three (support from friends, family, and professionals). It was felt that this set of questions captures the most important elements of more sophisticated instruments, while retaining brevity.

2.2.11 Demographic characteristics

Questions about characteristics of the spouses and family were asked. Information about the respondent's sex, date of birth, religious affiliation, current occupation, and highest level of education was collected. Religious affiliation was reported by checking one of four categories: Roman Catholic, Protestant, Jewish, or other. The response 'Jewish' was later collapsed into 'other' because of the very low rate of endorsement of this category. The resultant three categories were dummy-coded. The occupation question, which was

open-ended, was not used in analyses, since the responses proved to be too varied to be adequately captured by available systems for coding occupation. Coupled with the facts that a common response, housewife, was uncodeable, and that two other measures of socio-economic status (income and education) were available, it was felt to be unhelpful to include occupation. Based on findings that religiosity is related to marital satisfaction (Wilson & Filsinger, 1986), respondents were asked to rate how important their religious beliefs were in helping them handle marital problems, from very important (7) to not important at all (1). In case the partner did not answer this question, respondents were asked to use the same scale to estimate the importance of religion to the partner.

Respondents were also asked to indicate the family's gross income in the previous year, using a seven category scale from less than \$10,000 per year to over \$60,000 per year, changing in units of \$10,000. They were also asked to give the date on which the spouses began living together. This question, rather than date of marriage was asked in order to include any common-law spouses as well as to capture the entire length of the relationship for spouses who lived together before marriage.

2.2.12 Social desirability

Krause (1985) reported on a brief measure of social desirability based on work by Clancy and Gove (1974). Krause used ten items from Clancy and Gove, each responded to on a yes/no scale (five keyed yes, five keyed no). A factor analysis of the matrix of tetrachloric correlation coefficients for Krause's subjects revealed a single underlying dimension, on which three of the ten items loaded poorly. These items were eliminated from Krause's analyses and the seven remaining items were found to represent a single underlying dimension and to have an internal consistency of .70. These seven items were included in this study. The sum of the answers (corrected for direction of scoring) was used as a measure of social desirability. There is relatively little psychometric data available on

this short scale and it is, again, included as a compromise between the longer scale that would add to the length of the package subjects were asked to complete, and having no social desirability measure.

2.3 Procedure

Respondents completed their questionnaires in their own homes. The written instructions directed them to complete their questionnaires without consulting their partner, noting that to do so would invalidate their responses. This section of the instructions was in bold print. Each spouse was given a separate business reply envelope in which to return the questionnaire. This was done to protect confidentiality and to further encourage spouses to complete their questionnaires separately. Questionnaires from each member of a couple were matched upon receipt by use of a specially coded identity number.

When subjects are required to complete a series of questionnaires, there may be a question of whether or not responses to one will affect the responses to the next. Ideally, the order of presentation of questionnaires would be counterbalanced but that was logistically difficult. Moreover, making the questionnaire as visually pleasing and easy to complete as possible was also an important consideration in the arrangement of questions. Unfortunately, there was no easy way to resolve the problem of possible 'halo' effects of one part of the questionnaire on another.

However, the Coping Inventory (Marital), Brief Symptom Inventory and Dyadic Adjustment Scale used in the current study comprise a quite lengthy list of specific questions, and it is global evaluations which are most susceptible to influence (Fincham & Bradbury, 1990). While the Delighted-Terrible Scale is a global evaluation and therefore more susceptible to the influence of previous questions, it was asked both at the beginning and at the end of the questionnaire. The relationship between the answers at the two measurement points could be examined to determine if the responses are changed at the second measurement point.

Chapter 3

Results

3.1 Overview

Preliminary analyses of the characteristics of respondents, effects of sample groups, and management of missing data will be reported first. Next, results will be reported in several sections, corresponding to the goals of this project. The first goal was to test hypotheses based on the assumption that three aspects of respondents' well-being were related both to their own and to their spouse's marital coping. An additional assumption was that a respondent's well-being would be better predicted by the respondent's observations of the other than by the other's reports on the self. The second goal was to test hypotheses that differences between spouses in their coping and in their appraisals are related to well-being. The final goal was to examine the agreement between observer reports and self-reports, explore the utility of appraisals in predicting marital coping, and compare results with those from Bowman (1990).

3.2 Data Analysis

Step-wise regression analyses were used to test all of the hypotheses, in order to examine the relationships between predictor variables and outcome variables. One basic setup, with variations, was used. The three outcome variables (marital and life satisfaction and symptoms) were regressed on the sets of predictors using the BMDP program, P2R. Since the equations for men and women could not be assumed to be the same, separate regression equations were calculated for each sex. Thus, for each series of analyses that

were done, six regressions were conducted (the three outcomes for each of two sexes). Because of the large numbers of predictor variables (61), these were entered into step-wise regressions in sets. There were six sets of basic variables: demographic data on the parents, child variables, stressors, appraisals, marital problems, and social support. There were three sets of coping variables: self-reported coping (coping/self), observed coping (coping/observed), spouse's report on self (coping/other). Finally, there were the global evaluations comprising three sets with one variable in each, satisfaction with: support from partner, own coping, and partner's coping. See Tables 1 and 2 for set composition.¹ Initial analyses included the global evaluations but these were dropped from later analyses in order to focus on the relative contributions of coping. A number of the variables used were categorical and therefore were dummy-coded for use in the regression calculations. See Tables 1 and 2 for these variables.

In order to meet the first goal, the relationship between the predictor variables and the outcome variables were examined in several ways. Several types of analyses were done, including unplanned analyses, in order to further clarify the relationships amongst the variables and to evaluate alternative explanations for the findings. Initially, the individual correlations between the variables and the outcomes were calculated. Several series of step-wise regressions were then done in order to test hypotheses 1-7. These hypotheses concern the relationship of the three sources of information about marital coping to the respondent's well-being.

A series of analyses was then undertaken in order to evaluate the possibility that findings from the first series of step-wise regressions were due to the relatively small size of the sets of coping techniques. These consisted of only three variables, whereas some of the other sets included as many as 15 variables, giving the smaller sets an advantage in being entered into the regression equations. In order to check on that possibility, the

¹While this was the most rational aggregation of variables, several other set formations were explored with essentially similar results.

Table 1: Correlations of independent variables with dependent variables for women

Variables§	Satisfaction		
	Marital	Life	Symptoms
Demographics			
social desirability	.27	.21	-.28
age/parent	.17	.05	-.22
age/relationship	.11	.07	-.11
wage	.25	.24	-.20
importance/religion	.02	.10	.06
education	.08	.10	-.21
roman catholic†	.02	.09	-.04
protestant†	.12	.23	-.19
Child variables			
hospitalizations	-.01	-.11	.21
age/child	-.03	-.03	.09
number children	-.07	-.12	.08
child of mother†	-.20	-.16	.19
adopted†	.17	.06	.03
downs syndrome†	.01	.09	-.14
mentally handicapped†	-.15	-.15	.05
cerebral palsy†	.09	-.04	-.05
spina bifida†	-.01	.06	.05
handicap unknown†	-.06	.05	-.08
two or more handicaps†	-.05	-.10	.05
sex of child	-.14	-.09	.04
handicap noticed at birth	.05	-.07	.09
birth order of child	.14	.15	-.13
number of child's problems	.04	.02	.20
Appraisals			
can change	.01	-.02	-.15
must accept	-.03	.05	.08
need to know more	.03	-.16	.22
must hold back	-.22	-.24	.35
threat/loved one	-.24	-.25	.37
threat/self-esteem	-.35	-.34	.48
harm to self	-.08	-.16	.30
not achieving goal	-.18	-.18	.15
financial strain	-.21	-.28	.30
loss of respect/other	-.47	-.33	.39

Variables§	Satisfaction		
	Marital	Life	Symptoms
Stressors			
number of life events	.07	-.10	.30
stress	-.23	-.39	.51
other problems	-.09	-.02	.18
Marital problems			
communication†	-.28	-.27	.14
money†	-.02	-.19	-.00
children†	-.26	-.23	.13
time†	.02	.18	-.16
unknown†	.25	.24	-.18
two or more problems†	-.36	-.30	.30
Coping/self			
conflict	-.58	-.37	.53
avoidance‡	-.27	-.19	.25
positive approach	.55	.54	-.32
self-blame‡	-.45	-.52	.72
self-interest	-.26	.01	.15
rate/own coping	.50	.51	-.55
Coping/other			
conflict	-.47	-.29	.35
avoidance‡	-.25	-.27	.27
positive approach	.26	.19	-.17
self-blame‡	-.37	-.39	-.45
self-interest	-.18	.09	.07
Coping/observed			
conflict	-.56	-.36	.30
avoidance‡	-.61	-.43	.38
positive approach	.49	.39	-.15
self-blame‡	-.42	-.37	.35
self-interest	-.38	-.15	.34
rate/other coping	.56	.34	-.36
Support			
number of social supports	.26	.29	-.34
support/spouse	.66	.60	-.41

†dummy-coded

‡not present in sets unless otherwise noted

§each block is composed of the variables forming one set

Table 2: Correlations of independent variables with dependent variables for men

Variables§	Satisfaction		
	Marital	Life	Symptoms
Demographics			
social desirability	.40	.30	-.29
age/parent	.07	.26	-.08
age/relationship	.02	.22	-.09
wage	.01	.22	-.08
importance/religion	.05	-.06	.07
education	-.02	.08	-.12
roman catholic†	-.13	.00	.09
protestant†	.17	.10	-.01
Child variables			
hospitalizations	.11	-.00	.10
age/child	.04	.11	-.07
number children	-.08	-.02	.12
child of mother†	-.11	-.21	.01
adopted†	.16	.14	-.02
downs syndrome†	-.12	-.06	-.08
mentally handicapped†	.04	-.10	.22
cerebral palsy†	.02	-.09	.05
spina bifida†	-.11	.09	-.06
handicap unknown†	-.09	-.03	.09
two or more handicaps†	-.05	-.15	.19
sex of child	-.04	-.02	.06
handicap noticed at birth	.14	.03	-.10
birth order of child	.06	.11	-.03
number of child's problems	-.19	-.38	.29
Appraisals			
can change	-.06	.15	-.08
must accept	-.20	-.10	.04
need to know more	.09	.01	.06
must hold back	-.41	-.11	.24
threat/loved one	-.13	-.15	.15
threat/self-esteem	-.29	-.22	.18
harm to self	-.03	-.04	.12
not achieving goal	-.12	-.21	.32
financial strain	-.12	-.34	.43
loss of respect/other	-.34	-.22	.16

Variables§	Satisfaction		
	Marital	Life	Symptoms
Stressors			
number of life events	.07	-.20	.13
stress	-.09	-.25	.25
other problems	.05	-.01	.18
Marital problems			
communication†	-.13	-.04	.05
money†	.05	-.04	.03
children†	-.03	-.02	-.07
time†	-.00	.03	.05
unknown†	.15	.14	-.18
two or more problems†	-.10	-.04	.09
Coping/self			
conflict	-.61	-.44	.49
avoidance‡	-.53	-.43	.24
positive approach	.43	.26	-.20
self-blame‡	-.56	-.61	.59
self-interest	-.30	-.06	.11
rate/own coping	.47	.60	-.41
Coping/other			
conflict	-.56	-.29	.29
avoidance‡	-.24	-.14	-.04
positive approach	.38	.23	-.14
self-blame‡	-.41	-.37	.28
self-interest	-.29	-.08	.09
Coping/observed			
conflict	-.68	-.51	.48
avoidance‡	-.34	-.11	.13
positive approach	.46	.27	-.19
self-blame‡	-.55	-.53	.44
self-interest	-.39	-.24	.18
rate/other coping	.38	.33	-.24
Support			
number of social supports	.37	.42	-.40
support/spouse	.63	.51	-.39

†dummy-coded

‡not present in sets unless otherwise noted

§each block is composed of the variables forming one set

six basic analyses (sex \times outcomes) were rerun, with the three sets of coping techniques combined into one set that comprised nine variables, a more comparable size.

While it was hypothesized that observed coping would be more useful than other's reports in predicting the respondent's well-being, step-wise regression analysis with the variables entered into sets did not permit direct comparison of the individual coping techniques used, as reported from different sources within the dyad. Due to the large number of variables, comparison of these variables could only be done by examining only the coping techniques and the well-being measures. Therefore, the next, unplanned, analyses explored in more detail the relative relationships of self reports, observations, and other reports to well-being for individuals. These analyses were exploratory and intended as a corroboration and elaboration of findings from hypothesis testing. The basic analyses were rerun, using only the coping techniques and the P9R program of BMDP was used to generate solutions for the best possible subsets. Maximizing adjusted R^2 was used as the criterion for 'best'. All coping techniques, including coping by avoidance and by self-blame, were used because of the exploratory nature of these analyses. Data from men and women were analysed separately.

Next, an unplanned series of factor analyses was done in order to clarify the relationships between the variables as a whole. A Principal Components Analysis with direct quartimin rotation, giving an oblique solution, (BMDP program P4M) was used to seek the factor structure of the variables used in the regression analyses.

Finally, several planned analyses were done to clarify other relationships among the variables. The correlations among several global satisfaction measures and marital and life satisfaction were calculated. A second group of planned analyses on the effects of three non-coping variables (socio-economic status, length of relationship, and severity of child's handicap) which had been thought possibly to be related to well-being were done, using the basic step-wise regression analyses.

The second goal was to investigate whether spouses who were more disparate on coping techniques or on appraisals were also more unhappy in their marriage, dissatisfied with life, and symptomatic. This set of hypotheses was tested by replacing the appropriate variables with difference scores in the basic step-wise regression analyses described above, except that the three global satisfaction variables were not included. Specifically, in order to test whether spouses who are more disparate on their use of coping techniques are also less satisfied with their marriages and their lives and more symptomatic, the variable sets of other reports and observations of the other were replaced with the variable set of the differences between those two sets of reports. Because negative and positive coping techniques should have opposite relationships with outcomes, absolute differences were used.² In the next series of analyses, the set of coping options was replaced by the set of absolute differences between spouses on coping options.

The third goal was to investigate three collateral questions. The first question was whether differences between observer and self-reports were the same for men and women, and for unhappy and happy couples. Men as observers were compared with women as observers by conducting a multivariate analysis of variance (MANOVA). All MANOVAs were calculated using the P4V program from BMDP. Men and women were not sampled independently. They were, of course, couples and therefore each couple was treated as a case in MANOVA calculations and sex was treated as a within variable whenever it was used as an independent variable in a MANOVA. In order to explore observer-observed differences, the absolute differences between observer and self-reports on all five coping scales were treated as the dependent variables in a MANOVA. Next, the correlations between the set of differences and marital satisfaction for the individual were calculated.

The second question was whether there was a relationship between the appraisals

²E.g. seeing the partner as higher on conflict than oneself would result in a negative score, which would probably be negatively related to marital happiness. Correspondingly, seeing the partner as higher on positive approach would also result in a negative score but a positive correlation.

and the coping techniques which respondents reported using. Because the set of ten appraisals was to be compared to the set of five coping techniques, a canonical correlation was calculated, using the BMDP program P6M, for men and women separately. This is a measure of the dependence of each set of variables on the other set.

Third, results from the present study were compared with those of Bowman (1990). The first planned analysis tested for sex differences on coping techniques. A MANOVA was done with the independent variable, sex (male or female) treated as a within variable. The dependent variables were the five coping scales as reported by the self and the same five subscales as observed in the other. The latter were included for completeness, although this analysis was not planned. Next, the means for each coping technique as reported by each sex were compared to the corresponding means obtained in Bowman's sample. The significance of the difference between each pair of means was tested using the t-test.

3.3 Preliminary Analyses

3.3.1 Characteristics of the sample

The respondents represent a broad sampling of parents of handicapped children, from small B.C. communities as well as from several urban centres. See Table 3 for a summary of demographic information on the respondents. The mean age of respondents was 36 years for women and 38 years for men. Mean education was 13 years for both men and women, and the mean length of relationship was 12 years for both. Couples had an average of 2.4 children and average income, for the family, of \$40,000 to \$49,999. The mean number of life events that occurred in the previous year was one for both men and women, the mean number of problems reported for the child in the previous two weeks was also one for men and women. Data were collected on the type of employment each respondent had but there were so many jobs that did not fit available coding schemes

Table 3: Demographic characteristics of study participants

	Women mean(sd)	Men mean (sd)
Age (years)	36 (5.95)	38 (5.81)
Education (years)	13 (2.30)	13 (2.65)
Age of relationship (years)	12 (5.60)	12 (5.62)
Number of children	2.4 (1.12)	2.4 (1.19)
Annual income	\$40,000 – \$49,999 (1.54 units)	\$40,000 – \$49,999 (1.46 units)
	percent (N)	percent (N)
Religion:		
Roman Catholic	13% (13)	21% (21)
Protestant	54% (55)	50% (51)
Jewish	2% (2)	1% (1)
Other	31% (32)	28% (29)
Sample:		
Family Focus '89	53% (54)	53% (54)
L.F.V.C.P.A.	28% (29)	28% (29)
Family Focus '90	19% (19)	19% (19)

that the category was abandoned. The means of outcome criteria and of the coping techniques used are given for each sex and sample in Table 4.

Examination of the distribution of scores for psychological symptoms revealed that the distribution was highly skewed with several outliers. The variable was therefore transformed by using its square root for all subsequent analyses.

Table 4: Means and standard deviations for coping techniques and outcome variables by sample and sex

variable	sample	Women		Men	
		mean	sd	mean	sd
marital happiness	ALL†	106.88	16.94	106.37	16.88
	ff1	108.79	13.82	106.82	13.89
	cpa	106.87	20.20	108.61	18.65
	ff2	101.59	19.19	101.81	21.53
life satisfaction	ALL	5.10	1.05	5.17	1.06
	ff1	5.10	.90	5.28	.84
	cpa	5.19	1.35	5.09	1.36
	ff2	4.95	.97	4.97	1.10
symptoms	ALL	.72	.31	.63	.28
	ff1	.66	.27	.57	.24
	cpa	.78	.40	.68	.32
	ff2	.79	.28	.74	.28
coping/self conflict	ALL	2.31	.57	2.12	.60
	ff1	2.26	.50	2.04	.50
	cpa	2.37	.66	2.21	.56
	ff2	2.36	.66	2.19	.85
avoidance	ALL	2.43	.52	2.75	.61
	ff1	2.45	.48	2.69	.56
	cpa	2.31	.50	2.78	.62
	ff2	2.56	.62	2.89	.73
pos. approach	ALL	2.89	.54	2.97	.47
	ff1	2.89	.50	3.00	.45
	cpa	2.94	.55	2.96	.47
	ff2	2.81	.62	2.91	.56
self-blame	ALL	2.80	.61	2.54	.54
	ff1	2.80	.54	2.52	.50
	cpa	2.73	.73	2.48	.59
	ff2	2.93	.61	2.68	.57
self-interest	ALL	2.43	.53	2.25	.49
	ff1	2.43	.45	2.28	.48
	cpa	2.44	.59	2.22	.54
	ff2	2.40	.66	2.22	.49

variable	Women			Men	
	sample	mean	sd	mean	sd
coping/observed conflict	ALL	2.15	.67	2.38	.75
	ff1	2.08	.56	2.32	.63
	cpa	2.26	.73	2.45	.86
	ff2	2.18	.83	2.45	.92
avoidance	ALL	3.08	.75	2.51	.54
	ff1	3.03	.71	2.53	.48
	cpa	3.07	.81	2.54	.57
	ff2	3.23	.78	2.39	.64
pos. approach	ALL	2.85	.62	2.74	.58
	ff1	2.88	.62	2.71	.58
	cpa	2.82	.66	2.89	.49
	ff2	2.81	.59	2.60	.67
self-blame	ALL	2.53	.54	2.75	.58
	ff1	2.47	.54	2.76	.53
	cpa	2.53	.56	2.66	.66
	ff2	2.67	.54	2.85	.59
self-interest	ALL	2.36	.56	2.48	.60
	ff1	2.37	.49	2.51	.52
	cpa	2.28	.59	2.50	.64
	ff2	2.44	.70	2.38	.75

†ALL: all three samples combined.

ff1: sampled from the Family Focus Society conference in 1989.

cpa: sampled from the L.F.V.C.P.A.

ff2: sampled from the Family Focus Society conference in 1990.

