THE PSYCHOLOGICAL IMPACT OF PARTNER ABUSE ON WOMEN AND THEIR RELATIONSHIPS

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TABLE OF CONTENTS:

LIST OF TABLES:

ABSTRACT:

Psychosocial and relationship factors were investigated in relation to partner abuse in a survey of 104 New Zealand female tertiary student volunteers. Using the Conflict Tactics Scales partner abuse was categorised in four ways: verbal and physical abuse occurring within the year preceding the study, and verbal and physical abuse occurring prior to that. Compared to non-abused students, students who had been verbally abused during the year preceding the study used exit more as a problem-solving style, and rated themselves less effective in problem-solving, less committed to the relationship, less satisfied with the relationship, more attracted by alternatives to the relationship and more inclined to have an external locus of control for relationship satisfaction. Students who were verbally abused during the year preceding the study were also subject to more general feelings of distress and to negative affect, while rating their partners less effective in problem-solving, and more repressive of their autonomy and relatedness needs. Students who had been verbally abused prior to the year leading up to the study differed from non-abused students in sociability. Students who were physically abused during the year preceding the study differed from non-abused students in their perceptions of the effectiveness of their approach to problem-solving, and in closeness to their partner. Students who had been physically abused prior to the year leading up to the study differed from non-abused students in ratings of their partner's use of hostile control. These results support the findings of studies carried out across clinical samples, and indicate that abused women do differ from non-abused women across a range of psychosocial and relationship factors.

INTRODUCTION:

Cases of wife abuse have been documented throughout recorded history. The oldest laws on record, the Code of Hammyrabi (see Warren and Lanning, 1992), and the "rule of thumb" law (see Wodarski, 1987) legitimized the use of physical force by men against their wives. Women have also been systematically denied the right to protect themselves throughout history. During the Middle ages women were burned at the stake for daring to scold, nag, threaten, or talk back to their husbands, irrespective of the provocation (Davis, 1971), and while such laws may be considered barbaric by today's standards, the abuse of women in close heterosexual relationships continues nevertheless. Until recently women received little or no assistance in protecting themselves from such abuse, with the prevailing attitude that "a man's home is his castle" and the womenfolk his chattels serving to keep the problem out of public awareness (the New Zealand Committee of Inquiry into Violence, 1987).

During the later part of the 19th century British and American suffragettes, and authors such as John Stuart Mill (see The Subjection of Women in Mill, 1981) attempted to promote public awareness of the plight of abused women. However it wasn't until the early 1970's, corresponding to the rise of the feminist movement, that "domestic violence" gained widespread recognition as a serious social problem (Walker, 1979; Wodarski, 1987; Pizzey, 1974).

Even then early researchers considered "wife abuse" to be a problem affecting only a small number of women and not severe enough to be of major concern (Dobash & Dobash, 1979; Gelles, 1979). However this claim has been consistently refuted through subsequent research and researchers now estimate that as many as 50 to 60 percent of women will be physically abused by their partners at some point during their lifetime (Lewis, 1985; Straus, 1978; Walker, 1979).

Determining exactly how many women are being abused is not an easy task though. A national probability survey of 6,002 American households carried out by Straus and Gelles' (1988) revealed that 11.6 percent of husbands had assaulted their

wives during 1985, and that 3.4 percent of these cases involved severe violence. Based on these figures Straus and Gelles (1988) estimated that 21.5 million men carried out at least one violent act against their wives during this interval, with an estimated 1.8 million cases involving severe assault.

However Straus and Gelles (1988) point out that these rates probably underestimate the actual amount of violence occurring, and higher rates of violence have indeed been found across numerous other American studies. For example Lockhart (1987) found that 35.5 percent of women had encountered at least one incident of partner violence during the year preceding the study. Similarly O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989) found that 31 percent of their sample had been physically assaulted by their husbands during the preceding year, while Clarke (1987: cited in Straus & Gelles, 1988) found partner abuse in 27.4 percent of women sampled during the year preceding the study. Special populations have produced even higher rates of partner violence, with Barling, O'Leary, Jouriles, Vivian, and MacEwen (1987) reporting that in their sample of women receiving marital therapy, 74 percent had been the victims of partner abuse during the preceding year.

In Britain high rates of partner abuse have also been recorded, although they are not as high as those recorded in American samples (Russell & Hulson, 1992). In a review of the literature Andrews and Brown (1988) found that between 22 and 25 percent of British women were reported to have experienced violent domestic episodes during the year leading up to each of the studies they reviewed.

Research into partner abuse in New Zealand has been scarce to date and investigators have tended to focus on studying women passing through women's refuges. Figures generated through these studies suggest that a serious problem exists nevertheless. For example, an assessment of New Zealand women's refuges carried out by Synergy Applied Research Ltd (1983) identified a total of approximately 1,600 women per year had been admitted as residents to New Zealand women's refuges in the early 1980's. Other sources reveal that the number of women residing at such refuges more than quadrupled during the next decade,

with 7,221 women receiving assistance from women's refuges in 1992 (All About Women in New Zealand, 1993).

Figures derived from non-clinical populations provide a more accurate picture of the scale of the problem though. One such study carried out on a birth cohort of New Zealand children and their families revealed that 3.4 percent of the mothers sampled were assaulted by their legal or defacto husbands in the first year of the study, and that 8.5 percent, or just under 1 in 12 women, reported being assaulted by their partners at least once during the six year study period (Fergusson, Horwood, Kershaw, & Shannon, 1986). These figures are in line with Church's (1984) estimates that between 2 and 3 percent of women are severely assaulted by their partners in New Zealand each year. However Fergusson, Horwood, Kershaw, & Shannon, (1986) point out that their rates must be considered lower-level estimates and that overall partner abuse rates for New Zealand are likely to be much higher.

Therefore, while it is difficult to determine the exact number of women being abused by their partners each year, it is apparent that large numbers of women are encountering partner abuse, and that further research into the nature of this problem is imperative.

DEFINING PARTNER ABUSE:

There is a lack of consensus among researchers over the appropriate ways to define partner abuse and a large number of contrasting definitions of partner abuse have been used across studies to date. The use of the term "abuse" has itself been criticised by various authors and Straus and Gelles (1985, 1988) prefer to use the term "violence" in its place. However as Emery (1989, p. 322) points out, this does little to solve the problem, since describing an act as either "abusive" or "violent" places a subjective social judgement on the acts involved, and may introduce misconceptions due to the lack of precision of these terms. A more suitable or accurate term has yet to be be suggested though, and with the lack of consensus over how to define partner abuse, it is unlikely that such a term will be agreed upon in the near future. Rather than attempting to establish the best nominal definition of abuse, it is important that clear operational definitions of the way these terms are to be employed are set out within each study.

Some of the terms used to denote "partner abuse" in the past include domestic violence, wife or woman battering, interspousal aggression, wife beating, wife or spouse abuse, and the battered woman syndrome (Freeman, 1979; Gelles, 1985; Maidment, 1985; Ryback & Bassuk, 1986; Walker, 1979, 1984). Often these terms have been used interchangeably, although they may employ markedly different definitions that vary widely according to the variables considered relevant by the researcher.

Such variables may include the nature of the abusive act, the impact of the abuse on the recipient, the abuser's motivation, mitigating factors, social norms and standards of legitimate conduct, or a combination of these (Emery, 1989; Straus & Gelles, 1986, 1988). However it is virtually impossible to operationalize all of these dimensions of abuse and to incorporate them all into one comprehensive operational definition. As Emery (1989) points out, definitions based on a combination of variables have the advantage of being more comprehensive, but

definitions based on a singular variable, such as the nature of the abusive act, are clearer and easier to operationalize.

Defining partner abuse specifically in terms of the acts committed has the advantage of enabling an impartial approach to the measurement of abuse to be taken while remaining consistent with legal definitions of the term (Straus, 1986). Acts of abuse are reasonably unaffected by the irrelevant or random processes that other variables may be subject to, such as random variations in the amount of damage incurred, variations in perceptions of what qualifies as abuse versus legitimate behaviour, and so on (Straus, 1986).

One area of contention concerning definitions based on the nature of the abusive act though, is the point at which physical violence is determined to be severe, intense, or frequent enough to be considered abuse. Parker and Schumacher (1977: cited in Ryback & Bassuk, 1986) for example, consider no less than three deliberate, repeated and severe physically violent episodes producing at least severe bruising to constitute abuse, while others consider one incident of physical assault to be enough to constitute abuse (Rounsaville, Lefion, Bieber, & Bieber, 1979).

Straus (1980, p.683) suggests that because "minor" acts of violence, such as slapping, pushing, shoving, and so on, are statistically frequent, accepted as justified by many people, and not severe enough to result in serious injury, they can be considered "normal". He reserves the term "wife beating" for severe acts of violence by the husband where the probability of an injury resulting is high (Straus & Gelles, 1988, p. 16).

However the findings of a study carried out by Wayland, Roth, and Lochman (1991) suggest that abuse may not necessarily be defined in terms of the severity of the physical assault. Abused women in Wayland, Roth, and Lochman's (1991) sample reported encountering numerous different types of violence, but it was discovered that the severity of the violence had relatively little to do with the lasting impact on the victim. Walker (1979, 1984) further suggests that it is the on-going

process of abuse, rather than the severity of the violence itself that has a lasting impact on the victim. All manner of violent acts can therefore be considered abusive and the definition of partner abuse need not be limited to severe, intense, or frequent acts of violence.

Definitions of partner abuse have more recently been extended to include psychologically abusive acts, also referred to as "non-physical abuse", "emotional abuse", "indirect abuse", and "mental torture" by various authors (see Tolman, 1989). Walker (1979, p. xv) for example defines partner abuse as being "repeatedly subjected to any forceful *physical or psychological* behaviour by a man in order to coerce (his partner) to do something he wants her to do without concern for her rights" (italics added).

Evidence in support of extending the definition of partner abuse to include psychological factors comes from cross sectional studies (O'Leary & Curley, 1986) and the personal accounts of women who frequently report such acts to be more distressing and damaging than the physical abuse they may have encountered (Dreschner, 1984: cited in Murphy & O'Leary, 1989; Walker, 1979; Wayland, Roth, & Lochman, 1991). Tolman (1989) also points out that under the scrutiny of counselling programmes abusive men have been found to be able to curtail their physically abusive behaviour, while at the same time increasing other abusive behaviours can help them to maintain control of their partners. Furthermore Straus (1974) found, contrary to his expectations, that as verbal aggression increased physical aggression also increased. Thus a relationship between these two types of aggression and a link between the physical and psychological dimensions of abuse was indicated.

A broad range of behaviours have also been included in definitions of partner abuse, such as sexual assault and exploitation, marital rape, economic deprivation, the use of coercion, manipulation, public humiliation, controlling behaviour, excessive jealousy, and so on (London, 1978; Straus, 1980; Sonkin, Martin, & Walker, 1985, cited in Tolman, 1989; Walker, 1979, 1984, 1989). However it is difficult to assimilate such a wide range of behaviours into a useful operational

definition of abuse, and evidence that these factors combine to form a universal construct of abuse has yet to be established. There are also no standardized measures of abuse that adequately assess all of these factors in combination, and therefore while they are not rejected as possible contributing factors, for the purposes of the present study physical and psychological aggression are determined to be the main constituents of abuse.

In the present study the term "partner abuse" is defined as:

> the use of physical and/or psychological aggression against a woman by a male partner with whom she has been in an intimate relationship for at least the previous twelve months,

with "physical aggression" being operationally defined in much the same way as Straus (1979) defines the term, denoting:

> "the use of (any) physical force against another person as a means of resolving...conflict" (Straus, 1979, p. 32),

and with "psychological aggression" being defined in accordance with Straus' (1979) definition of "verbal aggression", which is:

> "the use of verbal and nonverbal acts which symbolically hurt the other, or the use of threats to hurt the other" (Straus, 1979, p. 32).

However unlike Straus and Gelles (1988), who differentiate between "wife beating" and "normal" violence on the basis of the severity of the physical aggression experienced, in the present study all acts of physical aggression are considered abusive for the reasons set out earlier.