3.3.2 Effect of sample on results

Data were collected from three groups, with 53% of the sample (54 couples) coming from Family Focus 1989, 28% (29 couples) from the Lower Fraser Valley Cerebral Palsy Association (LFVCPA), and 19% (19 couples) from Family Focus 1990. In order to ensure that data from the three groups could be combined, the groups were tested for significant differences on the major independent and dependent variables using MANOVA. MANOVAs were conducted separately for men and women. In order to have the most conservative test for possible differences between samples, the five coping techniques as reported for the self were tested separately from those five as observed. The variables tested for differences between the three sampled groups were the three outcome variables; marital satisfaction, life satisfaction, and symptoms, and the ten measures of marital coping; five reports on the self and five observations.

For both women and men the overall results for all MANOVAs showed no significant differences between the three sources of subjects. For MANOVAs on outcomes and self-reported coping for women, Wilkes maximum likelihood ratio $L = .82$, $F(16, 176) = 1.18$, $p < .29$. No univariate F values were significant. For men, $L = .77$, $F(16, 176) = 1.50$, $p < .10$. The only significant univariate F was for psychological symptoms, $F(2, 95) = 3.88$, $p < .02$. See Table 4 for the means. For MANOVAs on outcomes and observed coping, for women, $L = .83$, $F(16, 174) = 1.06$, $p < .39$. No univariate F values were significant. For men, $L = .77$, $F(16, 176) = 1.50$, $p < .10$. Once more, the only significant univariate F was for symptoms. See Table 4 for the means of the outcome variables and coping techniques by sample.

There is no obvious a posteriori reason why the means for symptoms should be different between samples for men. The two Family Focus conferences provided both the lowest and the highest means. While more Family Focus 1989 participants lived close to urban areas than Family Focus 1990 participants, LFVCPA participants also were

close to urban areas. Family Focus 1990 data and LFVCPA data were collected one year later than Family Focus 1989 data but there was no obvious intervening event in that year. However, while the results of the MANOVAs were not significant, and there was no reason to believe that the symptom means were different between samples, further analyses were done in order to completely rule out the possibility that sample could be considered an important variable in the data set.

In order to ensure that sample did not have an effect on the results, sample was dummy-coded and included as a set in the same step-wise regression procedures that were used to test the hypotheses. Each outcome measure was regressed on the total set of variables, using separate analyses for women and for men. When sample was included, 13 sets were entered. Sample did not enter the final regression equation for any of the six step-wise regression procedures, nor did inclusion of sample as a set change the outcome of the analysis in any important way. Sample was therefore dropped as a variable in succeeding analyses.

3.3.3 Missing data

Missing data were estimated using one of three different procedures, depending on the nature of the variable on which data was missing. This was done because of the unique characteristic of this data set, which was that information was available from both husband and wife on many variables. The methods used were; the two-step regression procedure of the PAM program from BMDP, substitution of the partner's report, or substitution of the mean.

In order to determine which method gave the best estimate of missing data, the two-step procedure was used initially to estimate missing data for a small sample of subjects. The results from this small sample of subjects were compared with either partner's report or item means, as appropriate. In the two-step procedure each variable with missing data

is regressed on all other available variables using a step-wise regression procedure to a maximum of two steps, resulting in a multiple correlation. Regression equations were calculated separately for men and women, since it was assumed that there might be a different equation for each sex.

For variables where data were available from both wife and husband, the multiple correlation of the predictors with the variable being estimated was compared with the bivariate correlation between partners' reports for that variable. If the correlation between partners' reports was higher than the multiple correlation obtained using PAM, the partner's report was substituted for the missing piece of data. This procedure was used to estimate family data, such as age of child, on which partners had good agreement. It was also used to estimate some demographic data, such as religious affiliation and age of respondent, which were better predicted by partner's score than by any other variables. If neither partner had provided the information, PAM was used to provide an estimate for each. However, partner's reports were not used to estimate missing variables for coping techniques or criteria, since each spouse's coping was going to be used to predict criteria for the other spouse.

For variables where summary scores were available, based on the combination of data from individual items of a measure, the mean of the items was used. Again, missing data for an initial sample of the subjects were estimated, using PAM. These estimates were compared with the mean of the items comprising the summary scores. In all cases, the estimates derived from PAM were essentially similar to the mean of the items and so the mean of the items was substituted for missing data. Variables estimated in this way included coping techniques, and the three outcome variables of marital and life satisfaction, and psychological symptoms. It is worth noting here that the authors of the life satisfaction and symptoms measures suggest using the mean to estimate missing variables. If missing data exceeded the critical number of items determined by the author

of the test, the summary score was considered to be missing for that measure.

Finally, where a variable was measured with only one item and partners' reports provided poorer estimates than the PAM procedure, PAM estimates were used.

3.4 Effects of marital coping on outcomes

3.4.1 Overview

This section describes analyses undertaken to meet the first goal (the first seven hypotheses and first two analyses), by examining the relationship of respondents' and partners' coping to outcomes. As an initial step, single order correlations of outcome measures with all of the variables included in the step-wise regression analyses were calculated. (See Appendix C for the intercorrelations of all of the independent variables used.) In order to test hypotheses that the respondent's own coping and that of the partner is related to outcome, two series of step-wise regression analyses were carried out, exploring variations of the same basic analyses. In the first, global evaluations of the respondent's own coping (rate/own coping), of the partner's coping (rate/other coping), and of the partner's provision of emotional support (support/spouse) were included in the variables for analysis. See Tables 5, 8, 12, 14, 17 and 19. In the second series, those global evaluations were dropped from the analyses. See Tables 6, 9, 13, 15, 18 and 20. In order to test hypotheses that observed coping is more important than other's coping, others' coping was forced into the equations in the third series. See Tables 7, 10, 11 and 16. Additional analyses were then done to carry out planned analyses and to further explore the findings from the hypothesis-testing analyses.

3.4.2 Intercorrelations: variables with outcome measures

Women: The zero-order correlations between demographic variables and outcome variables were generally low, ranging from .02 to -.28. See Table 1. The zero-order correlations between stressor variables and outcomes was also low (.00 to .30) with the exception of the global measure of stress. Correlations for stress ranged from -.23 for marital happiness to .51 for psychological symptoms. Appraisals ranged from .00 to .48. Marital problems ranged from .00 to -.36. Coping techniques ranged from .07 to .61. Global evaluations ranged from .34 to .66.

Men: A similar pattern emerged for men. Correlations between demographic variables and outcomes ranged from .00 to .40. See Table 2. The correlations for stressors ranged from .01 to -.25. For men, the overall measure of stress was not as highly related to outcomes as the summary measure of problems reported for the handicapped child. This measure was correlated from -.19 to .29 with outcomes. Appraisals ranged from .01 to .43. Marital problems ranged from .00 to -.18. Coping techniques were correlated from .06 to .68 with outcomes. Global evaluations ranged from -.24 to .63.

Examining the pattern of single order correlations reveals that coping techniques and global evaluations generally had the highest correlations with outcomes, especially for marital satisfaction. Appraisals and stressors also tended to be correlated with symptoms. For both men and women, the coping techniques of conflict, avoidance, self-blame, and self-interest whether self-reports or observer reports, were negatively related to marital and life satisfaction while positive approach was positively related. The reverse was true for symptoms. There were a few exceptions to this, but those correlations were all negligible.

Table 5: Marital satisfaction, step-wise regression with global ratings included: Women
 Contribution of each set to variance
 Change in R^2 if set removed

Sets	Steps		
	1	2	3
support/spouse	.428	.164	.162
coping/self		.239	.147
coping/other			.044
Summary			
R^2	.428	.667	.711
adjusted R^2	.423	.653	.688
F	71.97	46.56	31.60
df	1,96	4,93	7,90
p	.0000	.0000	.0052

3.4.3 Effects of marital coping on marital satisfaction

For women, when marital satisfaction was regressed on all 12 sets of predictor variables (series 1), three sets of variables were included in the equation. See Table 5. Overall satisfaction with the support provided by the partner accounted for 43% of the variance. Self reported coping accounted for an additional 24%, and other's coping for an additional 4%. When support satisfaction, satisfaction with one's own and with one's partner's coping were not included (series 2) the results were similar. See Table 6. Self reported coping entered into the equation first, giving an adjusted R^2 of .49. Observed coping entered for the second and final step, explaining an additional 8% of the variance.

Finally, in series 3, other's coping was forced to enter the latter equation, in which it had not previously been entered. Even when other's coping was forced into the equation, observed coping continued to add to the variance explained. See Table 7.

Table 6: Marital satisfaction, step-wise regression with global ratings not included:

Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps	
	1	2
coping/self	.503	.105
coping/observed		.075
Summary		
R^2	.502	.578
adjusted R^2	.487	.550
F	31.65	20.76
df	3, 94	6, 91
p	.0000	.0018

For men, when global variables were included (series 1), a four step solution was found. See Table 8. Satisfaction with spouse's support accounted for 40% of the variance, observed coping for an additional 22%, self reported coping accounted for an additional 6%, and satisfaction with own coping for an additional 2%. When the three global satisfaction variables were not included in the analysis (series 2), the adjusted R^2 for the two sets that were included in the equation was .63. Observed coping explained 60% of the variance and own coping another 5%. See Table 9.

Finally, in series 3, other's coping was forced into the step-wise regressions. Both when global variables were included and when they were not, observed coping continued to be entered into the equations. See Tables 10 and 11.

Table 7: Marital satisfaction, step-wise regression with others' reported coping forced into equation: Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
coping/other	.246	.046	.029
coping/self		.302	.106
coping/observed			.059
Summary			
R^2	.246	.549	.607
adjusted R^2	.222	.519	.567
F	10.23	18.42	15.11
df	3,94	6,91	9,88
p	.0000	.0000	.0064

Table 8: Marital satisfaction, step-wise regression with global ratings included: Men
 Contribution of each set to variance
 Change in R^2 if set removed

Sets	Steps			
	1	2	3	4
support/spouse	.399	.026	.028	.017
coping/observed		.224	.092	.072
coping/self			.056	.061
rate/own coping				.015
Summary				
R^2	.399	.623	.679	.693
adjusted R^2	.393	.607	.654	.666
F	65.02	39.21	27.76	25.70
df	1,98	4,95	7,92	8,91
p	.0000	.0000	.0020	.0405

Table 9: Marital satisfaction, step-wise regression with global ratings not included: Men
Contribution of each set to variance

Sets	Change in R^2 if set removed	
	1	2
coping/observed	.597	.214
coping/self		.054
Summary		
R^2	.597	.651
adjusted R^2	.584	.628
F	47.35	28.88
df	3,96	6,93
p	.0000	.0038

3.4.4 Effects of marital coping on life satisfaction

For women, when life satisfaction was regressed on all 12 sets of predictors (series 1), a three factor solution was found. See Table 12. Satisfaction with partner's support accounted for 33% of the variance, self-reported coping accounted for an additional 16% of the variance, and stressors for a further 6%. Eliminating the global variables (series 2) also resulted in a three step solution. Self-reported coping accounted for 37% of the variance, appraisals for an additional 14%, and demographic variables for an additional 9%. See Table 13.

For men, when global variables were allowed to enter (series 1), three sets entered the equation. Satisfaction with own coping accounted for 35% of the variance, self reported coping accounted for a further 11% of the variance, and child variables accounted for another 16% of the variance. See Table 14. When the global variables were not included in the equation (series 2), the adjusted R^2 was .42. Social support accounted for 17%

Table 10: Marital satisfaction, step-wise regression with others' reported coping forced into equation with global ratings: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps				
	1	2	3	4	5
coping/other	.365	.111	.025	.012	.017
support/spouse		.145	.022	.025	.032
coping/observed			.138	.064	.064
coping/self				.044	.038
stressors					.031
Summary					
R^2	.365	.510	.648	.691	.722
adjusted R^2	.345	.489	.621	.656	.680
F	18.38	24.73	24.16	19.92	17.18
df	3,96	4,95	7,92	10,89	13,86
p	.0000	.0000	.0000	.0081	.0279

Table 11: Marital satisfaction, step-wise regression with others' reported coping forced into equation: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
coping/other	.365	.029	.016
coping/observed		.261	.128
coping/self			.040
Summary			
R^2	.365	.626	.666
adjusted R^2	.345	.602	.633
F	18.38	25.93	19.96
df	3,96	6,93	9,90
p	.0000	.0000	.0160

Table 12: Life satisfaction, step-wise regression with global ratings included: Women
Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
support/spouse	.333	.125	.120
coping/self		.160	.127
stressors			.064
Summary			
R^2	.333	.493	.557
adjusted R^2	.326	.471	.522
F	47.99	22.60	16.15
df	1, 96	4, 93	7, 90
p	.0000	.0000	.0068

of the variance, observed coping accounted for a further 19%, and child variables for another 18%. See Table 15.

In the last analysis of this group (series 3), other's coping was forced into the regression with global variables not included. Once more, observed coping added to the variance, beyond that accounted for by other's coping. See Table 16.

3.4.5 Effects of marital coping on psychological symptoms

For women, when all 12 sets were used (series 1), four sets entered the equation. See Table 17. Satisfaction with one's own coping accounted for 30%, self-reported coping for 13% more, stressors for 8% more and support from partner for 3% more. When no global variables were included (series 2), the final adjusted R^2 was .51. Self reported coping accounted for 34% of the variance, stressors for 12% more, social support for 6% more,

Table 13: Life satisfaction, step-wise regression with global ratings not included: Women
Contribution of each set to variance

Sets	Steps		
	1	2	3
coping/self	.368	.275	.277
appraisals		.143	.175
parent variables			.093
Summary			
R^2	.368	.511	.604
adjusted R^2	.348	.436	.495
F	18.26	6.76	5.52
df	3, 94	13, 84	21, 76
p	.0000	.0124	.0348

and appraisal for 10% more. Stressors were removed in the fifth step. See Table 18.

For men, when global variables were included (series 1), three sets entered the equation. Satisfaction with one's own coping accounted for 17% of the variance, self-reported coping for an additional 18%, and social support for a further 3%. See Table 19. When only nine sets of variables were used (series 2), the final solution incorporated five sets. Self reported coping accounted for 26%, social support for an additional 6%, child variables for an additional 19%, appraisal for an additional 11%, and marital problems for an additional 7% of variance. See Table 20.

3.4.6 Effects of including avoidance in analyses

While the hypotheses did not include effects for coping by avoidance, the largest single correlation with marital satisfaction for women was the perception of avoidance in the

Table 14: Life satisfaction, step-wise regression with global ratings included: Men
Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
rate/own coping	.355	.248	.144
coping/self		.107	.061
child variables			.160
Summary			
R^2	.355	.462	.622
adjusted R^2	.349	.439	.532
F	53.98	20.37	6.91
df	1,98	4,95	19,80
p	.0000	.0006	.0107

partner. This variable also had relatively large bivariate correlations with life satisfaction and symptoms and therefore it was decided to further explore the effects of this variable. Therefore, a fourth series of step-wise regression analyses was run, in that this variable was included in the sets of coping techniques. The results of the analyses changed for women. See Tables 21 and 22.

For them, when marital satisfaction was regressed on all sets of variables, with the exception of the global satisfaction variables, the order of entry of the sets of coping techniques was reversed from the original result. Observed coping entered first, accounting for 58% of the variance with self-reported coping entering next, accounting for an additional 5% of variance and explaining a total of 63% of the variance when avoidance is included. When life satisfaction was regressed on all sets of variables, the set of other's

Table 15: Life satisfaction, step-wise regression with global ratings not included: Men
Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps			
	1	2	3	4
number social supports	.174	.062	.015	*out*
coping/observed		.190	.143	.173
child variables			.177	.225
Summary				
R^2	.174	.364	.541	.526
adjusted R^2	.165	.337	.432	.421
F	20.62	13.57	4.97	4.99
df	1,98	4,95	19,80	18,81
p	.0000	.0000	.0204	.1086

coping enters the equation, explaining an additional 9% of the variance, immediately after women's self-reported coping, which explained 37% of the variance. Other sets then entered the equation. The other's coping does not enter the equation when avoidance is not included.

Regressing symptoms on sets of variables including measures of avoidance resulted in very little change from the original analyses. There were essentially no changes in the original analyses for men. See Tables 23 and 24. Overall, these post-hoc analyses suggested that the partner's use of avoidance is strongly associated with life satisfaction and marital happiness for women.

Table 16: Life satisfaction, step-wise regression with others' reported coping forced into equation: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
coping/other	.112	.001	.012
coping/observed		.190	.150
child variables			.235
Summary			
R^2	.112	.302	.538
adjusted R^2	.084	.257	.414
F	4.04	6.72	4.33
df	3,96	6,93	21,78
p	.0094	.0001	.0027

Table 17: Psychological symptoms, step-wise regression with global ratings included:

Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps			
	1	2	3	4
rate/own coping	.298	.088	.050	.034
coping/self		.128	.090	.067
stressors			.079	.085
support/spouse				.034
Summary				
R^2	.298	.425	.504	.538
adjusted R^2	.290	.400	.464	.496
F	39.82	16.83	12.76	12.67
df	1,94	4,91	7,88	8,87
p	.0000	.0004	.0046	.0127

Table 18: Psychological symptoms, step-wise regression with global ratings not included:

Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps				
	1	2	3	4	5
coping/self	.337	.208	.164	.063	.066
stressors		.117	.096	.029	*out*
number social supports			.056	.048	.055
appraisals				.100	.167
Summary					
R^2	.337	.453	.510	.610	.581
adjusted R^2	.315	.417	.471	.525	.508
F	15.57	12.31	13.08	7.16	8.02
df	3,92	6,89	7,88	17,78	14,81
p	.0000	.0006	.0020	.0454	.1346

Table 19: Psychological symptoms, step-wise regression with global ratings included:

Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
rate/own coping	.173	.097	.067
coping/self		.183	.136
number social supports			.034
Summary			
R^2	.173	.356	.390
adjusted R^2	.164	.328	.356
F	20.04	12.85	11.75
df	1,96	4,93	5,92
p	.0000	.0000	.0266

Table 20: Psychological symptoms, step-wise regression with global ratings not included:
Men

Sets	Contribution of each set to variance Change in R^2 if set removed					
	Steps					
	1	2	3	4	5	6
coping/self	.259	.167	.140	.072	.088	.085
number social supports		.064	.037	.015	*out*	*out*
child variables			.190	.173	.196	.222
appraisals				.112	.134	.155
marital problems						.074
Summary						
R^2	.259	.323	.512	.624	.609	.683
adjusted R^2	.236	.294	.393	.464	.451	.513
F	10.97	11.08	4.31	3.89	3.84	4.00
df	3,94	4,93	19,78	29,68	28,69	34,63
p	.0000	.0040	.0241	.0438	.1052	.0334

Table 21: Marital satisfaction, step-wise regression with coping by avoidance included:

Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps	
	1	2
coping/observed	.579	.117
coping/self		.046
Summary		
R^2	.579	.625
adjusted R^2	.561	.591
F	31.93	18.54
df	4,93	8,89
p	.0000	.0331

Table 22: Marital satisfaction, step-wise regression with coping by avoidance included:

Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps	
	1	2
coping/observed	.608	.152
coping/self		.055
Summary		
R^2	.608	.662
adjusted R^2	.591	.633
F	36.77	22.31
df	4,95	8,91
p	.0000	.0079

Table 23: Life satisfaction, step-wise regression with coping by avoidance included:

Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps			
	1	2	3	4
coping/self	.370	.271	.227	.202
coping/other		.092	.087	.088
appraisals			.137	.142
marital problems				.067
Summary				
R^2	.370	.462	.599	.666
adjusted R^2	.343	.414	.507	.556
F	13.64	9.56	6.55	6.05
df	4, 93	8, 89	18, 79	24, 73
p	.0000	.0066	.0068	.0338

Table 24: Life satisfaction, step-wise regression with coping by avoidance included: Men
 Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps				
	1	2	3	4	5
number social supports	.174	.060	.015	*out*	*out*
coping/observed		.192	.146	.177	.056
child variables			.180	.225	.192
coping/self					.057
Summary					
R^2	.174	.366	.545	.531	.587
adjusted R^2	.165	.332	.430	.419	.462
F	20.62	10.83	4.74	4.76	4.70
df	1, 98	5, 94	20, 79	19, 80	23, 76
p	.0000	.0000	.0192	.1142	.0420

3.4.7 Summary of effects of marital coping

Self-reports and observations or other reports consistently appeared in the regression equations for marital satisfaction, and self-reports consistently appeared for symptoms and life satisfaction. A measure of partners' coping occurred in the equations for life satisfaction but inconsistently, depending upon which other variables and sets were allowed to enter the equation. Including coping by avoidance as a variable increased the importance of partner's coping as a predictor of marital and life satisfaction for women.³ Moreover, when other reports were forced into an equation, observations continued to add additional variance.