MEASUREMENT ISSUES:

The problems associated with defining abuse, mentioned earlier, are just part of a myriad of methodological problems that plague partner abuse research. As Strube (1988) points out, the practical and ethical barriers in this area outweigh those in most other field research making it difficult to conduct research that is useful and methodologically sound. Methodological problems common to research in this area include an over-reliance on retrospective and ex post facto research designs, a lack of appropriate comparison or control groups, and until recently few studies used standardized measures or appropriate statistical analyses (Rosenbaum & O'Leary, 1981; Widom, 1989; Gelles & Harrop, 1989; Wayland, Roth, & Lochman, 1991; Strube, 1988). There have also been differences in the number and type of variables measured making comparisons between studies difficult, a lack of control over the timing of follow-up assessments, and an absence of psychometrically sound outcome measures (Strube, 1988; Widom, 1989; Wayland, Roth, & Lochman, 1991).

Over-Reliance on Qualitative Research:

Researchers have also tended to rely on the qualitative method of data collection and conclusions have been drawn largely from anecdotal information collected via interviews. Emery (1989) points out that feminist authors consider this to be the most appropriate way to conduct research into partner abuse, as it takes into account the experiences of individual women. The quantitative approach, on the other hand, is considered artificial, as variables are assessed individually and out of their social context (Parlee,1981: cited in Walker, 1989). However qualitative research has limited application to abused women in general, as it necessitates the use of small select samples, appropriate comparison groups may not be employed, and there is little control over the variables being assessed in this type of research. In contrast the quantitative approach enables data to be collected across larger, more representative samples, results are generalizable, and the manipulation of specific variables enables hypotheses to be tested more exactly. Therefore while qualitative

research may be useful in providing detailed information on experiential factors affecting select groups of abused women, more quantitative research is called for.

Over-Reliance on Retrospective data:

An over-reliance on retrospective data and the recall of past abusive experiences, has also been common to much of the research carried out in this area to date. However, as Widom (1989, p.5) points out, the reliability of these data are threatened by "retrospective recall bias", and past events may be distorted by hind-sight, remembered incorrectly, or coloured by the participants' current views which may differ substantially from those they held at the time of the abuse. As longitudinal research is expensive, time consuming, difficult to conduct, and rarely carried out, a compromise has been to study abuse occurring within the immediate past. The 12 month interval prior to conducting research is considered to be an adequate period in which to detect the existence of abuse, as the effects of retrospective recall bias are still present but have been minimized to some degree (Straus, 1990a).

Over-Reliance on Clinical Samples:

By far the most common and troublesome methodological shortcoming of partner abuse research to date, has been the use of poor sampling techniques. The vast majority of research has been carried out on clinical or "convenience" samples made up of women seeking therapy, police assistance, medical aid, psychiatric treatment, and most frequently women seeking aid at women's refuges or shelters (Wayland, Roth, & Lochman, 1991, p. 497). The fact that women in these groups may differ substantially from other abused women, and that these samples may not be representative of abused women in general, has frequently been overlooked. The evidence suggests though, that abuse experienced by women who receive outside assistance may be different to abuse experienced by women not receiving such assistance.

Gelles (1976) found for example, that women who were frequently assaulted by their partners were more likely to seek police intervention than women who were infrequently assaulted, while severely abused women were more likely to seek separation, divorce, or the assistance of an agency, than women who had not been severely abused. Also Rosenbaum (1988) reports that women recruited from police and court records are more likely to be guarded, angry, and maritally dysfunctional, whereas those attending medical emergency rooms are more likely to have experienced physical injury.

Rounsaville (1978) also found that women who left their abusive partners were more likely to have been severely abused, to fear for their lives, and to have sought police assistance in the past. This further suggests that women in refuge-based samples who have attempted to leave abusive relationships, even if only temporarily, will differ from women who have not taken such action. Similarly, based on research carried out on refuge-based samples, Walker (1978) and Mills (1985) concluded that women remain trapped in abusive relationships by learned helplessness, and live like compliant zombies until they develop the strength and insight to overcome this pattern. If this is the case, women in shelter-based samples may be stronger, more insightful, or otherwise different from women who have not taken action to leave their partners (Launius & Lindquist, 1988).

Refuge-based samples also tend to over-represent various sociodemographic groups, such as women in lower socio-economic groups who, in lacking the financial resources to support themselves, may need to seek aid at a shelter (Dobash & Dobash, 1979). This may have in turn influenced conclusions drawn regarding the characteristics of abused women, as disproportionately high rates of abuse have been reported in women in working class groups, the unemployed, and those with lower education, dependent children, economic dependence on their partners, and so on (Dobash & Dobash, 1979; Schutte, Malouff, & Doyle, 1988; Straus, 1978). However being largely based on clinical research these results may reflect sampling-bias more than true differences, especially as others have shown that partner abuse occurs across all sociodemographic sectors of society (Hornung, Mc Cullough, &

Sugimoto, 1981; Hotaling & Sugarman, 1986: cited in Campbell, Polland, Waller, & Ager, 1992; O'Leary, Barling, Arias, Rosenbaum, Malone, & Tyree 1989; Straus, 1980).

Clinical samples thus under-represent women who have been less severely and/or less frequently abused, women who have experienced milder and purely psychological abuse, women in specific sociodemographic groups, and women who have not received help from the various agencies women in clinical samples have used. It is therefore important that in future more research be carried out using non-clinical samples, in order to reduce the impact of extraneous factors such as these on the results obtained, and to enhance the generalizability of findings.

Over-Reliance on the Assessment of Marital Relationships:

Past research has also focused almost exclusively on abuse occurring within marriage, to the exclusion of other types of relationships, such as dating, and cohabiting relationships, among others. However recent studies indicate that abuse may be even more prevalent in non-marital relationships. For example O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989) found that rates of aggression were 3 to 4 times higher in engaged couples than in married couples, while Kennedy and Dutton (1987: cited in Ellis, 1989) found single (or unmarried) participants were nearly 5 times as likely as married women to report abuse.

Carlson (1987) points out though, that while marriage may not be a prerequisite for violence, marriage-like relationships do appear to be more prone to violence than less serious relationships. In support of this is Ellis' (1989) finding that across studies, women in cohabiting relationships reported between one-and-a-half and two times more abuse than married women. However high rates of aggression have also been documented in high school and college students in non-cohabiting dating relationships, with reports ranging from between 12 and 36 percent of female students being physically abused by their partners at some time during their relationship (Arias, Samios, & O'Leary, 1987; Carlson, 1987). Furthermore studies now indicate that interpersonal aggression decreases over age,

that repeated aggression often occurs in the early stages of relationships, and that 18 to 24 year olds constitute the most violent age group (O'Leary Barling, Arias, Rosenbaum, Malone, and Tyree, 1989; Straus, Gelles, Steinmetz, 1980). Much valuable information about partner abuse would therefore be lost if dating relationships were not included in the study of partner abuse, as the very age at which most violence occurs is also the age at which most dating relationships are established. Also as Roscoe and Benaske (1985) point out, with abuse during courtship resembling abuse in marriage, professionals should be concerned with the study of abusive relationships, rather than studying spouse abuse and courtship violence as separate issues.

Rates of abuse among divorced and separated women have also been found to be consistently higher than those found in married women across studies (Gaquin, 1978; Smith, 1987, cited in Ellis, 1989). However the perceptions of divorced and separated women regarding their relationships with their ex-partners are likely to be clouded by ill-feeling, and may be subject to retrospective recall bias, mentioned earlier (see Widom, 1989). Also as these relationships are no longer voluntary, intimate, or continuing on the same basis as other intimate relationships it may be best to investigate the abuse of divorced and separated women separately, and to concentrate on researching existing relationships.

Sample Selection:

Contention exists over who may be affected by partner abuse and the best way for researchers to construct their samples in order to generate useful data in this area. One area of contention in particular concerns the debate over whether or not men abused by their female partners should also be included in partner abuse research. Steinmetz (1977) sparked this debate when she reported that men are also being abused by their female partners, and Straus and Gelles (1986) findings that rates of intra-family violence by women are almost as high as those of men supported this contention.

However, as Dobash and Dobash (1979), O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989), and even Straus and Gelles (1988) themselves, point out, the meanings and consequences of violence perpetrated by women and men in intimate relationships may differ greatly. It has been argued, for example, that women tend to engender less fear than men, to resort to violence as a means of self-defence or retaliation, and are much less likely to inflict injuries requiring medical attention on their partners (Dobash and Dobash, 1979; O'Leary, Barling, Arias, Rosenbaum, Malone, & Tyree, 1989; Straus, 1980, 1986; Straus & Gelles, 1988). Men, on the other hand, are described as being more likely to inflict pain and injury, and are capable of inflicting economic and social hardships on their partners that women tend to be incapable of meting out themselves (Straus, 1980; Straus & Gelles, 1988).

It has also been argued that, as women are far more adversely affected by abuse, research into the abuse of male partners by women is misguided, and that such research may even contribute to the problem of female partner abuse (Dobash & Dobash, 1979; Pagelow, 1979: cited in Gelles, 1985). Aggression used by women against their partners is therefore not generally considered to equate with partner abuse, except in special circumstances, such as lesbian relationships (see Morrow & Hawxhurst, 1989; Renzetti, 1988, 1992). However, even those who take the opposite view would agree that it is not always necessary or appropriate to study aggression used by both members of a couple when the aim of the research is the identify the characteristics of the members of only one of these groups.

A further contentious issue concerns an over-emphasis on research involving victims of abuse, while studies carried out on the perpetrators of abuse are scarce. Romero (1985, p. 541) describes this as "blaming the victim" and suggests that more attention needs to be placed on the tactics used by the perpetrators of abuse to control their victims. However research involving the perpetrators of abuse has limitations, as abusers are notoriously difficult to recruit, and their responses may be unreliable due to their tendency to provide socially desirable information (Straus, 1990a, Jouriles & O'Leary, 1985). Focusing solely on the perpetrators of abuse

also insinuates that the victims' perspectives are irrelevant, and that their actions require no further investigation.

Straus and Gelles (1986) argue instead that partner abuse research should centre on both the victims and perpetrators of abuse, for which they advocate the use of aggregate data, collected from individual men and women in separate abusive relationships. Russell and Hulson (1992) on the other hand consider aggregate data to be of limited value, and believe that the inclusion of both members of the couple in a sample is essential to create an understanding of the ways in which they interact to produce an abusive relationship.

However as Jouriles and O'Leary (1985) point out, there are wide discrepancies in the reports of men and women regarding abuse occurring within the relationship. Arias and Beach (1987, cited in Russell & Hulson, 1992) also found that victims and perpetrators of abuse tend to under-report their own aggression, but not their partner's aggression, in attempting to provide socially desirable responses. It may therefore be appropriate to collect data from both members of a couple when the research concerns aggression in both partners, or the interaction between victim and perpetrator.

However collecting responses from both members of a couple may not be imperative in research that focuses solely on the perceptions of abused women. As it is the abused women's perspectives that are being assessed, and as the reports of the victims of abuse are less likely to be influenced by social desirability bias than those of the abuser according to Arias and Beach (1987, cited in Russell & Hulson, 1992), sampling women only may be appropriate in these circumstances.

MEASUREMENT OF PARTNER ABUSE:

A further shortcoming of research into partner abuse has been the wide-spread use of inadequate assessment techniques and non-standardised measures (Rosenbaum & O'Leary, 1981; Wayland, Roth, & Lochman, 1991). Studies of reported cases and those using the self-report method predominate in this area of

research, with methods such as the use of experimentation, being difficult and/or unethical to carry out (Lapsley, 1993). As mentioned earlier, the use of reported cases (or clinical samples) has it's drawbacks, and applying the self-report method across non-clinical samples therefore offers the most viable approach to quantitative research in this area.

In conducting research based on the self-report method a variety of techniques have been employed. The use of single items such as "How many times in the past year has your partner hit you?" and "Do you consider yourself to be a battered woman?" are of limited use in measuring abuse, as the victim must not only recognise and classify herself as abused, she must also be prepared to openly admit this fact in response to one or two brief questions. Such items also fail to generate an accurate picture of the abuse encountered, and the criteria for identifying abuse is based entirely on the subjective opinions of the participants, which may differ widely from those of other participants, the researcher, and others studying partner abuse. Lapsley (1993) further points out that rates of violence tend to increase in accordance with the sophistication of the procedures used, and that questioning procedures which are not detailed or broad enough to include the full range of violent events will not produce accurate rates of abuse. Single items therefore lack the clarity and precision necessary in scientific research, although they may be of some value in researching a very broad range of factors, such as in Fergusson, Horwood, Kershaw, and Shannon's (1986) study.

Theoretically, open-ended questions, which enable participants to respond freely, are the most likely to produce accurate data (Straus, 1990a). However unstructured interviews where this technique is employed, require a lengthy interview process, highly skilled examiners, and the use of qualitative analysis which, as mentioned earlier, has limited application in this field. Also, unless prompted, participants may fail to recall abuse pushed out of memory, and unless the interviewer asks for information regarding specific acts of abuse, respondents may omit events they don't consider abusive, or those they consider legitimate.

Structured techniques on the other hand are useful in minimizing the length of the interview process and the skill required by the examiner. They also facilitate in the use of quantitative procedures, and enable abuse to be clearly operationalized and measured objectively. However very few standardized measures of abuse exist. Some of the more well known measures include Hudson and McIntosh's (1981) Index of Spouse Abuse (ISA), Tolman's (1989) Psychological Maltreatment of Women Inventory (PMWI), O'Leary and Curley's (1986) Spouse Specific Aggression Scale (SSAG), and the Conflict Tactics Scales (CTS) developed by Straus in 1974. Kuhl (1984) also developed the Domestic Violence Assessment Form (DVAF), which is a 61 item scale that measures demographic variables, childhood history, abuse history, and drug and alcohol use. However little information is provided by the author about this scale, and it's main application would be in researching the relationship between childhood abuse, the use of drugs and alcohol, and past history of abuse.

Index of Spouse Abuse:

Hudson and McIntosh's (1981) Index of Spouse Abuse is a 30-item measure of physical and nonphysical abuse. The index shows evidence of construct validity, and high internal consistency was found within each of the subscales according to Tolman (1989), although Hudson and McIntosh (1981) report that initial validity checks indicated the physical and non-physical abuse scales could be measuring a unidimensional construct. This is not surprising as items such as "My partner screams and yells at me" (see Hudson & McIntosh, 1981, p. 888 for the ISA scale items) have been categorized as physically abusive, when they would seem to be associated more with non-physical or verbal abuse.

The ISA scale of non-physical abuse also has a number of flaws, including what Gondolf (1987, cited in Tolman, 1989) found to be a limited range of non-physically abusive behaviours. The abusive nature of many of the acts included in this scale is also questionable. For example "My partner feels that I should not work or go to school" may be a perfectly innocuous opinion held by either one, or

both, members of the couple, and may not relate to the victimization of the participant in any way. Items such as "My partner is not a kind person", also fail to clearly set out distinct, quantifiable acts that the participant can recall occurring on specific occasions. Furthermore the ISA employs a 5-point ratings scale (of never to very frequently) which may be less accurate than recording the actual number of times abusive acts occurred.

The strengths of the ISA are that it is easy to administer, and it incorporates a larger number of physically abusive items than other similar measures of abuse, even though many of these items may not be strictly considered physically abusive. However the instructions are very brief and immediately alert respondents to the fact that the scale is measuring the degree of "abuse" occurring in the relationship (see Hudson & McIntosh, 1981, p. 888). This may put the respondents on guard, or may lead them to distort their responses in accordance with what they expect to be the desired outcome of the research (see Orne, 1962, cited in Tuckman, 1978).

No attempts are made to inform respondents that some of the behaviours being measured may be widely used, and this may lower response rates as well. Also the ISA doesn't include indexes of abuse perpetrated by the respondents themselves, which limits it's potential for use in studies where such information is required, and fails to provide respondents with the opportunity to give a balanced account of events.

Psychological Maltreatment of Women Inventory:

The Psychological Maltreatment of Women Inventory (PMWI) developed by Tolman (1989) includes 58 items compiled from a variety of sources to measure dominance-isolation and emotional-verbal factors. This inventory is inadequate for the assessment of overall abuse as it lacks a physical abuse measure. However it provides a rather more comprehensive measure of psychological abuse than is available in many other scales. This is an advantage in that the PMWI is sensitive to a broad range of non-physically abusive behaviours. But it's length and failure to

address abuse occurring outside of this realm make it impractical for use in many partner abuse studies.

Versions of the scale designed for use across both men and women facilitate in the comparison of couple data, but as the scale is directed at abuse perpetrated by the male partner it's application is not as broad as that of scales assessing abuse perpetrated and received by both members of a couple. The PMWI, like the ISA, also employs a 5-point ratings scale (of "never" to "very frequently") which, as previously mentioned, is less accurate than measuring abusive acts according to their exact frequency of occurrence.

The PMWI was also designed to measure abuse occurring within the previous 6 months. This may lessen retrospective recall bias, but it fails to establish an adequate interval in which to detect the presence of abuse, which as Straus and Gelles (1988) point out, may occur very infrequently, and may not necessarily continue year-round. Furthermore the reliability of the PMWI items was found to be low across couples, and it's validity as a measure of psychological abuse, versus relationship distress, is still questionable according to Tolman (1989).

Spouse Specific Aggression Scale:

The Spouse Specific Aggression Scale (SSAG) was created by O'Leary and Curley (1986), as part of the Spouse Specific Assertion and Aggression Scale. It is a 12-item scale that measures verbally aggressive and passive-aggressive behaviour. Like the PMWI, the SSAG was designed to measure psychological rather than physical aggression, and cannot be used as a measure of overall abuse. However the SSAG is somewhat shorter than the PMWI and may therefore be of greater practical use in the assessment of psychological abuse, although the ability of such a small number of select items to measure the full range of psychological behaviours is debatable. Some of the SSAG items outline very specific behaviours, while failing to account for behaviours that may be equally abusive.

Validity and reliability checks of the SSAG further indicate that it may be of limited value in the assessment of psychological abuse. Only moderate correlations

were found between scores obtained on this measure and another well respected measure of abuse (the Conflict Tactics Scale), and alpha reliability coefficients carried out between the items were also shown to be adequate, but not high (Murphy & O'Leary, 1989). Like the ISA and the PMWI, the SSAG can be used in the assessment of psychological abuse received by both partners, but it's failure to measure aggression used by the respondents themselves limits it's usefulness.

Conflict Tactics Scales:

By far the most widely used measure of partner abuse is the Conflict Tactics Scales (CTS), developed by Straus (1974). The CTS includes scales of reasoning, verbal aggression, and physical aggression. Straus (1974) included these modes of conflict resolution in the CTS due to their relevance to catharsis theory of violence control, although as Straus (1990a) points out, they have been shown to be useful in researching partner abuse regardless of their theoretical underpinnings. The factor structure of the CTS has also been confirmed through factor analysis in numerous studies (Barling, O'Leary, Jouriles, Vivian, & MacEwen, 1987; Jorgensen, 1977, cited in Straus, 1990b; Straus, 1990a) although Hornung, McCullough, and Sugimoto (1981) found evidence of a fourth factor, which they identified as "life threatening violence".

The CTS has been subjected to more assessments of it's validity and reliability than any other measure of abuse (see Straus, 1990b, for an in-depth discussion of these results). The internal consistency reliability of the CTS scales has been found to range from high to low (Straus, 1979, 1990b), but Straus (1990b) suggests that this is due mainly to the small number of items included in some of the scales. Straus (1990a) points out, for example, that the reasoning scale, which has the smallest number of items, also has the lowest internal consistency reliability, but that this may only be of significance where reasoning is an important focus of the research. In partner abuse research measuring physically and verbally aggressive acts tends to be of greater importance, and the CTS is a more reliable measure of these constructs than of reasoning (Straus, 1990b). Furthermore, Straus (1990a)

points out that the CTS, like other scales of partner abuse, may not be capable of measuring the infinite variety of tactics couples use in a conflict, but it is more succinct than other measures and maintains comparable levels of reliability.

While the internal consistency reliability of all of the CTS scales may not be high, Straus (1990b) reports that the construct validity of the scales is high, and that the CTS physical aggression scores have been associated with numerous factors theoretically related to abuse, such as health problems, relationship conflict and power imbalance, childhood history of abuse, stress, social isolation, alcohol problems, employment status, and so on. The concurrent validity of the CTS on the other hand, has only been shown to be moderate, and agreement between the responses of couples (a further indicator of concurrent validity) has been found to be low. This is possibly due to under-reporting of aggression by perpetrators attempting to provide socially desirable responses (Straus, 1990b). However the effects of social desirability on responses are no greater for the CTS than any other measure of abuse (Straus, 1990b).

The CTS has been used in large-scale studies in the United States, which has enabled norms to be generated for the CTS that other scales lack. Furthermore, unlike other measures of abuse, the CTS incorporates scales of aggression perpetrated and received by both partners. The CTS is therefore equipped to measure abuse from many angles, and reliability checks can be readily made using the reports of both members of a couple. Also being given the opportunity to report events from both sides enhances recall, encourages openness, and reduces anxiety in respondents who might otherwise fear unfairly blaming or "telling on" their partners.

Straus (1979) further points out that while the sensitive nature of questions regarding abuse could generate antagonism, self-defensiveness, and high refusal rates in participants, the design of the CTS minimizes these potential problems. This was achieved by placing the more positive reasoning items at the beginning of the scale, followed by items that gradually increase in aggressiveness. Respondents are therefore able to highlight their more positive behaviours first, which encourages

greater honesty in their responses to the later aggression items (Straus, 1979). The scale is also presented with an introductory paragraph that places conflict in the context of normal family interactions and this encourages greater openness in the reporting of aggressive behaviours.

However the CTS has been criticized on a number of other grounds. Ferraro and Johnson (1983), Murphy and O'Leary (1989), and Straus and Gelles (1986) point out for example, that the CTS fails to take into account the meanings, context, and impact of the abuse. However no other standardized measure of abuse adequately accounts for these factors either, and collating data from other sources, such as medical records, in-depth interviews, and so on can help to overcome this problem if necessary.

Szinovacs (1983) also points out that the CTS instructions do not specify that the motivation behind the acts should be to cause harm, and that even during conflict, acts such as mock punching, may be carried out without the intention to injure. However such instances are likely to be rare, and pretending to hit someone during the course of a fight may be considered a threatening or abusive act in itself, whether or not the intention was to follow through with the act. Szinovacs (1983) further criticizes the CTS for being ambiguous, as certain items set out several behaviours, such as throwing, smashing, hitting, and kicking things or people, within the one statement (see Appendix 1, for details). This could also be considered an advantage though, as it enables an extensive range of abusive behaviours to be measured concisely.

Thus, as Straus (1990b) points out, keeping the threats to the reliability and validity of the CTS, and it's other weaknesses in mind, the CTS is still the best measure of abuse available to date. Other indexes show similar levels of reliability and validity, but have fewer practical applications and more design flaws. Furthermore the widespread use of the CTS allows for comparisons to be easily made across studies carried out in this field, and for a large body of information regarding partner abuse to be accessed readily.

RESEARCH ISSUES:

Research indicates that the greater the frequency and severity of the abuse, the more likely it is that women will seek external assistance, and attempt to leave the relationship (Gelles, 1976). However there are also consistent reports of women continuing to live with their abusive partners even after experiencing abuse of life-threatening proportions (see Strube & Barbour, 1984a), and Ferraro and Johnson (1983) note that women often remain in abusive relationships for years without being detected. Their reasons for continuing to tolerate such abuse may seem vague though, and the literature is rife with theories that attempt to account for this paradoxical behaviour.