When the global evaluations of satisfaction were included in the list of variables to be used in analyses, they were consistently included in the equations. Marital satisfaction was related to satisfaction with partner's support for both men and women, accounting for a large percentage of variance in each case. However, observed coping continued to add a significant percentage of the variance explained. Symptoms were related to satisfaction with own coping for both men and women, but self-reported coping continued to add significantly to variance explained. Life satisfaction was inconsistently related to satisfaction variables (with other's support for women, with own coping for men). Overall, marital satisfaction was strongly related to the partner's coping and provision of emotional support as well as to self-reported coping, psychological symptoms were strongly related to self-reported coping and satisfaction with one's own coping, while life satisfaction was related inconsistently to own and measures of the partner's coping.

³When other set formations were used, the results were essentially the same for marital satisfaction and symptoms. When life satisfaction was regressed on predictors, observations sometimes entered the equation and sometimes did not, for both men and women.

3.4.8 Relative utilities of coping measures

The results of the first four series of regression analyses suggested that, when entered in sets, the three sources of information about coping were related to outcomes in specific ways. In order to further clarify the usefulness of the three sources of information about coping in a relationship relative to each other, and of specific coping techniques within the sets, the BMDP program P9R was used to select the best possible subsets of the coping techniques. This program has the advantage that it gives the change in R^2 for a set of variables if a given variable is removed from it. This provides an estimate of the usefulness of each variable relative to others in the set.

Once more six analyses were done, regressing each of the three outcome variables on the set of independent variables separately for each sex. In this case, however, only coping techniques were used in the analyses. All of the five coping subscales, including coping by avoidance and by self-blame were used. For each one, self-report, other's report, and observation of the other was included, resulting in a total of 15 variables (5 subscales \times 3 sources). The criterion for 'best' subset was adjusted R^2 . The program P9R generates subsets of the independent variables (coping techniques in this case) which maximize the adjusted R^2 with the dependent variable. It generates sets of subsets of differing sizes. The program was used to generate the ten best subsets. While this procedure capitalizes extensively on chance and would not be appropriate for hypothesis testing, it is useful for exploring the data and for verification of the findings. See Table 25 for a summary of the results of these analyses. More details from individual analyses are given in Appendix C. Overall, it was noteworthy that all solutions included one or more measures of partner's coping. Examining the pattern of 'best solutions' also reveals that avoidance appears consistently in solutions for all outcomes and both sexes, most extensively as husband's avoidance.

Table 25: Summary: Coping techniques which appeared in 'best' solutions

coping	women			men		
	self	obs.	other	self	obs.	other
Marital Satisfaction						
conflict	.	C	C	C	.	.
avoidance	.	A	.	A	.	A
positive approach	P	P	P	.	P	.
self-blame	I	.	.	.	I	.
self-interest	S	.	.	.	S	.
Life Satisfaction						
conflict	C	C	.	C	.	C
avoidance	.	.	A	A	A	A
positive approach	P	.	P	.	.	.
self-blame	I	.	I	I	.	.
self-interest	.	.	S	S	.	.
Psychological Symptoms						
conflict	.	.	.	C	.	.
avoidance	A	.	.	A	.	.
positive approach	.	.	.	.	.	.
self-blame	I	.	I	I	.	.
self-interest	.	.	.	S	S	.

3.4.9 Examination of overall pattern of relationships in variables

In examining the probabilities for each set before the first step in the step-wise regression analyses described above, it can be seen that these are also low for some of the sets that are not eventually included, suggesting that other sets could be useful predictors in the absence of data on coping techniques. It is possible to systematically compare the usefulness of the variables by forcing entry of given variables into the equation. However, because there are so many variables involved in these equations, it is difficult to compare all possible combinations. Therefore a series of factor analyses were done in order to clarify the relationships between variables.

Women: An initial solution found 21 factors with eigenvalues greater than one. Examination of the sorted, rotated factor loadings revealed that, beyond the first six, the factors consisted of only a few items. Examination of the variance explained by each factor suggested that a solution of three to six factors was optimal. When solutions of three, four, and five factors were compared, a four factor solution seemed most meaningful. See Table 26 for the factor loadings of each variable. The four factors were named 'Happy family', 'Problems/ poor coping', 'Age' of family, and 'Problems/good coping'. Age of family appeared in all solutions and consisted of age of parents, child, and relationship and related variables.

The 'Happy' family occurred as the first factor in all solutions. The three criterion variables all loaded on this factor, marital and life satisfaction positively and symptoms negatively. All three measures of coping by positive approach loaded positively on this factor and all three measures of coping by conflict, coping by avoidance and by introspective self-blame loaded negatively on this factor. No measure of self-interest loaded on this factor. Global measures of satisfaction with one's own, and one's partner's coping loaded positively as did the measures of emotional support from the spouse and from others. Few demographic, appraisal, marital problem, or stressor variables loaded on this factor.

The second factor consisted of items indicating problems and poor coping. Marital happiness loaded negatively, weakly, and symptoms loaded positively. All three measures of self-interest loaded positively, as did conflict and introspective self-blame. Avoidance did not load at all on this factor, nor did positive approach. The global measures of satisfaction and social support did not load heavily but global measures of stress did (number of child's problems, stress, and life events). No demographic variables loaded. Many of the appraisal variables loaded on this factor, mostly positively but few marital problems or individual stressors did.

The third factor was age. The fourth factor appeared to be made up of items relating to problems but also to good coping. In a three factor solution, this factor seems to be combined with the 'Problems/poor coping' factor. Symptoms but not life or marital satisfaction load on this factor. Observed and other reports of coping by positive approach load positively and observed and other reports of coping by conflict load negatively. The only other coping techniques that load on this factor are self-reported self-blame (positively) and other reports of self-interest and avoidance (negatively). Three global measures of problems load positively on the factor (number of child's problems, life events, and stress). Family income, religion, and education load negatively. The only remaining items that load on this factor are a scattering of stressor, appraisal, and marital problem variables, loading positively.

Men: A similar process led to the conclusion that a three factor solution was most meaningful. Factors similar to the factors for women could be identified. These were 'Happy' family, 'Problems/good coping' and 'Age' of family. See Table 27 for the factor loadings of each variable.

Again, the happy family was marked by high positive loadings for marital and life satisfaction and a negative loading for symptoms. All measures of positive approach loaded positively and all measures of conflict loaded negatively, as did all measures of

introspective self-blame. Perceptions of oneself or one's partner as avoidant loaded negatively and self-reports of self-interest loaded negatively. Global measures of satisfaction with coping and of social support loaded positively on this factor. Global measures of stress and problems did not load. Social desirability also loaded positively on this factor. Few other variables loaded on this factor.

Factor two appeared similar to the factor of problems but poor coping in women. Symptoms loaded positively. Global measures of satisfaction with coping and of social support did not load but several global measures of stressors did. Perceptions of oneself and one's partner as using positive approach loaded positively, as did all measures of self-interest, and all measures of introspective self-blame. Most of the other factor loadings were appraisals, which loaded positively. The remaining factor 'Age', was loaded on primarily by age-related factors.

Other factor solutions are, of course, possible. However, the factors described here continue to be identifiable when more factors are allowed to be present, while the interpretation of later factors becomes more difficult. It can also be argued that the factors for men and women replicate each other in essentials. For both, 'happy family' is the first factor, with the biggest eigenvalue. Similarly, conflict (negatively), positive approach (positively), and self-blame (negatively) all load on this factor as do the global measures of satisfaction with coping and and social support. Few other variables load on this factor. Age is clearly identifiable as a factor in all factor solutions for both men and women.

The remaining factors are less stable, changing more with different numbers of factors and are not the same for men and women. Nonetheless, there appear to always be one or more 'problem' factors.

Table 26: Principal Component Analysis: Women

Oblique Rotation (Direct Quartimin)
Rotated Factor Loadings†

Measures	Components			
	1	2	3	4
support/spouse	.78	—	—	—
marital happiness	.76	-.26	—	—
self: pos. approach	.73	—	—	—
observed: pos. approach	.73	—	—	.30
life satisfaction	.69	—	—	—
observed: avoidance	-.67	—	—	—
rate/other coping	.61	—	—	—
rate/ own coping	.55	-.27	—	—
communication	-.51	—	—	—
symptoms	-.51	.44	—	.31
harm to self	—	.62	—	—
observed: self-interest	—	.59	—	—
observed: self-blame	-.31	.57	—	—
self: self-blame	-.37	.56	—	.31
self: conflict	-.43	.56	-.30	—
other: self-blame	-.28	.55	—	—
financial strain	—	.55	—	—
other: conflict	-.33	.53	—	-.28
other: self-interest	—	.51	—	-.37
age/relationship	—	—	.81	—
age/parent	—	—	.73	—
number of children	-.29	—	.60	—
birth order	—	—	.58	—
age/child	—	—	.57	—
other: pos. approach	.49	—	—	.50
notice handicap, birth	—	—	—	.40
other problems	—	.30	—	.30
handicap unknown	—	—	—	—
threat/loved one	—	.50	—	—
threat/self-esteem	-.36	.26	—	.31
can change	—	-.30	—	—
must accept	—	—	—	—
need to know more	—	.32	.32	—
must hold back	—	.41	—	—
stress	—	.40	—	.42

Oblique Rotation (Direct Quartimin)
Rotated Factor Loadings†

Measures	Components			
	1	2	3	4
not achieving goal	—	.47	—	—
only 1 natural parent	—	—	-.34	—
loss of respect/other	-.40	—	—	.27
number of life events	—	.31	—	.45
money	—	.25	—	—
children	—	—	—	—
time	—	—	—	-.27
marital problems unknown	—	—	—	—
2 or more marital probs.	-.33	.26	—	—
Roman Catholic	—	—	.26	—
social desirability	.27	—	—	-.31
more than 1 handicap	—	—	—	.27
mentally handicapped	-.27	—	—	—
self: self-interest	—	.41	—	—
self: avoidance	-.34	—	—	—
hospitalizations	—	—	—	.35
adopted/fostered	—	—	.43	—
sex of child	—	—	—	—
Downs syndrome	—	—	—	-.48
other: avoidance	-.35	—	—	-.37
spina bifida	—	—	—	—
observed: conflict	-.43	.43	-.26	—
wage	—	—	.44	-.29
Protestant	—	—	—	-.32
education	—	—	—	-.34
number child's problems	.27	.40	—	.43
cerebral palsy	—	—	—	—
importance of religion	—	—	—	—
number social supports	.49	—	—	—
Eigenvalues	9.821	4.315	3.383	2.818
Sums of squares	7.006	5.530	3.591	3.484
Intercorrelations of the factors				
Factor 2	-.13			
Factor 3	.07	-.11		
Factor 4	-.07	.11	-.01	

†loadings less than .25 suppressed

Table 27: Principal Component Analysis: Men

Oblique Rotation (Direct Quartimin)
Rotated Factor Loadings†

Measures	Components		
	1	2	3
marital happiness	.86	—	—
observed: conflict	-.78	—	—
self: conflict	-.73	—	—
support/spouse	.72	—	—
self: self-blame	-.65	.27	—
life satisfaction	.64	—	—
observed: pos. approach	.62	.43	—
observed: self-blame	-.61	.30	—
other: conflict	-.60	—	—
symptoms	-.60	.31	—
self: pos. approach	.57	.41	—
rate/other coping	.56	—	—
self: avoidance	-.55	—	—
other: pos. approach	.52	—	—
rate/other coping	.51	—	—
threat/self-esteem	—	.59	—
financial strain	—	.57	—
threat/loved one	—	.56	—
harm to self	—	.55	—
not achieving goal	—	.53	—
number child's problems	—	.52	—
age/parent	—	—	.69
age/relationship	—	—	.68
birth order	—	—	.62
wage	—	—	.57
number of children	—	—	.55
other problems	—	—	—
more than 1 handicap	—	—	—
adopted/fostered	—	—	.34
notice handicap, birth can change	—	—	-.29
must accept	—	—	—
need to know more	—	.48	—
must hold back	-.38	—	.27
Downs syndrome	—	—	—

Oblique Rotation (Direct Quartimin)
Rotated Factor Loadings†

Measures	Components		
	1	2	3
mentally handicapped	—	—	—
only 1 natural parent	—	.31	-.38
loss of respect/other communication	-.28	.42	—
money	—	—	.28
children	—	—	—
time	—	—	—
marital problems unknown	.37	—	—
2 or more marital probs.	—	—	—
age/child	—	.32	.41
sex of child	—	—	—
handicap unknown	—	—	—
stress	—	—	—
self: self-interest	-.26	.29	—
cerebral palsy	—	—	—
importance of religion	—	—	—
number of life events	—	.48	-.35
hospitalizations	—	—	—
other: self-interest	—	.40	—
other: avoidance	—	—	—
other: self-blame	-.45	.30	—
spina bifida	—	—	—
Roman Catholic	—	—	—
observed: self-interest	—	.48	—
observed: avoidance	-.46	—	—
Protestant	—	—	.37
social desirability	.43	—	—
education	—	-.35	—
social support	.44	—	.26
Eigenvalues	8.708	4.328	3.492
Sums of squares	8.056	4.579	3.765
Intercorrelations of the factors			
Factor 2	-.03		
Factor 3	.06	.05	

†loadings less than .25 suppressed

3.4.10 Relationships of global ratings and criteria

Planned analyses of the correlations between the global ratings of satisfaction with partner's emotional support and partner's coping efforts and the outcome variables of marital and life satisfaction were conducted. In order to establish a significance level and correct for the number of correlations, a probability level of .05 was divided by the total number of planned correlations, 12, resulting in a significance level of .004. At this level, all of these ratings were quite strongly and significantly intercorrelated. Satisfaction with the partner's coping and with support from the partner were correlated .50 for women and .58 for men. Life satisfaction and marital satisfaction were also highly intercorrelated, .59 for women and .56 for men. Finally, support was highly intercorrelated with both marital and life satisfaction for women (.66 and .60 respectively) and men (.63 and .51 respectively). Satisfaction with partner's coping was less well correlated with marital and life satisfaction. The correlations were .56 and .34 respectively for women and .38 and .33 respectively for men. (See Table 28).

It was not expected that intercorrelations between symptoms and global satisfaction ratings would be as high as the former intercorrelations and therefore analyses were not planned. However, for completeness, the intercorrelations with symptoms are also given in Table 28. As the analysis was not planned, the significance of these correlations was not tested, but they are of the same order of magnitude as the intercorrelations with marital and life satisfaction.

3.4.11 Correction for small set size

Differences in the relative sizes of the sets raised concerns that the sets of coping techniques might have an advantage over some of the larger sets in entering the regression equations. The sets of variables used in the step-wise regressions were formed rationally and therefore they varied in size. Smaller sets have an 'advantage' in being able more

easily to enter the regression equation, and the sets of coping techniques, consisting only of three members each, were rather small compared to some of the other sets (e.g. there were 15 child variables). Therefore, in order to determine whether the coping techniques would be useful predictors even if they were not in small sets, all three sets of coping techniques were combined into one set consisting of nine coping techniques. Once more only the subscales of positive approach, conflict, and self-interest were used. Global satisfaction variables were not included, resulting in seven sets. The results of the six basic regression analyses (series five) were essentially the same as for those analyses when coping techniques were formed into three sets. In all but one analysis, the same sets entered the final equation, with the proviso, of course, that the superordinate set of coping techniques replaced any and all of the smaller sets of coping techniques. The exception was when symptoms were regressed on predictors for men. While coping techniques continued to enter the equation first, there were some other minor changes in the solution.

3.4.12 Effects of specific variables on outcomes

It was planned to examine the relationship between coping techniques used and outcome for socio-economic status, length of relationship, and severity of child's handicap. Income of family was used as most representative of socio-economic status since Bowman (1990) found no effects for education and, in this study, education had lower correlations than income with outcomes. Whether or not the child's handicap was noticeable at birth was used as the measure of severity of the handicap. Wage, age of relationship, and noticeability were removed from the sets that they were part of and were allowed to enter as single variables into the basic series of step-wise regression analyses, giving them an advantage, as noted above. The twelve sets of predictors were somewhat reduced in order to keep the numbers of sets manageable, by combining the two social support variables as one set, and the two measures of satisfaction with coping as another. This

resulted in a total of 13 sets. Marital satisfaction, life satisfaction, and symptoms were regressed on the sets of predictors separately for women and men, resulting in a total of six equations. In no case were the three single variables included in the final equations.

3.4.13 Summary of additional analyses of effects of partners' coping

All correlations between marital and life satisfaction and satisfaction with the partner's coping and provision of emotional support were significant. Symptoms and satisfaction with one's own coping were also related to marital and life satisfaction at a similar level, although these correlations were not tested. These findings are similar to those when all variables were included in a Principal Components Analysis. For both men and women, the first factor was the 'happy family' with high loadings for all three outcome variables, the global measures of satisfaction with the partner's provision of support and use of coping and the global measure of satisfaction with one's own coping. The consistency of these findings suggests the interrelatedness of these variables.

Corollary analyses, using step-wise regression analyses further verified the consistency of the findings. Collapsing all measures of coping into one set resulted in essentially the same solution as including these measures as separate sets. Conversely, several variables, potentially related to outcomes, were allowed to enter the equations as single variables, but did not enter them, indicating that these variables, even when given an advantage, did not replace coping techniques in predicting outcome.