Theories of Partner Abuse:

While general violence and aggression theories are not often used to account for partner abuse, numerous theories specific to family and intra-couple violence have been proposed. Generally distinctions have been made in the literature between intra-individual, macro-level, and psychosocial explanations of partner abuse (see Ferraro & Johnson, 1983; Launius & Lindquist, 1988; Painter & Dutton, 1985).

Intra-individual or intrapsychic theories link abuse to the personality characteristics, or psychopathology of the individuals involved in the abusive relationship (Ferraro & Johnson, 1983; Gelles, 1985; Launius & Lindquist, 1988; Painter & Dutton, 1985). For example early intrapsychic theories related partner abuse to sado-masochism, and women were said to remain in abusive relationships out of a masochistic need to experience pain and be treated badly (see Andrews & Brown, 1988; Dalton & Kantner, 1983; Ferraro & Johnson, 1983; Kuhl, 1984). However little evidence exists in support of this explanation, and as Carlson (1977) and Walker (1979) point out, attempting to identify pre-existing characteristics in abused women may be misguided, as it places blame on the victims and directs attention away from the perpetrators of the abuse.

Macro-level theories, on the other hand, link abuse to social, political, and economic forces and to the structure of society (Ferraro & Johnson, 1983; Gelles, 1985; Launius & Lindquist, 1988; Painter & Dutton, 1985). Straus's (1978) systems theory for example, posits that the structure of society reinforces the use of violence in the family, while the inequities in society filter down to the family, making abused women incapable of leaving the relationship. Other renowned macro-level theories include resource theory - that abuse is more prevalent when resources are limited, and being dependent on their partners makes it difficult for abused women to leave (Breines & Gordon, 1983; Gelles, 1985; Goode, 1971); exchange or investment theories - that the costs of remaining in the relationship are outweighed by the rewards (Breines & Gordon, 1983; Gelles, 1985); and feminist theories of patriarchal domination (Dobash & Dobash, 1979; Gelles, 1985; Mercer, 1988; Smith, 1990).

Different again are psychosocial theories which link abuse to socialization processes and psychological entrapment (Koslof, 1983; Launius & Lindquist, 1988; Strube & Barbour, 1984a). Proponents of social learning theory, for example, relate abuse to violence in the family of origin, suggesting that the tolerance of such behaviour is learned and transmitted intergenerationally (Breines & Gordon, 1983; Emery, 1989; Infante, Chandler & Rudd, 1989; Painter & Dutton, 1985; Walker, 1989; Widom, 1989). The theory of learned helplessness on the other hand, proposes that women encountering abuse become passive, withdrawn, and helpless, not as a result of a pre-existing psychological condition, but as a learned response to abuse (Walker, 1979).

Walker's (1984) cycle of violence theory also posits that physical abuse is preceded by a period of increasing tension and is followed by a period of loving contrition, which keeps the victim submissive, and prevents her from leaving the relationship. Post traumatic stress theories similarly suggest that abused women are incapacitated by a psychological reaction much the same as that experienced by victims of violent crime, brain-washing, and disasters, and by prisoners of war (Launius & Lindquist, 1983; Romero, 1985).

Evidence has been cited both for and against these explanations, and many researchers now assent to taking a multideterministic approach to the study of partner abuse (Koslof, 1983). As women are not always prepared to admit to being abused, it is of foremost concern that researchers identify factors that characterize victims of abuse. Having such information at their disposal would enable health-care professionals to identify women at risk of remaining in abusive relationships undetected, and to construct interventions accordingly.

Factors Associated with Partner Abuse in Women:

Gelles (1985) reports that factors consistently found to relate to partner abuse fall into 6 main categories including "childhood experiences of abuse, low socio-economic status, social and structural stress, social isolation and low community embeddedness, low self-concept, (and) personality problems and psychopathology" (Gelles, 1985, p. 358).

For example, abused women have been found to report witnessing and receiving abuse during childhood more than non-abused women (Gelles, 1976; Hotaling & Sugarman, 1990); to be poorer, less well educated, and less likely to be employed than non-abused women (Coleman, Weinman, & Hsi, 1980; Gelles, 1976; Hilberman & Munson, 1978; Hotaling & Sugarman, 1990; Schutte, Malouff, & Doyle, 1988; Sullivan & Davidson, 1991; Star, 1978; Strube & Barbour, 1984a), and to experience more stress and stressful life events than non-abused women (Finn, 1985; Gelles, Steinmetz & Straus, 1980; Mac Ewen & Barling, 1988; Seltzer & Kalmuss, 1988). Abused women have also been reported to lack social and emotional support (Hilberman & Munson, 1978; Cazenave & Straus, 1979; Sullivan & Davidson, 1991); to have poor self-concept (Hilberman & Munson, 1978; Hudson & McIntosh, 1981; Walker, 1978, 1979, 1984); and to require psychiatric assistance more than non-abused women (Romans-Clarkson, Walton, Herbison, & Mullen, 1990; Rosenbaum & O'Leary, 1981; Wayland, Roth & Lochman, 1991).

While Gelles (1985) claims that these factors have been consistently related to partner abuse, the exact nature of the relationship between partner abuse and many

of these factors has yet to be confirmed (see Andrews & Brown, 1988; O'Leary & Curley, 1986; Schutte, Malouff, & Doyle, 1988; Star, 1978; Stets & Pirog-Good, 1987), and further research is necessary before any firm conclusions can be made. In particular further research into factors associated with the effects of abuse on the relationship and the psychosocial functioning of the victim is warranted.

IMPACT OF ABUSE ON PSYCHOSOCIAL AND RELATIONSHIP FUNCTIONING:

Meredith, Abbott, and Adams (1986) point out that while the impact of partner abuse on the functioning of the individual has been documented in the literature, and many scholars have attempted to identify the role various psychosocial factors play in this process, minimal attention has been paid to the association between relationship functioning and partner abuse. While little information exists as yet regarding the association between abuse and the functioning of the relationship, a wealth of research has been carried out into factors associated with relationship dissolution and commitment, and associations may exist between these factors and the decision to remain in an abusive relationship. Further investigation of factors associated with partner abuse and relationship functioning therefore needs to be carried out, as does research geared towards developing a clearer understanding of the relationships between partner abuse and psychosocial factors.

Psychological Distress and Well-Being:

While physicians may be expected to be among the first to know that their patients are being abused due to the physical injuries they are presented with, Walker (1987) points out that this is often not the case. Fewer than 50 percent of the abused women in Walker's (1987) sample reported seeking medical treatment for their injuries, even when they felt such treatment was required. However abused women often seek medical attention for other somatic complaints such as insomnia, fatigue, eating disorders, headaches, backaches, chest and abdominal

pain, hyperventilation, and a range of more chronic physical illnesses (see Bergman, Larsson, Brismar, & Klang, 1987; Rybak & Bassuk, 1986; Walker, 1984, 1987).

Abused women have also been reported to display symptoms of anxiety, aggression, numbed affect, apathy, agitation, depression, phobia, drug and alcohol dependency, and suicidal tendencies (Campbell, Poland, Waller, & Ager, 1992; Hilberman & Munson, 1978; Launius & Lindquist, 1988; Rybak & Bassuk, 1986; Walker, 1987). Thus, Church (1984) concludes, the constant threat of abuse seems to take it's toll on both the physical and psychological health of the victim, and he suggests that the accumulation of stress associated with the abuse severely affects the psychological functioning of the victim.

However many of the psychological symptoms that have been associated with abuse were observed in, or reported by, women in clinical samples. Comparisons therefore need to be made between abused and non-abused women through research carried out using non-clinical samples before any firm conclusions can be made regarding the relationship between psychological functioning and abuse.

A number of studies have attempted to establish a link between partner abuse and psychiatric disturbance. Romans-Clarkson, Walton, Herbison, and Mullen (1990) found for example, that physical abuse was related to an increased likelihood of psychiatric disorder in a sample of New Zealand women. Carmen, Rieker, and Mills (1984) also discovered that nearly 43 percent of the psychiatric patients they sampled had a prior history of physical abuse. Also Bergman, Larsson, Brismar, and Klang (1987) found that abused women had higher levels of depression and had sought more psychiatric consultations in the past than non-abused control subjects in their sample, while Jaffe, Wolfe, Wilson and Zak (1986) found that shelter residents exhibited more somatic complaints, symptoms of depression, and higher levels of anxiety than a residential control group.

These results suggest that abused women may display more of the "neurotic" and psychiatric symptoms of psychological distress described by Green, Walkey, McCormick, & Taylor (1988, p. 61) than non-abused women. However the evidence of a direct relationship between psychological distress and abuse is still

sketchy, and the relationship between partner abuse and symptoms of distress such as somatic distress, performance difficulties, and general feelings of distress, therefore requires further investigation.

Related to psychological distress is the concept of psychological well-being. Well-being has been described by Kammann and Flett (1983) as a general sense of happiness which is a balance of positive affect (associated with good feelings and enjoyment of life), and negative affect (associated with distress, depression, anxiety, and somatic complaints). Many of the symptoms previously observed in abused women through clinical research, such as anxiety, depression, and numbed affect, are therefore associated with negative affect, and the discovery of a relationship between negative affect and partner abuse is thus to be expected. An inverse relationship between partner abuse and positive affect is also to be expected, as abused women may experience fewer good feelings, and a poorer quality of life associated with poorer well-being.

Well-being has been consistently related to marital satisfaction and to the absence of relationship distress in the literature (see Schaefer & Burnett, 1987), and this further suggests that an association between psychological well-being and partner abuse is likely to be found. Research into the relationship between well-being and partner abuse, as well as psychological symptoms of distress and partner abuse is therefore warranted.

Sociability and Shyness Factors:

As abused women may be socially isolated, timid, withdrawn, emotionally dependant on their partners, and introverted (Church, 1984; Launius & Lindquist, 1988; Walker, 1987; Wodarski, 1987), it is also possible that relationships may exist between shyness, sociability, and partner abuse. Cheek and Buss (1981) describe sociability as a preference for being with people, and shyness as the tension, discomfort and inhibition felt in the presence of others, with many of the factors previously mentioned being related to these constructs. It is possible, for example, that abused women appear anxious, timid, withdrawn and so on, due to

their shyness and lack of sociability. Low sociability and shyness may also be related to the lack of social support networks found in abused women through clinical research (Walker, 1984) and to the difficulty abused women report having in coping with social pressure (Kuhl, 1984).

Few studies have attempted to directly link shyness and sociability factors to partner abuse though. One study undertaken by Star, Clarke, Goetz, and O'Malia (1979) revealed that abused women may be shy and unsociable as their scores on personality inventories showed them to be more reserved than outgoing and more shy, introverted, and self-sufficient than group dependent. However this study was carried out on a sample of shelter residents, and while scores were compared to the norms of the scales used, it is still unclear from these results whether or not abused women differ from non-abused women in shyness and sociability. The possibility of an association is implied though, and further controlled research into the relationship between these factors and partner abuse is warranted.

Problem Solving:

Research into marital distress and relationship satisfaction indicates that good problem solving skills may serve as buffers against the development of distressed relationships, and that the ability to solve problems constructively may be related to healthy relationship functioning. Markman, Floyd, Stanley, and Storaasli (1988) found, for example, that by improving the communication and problem-solving skills of couples about to marry, greater marital satisfaction, and lower levels of problem intensity were achieved later in the relationship.

The progression in the use of non-physical to physical forms of conflict resolution techniques in the early stages of abusive marriages reported by Murphy and O'Leary (1989), suggests that a link may also exist between problem solving deficits and partner abuse. Walker's (1979) and Mill's (1985) claims that abused women lack the motivation to actively and constructively solve their problems due to learned helplessness, is a further indication that problem-solving deficits may be associated with abuse.

Studies examining the relationship between partner abuse and problem solving skills indicate that abused women may use only a narrow range of strategies in dealing with their problems. For example Claerhout, Elder, and Janes' (1982) found that abused women exhibited more avoidant and dependent responses to problem solving situations where abuse was an issue, and generated fewer alternative responses to these problem solving situations than non-abused women. Finn's (1985) research also supports these claims, as abused women were found to lack coping skills and under-utilize active problem solving behaviours. These problem solving deficits were evident in the women's tendencies to use passive avoidant strategies, to perceive their problems as being beyond their control, and also in their failures to enlist the help of others or to meet their problems "head on", according to Finn (1985).

Finn's (1985) discovery that the abused women in his sample perceived their problems to be outside of their control, indicates that the victims of abuse may attribute the cause of their problems to forces external to themselves, such as to their partners or the relationship. Fincham (1985) also found that in couples seeking marital therapy, the distressed partner was more likely than the non-distressed partner to attribute the cause of the problem to the relationship, and it is possible that abused women, who may also be distressed, make similar causal attributions.

On the other hand, Dobash and Dobash (1979), Romero (1985), and Walker (1979, 1984) consider self-blame to be an integral part of the abuse process that keeps the victims trapped in the relationship. As mentioned earlier, by increasing the victims' isolation, Avni (1991), Dobash, Dobash, Cavanagh, and Wilson (1978), and Romero (1985) suggest that it is possible for abusers to create the impression that the aggression is legitimate and to establish the belief that this behaviour is in some way the victims' fault. Rieker and Carmen (1986, cited in Hamilton, 1989) also point out that self-blame can restore the illusion of control and provide a rationale for the problem. It is therefore possible that women in abusive relationships engage in self-blaming attributions concerning their problems, and fail to act constructively on their own behalves as a consequence.

Research into abused women's perceptions of their partner's problem-solving behaviour is therefore warranted, as is further assessment of the problem-solving styles used by these women. Based on the results of earlier studies, abused women may be expected to employ more passive and destructive problem solving strategies than non-abused women, and to utilize fewer constructive and active problem solving strategies. But they may also perceive their own problem solving styles to be ineffective while perceiving their partner's styles to be effective.

Autonomy and Relatedness:

Also related to relationship functioning are factors associated with the degree to which abused women feel they are being controlled and influenced against their will by their partners, and the degree to which they perceive their needs for acceptance and relatedness to be met by their partners. Schaefer and Burnett (1987) refer to this as the need for autonomy and relatedness, and they suggest that the thwarting of such needs can impair the well-being and psychological adjustment of the individual. In Schaefer and Burnett's (1987) research, women's perceptions of their husband's behaviour towards them were found to have an impact on their subjective well-being and psychological adjustment, and it also seems likely that abused women will perceive their partner's behaviour in a similar way.

As mentioned earlier, Walker (1979, 1984) and Romero (1985) consider coercion, manipulation, social isolation, and control to be integral aspects of the abuse process based on data obtained from refuge-based samples. This indicates that the thwarting of autonomy and relatedness needs may also relate to abuse. Again however, women who have sought professional assistance may perceive their situations differently to women who have not sought help, and it cannot be assumed that both physical and psychological aggression in a relationship necessarily equate with women perceiving their partners to be controlling, unaccepting, and so on.

It is possible for example, that women who remain in abusive relationships fail to realise that their partner's behaviour does thwart their needs for autonomy and relatedness, and they may stay in the relationship through a lack of awareness that

there is anything untoward happening outside of the occasional violent episode. Rieker and Carmen's (1986, cited in Hamilton, 1989) finding that self-blame can restore the illusion of control and provide a rationale for the problem supports this possibility, and abused women may indeed feel that their autonomy is not being thwarted by the relationship and that they are themselves responsible for these needs not being met.

However research carried out by Church (1984) indicates that abused women living with their partners also feel controlled and rejected, and it is therefore unlikely that abused women reframe their perceptions of their partner's behaviours as controlling after leaving the relationship. The women in Church's (1984) sample were receiving counselling though, and it is yet to be established that abused women who have not sought outside assistance also feel controlled by their partners or that their needs for autonomy and relatedness have been thwarted. It is therefore important to assess the degree to which women in non-clinical samples feel their autonomy and relatedness needs have been met by their partners and the degree to which they feel control has been exerted over them by their partners.

Relationship Commitment:

One factor that may influence the decision to stay with an abusive partner is commitment to the relationship. Relationship commitment has been related to distress following the dissolution of relationships and to relationship stability (Simpson, 1987). It may therefore also play a role in preventing abused women from leaving their relationships, as being more committed to the relationship may provide the incentive to remain and tolerate being abused.

Cate, Henton, Koval, Christopher, and Lloyd's (1982) and Strube and Barbour's (1984b) findings that women who remained in abusive relationships were more committed to the relationship than those who decided to leave, offer support for this theory. However commitment was defined in limited terms across both of these studies, with relationship length and the stage of the relationship (from dating to married) being the only variables used to assess commitment in each of

these studies. It is possible though, to spend a great length of time in a relationship without necessarily being more committed to it, or to spend a short length of time in a relationship and be highly committed to it. A more extensive investigation of the relationship between commitment and abuse using a broader definition of commitment is therefore called for.

Exchange Factors:

As mentioned earlier proponents of exchange or investment theories suggest that abused women will choose to remain in the relationship when the rewards they gain from it outweigh it's costs (see Breines & Gordon, 1983; Gelles, 1985). The results of Gelles (1976) study provide some support for the explanatory power of this theory in relation to partner abuse, as the abused women they sampled reported having limited resources and few alternatives to staying in the relationship. Cate, Henton, Koval, Christopher, and Lloyd's (1982) discovery that women who remained in their relationships after being abused felt they had fewer alternative partners than women who left, also supports this view.

The results of various studies indicate that relationship satisfaction, having investments in the relationship, and having fewer alternatives to the relationship all relate to higher commitment to the relationship (Davis & Strube, 1993; Sprecher, 1988) and that these factors may therefore constitute exchange variables. These factors have also been linked to a lower probability of relationship dissolution (Rusbult, 1983), but except for the previously mentioned association between abuse and having fewer alternatives to the relationship found by Gelles (1976) and Cate, Henton, Koval, Christopher, and Lloyd (1982), a firm relationship between these exchange factors and partner abuse has yet to be established.

The results of Sprecher's (1988) study suggest that the exchange model can be further extended to include social support for the relationship or disapproval for the break-up of the relationship from family, friends, and others. Sprecher (1988) found that social support for the relationship was associated with relationship commitment along with other exchange factors such as relationship satisfaction and

having alternatives to the relationship. Thus an association is also expected to exist between social support for the relationship and partner abuse, in keeping with the theory that higher investments in the relationship encourage women to tolerate being abused.

As Rusbult (1980, 1983) identified satisfaction with the relationship to be an investment factor associated with relationship commitment, it is further possible that satisfaction with one's partner, may also be related to abuse. Simpson (1987) assessed satisfaction with the current partner in his study of factors related to relationship stability, and found that in relationships where satisfaction with one's partner was high, the relationship was least likely to dissolve. It is therefore possible that women who remain in abusive relationships are also highly satisfied with their partners, and that this serves as an exchange factor that keeps them committed to the relationship.

Closeness to one's partner may also be considered an exchange factor that serves to keep abused women committed to their relationships. Simpson (1987) points out that individuals who are highly invested in their relationships are more likely to be close to one another, as they find each-other's company rewarding and engage in more activities together. Maxwell and Coebergh (1986) further point out that having a close confidant has been found to be of great importance in maintaining psychological well-being, and the loss of such a close relationship may therefore pose a greater threat to abused women whose psychological well-being may have already been adversely affected by the abuse.

Furthermore if abused women are socially isolated as Walker (1979, 1984) and others (Dobash & Dobash, 1979; Rybak & Bassuk, 1986) suggest, it is likely that they have even more invested in saving the relationship than non-abused women. Their interest in maintaining the closeness that they do have with their partners may be higher than that of non-abused women, who in theory have stronger social support networks.

Locus of Control of Relationship Satisfaction:

Locus of Control of relationship satisfaction may also be related to the decision to remain in, or to leave an abusive relationship. As mentioned earlier, relationship satisfaction may be associated with having more invested in the relationship and with holding the relationship together. Cognitions about the forces responsible for this satisfaction may therefore also be related to abused women's reasons for remaining in their relationships.

Miller, Lefcourt, and Ware (1983) point out that in order to understand the factors associated with relationship instability and dissolution it is also necessary to identify factors associated with the success of relationships, such as relationship satisfaction. Both locus of control and social support have been found to moderate life stress (Gore, 1981, and Lefcourt, Miller, Ware, & Scherk, 1981, cited in Miller, Lefcourt, and Ware, 1983), and Miller, Lefcourt, and Ware (1983) point out that marriage is an institution that may offer both social support and a buffer against the harmful effects of stress. Therefore, Miller, Lefcourt, and Ware (1983) argue, it may be appropriate to assess locus of control within marriage specifically. They suggest that in examining locus of control within the context of marriage it may be possible to identify cognitions that aid in creating stable, satisfying relationships.

The results of Miller, Lefcourt, and Ware's (1983) study also confirm that this may be the case, as greater intimacy and satisfaction with the relationship was found to be associated with internal locus of control of marital satisfaction in married college students. Differences between abused and non-abused women in regard to these cognitions may therefore also provide useful information concerning the factors that aid in keeping abused women from leaving their relationships.

As previously mentioned, high degrees of intimacy may be achieved in both marital and non-marital relationships. Thus non-marital relationships may have the same social support and stress buffering properties that have been associated with marital relationships by Miller, Lefcourt, and Ware (1983). The suggestion that it may be useful to study locus of control in regard to marital satisfaction may therefore apply to intimate relationships in general, and broadening the sphere of

relationships being assessed to include dating and cohabiting, as well as marital relationships may therefore be warranted.

In regard to abused women in particular, conflicting evidence concerning the forces perceived to be controlling their lives has been reported across the literature. For example, Strube and Barbour's (1984b) claim that abused women have a tendency to internalize blame for their situation suggests that these women might be expected to perceive their lives as being controlled more by internal than external forces. On the other hand, Walker's (1984) claim that abused women feel they cannot control what happens to them and that they fail to recognise they have any influence over their situation, suggests that abused women may consider their lives to be controlled more by external forces.

The results of various studies also support this view. Finn (1986) found for example, that battered women perceived their lives to be controlled more by external forces than non-abused women. Similarly O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989) found that abused women were more likely to attribute blame for their abuse to external factors, such as alcohol, stress, and frustration, than non-abused women.

Edleson, Eisikovits, Guttmann, and Sela-Amit (1991) point out that research focussing specifically on abused women's cognitions and locus of control has been scarce, and that the results of the studies that have been carried out in this area have been largely inconclusive. Conflicting results have been reported across these studies, with some suggesting that abused women perceive their lives to be controlled by external forces (Pagelow, 1984, cited in Edleson, Eisikovits, Guttmann, & Sela-Amit, 1991) while others suggest that no differences exist between abused and non-abused women in general locus of control (see Edleson, Eisikovits, Guttmann, & Sela-Amit, 1991). The relationship between partner abuse and locus of control is therefore unclear at present.

The fact that these studies have been concerned with identifying the relationship between partner abuse and generalized locus of control may account for the inconsistencies in these findings though. As some of these studies included

relationship-oriented affiliation items, while others did not, it is possible that differences in the findings related to different perceptions regarding generalized locus of control and locus of control associated with the relationship specifically.

The forces perceived to be governing general life situations may therefore be less relevant in studying the cognitions of abused women than the forces perceived to be related to the functioning of the relationship itself. As Miller, Lefcourt, and Ware (1983) point out, relationship specific measures are more likely to produce results that accurately reflect the role locus of control plays in the relationship. It is therefore important to assess the locus of control of abused women in regard to their satisfaction with the relationship rather than simply measuring their generalized locus of control.