Table 28: Zero order correlations of global measures with outcome measures

Women				
	Satisfaction with			
	spouse support	spouse coping	own life	marriage
satisfaction with:				
marriage	.66†	.56†	.59†	
life	.60†	.34†		
spouse's coping	.50†			
correlations not tested:				
symptoms	-.41	-.36	-.61	-.61
rate: own coping	.37	.53	.51	.50

Men				
	Satisfaction with			
	spouse support	spouse coping	own life	marriage
satisfaction with:				
marriage	.63†	.38†	.56†	
life	.51†	.33†		
spouse's coping	.58†			
correlations not tested:				
symptoms	-.39	-.24	-.62	-.52
rate: own coping	.48	.47	.60	.60

† $p < .0001$ † $p < .001$

3.5 Effects of differences between partners

3.5.1 Differences on coping

Hypotheses eight and nine concerned the relationship between outcomes and differences between the coping techniques used by each spouse. High divergence between spouses on coping techniques was hypothesized to be associated with decreased marital and life satisfaction and with increased symptoms.

In order to test these hypotheses, the basic set of step-wise regression analyses were conducted using a variation of the coping scores. Scores on self-reported coping subscales and on observed coping subscales were replaced with the absolute differences between these two sets of scores (coping: differences) (e.g. how much conflict a woman sees herself using minus how much conflict she sees her spouse using). Once more, only the coping techniques of conflict, positive approach, and self-interest were included in the analysis. Scores on self-reports and observations were not included in the analysis since, arithmetically, inclusion of the difference score between two variables is equivalent to inclusion of the two variables. Coping as reported by the other was included. Global satisfaction scores were not included in these analyses.

When marital satisfaction for women was regressed on the sets of predictors that now included coping: differences, a four step solution was found. This solution incorporated coping: differences which entered on the last step of the analysis. See Table 29. For men, when marital satisfaction was regressed on these predictors, a three step solution was found that also included differences. Differences were entered into the equation on the second step. See Table 30.

When life satisfaction was regressed on the predictors, the difference scores were not included in the solutions for either women or men. See Tables 31 and 32.

When symptoms for women were regressed on predictors, differences were included

in the solution on the final step. See Table 33. For men, differences were not included in this regression. See Table 34.

3.5.2 Differences on coping options

Coping options were the overall types of coping responses respondents saw as available. There were four options and respondents endorsed the degree to which each applied. For comparison purposes, sex differences on options were investigated, in an unplanned analysis. A MANOVA was conducted, with sex as the independent variable and the four options scores as the dependent variables. The overall result was non-significant, $T^2 = 5.24$, $F(4, 98) = 1.27$, $p < .29$. Men and women did not differ in the coping options that they reported.

Next, the difference scores for coping options were included as a set in the stepwise regression analyses. Global satisfaction variables were not included in this analysis, resulting in ten sets of variables when differences were included. For each coping option, the difference score consisted of the absolute difference between the degree to which the woman saw that option as available and degree to which the man saw it as available. For this analysis the mean marital satisfaction, life satisfaction, and symptoms for each couple were used as criteria in the equations. Once more each of the three outcomes was regressed on the sets of predictors for women and men separately, resulting in six regression equations. In only one case did the differences between spouses on coping options enter the equations. For men, differences on options entered the equation when life satisfaction was regressed on the predictors. Differences in coping options accounted for 6% of the additional variance in the equation.

Table 29: Marital satisfaction, step-wise regression with coping differences between self-report and observations of spouse included: Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps			
	1	2	3	4
coping/other	.246	.158	.139	.119
appraisals		.193	.191	.176
number social supports			.052	.056
differences				.062
Summary				
R^2	.246	.439	.491	.553
adjusted R^2	.222	.352	.405	.458
F	10.23	5.06	5.71	5.83
df	3,94	13,84	14,83	17,80
p	.0000	.0037	.0048	.0145

Table 30: Marital satisfaction, step-wise regression with coping differences between self-report and observations of spouse included: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
coping/other	.365	.219	.150
differences		.092	.095
parent variables			.105
Summary			
R^2	.365	.457	.563
adjusted R^2	.345	.422	.491
F	18.38	13.06	7.81
df	3,96	6,93	14,85
p	.0000	.0021	.0149

Table 31: Life satisfaction, step-wise regression with coping differences between self-report and observations of spouse included: Women
 Contribution of each set to variance
 Change in R^2 if set removed

Sets	Steps		
	1	2	3
number social supports	.109	.076	.053
stressors		.117	.088
coping/other			.081
Summary			
R^2	.109	.226	.307
adjusted R^2	.100	.193	.253
F	11.80	6.80	5.70
df	1,96	4,93	7,90
p	.0009	.0043	.0185

Table 32: Life satisfaction, step-wise regression with coping differences between self-report and observations of spouse included: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps	
	1	2
number social supports	.174	.045
child variables		.225
Summary		
R^2	.174	.399
adjusted R^2	.165	.283
F	20.62	3.44
df	1,98	16,83
p	.0000	.0194

Table 33: Psychological symptoms, step-wise regression with coping differences between self-report and observations of spouse included: Women

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps				
	1	2	3	4	5
stressors	.246	.202	.032	*out*	*out*
number social supports		.100	.074	.085	.096
appraisals			.200	.371	.262
differences					.045
Summary					
R^2	.246	.346	.546	.515	.560
adjusted R^2	.221	.317	.468	.451	.484
F	10.00	12.02	6.97	8.10	7.37
df	3, 92	4, 91	14, 81	11, 84	14, 81
p	.0000	.0003	.0006	.1393	.0456

Table 34: Psychological symptoms, step-wise regression with coping differences between self-report and observations of spouse included: Men

Contribution of each set to variance

Change in R^2 if set removed

Sets	Steps		
	1	2	3
number social supports	.156	.105	.031
appraisals		.198	.180
child variables			.199
Summary			
R^2	.156	.353	.552
adjusted R^2	.147	.271	.388
F	17.70	4.27	3.37
df	1,96	11,86	26,71
p	.0001	.0077	.0193

3.5.3 Summary of effects of differences

For both men and women differences between self-reports on coping and coping as observed in the partner added to the variance explained for marital coping, beyond that contributed by partner's reports. For neither women nor men did these differences add to the variance explained for life satisfaction. However, for women but not men, the differences did add to the variance explained on symptoms. This was true even after partner's reports were forced into the equation. Differences between spouses on the coping options that they saw as available were not, with one exception, related to the well-being of couples.

3.6 Collateral questions

3.6.1 Agreement of reports from observer and observed

It was planned to examine the agreement between how respondents saw the spouse and how the spouse saw the self, as well as the effect of marital happiness and sex of observer on the agreement between spouses' self-reported coping and that coping as observed by the other spouse (i.e. between observed and observer; planned analysis 3).

Zero-order correlations for the two sources of information on coping techniques are given in Table 35. Examining the table reveals that observer and observed reports tended to be correlated, especially for the coping techniques of conflict, positive approach, and introspective self-blame (.50 to .68). For example, men's observations of women's use of conflict correlated .62 with women's self-reported use of conflict. The correlations between self-reports and reports on the other (within observer) also tended to be quite high for the same three coping techniques (.41 to .66). For example, men's observations of women's use of conflict was correlated .61 with men's observations of their own use of conflict. However, correlations between the two self-reports do not tend to be as high

Table 35: Intercorrelations: measures of coping as observed and as reported by self and other

Technique	self	Report on other††		self: men§
		women	men	
conflict	women	.66	.62	.55
	men	.66	.61	
avoidance	women	.21	.32	.00
	men	.50	.24	
pos. approach	women	.66	.68	.38
	men	.55	.58	
self-blame	women	.41	.54	.39
	men	.50	.63	
self-interest	women	.39	.39	.18
	men	.32	.37	

†Correlations in bold type are between coping as observed in the other and as reported on the self by the other.

‡Correlations not bolded are between coping as observed in the other and as reported for the self.

§This column gives correlations between husbands' self-reports and their wives' self-reports.

(.00 to .55). In fact, the correlation between women's self-reported use of conflict and men's self-reported use of conflict was the highest in the latter case (.55).

Next, the planned analysis addressed the question of whether the observations of men or of women were more likely to agree with coping as reported by their partner? A MANOVA was done to test for sex differences on the set of differences between coping as reported by observer and observed. The absolute differences for each of the five coping techniques were calculated for women as observers and men as providers of self-reports. These differences were also calculated for men as observers and women as providers of

self-reports. The result was a set of ten difference variables, five for men as observers and five for women as observers. These ten difference variables were tested for differences between men and women. The result was significant. The overall Hotellings $T^2 = 12.05$, $F(5, 93) = 2.31$, $p < .05$. The only significant univariate F was for avoidance, $F(1, 97) = 4.69$, $p < .03$. The mean difference between observer and observed for female observers was .62 and for male observers was .49. In other words, when men observed their wives' use of avoidance, their reports agreed with their wives' more than when women observed their husbands' use of avoidance.

The next planned analysis addressed the question of whether marital happiness was related to the agreement between observer and observed. Once more the absolute differences between observed coping and other's coping were used. Then the correlations of these differences with the marital satisfaction of the observer were calculated. There were thus five correlations of differences with marital satisfaction for wives as observers and five correlations with husbands as observers. The correlations were uniformly rather low and negative. The only exception was a positive correlation of differences on self-blame with marital happiness. See Table 36, upper left to lower right diagonal. For comparison, the correlations of differences between observer and observed with the marital happiness of the observed are also given (upper right to lower left diagonal). In other words, the more unhappy the observer, the more likely his or her observations were to be different from the spouse's self-observations.

3.6.2 Relationship of appraisals to coping

Two questions were asked regarding the relationship of appraisals to coping. The first was whether there was any discernible pattern of relationships between the appraisals respondents made of the coping options available and of what was at stake and the coping techniques that they reported using. The second question was whether spouses who are

Table 36: Correlations: marital happiness with differences between observer and observed

Coping	marital happiness	Observer†	
		women	men
conflict	women	-.16	-.21
	men	-.03	-.26
avoidance	women	-.16	-.19
	men	.01	-.12
pos. approach	women	-.13	.05
	men	-.11	-.14
self-blame	women	.02	.03
	men	.14	.17
self-interest	women	-.09	-.17
	men	-.07	-.17

†Correlations of differences between observer and observed with marital happiness of observer, the planned analyses, are given in bold type.

more different in the appraisals that they make are also likely to be more different in the way in that they cope.

Overall, by observation, most appraisals were not individually well correlated with coping techniques, nor were differences between spouses on coping apparently related to differences on appraisals. (See Tables 37 and 38). Canonical correlations were done for men and women separately, with coping techniques regressed on appraisals. When absolute differences between spouses in their self reported coping were regressed on absolute differences in their appraisals, there was of course only one analysis possible since both men's and women's reports were included in the difference scores. The four coping options, six stakes variables, and all five coping techniques were included in the analysis.

For women the results were significant when a canonical correlation was done regressing the set of coping techniques on the set of appraisals: $\chi^2(50) = 92.54, p < .0002$. Examination of the values of χ^2 suggest that there is only one canonical variable that captures the dependence of coping and appraisals. Further examination of the squared multiple correlations of each coping technique with all the appraisals suggests that conflict and self-blame are the only coping techniques predictable from appraisals. In fact, coping by conflict has the highest squared multiple correlation with all the other coping techniques. This correlation of .49 is so close to the squared canonical correlation of the first canonical variate, .49, that it suggests that the relationship of conflict to appraisals is as useful as the whole canonical correlation.

For men, the results of the canonical correlation were not significant: $\chi^2(50) = 54.89, p < .31$. The coping techniques men reported using were not predictable from the set of appraisals that they made.

When the set of differences between spouses' self-reported coping were regressed on the set of differences between their appraisals, the results were not significant: $\chi^2(50) = 45.00, p < .67$. No common element of 'differentness' appeared in these couples.

3.6.3 Comparison of results with those in Bowman's research

In a planned analysis, sex differences on coping were explored. While it was only planned to investigate sex differences on self-reported coping, observations of partner's coping were included for completeness. The coping subscales included in each set of reports were conflict, avoidance, positive approach, self-blame, and self-interest. Thus the analysis was sex (men vs women) on ten measures of coping. On a MANOVA the overall T^2 was significant for gender differences: $T^2 = 96.16$, $F(10, 88) = 8.72$, $p < .0000$. Univariate F values were significant for all coping techniques except self reported and observed positive approach and observed self-interest, indicating that men and women are significantly different in most of the coping techniques which they perceive themselves and their partners as using. See Table 39 for means and univariate F values. These findings replicate those of Bowman (1990) for self reported coping.

In another planned analysis, the means of the coping techniques reported by respondents in Bowman's (1990) sample from the general population were compared with the means reported by the parents of handicapped children who were the respondents in the current sample (See Table 40). When pairwise t -tests were done on each of the five coping techniques for men and women separately (ten tests), one test showed significant differences between the two samples. This was for use of the technique of positive approach by women. Women in the current study reported using positive approach less frequently than women in Bowman's study, $t(324) = 2.00$, $p < .05$. Given that there were 10 t -tests conducted, that the sample sizes in both cases were large, and that the samples were from quite divergent groups, it is rather surprising that the means for this group agree so well with those of Bowman's group.

Overall, the results of both sets of analyses are very similar to those that Bowman obtained. Men and women in this sample are significantly different on the same coping subscales as in Bowman's research and, moreover, the means in the sample reported here

are significantly different from those reported in Bowman in only one instance out of ten comparisons.

Table 37: Correlations of appraisals with self-reported coping techniques

Appraisals	Women				
	conflict	avoidance	positive approach	self blame	self interest
options					
can change	-.09	-.11	-.08	-.13	-.10
must accept	.16	.10	.08	.16	.09
need to know more	-.01	-.14	.05	.16	.09
must hold back	.29	.17	-.10	.30	.17
stakes					
threat/self-esteem	.42	.26	-.14	.47	.17
threat/loved one	.31	.14	-.14	.33	.18
harm to self	.36	.14	-.02	.36	.09
not achieving goal	.19	-.04	-.02	.18	.03
financial strain	.25	.12	-.00	.34	.13
loss respect/other	.37	.21	-.14	.24	.33
Appraisals	Men				
	conflict	avoidance	positive approach	self blame	self interest
options					
can change	-.05	.06	-.01	-.07	-.05
must accept	.13	.18	-.12	.11	.06
need to know more	.09	.02	.14	.02	.07
must hold back	.29	.19	-.13	.11	.15
stakes					
threat/self-esteem	.13	.21	-.00	.23	.08
threat/loved one	.06	.12	.02	.12	.08
harm to self	-.02	-.04	.15	.04	.00
not achieving goal	.23	-.02	.10	.26	.16
financial strain	.16	.02	.16	.35	.06
loss respect/other	.18	.22	-.05	.20	.11

Table 38: Correlations of differences on appraisals with differences on self-reported use of coping techniques

Differences/ Appraisals	Differences on self-reported coping				
	conflict	avoidance	positive approach	self blame	self interest
options					
can change	-.04	.07	-.10	.04	.06
must accept	.20	.08	-.03	.03	.07
need to know	.06	.02	-.19	-.11	-.10
must hold back	.15	.11	.16	.01	.14
stakes					
threat/self-esteem	-.02	.15	-.02	.31	.01
threat/loved one	-.07	.01	.01	-.08	.02
harm to self	.07	.02	.19	.04	-.14
not achieving goal	.06	-.07	.14	.08	-.01
financial strain	-.04	.06	.01	.21	-.14
loss respect/other	.06	.06	-.10	.16	.22

Table 39: Means: MANOVA on coping techniques with sex as within variable

Coping	Women	Men	$F(1, 97)$	p
self-reports				
conflict	2.31	2.11	12.47	.001
avoidance	2.42	2.76	17.47	.000
pos. approach	2.89	2.97	1.91	.17
self-blame	2.81	2.55	16.01	.000
self interest	2.43	2.24	7.53	.007
observations				
conflict	2.15	2.37	8.59	.004
avoidance	3.07	2.49	40.12	.000
pos. approach	2.85	2.75	2.78	.099
self-blame	2.52	2.76	11.20	.001
self interest	2.36	2.49	2.25	.137

Table 40: Comparison of Bowman's means and standard deviations with those from this sample

self-reports coping	Bowman†		Robinson‡		t
	mean	sd	mean	sd	
Women					
conflict	32.5	9.6	34.6	8.9	1.93
avoidance	27.1	6.7	26.8	5.7	0.42
pos. approach	42.3	8.8	40.4	7.5	2.00§
self-blame	40.7	10.1	42.0	9.1	1.15
self-interest	21.6	6.4	21.9	4.8	0.47
Men					
conflict	30.3	7.5	31.8	8.9	1.38
avoidance	29.1	6.9	30.3	6.7	1.35
pos. approach	42.4	8.1	41.5	6.6	0.95
self-blame	36.3	8.3	38.1	8.1	1.68
self-interest	19.9	5.6	20.3	4.5	1.06

†Bowman: N = 225 for females, 139 for males.

‡Robinson: N = 101 for females, 100 for males.

§ $p < .05$, $df = 101$.

Chapter 4

Discussion

The first goal of this study was to test hypotheses that the marital coping of both respondents and their partners would be related to the respondent's marital and life satisfaction and psychological symptoms. It was also hypothesized that respondents' observations of their partner's coping would be more useful as predictors of outcomes than the partner's self-reports on coping. An integrated model of coping and social support was proposed, based on the assumption that the coping of each partner does affect the other and, by affecting the other's well-being and marital satisfaction in particular, affects the ability of the other to provide emotional support to the respondent.

The second goal was to investigate the results of differences between respondents and their partners on marital coping and on the coping options each saw as available. It was hypothesized that these differences might be related to the well-being of each spouse. Finally, three collateral but related questions were investigated: the relationship between reports of coping by observer and observed, the relationship of appraisals to coping techniques used by respondents, and the similarity of the coping used by parents of handicapped children to that used by spouses from the general population in a previous study by Bowman (1990).

This research was exploratory, intended to indicate fruitful lines of enquiry into coping as a behaviour embedded within the context of a relationship. The results suggested the importance of marital coping and in particular of contextual effects. Differences between partners and appraisals within the marital context were also found to be potentially useful lines of enquiry for the study of coping. Methodologically, the results of this research

suggest the value of collecting data from both marital partners, with the possibility of unexpected effects resulting from the combination of data from both of them. Results also revealed that further refinement of concepts and methodology is needed to investigate differences between spouses and the appraisals they make of marital problems.

4.1 Effect of partners' coping on outcomes

It is important to note that examination of the pattern of results from both planned and unplanned analyses reveals consistent solutions. As hypothesized, self-reported coping was related to satisfaction with one's life and marriage and to symptoms. This was true for both men and women. The one exception was that, for men, when life satisfaction was regressed on all predictors, self-reported coping was not included in the equation.

Contrary to hypothesis, other's coping was seldom included in regression equations. In fact, it only occurred in the prediction of outcomes for women, specifically for marital satisfaction when global ratings were included in the variables to be used and for life satisfaction when coping by avoidance was included in the variables to be used. Given the relatively high correlations between observed and other-reported coping (ranging from .32 to .68), it may be that these two variables share enough variance that other-reported coping is usually not as useful a predictor as observed coping, when that is available. To clarify this an additional post-hoc series of the basic step-wise regression analysis was done, without global ratings, and without observed coping, but with coping by avoidance included. In this case, other's coping did enter the equation for marital satisfaction, for both men and women. It also entered the equation for life satisfaction for women but did not enter the equation for symptoms for either men or women. It should also be noted that other's coping techniques have some high factor loadings, for both men and women, on the principal components analyses and frequently were chosen among the best solutions for prediction of the three outcomes. These results suggest that others' coping

is indeed a useful predictor of marital and life satisfaction although perhaps not as useful as observed coping.