Social Support:

As mentioned earlier, abused women have frequently been described as being socially isolated (see Cazenave & Straus, 1979; Hilberman & Munson, 1978; Kennedy, Ford, Smith & Dutton, 1991; Walker, 1979, 1984), and it has been suggested that a lack of support from friends, family, neighbours, and the community makes it difficult for the victims of abuse to escape the confines of the relationship (Strube & Barbour, 1984a). Rybak and Bassuk (1986) and Walker (1984) propose that abusive men deliberately increase their partner's isolation by preventing them from working and taking up outside activities. In this way abused women are given little feedback concerning the true nature of their situation, and the illusion that the abuse is legitimate or deserved is maintained (Avni, 1991; Dobash, Dobash, Cavanagh & Wilson, 1978; Romero, 1985; Wodarski, 1987). Church's (1984) findings also suggest that this may be the case, as 96 percent of the abused women in his sample reported feeling that their partner's behaviour had caused them to become isolated from their family and friends.

Wayland, Roth, and Lochman (1991) propose that abused women limit their own social contacts in response to their partner's possessiveness, jealousy, and emotional insecurity, while Dobash and Dobash (1979) suggest that abused women

become isolated in response to feelings of shame and self-blame about the abuse. Others believe that social isolation is a response to being abused, which in turn escalates stress within the relationship and increases the likelihood of further abuse occurring (see Breines & Gordon, 1983; Kennedy, Ford, Smith & Dutton, 1991).

However there is still little firm evidence, to confirm that the victims of abuse are in fact more socially isolated than non-abused women. Few of the studies carried out in this area to date have used non-clinical samples, and the results of research into the relationship between partner abuse and social isolation have been inconsistent. For example Sullivan and Davidson (1991) found that social support was not high on the list of the unmet needs of abused women. Material, educational, legal, medical, and financial needs were considered to be of greater importance to these women, although over half of the total sample did rate social support as an area they would like to see improvement in.

Brown (1986, cited in Coley & Beckett, 1988) on the other hand, found that having few support networks was related to increased levels of partner violence and stressful life events in black couples. In the absence of further information regarding the method used to assess support networks in Brown's (1986, cited in Coley & Beckett, 1988) doctoral study it is difficult to assess the relevance of these findings though.

Cazenave and Straus (1979) also examined the relationship between social network embeddedness (the degree to which individuals are involved in the community and social relationships) and partner abuse, finding that fewer instances of violence occurred in black couples living in close proximity to other family members. Violence was also lower in black families residing in the same neighbourhood for a number of years, and Cazenave and Straus (1979) concluded that strong social ties such as these serve as mechanisms for controlling family violence. A clear association between network embeddedness and abuse was not found in the white families in Cazenave and Straus' (1979) study though, and they neglected to assess other possible sources of social support, such as friends and colleagues.

Cazenave and Straus (1979) further failed to consider the quality, intensity, or amount of social contact, and they overlooked the satisfaction derived from these interactions by the women they studied. Further assessment of these aspects of social support is therefore necessary before any firm conclusions can be drawn regarding the relationship between social support and partner abuse.

A general short-coming in studies that attempt to relate social support to partner abuse, has been the failure to take into account the possibility that social networks are available to these women, but that they may simply fail to recognise or use them. It is possible that abused women's reports of being socially isolated are erroneous and that their perceptions of receiving little support may simply relate to their having discounted the support they have actually received. Breiner's (1992) discovery that abused women feel insecure, deprived, and have a tendency to be easily hurt in situations involving trust, indicates that this may indeed be the case. Kuhl's (1985) finding that abused women have difficulty in coping with social pressure may also be an indication that victims of abuse simply fail to gain satisfaction from the social contacts available to them.

In order to determine whether or not this is the case objective measures of social support must be used to establish amount of social contact, rather than relying on the subject's own perceptions of social support. Cazenave and Straus's (1979) study made some progress towards achieving this, by using objective measures of support (such as counting relatives living in close proximity), but fell short in assessing only a limited range of support groups. Further research is therefore necessary to determine the actual amount of contact being received, the value of friendship networks, and the satisfaction obtained from these contacts.

SUMMARY:

The primary purpose of the present research is to establish the relationship between partner abuse and psychosocial and relationship factors in a New Zealand population of female tertiary students. As mentioned earlier, much of the research carried out in this area to date has been methodologically flawed. An over-reliance

on qualitative research designs, retrospective data, and highly select samples has limited the usefulness of much of the data collected, and carefully planned and executed research using representative samples is necessary in order to rectify this problem. The use of standardized self-report measures, such as the Conflict Tactics Scales can aid in this process, as they make it possible to generate reliable data across large representative samples.

In taking a multifaceted approach to research in this area it is possible to concentrate on the fundamental task of identifying factors related to abuse and abused women's reasons for choosing to remain in relationships that are detrimental to their health and well-being. With this information at their disposal clinicians may be better able to identify abused women and appropriate interventions can be developed.

Areas of particular concern include the effects of abuse on the psychological health and well-being of abused women, the possible link between shyness, sociability, and partner abuse, and the relationship between social support and partner abuse. The consequences of abuse on the relationship are also of concern and further research is called for regarding the problem solving strategies used by abused women, the degree to which they perceive their autonomy and relatedness needs as being met by the relationship, the amount of commitment they have to the relationship, their investments in the relationship, and their locus of control concerning relationship satisfaction.

All of these factors have received little attention from researchers investigating partner abuse in the past. Studies that have examined these or related issues, have also generally been carried out in the USA, and have been based on data generated from women who were older, married, and in clinical samples. The aim of the present research is therefore to bridge this gap by investigating pertinent psychosocial and relationship factors in a young, broader, non-clinical sample of New Zealand tertiary students. The specific hypotheses of the study are as follows:

Hypothesis 1:

Women in abusive relationships[1] are hypothesized to display symptoms of psychological disturbance associated with feelings of distress, negative affect, and diminished positive affect. It is predicted that women reporting verbal or physical abuse measured by the "Physical", "Verbal", and "If Ever" subscales of the Conflict Tactics Scales (Straus, 1979) will score significantly higher than non-abused women on symptoms of Somatic Distress, General Feelings of Distress, and Performance Difficulty measured by the Hopkins Symptom Checklist-21 (Green, 1988). Abused women are further predicted to score significantly lower in positive affect, and significantly higher in negative affect, on the adjective subscale of the Affectometer 2 (Kammann & Flett, 1983), than non-abused women.

Hypothesis 2:

Abused women are hypothesized to be less sociable, and more shy than non-abused women. It is predicted that abused women will score significantly higher in sociability measured by Cheek and Buss' (1981) Social Interaction scale than non-abused women, and that they will score significantly higher in shyness measured by this scale, than non-abused women.

Hypothesis 3:

Women in abusive relationships are hypothesized to use a narrower range of problem solving styles than those used by women in non-abusive relationships, and to blame themselves for their relationship problems. Abused women are therefore predicted to score significantly higher in the use of the passive problem solving strategies of loyalty and neglect (Rusbult,1986) than non-abused women, and are predicted to score significantly lower than non-abused women in perceived effectiveness of their own problem solving styles measured by part two of the Rusbult Problem Solving Questionnaire (Rusbult, 1986). Abused women are also

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[1] Abuse in this case refers to being physically and/or verbally abused.

predicted to score significantly higher in perceived effectiveness of their partners problem solving styles, measured by part three of the Rusbult Problem Solving Questionnaire (Rusbult, 1986), than non-abused women.

Hypothesis 4:

Abused women are hypothesized to perceive their needs for autonomy and relatedness as being thwarted by their partners, and are predicted to report that their partners use control, hostile detachment, and hostile control, measured by the Autonomy and Relatedness Inventory (Schaefer & Burnett, 1987), significantly more than non-abused women. It is further predicted that abused women will perceive their needs for autonomy, relatedness, and acceptance, measured by the Autonomy and Relatedness Inventory (Schaefer & Burnett, 1987), as being significantly less fulfilled by their partners than non-abused women.

Hypothesis 5:

It is hypothesized that abused women are more committed to their relationships, and abused women are predicted to score significantly higher in relationship commitment, measured by Sprecher's (1988) Relationship Commitment Scale, than non-abused women.

Hypothesis 6:

It is further hypothesized that women who have more invested in the relationship will have more to lose in the event of a break-up and are therefore more likely to tolerate being abused. Abused women are therefore predicted to score significantly higher in investments and social support for the relationship measured by Sprecher's (1988) Satisfaction, Investment, Alternatives, and Social Support items, than non-abused women. Abused women are also predicted to score significantly higher in closeness to their partners, measured by Maxwell's (1985) Relationships Scale, than abused women, and to score significantly higher than

non-abused women in satisfaction with their partners, measured by Simpson's (1987) Satisfaction Index.

Hypothesis 7:

Abused women are hypothesized to attribute their satisfaction with the relationship to factors external to themselves, and are predicted to score significantly higher in external locus of control of relationship satisfaction, measured by the externality index of the Miller Marital Locus of Control Scale (Miller, Lefcourt, & Ware, 1983), than non-abused women. They are also predicted to score significantly lower in internal locus of control concerning relationship satisfaction measured by this scale, than non-abused women.

Hypothesis 8:

Contrary to previous research findings, abused women are hypothesized to be no more socially isolated than non-abused women, and it is predicted that no significant differences will be found between the scores of abused and non-abused women in amount of contact with others, measured by questions 2, 3, 4, of Maxwell's (1985) Social Support Scale, and in the number of close friends they have, measured by item 14 of the scale.

Hypothesis 9:

It is further hypothesized that abused women's perceptions of themselves as having few social supports stem from feelings of being unsupported in their relationships with others, and abused women are predicted to report significantly less satisfaction with their social relationships measured by question 1 of Maxwell's (1985) Social Support Scale, than non-abused women.

METHOD:

PARTICIPANTS:

The participants were 104 female tertiary students who were in existing heterosexual relationships of at least 12 months' duration. Three completed questionnaires were returned where the respondent did not meet these criteria and these were discarded from the final analysis. The participants came from a range of tertiary institutions, and were completing a wide range of courses (from veterinary sciences to teacher training). They were also enrolled on full-time, part-time, internal and extramural bases, and at under-graduate and post-graduate levels. The demographic characteristics of the sample are presented in Tables 1 to 5.

Table 1 displays the number of participants responding, the mean, standard deviation and range of the participants' ages in years, the length of their relationships in years, the number of years spent in tertiary study, and the approximate number of hours the participants spent with their partners in a week.

Table 1: General Demographic Information regarding the Participants

Variable	N	x	s.d.	range
Age (years)	103	23.41	6.25	16-48
Length of relationship (years)	103*	2.94	2.94	1-13.5
Years at university	100*	3.11	1.95	1-9
Hours per week together	95	39.19	21.86	0-120

* Participants failing to report the length of the relationship or the number of years spent at university indicated elsewhere that they met the criteria of being tertiary students in a relationship of 12 months duration or longer.

The participants ranged in age from 16 to 48 years, with the average age being 23.41 years.[2] Relationships ranged in length from 12 months to 13 and a half years, averaging at around 3 years. While some participants spent no time at all with their partners in a week and others spent up to 120 hours with them, on average participants spent just under 40 hours a week with their partners. The average length of time spent at university or other tertiary institutions was just over 3 years, although there was a range from 1 to 9 years.

The living arrangements of the participants are set out in Table 2. The number and percentage of participants reporting that they lived with their partners (signified by "yes" responses), that they didn't live with their partners (signified by "no" responses), and that they sometimes lived in the same house as their partners, are set out in the table.

Table 2: Living Arrangements of the Participants

Variable	N	Yes	No	Sometimes
Living in the same house	104	42 (40.8%)	37 (35.6%)	25 (24.0%)
Living in the same city	103	75 (72.8%)	21 (20.4%)	7 (6.8%)

Responses of participants who did, did not, or only sometimes lived in the same city as their partners are set out in the same way in the table. The majority of participants reported living in the same city as their partners, although the number of participants living in different cities was somewhat higher than might be expected. However this may be attributed to students moving to other cities to carry out specific courses of study. The number of participants residing with their partners

[2] Note that three-quarters of the sample (75.96%) were below 25 years of age (N=79) while 23.08% (N=24) were over the age of 25.

versus those living apart were fairly evenly dispersed, indicating that the sample consisted of participants in a range of relationship types.

Table 3 displays the numbers and percentages of participants in various types of relationships. Over half of the participants indicated that they were in dating relationships (61.54%), signified by "boyfriend" responses, whereas less than a sixth of the women in the sample were married (15.38%), and less than a tenth were cohabiting or in defacto relationships (9.62%). Seven responses failed to fit into the married, dating, or cohabiting categories and were classified as "Other" (see Table 3). These included fiancees (N=5), a lover (N=1), and a man-friend (N=1).

Table 3: Relationships of the Participants to their Partners

Variable	N	%
Boyfriend	64	61.54
Husband	16	15.38
Cohabiting	10	9.62
Other	7	6.73
Missing	7	6.73
Total	104	100.00

Table 4 displays the number and percentage of participants reporting the source of the highest level of income within their household. Almost equal numbers of participants stated that their partners brought the most income into the household (N=26) or that they generated the most income themselves (N=25). A high percentage of fathers also brought in the most income (13.5%), while mothers were the least likely to do so (6.7%). A high number of participants (N=13) also indicated that income was generated from numerous sources and equally distributed within the household (referred to as "equally" in Table 4), while 10 gave responses that were not otherwise classifiable, mainly concerning fluctuations in seasonal work or living arrangements.

Table 4: Highest Source of Income in the Participants' Households

Variable	N	%
Partners	26	25.0
Own	25	24.0
Fathers	14	13.5
Equal	13	12.5
Other	10	9.6
Missing	9	8.7
Mothers	7	6.7
Total	104	100.0

Table 5 displays the number and percentage of participants and their partners employed in various occupational groups. A modified version of the classification structure set out in the New Zealand Standard Classification of Occupations 1990 (1992, p. 17-39) was used in the present study to classify the participants and their partners according to the level of skill required in their occupations. The occupational groupings set out in the New Zealand Standard Classification of Occupations 1990 (NZSCO90) included those set out in Table 4 as Groups 0, 1 to 9, and 99. A further three categories were added in order to accommodate special characteristics of the sample and of the present research. These included "Group 10: Student Only", "Group 11: Household Technician" (as distinct from Housekeeping and Restaurant Service Workers categorised under Group 5 of the NZSCO90), and "Group 12: Unemployed".

Close to half of the participants (n=51), and by far the largest group, reported that they were solely students and not otherwise employed. Similarly more of the participants' partners (n=30) were classified as being solely students, than those reported to be in any of the other occupational groups.

Table 5: Occupations of the Participants and their Partners

Occupational Group	Partner		Self	
	N	%	N	%
(0). Armed Forces	2	1.92	0	0.00
(1). Legislators/ Administrators/Managers	5	4.81	0	0.00
(2). Professionals	17	16.35	15	14.42
(3). Technicians and Associate Professionals	9	8.65	7	6.73
(4). Clerks	3	2.88	4	3.85
(5). Service and Sales Workers	6	5.77	16	15.39
(6). Agriculture and Fisheries Workers	1	0.96	0	0.00
(7). Trades Workers	8	7.69	0	0.00
(8). Plant and Machine Operators and Assemblers	5	4.81	1	0.96
(9). Elementary Occupations	5	4.81	1	0.96
(10). Student Only	30	28.85	51	49.04
(11). Household Technician (Housewife/husband)	0	0.00	0	0.00
(12). Unemployed	7	6.73	2	1.92
(99). Not otherwise classified or missing	6	5.77	7	6.73
Total	104	100.00	104	100.00

The third largest grouping for the participants themselves and the second largest occupational group for partners was that of professionals, which encompasses occupations generally requiring a university degree or teachers training qualification, according to the NZSCO90 (1992, p. 13). As the sample was made up of students, many of whom were post-graduates with partners who were also post-graduates, this was not unexpected.

Two of the participants attending university part-time identified themselves as being unemployed, and overall only 7 of the women's' own occupations, and 6 of those given for partners were considered unclassifiable. This was mainly due to a lack of clarity in the participants' job descriptions rather than missing values, as only 2 respondents failed to report any occupation for their partners and themselves.

Of the occupational categories available the only group that none of the participants' partners fell into was that of household technician (sometimes referred to as "house-husband"). Similarly none of the participants themselves reported being household technicians (or "house-wives"). This new category was therefore not an essential addition to the occupational categories included in the present research, although there were valid reasons for anticipating that it could be of use.

There were a number of other occupations that none of the female participants reported being engaged in, including working as legislators, administrators and managers, agriculture and fishery workers, trades workers, and in the armed forces. This was in keeping with claims that discrepancies exist in the distribution of males and females across the labour-force.

THE QUESTIONNAIRE:

A copy of the questionnaire is provided in Appendix I (pp. 138-159) and the means, ranges, standard deviations, and alpha reliability coefficients for the measures are outlined in Appendix II (pp. 160-163).

Introductory Information

A 2-page introductory letter was attached to the front of the questionnaire giving a brief outline of what the study involved. Also included in the outline was information about the researcher and supervisors, details of the participants' rights, an assurance that their responses would be anonymous and treated as confidential, and brief instructions for those choosing to go ahead with the study. A consent form and a section where a request for further information could be made were attached to the back of the information sheets. These were to be filled out and returned to the researcher separately from the questionnaire itself. The introductory letter, consent form, request slip, and questionnaire are outlined in Appendix I.

Demographic Questions:

A brief set of questions measuring specific demographic characteristics of the participants and their partners were placed towards the front of the questionnaire. The demographic questions and other measures described below, are also set out in Appendix I.

Conflict Tactics Scales (Straus, 1990a, 1990b)

Couple Form R (Revised) of The Conflict Tactics Scales was used to determine the presence of abuse in the present study. As previously mentioned this device includes three scales designed to measure how often the respondents and their partners used Reasoning, Verbal Aggression and Physical Aggression (or Violence) as tactics for dealing with conflict in their relationship.

The Reasoning scale is made up of the first three items (items a, b, and c of the measure), the Verbal Aggression scale is made up of six items (items d, e, f, h, i, j), and the Physical Aggression or Violence scale is comprised of the final nine items (items k, l, m, n, o, p, q, r s). Item g of the measure, which indicates that the respondent "cried", is not included in the scoring of the Verbal Aggression scale as crying cannot be considered an act of verbal aggression. Nevertheless its inclusion in the scale is warranted, as "pre-test interviewing showed it to be a frequent

response and because respondents became uneasy if there was no place to record this" according to Straus (1990b, p. 37).

The scales also enable data to be collected across 3 contingencies. The first contingency (Qi items) records respondents' ratings of the number of times they engaged in acts of reasoning, verbal aggression and violence themselves during the preceding year on a 7-point ratings scale. Responses on this scale can range from 0 representing "Never" to 6 representing "More than 20 times". The second contingency (Qii items) records respondents' ratings of the number of times their partner engaged in the same acts during the preceding year, also using the same type of 7-point ratings scale. Where respondents report that neither they, nor their partner, engaged in a particular act during the preceding year a third contingency (Qiii items) records whether the act has been used at an earlier time in the relationship. An alternate choice ratings scale is used to record these responses, with 1 indicating "Yes" and 0 indicating "No".

Originally Straus (1990b) labelled these response categories "Q35. Respondent In Past Year", "Q36. Spouse In Past Year", and "Q37. For items marked 'Never' on both Q35 and Q36 Has it Ever happened?" However in order to provide greater clarity for the participants these labels were altered in the present study to "Qi You In The Past Year", "Qii Your Partner In The Past Year", and "Qiii For Items Marked 'Never' on Both Qi and Qii Has it Ever Happened?" Otherwise the Conflict Tactics Scales items and instructions were identical to those originally outlined by Straus' (1990b).

Reasoning scores and Qi (self scores) were irrelevant to the purposes of the present study and data gathered for these constructs were not subject to further analyses. However the inclusion of these measures in the questionnaire was considered necessary in order to maintain reliability and consistency.

Responses to Qii (partner scores) ranged from a minimum possible score of 0, to a maximum of 36 for Verbal Aggression, and 54 for Physical Aggression. However according to Straus (1990b), the low rates of abuse occurring in society detected by the Physical Aggression indexes of the Conflict Tactics Scales, tend to

produce extremely skewed distributions, which can generate unreliable results when further analyses such as correlations are carried out.[3] Partner Violence or Physical Aggression scores were therefore dichotomized into "violent" and "non-violent" categories as recommended by Straus (1990b). Any report of violence was thus scored as "1" regardless of the frequency of its occurrence (originally rated on a scale of "1 to 6"), while non-violence was scored as "0". The maximum Physical Aggression score possible therefore became 9, rather than 54 as previously indicated. Responses to Qiii ("if ever") scores ranged from a minimum possible score of 0 to a maximum of 6 for Verbal Aggression, and 9 for Physical Aggression.

In the interests of maintaining brevity reports of Verbal and Physical Aggression against a participant by her partner during the year preceding the study will be referred to as "Verbal Aggression" and "Physical Aggression". Reports of Verbal and Physical Aggression prior to the year leading up to the study will be referred to as "Past Verbal Aggression" and "Past Physical Aggression".

Straus (1990a, 1990b) presents data indicating that the Verbal Aggression and Physical Aggression scales are reliable and valid measures, although the Reasoning scale was found to be less so. However this drawback may only be of significance where 'reasoning' is an important focus of the research and in the case of the present study it was not. Alpha reliability coefficients were not calculated for the Conflict Tactics scales in the present study, as each item measures a different facet of the constructs "verbal aggression" and "physical aggression".

Hopkins Symptom Checklist-21 (Green, Walkey, McCormick & Taylor, 1988)

The Hopkins Symptom Checklist-21 is a modified version of the original 58-item Hopkins Symptom Checklist (mentioned by Green, Walkey, McCormick & Taylor, 1988), designed to measure symptom and general distress. Three factors

[3] Note that higher rates of verbal abuse detected by the Verbal Aggression indexes are not subject to producing skewed distributions and the frequency data (ranging from 0 to 6) are therefore suitable for use in further analyses.

are measured by the subscales of the 21-item checklist. These include a General Feelings of Distress factor (measured by items D, F, G, H, I, J, L), a Somatic Distress factor (measured by items E, M, O, Q, R, T, U), and a Performance Difficulty factor (measured by items A, B, C, K, N, P, S). Participants rated their responses on a 4-point ratings scale of 1 representing "not at all" to 4 representing "extremely". No changes were made to any aspect of the Checklist and participants' scores ranged from a minimum possible score of 7 to a maximum of 28 on each of the subscales.

The split-half and alpha reliability coefficients obtained by Green, Walkey, McCormick & Taylor, (1988) for the checklist and it's subscales were all reported to be high, with alphas ranging from 0.75 for the Somatic Distress subscale to 0.90 for total distress (obtained for the checklist overall). Similarly Deane, Leathem, and Spicer (1992) found evidence to suggest that the checklist has high internal reliability, as well as reporting that it has satisfactory construct and concurrent validity. In the present research the checklist and it's subscales were also found to display high internal consistency. The alpha coefficients obtained were 0.85 for General Feelings of Distress, 0.70 for Performance Difficulty, 0.67 for Somatic Distress, and 0.84 for total distress.

Affectometer 2 (Kammann & Flett, 1983)

The Affectometer 2 is a modified 40-item version of the original 96-item Affectometer 1, and was designed to measure the respondent's sense of well-being or general happiness. An even shorter 10-item version of the Affectometer 2 was used in the present study for its expediency, with five of its items measuring positive affect and five measuring negative affect. The items measuring positive and negative affect were randomly distributed throughout the scale with positive affect being measured by items A, B, E, H, and I, and negative affect being measured by items C, D, F, G, and J.

No changes were made to any aspect of the version of the Affectometer 2 (Short Form). Participants rated their responses on a 5-point scale where 1

represented "Not at all" and 5 represented "All of the time". The minimum score possible was therefore 5, with the maximum possible being 25 on each of the positive and negative affect measures.