As hypothesized, observed coping was invariably related to marital happiness. Indeed, some measure of the partner's coping was included in every regression of marital satisfaction on variables. Contrary to hypothesis, however, spouses' coping, whether self-reported or observed, was almost never related to symptoms. The results were more variable for life satisfaction, since measures of the spouse's coping were sometimes related and sometimes not, depending upon which variables were available for inclusion in the equation. Observed coping was related to life satisfaction for men and when coping by avoidance was included as a predictor variable, a relationship between life satisfaction and the partner's coping was found for women as well.

The observed coping of their partner seemed to be more useful for predicting the well-being of men than for women (since it accounted for more variance, relative to own coping, than it did for women), but the partner's self-reported coping seemed to be more useful for predicting the well-being of women than for men. When avoidance was included as a predictor, the partner's coping became more important than their own coping for women on marital satisfaction. Overall, as hypothesized, a respondent's observations of the other's coping were more efficient predictors of the respondent's well-being than the other's self-reports. Nonetheless, it is also clear that coping that is good for oneself is also good for the partner, since the signs of the correlations of coping with outcomes were the same for all measures of a coping technique (e.g. conflict, whether reported by oneself, by the partner, or observed in the partner, was always negatively related to marital satisfaction).

An interesting sidelight was the relationship of the partner's use of avoidance to marital and life satisfaction for women. Including this coping technique in post-hoc analyses resulted in a stronger relationship between partner's coping and both marital and

life satisfaction for women. In fact observed avoidance in the partner had the single largest correlation with marital satisfaction for women. Effects for coping by avoidance had not been hypothesized since Bowman (1990) did not find it to be a useful predictor of Marital or Life Satisfaction, however she only measured self-reports of avoidance. Examining the pattern of single order correlations of coping with outcomes, it is avoidance as *observed* by women that seems useful. While this finding did not derive from a planned analysis and therefore requires further confirmation, it accords very well with what women informally report and with Christensen and Heavey's (1990) finding that men's withdrawing as observed by researchers was related to average marital happiness for couples. There are three important points to be made regarding this finding. The first point concerns the importance of coping by avoidance per se. As noted in the introduction, the distinction between approach and avoidance in coping is a continued theme (e.g. Byrne, 1961; Cohen & Roth, 1984; P. Miller et al., 1986; S. Miller, 1980) and the findings here further validate the importance of this distinction and extend it. The effect of avoidance on oneself is becoming well-documented: the effect of one's avoidance on others may well be an equally important concern. In fact given that one's coping affects one's partner, the question arises of how much of the effects of coping in general are due to an indirect effect due to others' responses to our coping. For example, how much of the effect on men of their use of avoidance is due to the distress it causes women, who then respond in a distressing way to men? This may well be an important question which is unanswerable when the individual is the focus of study. Pragmatically, marital therapy might usefully focus specifically on men's use of avoidance since this seems to be so related to marital unhappiness.

The second point concerns the uniqueness of observations by involved others. This kind of information is qualitatively different from observations of oneself and observations

by uninvolved others (e.g. researchers). It may be very important for the spouse's well-being but is not obtainable from the studies which focus only one person or which use 'objective' observers. While family therapists often elicit this kind of information in clinical work, it is seldom studied in research but perhaps should be.

The finding that marital coping is related not just to marital satisfaction but also to symptoms provides further evidence for the importance of this realm of stress resistance for health. While the direct effects of the partner's coping are virtually non-existent for symptoms this is not a complete analysis of contextual effects. Marital happiness, symptoms, and life satisfaction are themselves interrelated so that it is possible that a spouse's coping has an indirect effect on symptoms. This may occur through influencing the other's coping, which then affects the other's symptoms, or through association with the other's marital and life satisfaction that are related to symptoms. In fact marital distress has been linked to immunological and physiological effects (Kiecolt-Glaser et al., 1987, 1988 and Musante et al., 1990).

An interesting and unexpected result of this study was the strong performance of three single-item variables intended to measure the respondent's global satisfaction with his/her own coping, with the spouse's coping and with the emotional support provided by the spouse. Each of these items had comparatively high correlations with outcomes. In the step-wise regression equations these global variables repeated the same pattern as the longer coping measures. Satisfaction with the partner's support entered the equation for marital satisfaction for both men and women. Satisfaction with own coping entered the equation for symptoms for both men and women. The results for life satisfaction were mixed, with satisfaction with partner's emotional support entering (but not observed coping) for women, and satisfaction with own coping (and observed coping) for men. The global evaluations and the measures of observed coping seem to replace each other in the regression equations.

It is difficult to know why these simple items were so effective in predicting outcomes. One likely possibility is that satisfaction with partner's emotional support was so similar to marital satisfaction per se that criterion contamination has taken place. Examination of the order of questions on the questionnaire suggests another possibility. A global evaluation question always occurred after the respondents had completed the section of the questionnaire most related to that global evaluation. Therefore, the evaluations may have simply provided a summary of how the individual felt after answering the questions and might have been otherwise ineffective. On the other hand, it may be that respondents have a sense of how well they and their partners are doing and that these global assessments are quite useful in predicting well-being. It is worth noting however that these global evaluations did not replace the more lengthy assessments of coping behaviours used.

4.2 Effects of differences between partners

It was hypothesized that differences between how respondents saw their own and how they saw their spouses' coping would be significantly related to the respondents' well-being. Moreover, it was hypothesized that, as observations added to the variance explained by other reports, so these differences would also add to the variance explained by other reports. When these difference scores were included in the basic series of step-wise regressions, it was found that differences entered into the prediction of marital satisfaction but not life satisfaction. They entered into the prediction of symptoms for women. However, in every case, comparing the final adjusted R^2 when differences were included with the final adjusted R^2 when self-reports and observations were included, the adjusted R^2 is smaller when the difference scores are used. This suggests that differences between reports on self and reports on other are not as useful as the full range of the reports themselves. It was also hypothesized that differences on the coping options that each

partner reported using would be related to the mean well-being of respondents. This hypothesis was supported in only one case out of six, when life satisfaction was regressed on predictors for men. While the finding of a relationship between differences and marital satisfaction is consistent with other results reported here, the other relationships reported in this section are not and may not be replicable. It is also possible that differences between spouses are important in some areas but not others.

Taken altogether, the results suggest that differences between spouses in their use of coping techniques and their appraisals of coping options available may be associated with diminished well-being. These effects are not as clear or strong as the effects of partner's coping on each other. It would probably be worthwhile however to continue to explore the effects of differences between spouses on important variables. Using absolute differences between spouses may not capture the important aspects of asymmetry in spouses. It may be more important to examine the patterns of coping in couples (e.g. does one predominantly cope in one way while the other predominantly copes in another). It may also be that differences between spouses in their appraisals of what is at stake in marital problems are more important than their appraisals of the coping options available. Visual inspection of the pattern of correlations of appraisals with coping suggests that stakes may have higher correlations with coping than options.

4.3 Collateral investigations

4.3.1 Agreement of reports from observer and observed

Results of these analyses suggest that spouses' observations are fairly well correlated with the other spouse's reports for conflict, positive approach, and introspective self-blame, with correlations ranging from .50 to .68. Self-interest and avoidance may be harder for spouses to observe in partners (or perhaps in themselves). While observations can be fairly accurate, any use of partners' observations needs to be tempered by recognition of

limitations. As a rule, there were low negative correlations between observer-observed differences and the observer's marital happiness, with the exception of coping by self-interest. This suggests that, as marital happiness decreases, spouses are less likely to see the other as the other sees him/her self. While men and women were equally likely to see the other as the other saw him/her self on most coping techniques, for avoidance husbands saw their wives more as the wives saw themselves, whereas wives saw husbands less as the husbands saw themselves. Since avoidance seems to be particularly important to women's marital and life satisfaction, this sex difference may contribute further to problems in using observer's reports.

While spouses' observations may well add something to self-reports as a measure of coping, it is unclear what differences between these two sources of information may mean. From a psychometric point of view both sources of reports should be highly correlated. On the other hand, from a systemic point of view, each person in a family has an equally valid and useful point of view and there is no 'correct' report. A systemic point of view may be more appropriate in understanding the meaning of differences between partners in what they report. Each source of information adds to our understanding of how the dyad functions but does not necessarily clarify the 'true' coping of the individual. The implications of a systemic approach to assessing coping in dyads are two-fold. First, the kind of coping that an individual is seen to be doing probably depends, to some extent, on the person doing the evaluation. Second, an understanding of the effects of coping based on outcomes for the copier alone is limited.

Furthermore, while the idea that the reports of marital partners can be used to validate self-reports of coping has gained substantial popular currency (e.g. McCrae & Costa, 1986), results from the research reported here suggest that these reports should not and cannot be used as observer reports in the traditional sense. They are not more 'objective'

than those of self-reports. These findings support the contention of Fincham and Bradbury (1990), in the area of social support, that behaviours by spouses and perceptions of that behaviour are complementary pieces of information, rather than confirming.

From a methodological and from a clinical viewpoint, both of these types of reports are necessary to fully understand coping in the context of relationships. Unless we also have partners' own reports, its hard to know what observations of the partner mean. In fact, this is a core philosophical problem in psychology, which surfaces continually in various phenomenological guises and continually gets swept under the rug of long, technical discussions of methodology. This is the problem of accuracy in measurement. We like to assume that there is some 'true score' on a construct. Statisticians explicitly assume this in discussions of mathematical operations and researchers imply this assumption. This assumption is fairly easy to sustain when we limit discussion to observations of one individual. However, for the construct of coping by avoidance in a relationship (for example), it is not at all clear what a 'true score' would be. Is it what one says one does? Another observer (a very well trained graduate student using the best observational techniques) might notice many avoidant behaviours that the respondent hadn't or miss some that the respondent reported. On the other hand, those missed behaviours might be unimportant because they are missed. Finally, the partner's observations of the respondent are almost certainly different from both of the above. It is not at all clear whether there is a true observation of behaviour beyond the most trivial kind.

Using partners as observers makes clear what psychology all too often glosses over, which is the fundamental problem of observing subjects who have their own experience, who observe themselves. When observers are not intimately related to the observed, as has usually either been the case or at least treated as if it was the case in Psychology, this issue can be ignored or treated in limited, 'empirical' ways such as studies of researcher bias. It is suggested here that the 'reality' of a behaviour in the context of a relationship

does not reside in the individual but is created in the relationship of that individual to the observer. Nonetheless, the relationship between self-reports and observations by intimate others could be an important area of study, which requires observations by 'objective' others to be fully understood.

4.3.2 Relationship of appraisals to coping

Appraisals questions taken from Folkman, Lazarus and colleagues' work (Folkman, Lazarus, Dunkel-Schetter et al., 1986) were related to marital coping for women. The use of conflict in particular was associated with appraisals. Once more, this was an initial exploration of the potential of this line of enquiry. Examination of the pattern of zero-order correlations suggested that appraisals of what is at stake in a coping encounter ('stakes') were more important for predicting the coping techniques used than were appraisals of the coping options available. Furthermore, these results suggested that the use of conflict might be found to be associated with appraisals for men in further research. This does make sense, since the items comprising the options questions are not as clearly related to marital issues as some of the items from the stakes scales.

It would be useful to explore the effects of appraisals on marital coping in a more elaborate and sophisticated way than was possible in this research. The development and evaluation of a list of appraisals that may be specific to marital coping would be a useful precursor to this effort. In particular, it is important to know which kinds of appraisals lead spouses to use positive coping and which lead them to use negative coping. The appraisals used in this study all seem to function in a negative way. If they are correlated at all with outcomes, they are correlated negatively with marital and life satisfaction and positively with symptoms. For both men and women, appraisals entered the equations for symptoms but not marital satisfaction and loaded (positively) on the factors that represented families with problems.

4.3.3 Replication of Bowman's findings

Two analyses were planned to replicate Bowman's (1990) findings: a test of the pattern of sex differences on coping techniques used and a comparison of means for coping in this sample with those in Bowman's. In both cases, the findings from this group of respondents were remarkably similar to those of Bowman.

These findings support the generalizability of Bowman's coping measure to groups where the couples are actually under stress. Coupled with the finding that marital coping measured by this method is related to symptoms, it suggests the utility of examining marital coping and the importance of this type of coping for well-being. Conversely, the similarity of the parents of handicapped children in this study to those in a much broader sample of couples, suggests that the results from this research are generalizable to other couples.

4.4 Additional findings

In an effort to clarify questions of context, the data for men and women were factor analysed, separately. For both men and women it was found that marital and life satisfaction, symptoms, the global measures of satisfaction and most measures of coping by positive approach, conflict, avoidance, or self-blame all loaded on one factor, dubbed the 'happy family'. Marital and life satisfaction, global satisfaction and positive approach loaded positively, while symptoms, conflict, avoidance, and self-blame loaded negatively.

A further interesting and unexpected observation was that, for both women and men a symptomatic but coping family pattern occurred. In these families, there are symptoms, and a substantial number of stresses and negative appraisals, but without marital unhappiness (or happiness). For women, their husband's coping, as reported by both of them, is an important feature. The husband uses positive coping and doesn't use a number of negative coping strategies. For men, seeing themselves and their wives

as using positive approach is important, as is the report by husbands and wives that the wife uses self-interest to cope. These findings are somewhat similar to those of Johnson, White, Edwards and Booth (1986). They factor analysed five measures of marital quality and found two dimensions, happy families and unhappy families. For women alone, a third family type appeared, that of the non-coping family. Marital (un)happiness loaded on this factor as well as symptoms and many stress and appraisal variables. Husbands' coping by negative means, as reported by both husband and wife also loads heavily on this factor. It would be interesting to pursue these patterns further. Perhaps it would be possible to choose between two aphorisms that have long been popular for family therapists:

'All happy families are alike; every unhappy family is unhappy in its own way.' *Tolstoy*

'All happy families are more or less dissimilar; all unhappy ones are more or less alike.' *Nabokov*

Evidence in this study suggests that a third aphorism is needed:

'For men and women, happy families are alike, and doing okay families are alike. For women there are unhappy families and for men, there aren't.'

These findings are similar to those of researchers who have found that marriage has a different character for women than for men. Johnson et al. (1986) found that, while their two factors of marital quality were similar for men and women, women were more variable on marital quality compared to men. Other research indicates that men are more likely to be beneficiaries of marriage while women want more change (Jacobson, 1983, 1989). Gove, Hughes and Style (1983) found women's happiness was related to the emotional quality of the relationship, while men's was related to being married.

4.5 Limitations of the study

In any regression study, as noted earlier, the question of context arises. Which variables are measured and in which way are they combined? The fact that a set of variables is not included in the final solution does not mean that the variables are unimportant. In order to circumvent this problem, data were analysed in a number of different ways but the results are certainly not conclusive and the findings need to be verified in new research. There is a double bind in exploratory studies. Including many variables makes it impossible to evaluate the relative contribution of each to the variance of the outcome variables. On the other hand, if these variables are simply left out, nothing is known about their contribution. Given pragmatic limitations on the number of respondents one can persuade to take part in research, including a large number of variables and combining them in meaningful sets seemed the best compromise. Therefore many different variables were measured, although the list was not exhaustive. It was not intended to explore the complexities of other possible predictors of well-being and little can be said here about that. These might well vary depending on the circumstances of the couples involved in the study. However, examination of the overall pattern of results does reveal consistent findings.

Three closely related questions arise regarding circularity in this type of research. The first question is a methodological one. Given that all measures were administered in the context of one questionnaire at one time period, was there contamination of responses to later questions by responses to earlier ones? More fundamentally, from a theoretical point of view is the second question of whether partner's coping rather than simply the respondent's bias has an effect on outcomes. Does it really matter what the partner does? The third question is whether coping really matters. Is it the case that happily married couples tend to use positive approach and avoid conflict rather than the other way around?

While there is no complete answer to the question of whether responses to one set of questions contaminated responses to another, the type of questions asked, to some extent, reduced that possibility. For the most part, the questions were specific and fairly concrete, reducing the likelihood that they would be influenced by earlier responses. There is also some evidence from within the data set that this did not take place. Being global evaluations, the questions asking about life satisfaction might be most likely to be affected by previous questions. These two questions appeared at the beginning of the questionnaire and at the end. The correlations between responses from these two positions were .78 for men and .73 for women. Both are higher than the correlation of .68 between the two questions reported by Andrews and Withey (1976), suggesting that reliability of this measure at least, was not adversely affected by intervening questions.

The answer to the theoretical questions is both yes and no. In order to place these questions in perspective, it is important to reiterate that these chicken and egg questions are a continued bugbear in all coping research, appearing in many different forms. From the point of view of a family therapist, questions about the validity of a family member's experience and linear causality are mistaken.

How well do respondent's observations correspond to 'reality'? Family therapists usually assume that there is no 'true' report of events in a family. Each person's experience is valid and what is most important is the perception each has of the family. In the case of coping, what is most important for a wife's response to her husband is not whether he says he is taking time to be with her but whether she experiences him as doing so. However, one would expect that a respondent's observations of the partner would have some relationship to the self-reports of the partner and there is evidence within the data collected in this study that suggests this is so, as described above. Observer reports were, for the most part, correlated with reports from the observed as well as or better than they correlated with self-reports. This suggests that respondents are in fact observing

characteristics of the spouse.

Which direction is causality in? Once more, from a family therapist's viewpoint, families are expected to operate in a series of feedback loops, with each person's behaviour affecting the system as a whole. When couples feel happy in their marriage they will probably do more nice things for each other and fight less. Conversely, doing more nice things for each other probably results in a happier marriage. In fact, 'prescribing' special time for parents together is a commonly used family therapy technique that can be interpreted as increasing the amount of coping by positive approach that couples use. Pragmatically, it is difficult to know how to intervene if 'marital happiness' is treated as a cause of poor coping. On the other hand, the use of certain types of coping is relatively amenable to therapeutic intervention. For example, the technique of 'reframing', or changing the perceptions that family members have of family events, could be and undoubtedly has been, used to change spousal perceptions of how a partner is coping. Fundamentally however, a correlational study can never really answer questions about causation. Only further longitudinal research can indicate whether spouse behaviours at time one are related to later outcomes.

Further limitations to the study are statistical. A large number of regressions and additional analyses were done. This may lead to concerns about capitalizing on chance. However, capitalizing on chance occurs when a large number analyses are done and only a few results are significant. In this case, the large number of analyses were undertaken in order to explore alternative explanations for findings from the core, a priori, planned investigations. In other words, to allow alternative forms of analysis to contradict those findings, since no statistical procedure rules out alternative explanations entirely. For example, although an initial MANOVA showed no overall differences between samples, further analyses were done in order to ensure that the null hypothesis had not been accepted incorrectly, since the null hypothesis was the preferred hypothesis in this case.

Similarly, a principal components analysis was done because this permitted inclusion of all the variables in one analysis without being assigned to sets, thus potentially allowing a pattern of relationships among the variables different from that found in the main regression analyses to emerge. While the ratio of subjects to variables was low (2:1) for the principal component analyses, thus limiting the number and size of the factors that could be interpreted, there were relatively few factors (three and four) interpreted and these had eigenvalues which ranged from 9.8 to 2.8. Interpretation of this analysis beyond its function as a potential disconfirmation of other findings should certainly be limited by its post hoc nature and the number of subjects.

A final limitation to this study is related to the relatively weak effects found for the coping/differences variables. As Cronbach and Furby (1970) point out, difference scores are usually less reliable than the component scores from which they are constructed. The effect of this is often to underestimate real effects. However, their suggestions are based on research using primarily change scores from time one to time two, and on the use of raw score data, neither of which is the case here. As Fisher, Kokes, Ransom, Phillips, and Rudd (1985) point out, researchers on family issues rarely combine data from several informants. Fisher et al. make several suggestions for ways to do this, but none are particularly useful for this study which was really concerned with capturing the construct of differentness between marital partners and each has drawbacks. Certainly, further research into what aspects of differentness are important and how best to measure it is warranted (as noted in the introduction).

4.6 Summary of findings and implications

The first, major contributions of the research reported here stems from the following findings.

a) The marital coping of respondents was related to their own well-being, including

psychological symptoms, as hypothesized (hypotheses one, four and five).

b) Contrary to hypothesis (hypothesis two) other-reports of coping tended not to be selected for regression equations, when observed coping was an option. When it did occur, it added to the variance explained by own coping, as hypothesized (hypothesis six). There were some exceptions to this, for women.

c) As hypothesized (hypotheses three, four and five), observed marital coping was related to respondents' marital happiness (for men and women) and life satisfaction (for men). However, contrary to hypothesis, marital coping by the partner was not related to the respondent's psychological symptoms.

d) Observations of the partner's coping accounted for variance beyond that accounted for by the respondent's and the partner's own reports, as hypothesized (hypothesis seven).

e) While differences between partners on marital coping and on coping options are related to some aspects of well-being, as hypothesized (hypotheses eight and ten), and did, for marital coping in those cases, add to the variance accounted for by Person 2's coping (hypothesis 9), many of the analyses did not reveal relationships, contrary to hypotheses, suggesting that differences between partners may not be as useful as the full range of data from the partners.

e) Planned analysis (analysis six) comparing the coping techniques used by respondents in the current sample with those in Bowman's (1990) sample of married individuals in the community reveal a high degree of similarity. The results of planned analysis seven comparing the coping techniques used by men with those used by women were also similar to those found by Bowman.

These findings have theoretical and methodological implications. Findings of similarity between Bowman's sample and the one reported here suggest that these implications are generalizable to other couples in the community. The results are congruent with the

integrated model of stress regulation described in this thesis and suggest that examination of the interpersonal effects of coping may be helpful in unifying the fields of coping and of social support. To the degree that marital satisfaction can be considered a measure of emotional support from the spouse, it is clear that the way in which one copes with marital problems is related both to one's own sense of support and to the sense of support that one's partner experiences. Further, it seems probable that the individuals who feel satisfied with their marriage and indeed with their lives, will be better able to provide support to their spouses and vice versa. The precise nature of these links remains to be investigated, however.

As noted in the introduction, one person's coping in a relationship may in fact *be* emotional support to the other. For example, coping with marital problems by doing something special for the spouse in fact does provide emotional support to the spouse. Differences between spouses may not be as important to well-being as what each spouse does or is perceived to do. On the other hand, this study may not have captured the important aspects of differences. From a methodological perspective, these findings suggest that, for marital coping at least, it may not suffice to use the well-being of the coper alone as a criterion for good coping since the coper's spouse may also be affected by that coping.

The second contribution of this thesis stems from the unexpected findings of the importance of the partner's use of avoidance for women's marital and life satisfaction.

a) Men's avoidance, as observed by their spouse, had a large single order correlation with women's marital, and to a lesser extent, life satisfaction. In other words, the more men avoided, the lower their spouses' marital and life satisfaction was.

b) Including men's avoidance, either as observed by their wives or as reported by the men increased the correlations between partner's coping and marital and life satisfaction in the step-wise regressions. Once more, the more men avoided, the less satisfied their

wives were with their marriages and their lives.

c) Men's use of avoidance consistently appeared within the sets chosen as 'best' for predicting all outcomes, for both men and women.

d) Men's observed use of avoidance loaded heavily on the 'happy family' factor for women and men's self-reported use of avoidance loaded heavily on the 'happy family' factor for men.

These post hoc findings suggesting the importance of the partner's use of coping by avoidance in relationship to women's marital and life satisfaction, coupled with the finding that women are less likely than men to see the partner as the partner sees him or herself on avoidance, underscore the importance of this area of marital coping. They also underscore the importance of studying partners' marital coping in relationship to each other, since a copier's coping may have an effect on the spouse that it doesn't have, directly, on the copier. Men's coping by avoidance does not seem to be related to their own outcomes as strongly as it is related to their spouses' outcomes, suggesting that the effect of their avoidance on themselves may be secondary to its effect on the spouse.

The third contribution of this thesis stems from the collateral studies.

a) In a planned analysis (analysis three) it was found that the reports from observers and observed agreed quite well on some coping techniques but that there was a consistent, low correlation between marital unhappiness and observer-observed differences on coping between spouses. There was also a difference between women as observers and men as observers on one important area of coping, avoidance.

b) For women, but not men, appraisals were related to coping used, particularly coping by conflict (planned analyses four and five).

Results of these analyses suggest that spouses cannot simply be used as observers of each other's behaviour. The collection of observations by a spouse adds information to that obtained by simple self-report, but this technique is probably more useful from

a systemic perspective than from a psychometric one. However, research into the phenomenon of how spouses perceive each other has great potential to be a fruitful source of information in a number of research areas. The study of attributions in marriage (Bradbury & Fincham, 1990) is one area where this exploration is already yielding results. This investigation of appraisals as an aspect of marital coping was tentative and exploratory, however it did suggest that, for women at least, the appraisals made are related to the coping used. This is an important finding when it is observed how frequently appraisals entered into the equations for psychological symptoms and life satisfaction.

Overall, the most fundamental, and perhaps most important implications of the findings as a whole are for the importance of marital coping. Results here indicate that marital coping may be related not only to marital happiness but also to other areas of well-being as well. Because marital happiness is such an important aspect of daily life and has such profound social implications, the finding that each spouses' coping affects the other, and that happy; symptomatic but coping; and non-coping families show different coping patterns, is of great importance. It is clear that, for couples, as postulated in this thesis, all aspects of well-being, and each partner's coping tend to be linked together. The perceptions that spouses have of each other, the differences between spouses' perceptions, and the appraisals they make are all potentially fruitful lines of enquiry. In this research, data was collected from both partners in a relationship, not only on themselves but on their partners. This relatively unique method offered an opportunity to explore important aspects of stress management within the context of a relationship. Results suggest that, while this method adds a substantial increase in complexity and thus problems, it is well worth while because of the potential for new discoveries.

On the level of clinical practice, it may be that stress management programs for individuals in relationships could be more helpfully directed towards both partners in the relationship and moreover that more clinical attention should be directed towards

management of coping, social support, and stress processes within couples. If couples can be helped to alter their patterns of coping with the problems in their marriage, they may be able to increase the experienced support of themselves and their partners, reduce their psychological symptoms and maintain a source of support for both partners. This in turn could have substantial social benefits, given the high social costs of divorce and of health problems.

Aside from the benefits of a good marriage as a source of support (e.g. Lieberman, 1986; Kiecolt-Glaser et al. 1987, 1988; Verbrugge, 1979), there are some specific areas where helping couples cope with problems in a way that is supportive rather than destructive of relationships could be useful. One area is that of couples where one is depressed. Some recent research (Gotlib, Wallace & Colby, 1990; Jacobsen, Dobson, Fruzzetti, Schmaling & Salusky, 1991) suggests that marital therapy can be an effective treatment for depression and this research both suggests some possible underlying mechanisms for such results (increasing sense of support, reducing aversive coping) and suggests that training in the use of positive approach by both partners and in reduction of the use of avoidance by men in particular could improve well-being for both partners. Furthermore, the finding that one's own marital coping is related to psychological symptoms suggests the possibility that using more positive and fewer negative marital coping techniques might have a direct relationship to one's own feelings of distress.

Another important area for application of the findings from this research is the population studied. Families under chronic stress due to, for example, a handicapped child, or long-term economic problems might benefit from programs directed towards coping as a way of maintaining their support systems, as well as simply a way of handling stressors. If coping is related to social support not only in the realm of marriage but also in other support systems, focussing on the effect of one's coping on one's sources of support (e.g. professionals), might be helpful for these families.

4.7 Future directions

This exploratory research provides support for the usefulness of considering the effects of one person's stress management efforts on the other. Many more questions are suggested, however. There are methodological questions about collecting data from both participants in an interaction, there are specific questions about marital coping and most importantly, there are theoretical questions about an integrated model.

Collecting both observer and self-report data, especially from two participants in a system provides a rich source of information. However, due to the very richness and complexity of this type of information, much more work needs to be done on clarifying methodological questions, such as how best to combine sources of information, including whether outcomes should be considered for individuals only or for pairs. Further work is required on the complex interplay of observations and self-reports in couples. Specific questions about the relationships between the four measures of coping in a marriage (each person's perceptions of their own and their partner's coping) need to be formed and answered.

Further work needs to be done on elucidating the special aspects of marital coping. Are marital coping techniques simply a specialized version of more general techniques or are they unique to relationships? What kind of appraisals do spouses make in situations which require coping? Since the appraisals used in the current research were taken from research on more general processes of coping, they may not be the most appropriate for the study of marital coping. The next step in this area should be to develop a measure designed to evaluate appraisals specific to the marital area.

This research supports the utility of contextual research for unifying the concepts of coping and social support into one function of human behaviour: resistance to the many demands that the environment places on each of us. By setting this function in the context of a system, the effect of time becomes more salient. Systems are dynamic,

changing and adapting to new conditions while maintaining stability and it is time to emphasize the dynamic nature of stress resistance efforts. What is now needed are more sophisticated path analysis studies, utilizing longitudinal data to delineate the direction of effects between various elements of a unified model. The model itself will need to be refined, with the ideas about aspects of its functioning more fully delineated and operationalized. One area of focus should be to investigate the importance of *the expectancies* that individuals build up for the way in which significant others will cope or provide support if needed. Another important question has to do with combinations of coping patterns. Are spouses who use different coping techniques or make different appraisals at an advantage or disadvantage. What kinds of differences make a difference? Do spouses shape each other's use of coping techniques, and if so, in what way?

Moreover, as part of this new approach it will also be necessary to take the next step, by understanding how individuals and systems create their own level of stress. Hans Selye (1974), one of the originators of the study of stress, pointed out that a certain level of stress is needed for health. This concept of stress has been gradually deemphasized as it has become clear that only negative events are associated with symptoms and distress. However, it seems probable that some individuals/systems prefer higher stress levels than others. For example, within a family, one child may seek a Ph.D. degree while another child, equally gifted, may prefer a less exiguous life. This suggests that the field of research could be more usefully thought of as 'stress regulation', rather than stress resistance or coping and social support.

The aim of future research would be to develop and test a model of *stress regulation* within a system and an examination of the role that relationships play in maintaining an acceptable level of stress for participants in the relationships.

References

- Aldwin, C.M. & Revenson, T.A. (1987). Does coping help? A reexamination of the relation between coping and health. *Journal of Personality and Social Psychology*, *53*, 337-348.
- Alexander, F., & French, T. (1946). *Psychoanalytic Therapy*. New York: Ronald Press.
- Andrews, F. M., & Withey, S. B. (1976). *Social Indicators of Well-Being: Americans' Perception of Life Quality*. New York: Plenum Press.
- Antonucci, J. & Jackson, J.S. (1990). The role of reciprocity in social support. In B.R. Sarason, I.G. Sarason, & G.R. Pierce (Eds.), *Social Support: An interactional view*. (pp.173-197). New York: John Wiley & Sons.
- Barbarin, O., Hughes, D., Chesler, M. (1985). Stress, coping, and marital functioning among parents of children with cancer. *Journal of Marriage and the Family*, *47*, 473-480.
- Belsky, J., Spanier, G.B., & Rovine, M. (1983). Stability and change in marriage across the transition to parenthood. *Journal of Marriage and the Family*, *45*, 567-577.
- Bolger, N. (1990). Coping as a personality process: A prospective study. *Journal of Personality and Social Psychology*, *59*, 525-537.
- Bolger, N., Kessler, R.C. & Schilling, E.A., (Manuscript). Visible support, invisible support, and adjustment to daily stress. (Manuscript submitted for publication.)
- Bowman, M. (1990). Coping efforts and marital satisfaction: Measuring marital coping and its correlates. *Journal of Marriage and the Family*, *52*, 463-474.
- Bradbury, T. & Fincham, F. (1987a). Affect and cognition in close relationships: Towards an integrative model. *Cognition and Emotion*, *1*, 59-87.

- Bradbury, T. & Fincham, F. (1987b). The assessment of affect in marriage. In K.D. O'Leary (Ed.), *Assessment of marital discord* (pp. 59-108). Hillsdale, NJ: Erlbaum.
- Bradbury, T. & Fincham, F. (1990). Attributions in marriage: Review and critique. *Psychological Bulletin*, *107*, 3-33.
- Brown, G.W. & Harris, T. (1978). *The social origins of depression*. New York: Free Press.
- Byrne, D. (1961). The repression-sensitization scale: Rationale, reliability, and validity. *Journal of Personality*, *29*, 334-349.
- Campbell, D. & Fiske, D.W. (1959). Convergent and discriminant validation by the multitrait multimethod matrix. *Psychological Bulletin*, *56*, 81-105.
- Caspi, A. & Herbener, E. (1990). Continuity and change: Assortative marriage and the consistency of personality in adulthood. *Journal of Personality and Social Psychology*, *58*, 250-258.
- Christensen, A. & Heavey, C. (1990). Gender and social structure in the demand/withdrawal pattern of marital conflict. *Journal of Personality and Social Psychology*, *59*, 73-81.
- Clancy, K., Gove, W. (1974). Sex differences in mental illness: An analysis of response bias in self-reports. *American Journal of Sociology*, *80*, 205-216.
- Clark, A., & Friedman, M.J. (1983). Factor structure and discriminant validity of the SCL-90 in a veteran psychiatric population. *Journal of Personality Assessment*, *47*, 396-404.
- Cohen, L. & Roth, S. (1984). Coping with abortion. *Journal of Human Stress*, *10*, 140-145.
- Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*, 310-357.
- Coyne, J.C., Aldwin, C., & Lazarus, R.S. (1981). Depression and coping in stressful episodes. *Journal of Abnormal Psychology*, *90*, 439-447.

- Coyne, J.C. & Bolger, N. (1990). Doing without social support as an explanatory concept. *Journal of Social and Clinical Psychology, 9*, 148-158.
- Coyne, J.C. & DeLongis, A. (1986). Going beyond social support: the role of social relationships in adaptation. *Journal of Consulting and Clinical Psychology, 54*, 454-460.
- Coyne, J.C., Ellard, J.H., Smith, D.A.F. (1990). Social support, interdependence, and the dilemmas of helping. In B.R. Sarason, I.G. Sarason, & G.R. Pierce (Eds.), *Social Support: An interactional view*. (pp.129-149). New York: John Wiley & Sons.
- Crnic, K.A., Friedrich, W.N. & Greenberg, M.T. (1983). Adaptation of families with mentally retarded children: A model of stress, coping, and family ecology. *American Journal of Mental Deficiency, 88*, 125-138.
- Cronbach, L.J. & Furby, L. (1970). How we should measure change - Or should we? *Psychological Bulletin, 74*, 68-80.
- Cummings, S.T. (1976). The impact of the child's deficiency on the father: A study of fathers of mentally retarded and of chronically ill children. *American Journal of Orthopsychiatry, 46*, 246-255.
- Cummings, S.T., Bayley, H.C., & Rie, H.E. (1966). Effects of the child's deficiency on the mother: A study of mothers of mentally retarded, chronically ill and neurotic children. *American Journal of Orthopsychiatry, 36*, 595-698.
- DeLongis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology, 1*, 119-136.
- DeLongis, A. (1988). *Stress and coping: An interpersonal perspective*. Paper presented at the American Psychological Association conference, 1988.
- Derogatis, L.R. (1975). *Brief Symptom Inventory*. Baltimore: Clinical Psychometric Research.

- Derogatis, L.R. & Spencer P. (1982). *Administration and Procedures: BSI Manual-I*. Baltimore: Clinical Psychometric Research.
- Dunkel-Schetter, C., Folkman, S., & Lazarus, R. (1987). Correlates of social support receipt. *Journal of Personality and Social Psychology*, 53, 71-80.
- Dunst, C.J., Trivette, C.M., & Cross, A.H. (1986). Mediating influences of social support: Personal, family, and child outcomes. *American Journal of Mental Deficiency*, 90, 403-417.
- Emery, R.E., Joyce, S., & Fincham, F. (1987). Assessment of child and marital problems. In K.D. O'Leary (Ed.), *Assessment of Marital Discord* (pp.223-262). Hillsdale, N.J.: Lawrence Erlbaum Associates, Publishers.
- Endler, N.S., & Parker, J.D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 58, 844-854.
- Fincham, F., Beach, S. & Baucom, D. (1987). Attribution processes in distressed and nondistressed couples: 4. Self-partner attribution differences. *Journal of Personality and Social Psychology*, 52, 739-748.
- Ferlinghetti, L. (1969). Constantly risking absurdity and death. In G. Geddes (Ed.) *20th Century Poetry and Poetics* (pp. 312). Toronto: Oxford University Press.
- Fincham, F., & Bradbury, T. (1987). The assessment of marital quality: A reevaluation. *Journal of Marriage and the Family*, 49, 797-809.
- Fine, M., & Turner, J. (1991). Tyranny and freedom: Looking at ideas in the practice of family therapy. *Family Process*, 30, 307-320.
- Fincham, F., & Bradbury, T. (1990). Social support in marriage: The role of social cognition. *Journal of Social and Clinical Psychology*, 9, 31-42.
- Fisher, L., Kokes, R.F., Ransom, D.C., Phillips, S.L., & Rudd, P. (1985). Alternative strategies for creating "relational" family data. *Family Process*, 24, 213-224.
- Folkman, S. & Lazarus, R.S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21, 219-239.

Folkman, S. & Lazarus, R.S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170.

Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.

Folkman, S., Lazarus, R.S., Gruen, R., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, 50, 571-579.

Foorman, S. & Lloyd, C. (1986). The relationship between social support and psychiatric symptomatology in medical students. *Journal of Nervous and Mental Disease*, 174, 229-239.

Friedrich, W. (1977). Ameliorating the psychological impact of chronic physical disease on the child and family. *Journal of Pediatric Psychology*, 2, 26-31.

Friedrich, W.N. (1979). Predictors of the coping behavior of mothers of handicapped children. *Journal of Consulting and Clinical Psychology*, 47, 1140-1141.

Friedrich, W.N. & Friedrich, W. (1981). Psychosocial assets of parents of handicapped and nonhandicapped children. *American Journal of Mental Deficiency*, 85, 551-553.

Friedrich, W.N., Wilturner, L.T., & Cohen, D.S. (1985). *American Journal of Mental Deficiency*, 90, 130-139.

Gath, A. (1977). The impact of an abnormal child upon the parents. *British Journal of Psychiatry*, 130, 405-410.

George, L. (1984). Coping with the challenge of time. Paper presented at the 13th annual scientific and educational meeting of the Canadian Association of Gerontology, Nov. 1-4, 1984, Vancouver, B.C.

- Goldfried, M.R. & D'Zurilla, T. (1969). A behavioral-analytic model for assessing competence. In C.D. Spielberger (Ed.) *Current Topics in clinical community psychology*. New York: Academic Press.
- Gotlib, I.H., Wallace, P. & Colby, C.A. (1990). Marital and family therapy for depression. In B. Wolman and G. Stricker (Eds.) *Depressive Disorders: Facts, Theories, and Treatment Methods* (pp.396-423). New York: John Wiley and Sons, Inc.
- Gove, W.R., Hughes, M. & Style, C.B. (1983). Does marriage have positive effects on the psychological well-being of the individual? *Journal of Health and Social Behavior*, *24*, 122-131.
- Haan, N. (1982). The assessment of coping, stress, and defense. In L. Goldberger and S. Breznitz (Eds.) *Handbook of Stress* (pp. 254-270). New York: The Free Press.
- Haley, J. & Hoffman, L. (1967). *Techniques of Family Therapy*. New York: Basic Books, Inc.
- Heller, K., Swindle, R.W., & Dusenbury, L. (1986). Component social support processes: comments and integration. *Journal of Consulting and Clinical Psychology*, *54*, 466-470.
- Hobfoll, S., & Freedy, J. (1990). The availability and effective use of social support. *Journal of Social and Clinical Psychology*, *9*, 91-103.
- Hoffman N.G., & Overall, P.B. (1978). Factor structure of the SCL-90 in a psychiatric population. *Journal of Consulting and Clinical Psychology*, *46*, 1187-1191.
- Holahan, C.J., & Moos, R.H. (1986). Personality, coping and family resources in stress resistance: A longitudinal analysis. *Journal of Personality and Social Psychology*, *51*, 389-395.
- Holahan, C.J., & Moos, R.H. (1990). Life stressors, resistance factors, and improved psychological functioning: An extension of the stress resistance paradigm. *Journal of Personality and Social Psychology*, *58*, 909-917.

- Holcomb, W.R., Adams, N.A., & Ponder, H.M. (1983). Factor structure of Symptom Checklist-90 with acute psychiatric inpatients. *Journal of Consulting and Clinical Psychology, 51*, 535-538.
- Holmes, T.A. & Rahe, R. H. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 11*, 213-218.
- Jacobson, N.S. (1983). Beyond empiricism: The politics of marital therapy. *American Journal of Family Therapy, 11*, 11-24.
- Jacobson, N.S. (1989). The politics of intimacy. *Behavior therapist, 12*, 29-32.
- Jacobson, N.S., Dobson, K., Fruzzetti, A., Schmaling, K.B., & Salusky, S. (1991). Marital therapy as a treatment for depression. *Journal of Consulting and Clinical Psychology, 59*, 547-557.
- Jacobson, N.S., & Moore, D. (1981) Spouses as observers of the events in their relationship. *Journal of Consulting and Clinical Psychology, 49*, 269-277.
- Johnson, D.R., White, L.K., Edwards, J.H., & Booth, A. (1986). Dimensions of marital quality. *Journal of Family Issues, 7*, 31-49.
- Kiecolt-Glaser, J.K., Fisher, L.D., Ogrocki, P, Stout, J.C., et al. (1987). Marital quality, marital disruption, and immune function. *Psychosomatic Medicine, 49*, 13-34.
- Kiecolt-Glaser, J.K., Kennedy, S., Malkoff, S. & Fisher, L.D. (1988). Marital discord and immunity in males. *Psychosomatic Medicine, 50*, 213-229.
- Kessler, R.C., Price, R.H., & Wortman, C.B. (1985). Social factors in psychopathology: stress, social support, and coping processes. *Annual Review of Psychology, 36*, 531-572.
- Korn, S.J., Chess, S., & Fernandez, P. (1978). The impact of children's physical handicaps on marital and family interaction. In R.M. Lerner & G.B. Spanier (Eds.), *Child influence on marital and family interaction-A lifespan perspective* (pp. 229-326). New York: Academic Press.
- Kobasa, S.C., Maddi, S.R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology, 42*, 168-177

- Krause, N. (1985). Stress, control beliefs, and psychological distress: The problem of response bias. *Journal of Human Stress, 11*, 11-19.
- Krausz, S. (1988). Illness and loss: helping couples cope. *Clinical Social Work Journal, 16*, 52-65.
- Kupst, M.J., Schulman, J.L., Maurer, H., Honig, G., Morgan, E. & Fochtman, D. (1984). Coping with Pediatric Leukemia: A two-year follow-up. *Journal of Pediatric Psychology, 9*, 149-163.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer Publishing Company, Inc.
- Levy-Shiff, R. (1986). Mother-father-child interactions in families with a mentally retarded young child. *American Journal of Mental Deficiency, 91*, 141-149.
- Lieberman, M.A. (1986). Social supports - The consequences of psychologizing: A commentary. *Journal of Consulting and Clinical Psychology, 54*, 461-465.
- McCrae, R. & Costa, P. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality, 54*, 385-405
- McCubbin, H.I., Joy, C., Cauble, E., Comeau, J., Patterson, J., & Needle, R. (1980). Family stress, coping, and social support: A decade of review. *Journal of Marriage and the Family, 42*, 855-871.
- Manne, S. & Zautra, A. (1989). Spouse criticism and support: Their association with coping and psychological adjustment among women with rheumatoid arthritis. *Journal of Personality and Social Psychology, 56*, 608-617.
- Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon Press.
- Melamed, B. & Brenner, G. (1990). Social support and chronic medical stress: An interaction-based approach. *Journal of Social and Clinical Psychology, 9*, 104-117.
- Menaghan, E.G. (1982). Measuring coping effectiveness: A panel analysis of marital problems and coping efforts. *Journal of Health and Social Behavior, 23*, 220-234.

- Miller, P.C., Lefcourt, H.M., Holmes, J.G., Ware, E.E., & Saleh, W.E. (1986). Marital locus of control and marital problem solving. *Journal of Personality and Social Psychology, 51*, 161-169.
- Miller, S. (1980). When is a little information a dangerous thing? Coping with stressful events by monitoring vs. blunting. In S. Levine and H. Ursine (Eds.) *Coping and Health*. (pp. 145-169). New York: Plenum Press.
- Minuchin, S. & Fishman, H.C. (1981). *Family therapy Techniques*. Cambridge, Mass.: Harvard University Press.
- Monroe, S., Bromet, E., Connell, M. & Steiner, S. (1986). Social support, life events, and depressive symptoms: A one year prospective study. *Journal of Consulting and Clinical Psychology, 54*, 424-431.
- Musante, L., Treiber, F.A., Strong, W.B., & Levy M. (1990). Individual and cross-spouse correlations of perceptions family functioning, blood pressure and dimensions of anger. *Journal of Psychosomatic Research, 34*, 393-399.
- Nichols, M.P. (1984). *Family Therapy: Concepts and Methods*. New York: Gardner Press, Inc.
- Olson, D.H., & Cromwell, R.E. (1975). Methodological issues in family power. In R.E. Cromwell & D.H. Olson (Eds.) *Power in Families*, New York: Halsted.
- Patterson, G.R. (1976). Some procedures for assessing changes in marital interaction patterns. *Oregon Research Institute Bulletin, 16*.
- Pearlin, L.I. & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Pearson, J. (1986). The definition and measurement of social support. *Journal of Counseling and Development, 64*, 390-395.
- Pittman, J.F., & Lloyd, S. (1988). Quality of family life, social support, and stress. *Journal of Marriage and the Family, 50*, 53-68.

- Pizan, C. de (1982). *The Book of the City of Ladies*. New York: Persea Books.
- Procidano, M.E., & Heller, K. (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology, 11*, 1-24.
- Quittner, A.L., Glueckauf, R.L., Jackson, D.N. (1990). Chronic parenting stress: Moderating versus mediating effects of social support. *Journal of Personality and Social Psychology, 59*, 1266-1278.
- Rohde, P, Lewinsohn, P.M., Tilson, M., & Seeley, J.R. (1990). *Journal of Personality and Social Psychology, 58*, 499-511.
- Ruch, L. (1977). A multi-dimensional analysis of the concept of life change. *Journal of Health and Social Behavior, 18*, 71-83.
- Rusbult, C.E., Johnson, D.J., & Morrow, G.D. (1986). Impact of couple patterns of problem solving on distress and nondistress in dating relationships. *Journal of Personality and Social Psychology, 50*, 744-753.
- Sabbeth, B.F., & Leventhal, J.M. (1984). Marital adjustment to chronic childhood illness: a critique of the literature. *Pediatrics, 73*, 845-853.
- Sarason, I., Levine, H., Basham, R., Sarason, B. (1983). Assessing social support: The social support questionnaire. *Journal of Personality and Social Psychology, 44*, 127-139.
- Sarason, I., Sarason, B., & Pierce, G. (1990). Social support: The search for theory. *Journal of Social and Clinical Psychology, 9*, 133-147.
- Sarason, B., Shearin, E., Pierce, G., & Sarason, I. (1987). Interrelationship of social support measures: Theoretical and practical implications. *Journal of Personality and Social Psychology, 52*, 813-832.
- Schaefer, C., Coyne, J.C., & Lazarus, R.S. (1982). The health-related aspects of social support. *Journal of Behavioral Medicine, 4*, 381-406.

- Selye, H. (1974). *Stress without distress*. Philadelphia: Lippincott.
- Sharpley, C.F., & Cross, D.G. (1982). A psychometric evaluation of the Spanier Dyadic Adjustment Scale. *Journal of Marriage and the Family*, 44, 739-741.
- Silver, R., Wortman, C., & Crofton, C. (1990). The role of coping in support provision: The self-presentational dilemma of victims of life crises. In B.R. Sarason, I.G. Sarason, & G. R. Pierce, (Eds.) *Social Support: An interactional view*. (pp.397-426). New York: John Wiley & Sons, Inc.
- Spanier, G.B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15-28.
- Spanier, G.B. (1989). *Manual for the Dyadic Adjustment Scale*. North Tonawanda, N.Y.: Multi-Health Systems, Inc.
- Spanier, G., & Thompson, L., (1982). A confirmatory analysis of the Dyadic Adjustment Scale. *Journal of Marriage and the Family*, 44, 731-733.
- Stein, S.J., Girodo, M., & Datzenroth, S. (1982). The interrelationships and reliability of a multilevel behavior-based assessment package for distressed couples. *Journal of Behavioral Assessment*, 4, 343-360.
- Stern, M.J., & Pasquale, L., (1979). Psychosocial adaptation to post-myocardial infarction: The spouse's dilemma. *Journal of Psychosomatic Research*, 23, 83-87.
- Stokes, J.P. (1983). Predicting satisfaction with social support from social network structures. *American Journal of Community Psychology*, 11, 141-152.
- Stone, A. and Neale, J. (1984). New measure of daily coping: Development and preliminary results. *Journal of Personality and Social Psychology*, 46, 892-906.
- Sullaway, M. & Christensen, A. (1983). Couples and families as participant observers of their interaction. In J. P. Vincent (Ed.), *Advances in Family Intervention, Assessment, Theory*, 3 (pp. 119-160). Greenwich, Conn.: JAI Press Inc.
- Thoits, P.A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology*. 54, 416-423.

- Vaux, A. (1990). An ecological approach to understanding and facilitating social support. *Journal of Social and Personal Relationships*, 7, 507-518.
- Verbrugge, L. M. (1979). Marital status and health. *Journal of Marriage and the Family*, 38, 15-28.
- Waisbren, S.E. (1980). Parents' reactions after the birth of a developmentally disabled child. *American Journal of Mental Deficiency*, 84, 345-351.
- Wallander, J.L. , Varni, J.W., Babani, L., DeHaan, C.B., Wilcox, K.T., Banis, H.T. (1989). The social environment and the adaptation of mothers of physically handicapped children. *Journal of Pediatric Psychology*, 14, 371-387.
- Weiss, R.S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17-26). Englewood Cliffs, NJ: Prentice-Hall.
- Wiggins, J. (1973). *Personality and prediction: principles of personality assessment*. Reading, Mass: Addison-Wesley Publishing Company.
- Wilson, M., & Filsinger, E. (1986). Religiosity and marital adjustment: Multidimensional interrelationships. *Journal of Marriage and the Family*, 48, 147-151.

Appendix A

Questionnaire

This appendix consists of a copy of the questionnaire used in this study. Items 154-155, items 156-187 and the final page of the questionnaire are omitted since they consist of the appraisal scales, Dyadic Adjustment Scale and the Brief Symptom Inventory respectively, and these are copyrighted tests. Only one questionnaire is included, labelled 'Mother', since the questionnaire for 'Father' was identical except for gender-related pronouns and the label 'Father'.

QUESTIONNAIRE ON FAMILIES WITH MENTALLY OR PHYSICALLY CHALLENGED CHILDRENThis Form Is to be Completed By **MOTHER (FATHER)****Subject Information and Consent Form**

The university and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects.

You are being asked to participate in a study of how parents handle the process of bringing up a physically or mentally challenged child. We wish to know as much about your experiences and feelings as possible, in order to better understand your situation, especially how people in your situation deal with all the problems that come up for you, not just problems with your child. **It is very important that both parents complete their copy of this questionnaire** because the perspectives of both fathers and mothers are important. **It is equally important that you NOT discuss your answers to the questions in the booklet with your partner before BOTH of the questionnaires are completed** in order to avoid contamination of your responses. Discussion with your partner will invalidate your responses. Once you have BOTH completed the questionnaires, you and your partner may find it enjoyable and useful to compare and discuss your responses. When the questionnaire is completed, please return it using the stamped, addressed envelope provided.

All information from your participation in this experiment will be kept confidential. Your partner will not be informed of your responses and separate return envelopes are provided to ensure this. The signed consent form will be separated from the questionnaire on receipt. Your responses will then be identifiable only by an identification number which will be used to match your questionnaire with that of your partner, when it is returned. When the information has been coded, original response forms will be destroyed. Information will be analysed by groups only and no individual will be identified or identifiable. You may discontinue your participation at any time. Any complaints about the research procedures may be addressed to Dr. R. Blackman, Chairman, Psychology Department, Simon Fraser University (SFU), Burnaby, B.C., V5A 1S6.

Would you be willing to participate in a future study? YES NO

If "yes" please give your telephone number and address below:

Telephone:

Address:

If you would like a summary of the results when the study is completed, write: L. Robinson, Psychology Department, Simon Fraser University, Burnaby, B.C., V5A 1S6.

Consent Form

Having been asked by Lynne Robinson of the Psychology Department of S.F.U. to participate, I have read the procedures described above and I agree to participate.

Name _____ ID # _____
 Signature _____
 Date _____

ID # _____

Please complete the following questions by circling the response that applies to you or filling in the blanks, as required.

Part I.

1. Sex: FEMALE MALE

2. Date of your birth: 19 _____ /Month _____

3. Family's gross income in the past year (Please check the range of income that applies):

- 1. Under \$10,000 per year _____
- 2. \$10,000 - \$19,999 per year _____
- 3. \$20,000 - \$29,999 per year _____
- 4. \$30,000 - \$39,999 per year _____
- 5. \$40,000 - \$49,999 per year _____
- 6. \$50,000 - \$59,999 per year _____
- 7. Over \$60,000 per year _____

4. Current job title: _____

5. Religious Affiliation:

- 1. Roman Catholic _____
- 2. Jewish _____
- 3. Protestant _____
- 4. Other (Please specify) _____

6. Highest level of education: _____

7. Date on which began living with current partner: 19 _____ /Month _____

8. How do you currently feel about your life as a whole?

7 6 5 4 3 2 1

Delighted Terrible

Part II.

9. How many children do you have? _____

10. Challenged child's birth order (1st born, 2nd born, etc.)

1 2 3 4 5 6 Later

11. Date of challenged child's birth: 19 _____ /Month _____

12. Challenged child is: FEMALE MALE

13. Challenged child is:

1. The biological child of myself but not of my partner ____
2. The biological child of myself and my partner ____
3. Other (Please specify) _____

14. Number of times challenged child has been admitted to hospital (overnight stay) in past year _____

15. Describe child's special challenge _____

Was this noticeable at birth? YES NO

16. Within the past two weeks, which, if any of the following problems have occurred for the challenged child:

- | | | |
|---|-----|----|
| a. Complaint from school/day-care about child's academic performance. | YES | NO |
| b. Complaint from school/day-care about child's behaviour. | YES | NO |
| c. Complaint from neighbours/friends about child's behaviour. | YES | NO |
| d. Continuing complaints about child from brother, sister, parent, or grandparent. | YES | NO |
| e. Child is in trouble with the law. | YES | NO |
| f. Child required treatment by physician or nurse. | YES | NO |
| g. Major change in child's condition (Please specify) | YES | NO |
| h. Any other problems that were <i>not</i> related to the challenged child (Please specify) _____ | YES | NO |

17. Please indicate which, if any, of the following events has occurred within the past year:

- | | | |
|--|-----|----|
| a. Trouble with the boss | YES | NO |
| b. In-law troubles | YES | NO |
| c. Foreclosure on a mortgage or loan | YES | NO |
| d. Death of a close friend | YES | NO |
| e. Being fired from work | YES | NO |
| f. Detention in jail or other institution | YES | NO |
| g. Major personal injury or illness | YES | NO |
| h. Death of a close family member | YES | NO |
| i. Worse off financially than in the previous year | YES | NO |

Part III.

Most people in close relationships notice that certain problems tend to come up over and over again. For example, you and your partner may disagree over housework issues, in-laws' interference, your partner's jealousy, drinking, children, communications, or sexual matters. Problems of this kind may occur even in satisfying marriages.

Think of any recurring problems you and your partner have. Describe any that have occurred within the last two weeks.

Listed below are many ways people may deal with marital problems. Keeping in mind the problem(s) you have identified, indicate how often you tend to do each of these things when dealing with the problems, by circling the word on the scale provided after each item.

Note that the answer words on the scale are sometimes in a reversed order, so read the items and the answer words carefully. Please try to answer all the questions.

When I am dealing with this (these) problem(s) I.....

- | | | | | | |
|---|-----------|----------|-------------|----------|-----------|
| 18. sit down and talk things out with my partner | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 19. yell or shout at my partner | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 20. buy presents for my partner or do special favours for him | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 21. blame myself | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 22. put more energy into my work | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 23. feel sorry for myself | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 24. tell my partner that he is childish, self-centred, domineering, or moody | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 25. try not to think about the problem | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 26. have difficulty falling asleep or staying asleep | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 27. remind my partner of things he has said or done in the past that made me unhappy | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 28. do more things with my partner that both of us find enjoyable | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 29. spend more time on my hobbies | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 30. do more things with my partner that he enjoys | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 31. demand that my partner do things differently | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 32. try to initiate discussion with my partner | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 33. sleep more than usual or have trouble getting out of bed in the morning | 5 never | 4 rarely | 3 sometimes | 2 often | 1 usually |
| 34. am sarcastic to my partner | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |
| 35. experience more health problems than usual | 5 usually | 4 often | 3 sometimes | 2 rarely | 1 never |

36. avoid initiating physical contact with my partner	5 never	4 rarely	3 sometimes	2 often	1 usually
37. spend more time with friends	5 never	4 rarely	3 sometimes	2 often	1 usually
38. tell myself the difficulties are not that important	5 usually	4 often	3 sometimes	2 rarely	1 never
39. refuse to have sex with my partner	5 never	4 rarely	3 sometimes	2 often	1 usually
40. feel more tired than usual	5 usually	4 often	3 sometimes	2 rarely	1 never
41. wait for time to remedy the problem	5 usually	4 often	3 sometimes	2 rarely	1 never
42. argue more than usual with people	5 never	4 rarely	3 sometimes	2 often	1 usually
43. am more physically affectionate than usual toward my partner	5 never	4 rarely	3 sometimes	2 often	1 usually
44. nag	5 usually	4 often	3 sometimes	2 rarely	1 never
45. try to bring new people into my life	5 never	4 rarely	3 sometimes	2 often	1 usually
46. feel depressed and blue	5 never	4 rarely	3 sometimes	2 often	1 usually
47. take on new time-consuming responsibilities at work or in the community	5 usually	4 often	3 sometimes	2 rarely	1 never
48. deny that anything is wrong or change the subject if my partner brings up the problem	5 usually	4 often	3 sometimes	2 rarely	1 never
49. hit or bash things	5 never	4 rarely	3 sometimes	2 often	1 usually
50. feel anxious, tense, and unsettled	5 never	4 rarely	3 sometimes	2 often	1 usually
51. develop new time-consuming hobbies or interests (e.g. an evening course)	5 usually	4 often	3 sometimes	2 rarely	1 never
52. remind myself of good times my partner and I have had in the past	5 never	4 rarely	3 sometimes	2 often	1 usually
53. cry when I am by myself	5 never	4 rarely	3 sometimes	2 often	1 usually
54. am irritable around my partner	5 usually	4 often	3 sometimes	2 rarely	1 never
55. tell myself that I will deal with the problem in the future but that now isn't a good time	5 usually	4 often	3 sometimes	2 rarely	1 never
56. remind my partner of good times we have had in the past	5 usually	4 often	3 sometimes	2 rarely	1 never
57. feel hopeless about the situation	5 never	4 rarely	3 sometimes	2 often	1 usually
58. put down my partner in front of others	5 usually	4 often	3 sometimes	2 rarely	1 never
59. keep busy when I am at home with my partner	5 never	4 rarely	3 sometimes	2 often	1 usually
60. make more effort to look attractive when I am with my partner	5 never	4 rarely	3 sometimes	2 often	1 usually
61. criticize my partner for things other than what is really bothering me	5 never	4 rarely	3 sometimes	2 often	1 usually

84. How do you feel about the way you handled these problems?

7 6 5 4 3 2 1

Very satisfied

Very unsatisfied

85. Please indicate, for each item below, whether it is true of you or not:

- | | | |
|--|-----|----|
| a. I never hesitate to go out of my way to help someone in trouble. | YES | NO |
| b. On occasion I have doubts about my ability to succeed in life. | YES | NO |
| c. No matter who I'm talking to, I'm always a good listener. | YES | NO |
| d. I sometimes try to get even, rather than forgive and forget. | YES | NO |
| e. At times I have really insisted on having things my own way. | YES | NO |
| f. I have never been irked when people expressed ideas very different from my own. | YES | NO |
| g. There have been times when I felt like rebelling against people in authority, even though I knew they were right. | YES | NO |

Part IV.

Think of the recurring marital problems you identified in Part III above. Keeping in mind the problem(s) you have identified, indicate how often *your partner* tends to do each of these things when dealing with the problems, by circling the word on the scale provided after each item.

Note that the answer words on the scale are sometimes in a reversed order, so read the items and the answer words carefully. Please try to answer all the questions.

When he is dealing with this (these) problem(s) he.....

86. sits down and talks things out with me

5 never 4 rarely 3 sometimes 2 often 1 usually

87. yells or shouts at me

5 usually 4 often 3 sometimes 2 rarely 1 never

88. buys presents for me or does special favours for me

5 never 4 rarely 3 sometimes 2 often 1 usually

89. blames himself

5 never 4 rarely 3 sometimes 2 often 1 usually

90. puts more energy into his work

5 never 4 rarely 3 sometimes 2 often 1 usually

91. feels sorry for himself

5 never 4 rarely 3 sometimes 2 often 1 usually

92. tells me that I am childish, self-centred, domineering, or moody

5 never 4 rarely 3 sometimes 2 often 1 usually

93. tries not to think about the problem

5 never 4 rarely 3 sometimes 2 often 1 usually

94. has difficulty falling asleep or staying asleep

5 usually 4 often 3 sometimes 2 rarely 1 never

95. reminds me of things I have said or done in the past that made him unhappy

5 usually 4 often 3 sometimes 2 rarely 1 never

96. does more things with me that both of us find enjoyable	5 never	4 rarely	3 sometimes	2 often	1 usually
97. spends more time on his hobbies	5 usually	4 often	3 sometimes	2 rarely	1 never
98. does more things with me that I enjoy	5 usually	4 often	3 sometimes	2 rarely	1 never
99. demands that I do things differently	5 usually	4 often	3 sometimes	2 rarely	1 never
100. tries to initiate discussion with me	5 never	4 rarely	3 sometimes	2 often	1 usually
101. sleeps more than usual or has trouble getting out of bed in the morning	5 never	4 rarely	3 sometimes	2 often	1 usually
102. is sarcastic to me	5 usually	4 often	3 sometimes	2 rarely	1 never
103. experiences more health problems than usual	5 usually	4 often	3 sometimes	2 rarely	1 never
104. avoids initiating physical contact with me	5 never	4 rarely	3 sometimes	2 often	1 usually
105. spends more time with friends	5 never	4 rarely	3 sometimes	2 often	1 usually
106. tells himself the difficulties are not that important	5 usually	4 often	3 sometimes	2 rarely	1 never
107. refuses to have sex with me	5 never	4 rarely	3 sometimes	2 often	1 usually
108. feels more tired than usual	5 usually	4 often	3 sometimes	2 rarely	1 never
109. waits for time to remedy the problem	5 usually	4 often	3 sometimes	2 rarely	1 never
110. argues more than usual with people	5 never	4 rarely	3 sometimes	2 often	1 usually
111. is more physically affectionate than usual toward me	5 never	4 rarely	3 sometimes	2 often	1 usually
112. nags	5 usually	4 often	3 sometimes	2 rarely	1 never
113. tries to bring new people into his life	5 never	4 rarely	3 sometimes	2 often	1 usually
114. feels depressed and blue	5 never	4 rarely	3 sometimes	2 often	1 usually
115. takes on new time-consuming responsibilities at work or in the community	5 never	4 rarely	3 sometimes	2 often	1 usually
116. denies that anything is wrong or changes the subject if I bring up the problem	5 usually	4 often	3 sometimes	2 rarely	1 never
117. hits or bashes things	5 never	4 rarely	3 sometimes	2 often	1 usually
118. feels anxious, tense, and unsettled	5 never	4 rarely	3 sometimes	2 often	1 usually
119. develops new time-consuming hobbies or interests (e.g. an evening course)	5 usually	4 often	3 sometimes	2 rarely	1 never
120. reminds himself of good times he and I have had in the past	5 never	4 rarely	3 sometimes	2 often	1 usually
121. cries when he is by himself	5 never	4 rarely	3 sometimes	2 often	1 usually
122. is irritable around me	5 usually	4 often	3 sometimes	2 rarely	1 never

123. tells himself that he will deal with the problem in the future but that now isn't a good time
 5 usually 4 often 3 sometimes 2 rarely 1 never
124. reminds me of good times we have had in the past
 5 usually 4 often 3 sometimes 2 rarely 1 never
125. feels hopeless about the situation
 5 never 4 rarely 3 sometimes 2 often 1 usually
126. puts me down in front of others
 5 usually 4 often 3 sometimes 2 rarely 1 never
127. keeps busy when he is at home with me
 5 never 4 rarely 3 sometimes 2 often 1 usually
128. makes more effort to look attractive when he is with me
 5 never 4 rarely 3 sometimes 2 often 1 usually
129. criticizes me for things other than what is really bothering him
 5 never 4 rarely 3 sometimes 2 often 1 usually
130. keeps his hurt feelings to himself
 5 usually 4 often 3 sometimes 2 rarely 1 never
131. pays more attention to me
 5 usually 4 often 3 sometimes 2 rarely 1 never
132. feels that he is a failure
 5 never 4 rarely 3 sometimes 2 often 1 usually
133. tries to figure out what is causing the problems
 5 never 4 rarely 3 sometimes 2 often 1 usually
134. tells me how much he loves and cares about me
 5 never 4 rarely 3 sometimes 2 often 1 usually
135. tells me that the problem is all my fault
 5 usually 4 often 3 sometimes 2 rarely 1 never
136. gets more exercise, or puts more energy into physical activities
 5 never 4 rarely 3 sometimes 2 often 1 usually
137. tries to make me see a funny side to the situation
 5 never 4 rarely 3 sometimes 2 often 1 usually
138. goes over and over the problem in his mind without seeming to get anywhere
 5 usually 4 often 3 sometimes 2 rarely 1 never
139. picks fights with me over small issues
 5 usually 4 often 3 sometimes 2 rarely 1 never
140. sets aside a time with me so that we can discuss the problem
 5 never 4 rarely 3 sometimes 2 often 1 usually
141. tries to see a funny side to the situation
 5 usually 4 often 3 sometimes 2 rarely 1 never
142. worries about his health
 5 usually 4 often 3 sometimes 2 rarely 1 never
143. socializes more than usual without me
 5 usually 4 often 3 sometimes 2 rarely 1 never
144. gives me ultimatums such as insisting that things be done his way or he will....
 5 never 4 rarely 3 sometimes 2 often 1 usually
145. finds he can't concentrate on his work or other interests
 5 never 4 rarely 3 sometimes 2 often 1 usually
146. tries to solve the problem himself without talking about it with me
 5 usually 4 often 3 sometimes 2 rarely 1 never
147. decides to get even with me
 5 never 4 rarely 3 sometimes 2 often 1 usually
148. feels guilty
 5 never 4 rarely 3 sometimes 2 often 1 usually

149. suggests to me that we 'make up'

5 usually 4 often 3 sometimes 2 rarely 1 never

150. How important are your partner's religious beliefs in helping him handle these problems?

7 6 5 4 3 2 1

Very Important

Not important at all

151. How stressful were the past 2 weeks for your partner?

1 2 3 4 5 6 7

Not at all stressful

Extremely stressful

152. Were the past two weeks more stressful for you or for your partner?

- 1. Me _____
- 2. My partner _____
- 3. About the same _____

153. How do you feel about the way your partner handled these problems?

7 6 5 4 3 2 1

Very satisfied

Very unsatisfied

Appendix B

Questionnaire Items and Variable Names

Table 41: Questionnaire items corresponding to each variable

Variable Names	Numbers of Questionnaire Items
Demographics	
social desirability	85
age/parent	2
age/relationship	7
wage	3
importance/religion	82
education	6
roman catholic	5
protestant	5
Child variables	
hospitalizations	14
age/child	11
number children	9
child of mother	13
adopted	13
downs syndrome	15
mentally handicapped	15
cerebral palsy	15
spina bifida	15
handicap unknown	15
two or more handicaps	15
sex of child	12
handicap noticed at birth	15
birth order of child	10
number of child's problems	16(a-g)
Appraisals	
can change	154
must accept	154
need to know more	154
must hold back	154
threat/loved one	155
threat/self-esteem	155
harm to self	155
not achieving goal	155
financial strain	155
loss of respect/other	155

Variable Names	Numbers of Questionnaire Items
Stressors	
number of life events	17
stress	83
other problems	16h
Marital problems	
communication	Part III
money	Part III
children	Part III
time	Part III
unknown	Part III
two or more problems	Part III
Coping/self	
conflict	18-81
avoidance	18-81
positive approach	18-81
self-blame	18-81
self-interest	18-81
rate/own coping	84
Coping/other	
conflict	partner's questionnaire
avoidance	partner's questionnaire
positive approach	partner's questionnaire
self-blame	partner's questionnaire
self-interest	partner's questionnaire
Coping/observed	
conflict	86-149
avoidance	86-149
positive approach	86-149
self-blame	86-149
self-interest	86-149
rate/other coping	153
Support	
number of social supports	189
support/spouse	188
Dependent Variables	
marital satisfaction	156-187†
life satisfaction	8, 190
symptoms	last page†

†omitted as these items are copyright tests

Appendix C

Coping Techniques Appearing in Best Solutions

Table 42: Marital Satisfaction, coping techniques which appeared in 'best' solutions:
Women

	R^2	.65	.65	.65	.66	<i>unchanging</i>				
	adjusted R^2	.62	.62	.61	.62	<i>unchanging</i>				
self										
conflict (C)	
avoidance (A)		.	.	A	A	A	.	.	A	A
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S
observed										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)	
self-interest (S)		.	S	.	.	S	S	S	S	.
other										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	.	A	A
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)		.	.	.	I	.	I	.	I	I
self-interest (S)	

†Letter indicates corresponding technique occurred

'.' indicates technique did not occur, in 'best' subset.

Table 43: Marital Satisfaction, coping techniques which appeared in 'best' solutions:
Men

	R^2	.70	.70	.70	.71	<i>unchanging</i>				
	adjusted R^2	.68	<i>unchanging</i>							
self										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P	.	.	P
self-blame (I)		.	I	I	.	.	I	.	I	I
self-interest (S)		S	.	.	.	S
observed										
conflict (C)		C	.	C	C	C	.	C	C	C
avoidance (A)	
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S
other										
conflict (C)		.	C	.	C	.	C	.	C	.
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)	
self-blame (I)	
self-interest (S)		S	.	S	S	S	S	S	S	S

†Letter indicates corresponding technique occurred

‘.’ indicates technique did not occur, in ‘best’ subset.

Table 44: Life Satisfaction, coping techniques which appeared in 'best' solutions: Women

	R^2	.62	.62	.62	.62	.63	<i>unchanging</i>			
	adjusted R^2	.59	.59	.58	.58	.58	.59	.58	<i>unchanging</i>	
self										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		.	.	.	A	.	A	.	.	A
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		.	S	.	.	.	S	S	S	S
observed										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	.	.
pos. approach (P)		.	.	P	.	.	.	.	P	.
self-blame (I)		I	.	.	.	I
self-interest (S)	
other										
conflict (C)	
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P	P	P	P	P	P	P	P	P
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S

†Letter indicates corresponding technique occurred

‘.’ indicates technique did not occur, in ‘best’ subset.

Table 45: Life Satisfaction, coping techniques which appeared in 'best' solutions: Men

	R^2	.54	.54	.54	.55	<i>unchanging</i>				.56
	adjusted R^2	.50	.50	.49	.50	<i>unchanging</i>	.49	.49	.49	
self										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)	
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S
observed										
conflict (C)		C	.	C	C	.	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P
self-blame (I)		I	I	.	I	I	.	I	I	I
self-interest (S)		S	S	S	S	S
other										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P	.	.
self-blame (I)		.	I	I	I	I	I	I	I	I
self-interest (S)		S	.

†Letter indicates corresponding technique occurred

‘.’ indicates technique did not occur, in ‘best’ subset.

Table 46: Psychological Symptoms, coping techniques which appeared in 'best' solutions:
Women

	R^2	<i>unchanging</i>					$.61$	$.61$	$.61$	
adjusted R^2	$.58$	<i>unchanging</i>								
self										
conflict (C)	.	C	.	.	C	C	.	C	C	.
avoidance (A)	A	A	A	A	A	A	A	A	A	A
pos. approach (P)	P	.	P	P	P	.	P	.	P	P
self-blame (I)	I	I	I	I	I	I	I	I	I	I
self-interest (S)	.	.	.	.	.	S	.	S	.	.
observed										
conflict (C)	.	.	.	.	.	.	.	.	.	.
avoidance (A)	.	.	.	.	.	A	.	A	.	.
pos. approach (P)	.	.	.	.	.	.	.	.	.	.
self-blame (I)	.	.	.	I	.	.	.	I	I	.
self-interest (S)	.	.	.	.	.	.	.	.	.	.
other										
conflict (C)	.	.	.	.	.	.	C	.	.	C
avoidance (A)	A	A	A	A	A	.	A	.	A	A
pos. approach (P)	.	.	.	.	.	.	.	.	.	.
self-blame (I)	I	I	I	I	I	I	I	I	I	I
self-interest (S)	.	S	S	.	.	.	.	.	.	S

†Letter indicates corresponding technique occurred

‘.’ indicates technique did not occur, in ‘best’ subset.

Table 47: Psychological Symptoms, coping techniques which appeared in 'best' solutions:
Men

	R^2	.50	.51			<i>unchanging</i>				
	adjusted R^2	.48	.48	.48	.47	<i>unchanging</i>				
self										
conflict (C)		C	C	C	C	C	C	C	C	C
avoidance (A)		A	A	A	A	A	A	A	A	A
pos. approach (P)		P	.	.
self-blame (I)		I	I	I	I	I	I	I	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S
observed										
conflict (C)		.	.	.	C	.	.	.	C	.
avoidance (A)	
pos. approach (P)	
self-blame (I)		.	I	.	.	I	.	.	I	I
self-interest (S)		S	S	S	S	S	S	S	S	S
other										
conflict (C)	
avoidance (A)		A	A	A	.	.
pos. approach (P)		P
self-blame (I)		.	.	I	.	.	I	I	.	.
self-interest (S)	

†Letter indicates corresponding technique occurred

‘.’ indicates technique did not occur, in ‘best’ subset.

Appendix D

Correlation Matrix

This appendix gives the intercorrelations of the 61 independent variables used in the analyses reported in this thesis. As was done for most of the analyses, results for women and for men are reported separately in Tables 49 and 50 respectively. The correlation matrix output is adapted from that produced by the BMDP P8D program. A listing of the keyword definitions for the variables appears in Table 48 preceding the analyses.

Table 48: Variable name keywords for correlation matrix

Variable Names	Keywords	
	Women	Men
Demographics		
social desirability	Wsocdes	Zsocdes
age/parent	Wagepar	Zagepar
age/relationship	Wagerel	Zagerel
wage	Wwage	Zwage
importance/religion	Wrell	Zrell
education	Wed	Zed
roman catholic	WRC	ZRC
protestant	WProt	ZProt
Child variables		
hospitalizations	Whosp	Zhosp
age/child	Wagech	Zagech
number children	Wkids	Zkids
child of mother	Wone	Zone
adopted	Wneith	Zneith
downs syndrome	Wds	Zds
mentally handicapped	Wmr	Zmr
cerebral palsy	Wcp	Zcp
spina bifida	Wsb	Zsb
handicap unknown	Whcuk	Zhcuk
two or more handicaps	Wmt1	Zmt1
sex of child	Wsexch	Zsexch
handicap noticed at birth	Wnotice	Znotice
birth order of child	Wbthord	Zbthord
number of child's problems	Wprobch	Zprobch
Appraisals		
can change	Wappa1	Zappa1
must accept	Wappa2	Zappa2
need to know more	Wappa3	Zappa3
must hold back	Wappa4	Zappa4
threat/loved one	Wthreat	Zthreat
threat/self-esteem	Wse	Zse
harm to self	Wappb3	Zappb3
not achieving goal	Wappb5	Zappb5
financial strain	Wappb6	Zappb6
loss of respect/other	Wappb12	Zappb12

Variable Names	Keywords	
	Women	Men
Stressors		
number of life events	Wlifevn	Zlifevn
stress	Wstres1	Zstres1
other problems	Wprobch8	Zprobch8
Marital problems		
communication	Wcomm	Zcomm
money	Wcash	Zcash
children	Wchip	Zchip
time	Wtime	Ztime
unknown	Wmpuk	Zmpuk
two or more problems	W2mp	Z2mp
Coping/self		
conflict	WCT11C	ZCT11C
avoidance	WCT11A	ZCT11A
positive approach	WCT11P	ZCT11P
self-blame	WCT11I	ZCT11I
self-interest	WCT11S	ZCT11S
rate/own coping	Whand1	Zhand1
Coping/other		
conflict	ZCT11C	WCT11C
avoidance	ZCT11A	WCT11A
positive approach	ZCT11P	WCT11P
self-blame	ZCT11I	WCT11I
self-interest	ZCT11S	WCT11S
Coping/observed		
conflict	WCT12C	ZCT12C
avoidance	WCT12A	ZCT12A
positive approach	WCT12P	ZCT12P
self-blame	WCT12I	ZCT12I
self-interest	WCT12S	ZCT12S
rate/other coping	Whand2	Zhand2
Support		
number of social supports	nWsocsup	nZsocsup
support/spouse	WsocsupA	ZsocsupA