Kammann and Flett (1983) report that the Affectometer 2 has high validity and that it demonstrates high internal reliability (alpha=0.95). However they also point out that decay in the stability of the measure over time indicates that it is primarily a measure of the short-term state of well-being rather than a long-term general happiness trait. Standardized item alpha coefficients computed in the present research revealed that the internal consistency reliability of the short form of the Affectometer 2 was similarly high with it's subscales demonstrating alpha coefficients of 0.81 for positive affect and 0.79 for negative affect.

Cheek and Buss Social Interaction Scale (Cheek & Buss, 1981)

Cheek and Buss' Social Interaction Scale is made up of a 9-item shyness scale and a 5-item sociability scale. The shyness scale was developed by Cheek and Buss (1981) and includes items such as "I am socially somewhat awkward" and "I am more shy with members of the opposite sex". The sociability scale on the other hand was mainly adapted from Guilford's (1959, cited in Cheek & Buss, 1981) measure of gregariousness and includes items ranging from "I like to be with people" to "I'd be unhappy if I were prevented from making many social contacts".

Participants rated their responses to the items included in both of these measures on a 5-point ratings scale where 0 represented "Extremely uncharacteristic of me" and 4 represented "Extremely characteristic of me". The minimum possible shyness score a single participant could obtain was therefore 0, with the maximum being 36. The minimum sociability score a participant could achieve was also 0, while the maximum was 20. No changes or alterations were made to the scales outlined by Cheek and Buss' in their 1988 article.

Cheek and Buss (1981) report that both of the scales demonstrate validity and that they maintain internal consistency reliability with alpha coefficients of 0.79 for the shyness items and 0.70 for the sociability items. In the present research the

internal consistency of both of these scales was found to be slightly higher than that demonstrated by Cheek and Buss (1981), with alphas of 0.80 for shyness and 0.84 sociability.

Couple Problem Solving Scale (Rusbult, Johnson, & Morrow, 1986a, 1986b)

The Couple Problem Solving Scale was also referred to as the "Rusbult Questionnaire" in the present study. The Couple Problem Solving Scale includes two 28-item scales (parts I and II) designed to measure the tendencies of participants themselves and those of their partners to employ the problem solving styles of exit, voice, loyalty and neglect. The scale also has two 4-item scales designed to measure the perceived effectiveness of the participants' own approach to problem solving and that of their partner.

As the present research is concerned mainly with identifying characteristics of women who stay in abusive relationships, and due to constraints on time and space, Part II of the Couple Problem Solving Scale dealing with perceptions of partners' problem solving styles of voice, loyalty, exit and neglect was not included in the present study. However the four items measuring perceived effectiveness of the participants' partners' approach to problem solving were included as they took up very little time and space while still providing information central to the purpose of this study (see Hypothesis 1).

Part I of the Couple Problem Solving Scale included seven items in each of the categories of exit (measured by items 1, 6, 10, 15, 18, 22, and 25), neglect (measured by items 3, 5, 9, 14, 19, 24, and 28), voice (measured by items 4, 7, 11, 13, 17, 21, and 26), and loyalty (measured by items 2, 8, 12, 16, 20, 23, and 27). These four subscales measure responses to problems occurring in romantic relationships along the dimensions of activity/passivity and constructiveness/destructiveness. Exit responses thus involve the use of active-destructive actions, such as leaving, divorcing, and physically abusing a partner. Neglect responses involve passive-destructive actions, such as ignoring, criticising, insulting and avoiding one's partner. Voice responses are comprised of active-

constructive actions including seeking outside assistance, talking problems through, compromising and so on. Finally loyalty responses involve passive-constructive behaviours such as hoping for improvement and continuing to support one's partner despite being treated poorly.

Each of these items was rated by the participants on a 7-point ratings scale of 1 representing "not at all" to 7 representing "all of the time". This was in contrast to Rusbult, Johnson, and Morrow's (1986a) use of a more complex and potentially more confusing 9-point ratings scale. In the present research participants were therefore able to obtain a minimum possible score of 7 and a maximum of 49 on each of the four subscales.

The two remaining 4-item scales required the participants to rate their responses on a 5-point ratings scale of 0 representing "not at all" to 4 representing "all of the time" which again contrasted with Rusbult, Johnson, and Morrow's (1986a) use of a 9-point ratings scale. The participants were therefore capable of obtaining a minimum possible score of 0 and a maximum possible score of 20 across each of these scales.

Reworded versions of the four items designed to assess the effectiveness of the participants' own problem solving styles, were used to measure the effectiveness of the participants' partners' problem solving styles. For example item 1 of the scale assessing the effectiveness of the participants own problem solving styles inquired "Do you think <u>your</u> method of problem solving works?" while item 1 of the scale assessing the effectiveness of the participants' partners' problem solving styles inquired "Do you think <u>your partner's</u> method of problem solving works?" All of the items in part I and those assessing the effectiveness of problem solving skills were taken directly from Rusbult, Johnson, and Morrow's (1986a) article and were not changed or altered in any way.

Rusbult, Johnson, and Morrow (1986a, 1986b) provide data indicating that all of the Couple Problem Solving scales have adequate to good reliability and validity. Rusbult, Johnson, and Morrow's (1986a, 1986b) data concerning the internal consistency of the measures compare favourably with those obtained

through the present research. Standardized item alpha coefficients obtained in the present research were 0.83 for self-reported tendencies to exit, 0.63 for self-reported tendencies to use voice, 0.57 for self-reported tendencies toward loyalty, and 0.69 for self-reported tendencies toward neglect. Alpha coefficients of 0.85 for perceived effectiveness of one's own problem solving style and 0.89 for perceived effectiveness of one's partner's problem-solving style were also obtained in the present research.

Autonomy and Relatedness Inventory (Schaefer & Burnett, 1987)

The Autonomy and Relatedness Inventory is a modified version of Schaefer and Edgerton's (1979, cited in Schaefer & Burnett, 1987) Marital Autonomy and Relatedness Inventory which Schaefer and Burnett restructured in 1981 (cited in Schaefer & Burnett, 1987). The Autonomy and Relatedness Inventory (ARI) was designed to measure the quality of marital and intimate relationships, and the degree to which a partner's behaviour facilitates or hinders the fulfilment of interpersonal autonomy and relatedness needs. It includes six 4-item scales, the scores of which combine to assess respondents' perceptions of their partners' behaviours towards them on the two poles; those generating forces within the relationship that threaten the respondent with harm, versus those that promise to benefit the respondent. Included are scales of Relatedness (measured by items 1, 7, 13 and 19), Hostile Control (measured by items 2, 8, 14 and 20), Acceptance (measured by items 3, 9, 15 and 21), Hostile Detachment (measured by items 4, 10, 16 and 22), Control (measured by items 5, 11, 17 and 23), and Autonomy (measured by items 6, 12, 18 and 24).

Each of the 24 items was rated by the participants on a 5-point scale of 1 representing "not at all like my boyfriend/partner" to 5 representing "very much like my boyfriend/partner". Participants were therefore able to achieve a minimum possible score of 4 and a maximum of 20 across any of the six scales. The method originally used by Schaefer and Burnett (1987) of collecting responses by directing respondents to circle a number (from 1 to 5) in columns next to each item was

altered in the present study due to limitations on the space available. Instead participants were invited to select a responses from five options listed at the top of each page, which were to be written in a space provided next to each item.

A further minor adjustment was made concerning Schaefer and Burnett's (1987) reference to "husband/wife or other intimate" in the instructions which was replaced with "boyfriend/partner" in the present study. However no other major alterations were made to the inventory and the items themselves were copied verbatim from Schaefer and Burnett's (1987) study.

Evidence suggests that the scales have concurrent validity (Hall, 1983; cited in Schaefer and Burnett, 1987) and in examining the test-retest reliability of the ARI scales Schaefer and Burnett (1987) found that all except the Hostile Detachment scale displayed adequate reliability over time. All of the scales displayed high internal consistency when evaluated through the present research, with alpha coefficients of 0.73 for Relatedness, 0.73 for hostile control, 0.70 for acceptance, 0.72 for hostile detachment, 0.68 for control, and 0.69 for autonomy.

Relationship Commitment Scale (Sprecher, 1988)

Four items designed to measure the degree of commitment to one's partner were taken from Sprecher's (1988) study. The participants rated the items on a 9-point scale by placing an "X" in one of nine spaces provided beneath each item. Responses ranged from "Extremely uncommitted" to "Extremely committed" for item 1, "Several times" to "Never" for item 2, and "Extremely likely" to "Extremely unlikely" for items 3 and 4. The responses categories for items 2 to 4 were originally in reverse order in Sprecher's (1988) study (e.g., responses to item 2 ranged from "Never" to "Several times", etc.) and would have required recoding. However this was considered confusing and not particularly useful, and the response categories were therefore rearranged for these items prior to administration in the version of the scale used in the present study.

No other changes were made to the measure and as in the original study participants were able achieve a minimum possible score of 4 and a maximum of 36.

While no information regarding the validity of the scale as a measure of relationship commitment was reported by Sprecher (1988) she does indicate that the scale was found to be reliable (Cronbach alpha=0.80). This result was confirmed in the present research with an alpha of 0.81.

Satisfaction With Partner Scale (Simpson, 1987)

Simpson's Satisfaction Index was referred to as the Satisfaction With Partner Scale in the present study. It is comprised of 11 items describing attributes including the ability to be kind and understanding, similarity of activity interests, similarity of attitudes and values, social status, financial resources, physical attractiveness, ability to provide emotional support, sexual attractiveness, stability and pleasantness of personality, reliability/trustworthiness, and ability to be close and intimate.

The participants rated the extent of their satisfaction with their partner where these attributes were concerned using a 7-point ratings scale of 1 representing "terrible" to 7 representing "delighted". Overall scores ranged from 11 to 77 for each respondent. A 7-step "delighted-terrible" satisfaction rating scale was selected for use in the present study in favour of the 7-point very "satisfactory-very unsatisfactory" response categories created originally by Simpson (1987, p. 685). No other major changes were made to the scale.

Simpson (1987) makes no mention of the validity of this measure, but does report that it has high reliability (with a Cronbach alpha of 0.85). This was confirmed in the present research with an alpha of 0.87.

Maxwell Relationships Scale (Maxwell, 1985)

The Maxwell Relationships Scale, referred to as "Closeness to Partner" in the present study, is a modified version of the Close Relationships Questionnaire (Maxwell, 1985). This scale is designed to measure the closeness of each participant to her partner and responses to the 5 items were made on 7-point ratings scales, where 1 represented a relationship that wasn't close and 7 represented a very

close relationship. Participants could therefore obtain a minimum possible score of 5 and a maximum of 35. Maxwell and Coebergh (1986) found this scale to be highly reliable (alpha=0.93), with high internal consistency of the items also being found in the present study (alpha=0.80).

Consequences of Ending the Relationship Scale (Sprecher, 1988)

Also included were 4 items from Sprecher's (1988) study which she described as "investment variables and perceived social support" (p. 321). These 4 items measure variables independently of each other and in the present study they were grouped together under the heading "the Consequences of Ending the Relationship Scale" for convenience.

Satisfaction with the relationship was measured by item 1 which inquired, if the respondent decided that the relationship were to end "Would this be a loss of a very satisfying relationship?" The form of this item used in the present study had been reworded from Sprecher's (1988) version which inquired "to what extent would you be giving up a very satisfying relationship?". Item 2 measured investments in the relationship, item 3 measured social support for the relationship or social disapproval for a break-up, and item 4 measured the attractiveness of alternatives to the relationship. Item four was later recoded to facilitate comparison with the other items, as higher scores on this item originally signified less investment in the relationship, versus higher scores on items 1 to 3 signifying greater investment in the relationship.

A simplified version of the measure which used 5-point ratings scales, was selected in favour of Sprecher's (1988) version which utilized 9-point ratings scales. Responses thus ranged from 1 representing "Not at all" to 5 representing "It would be an extreme loss" for items 1 and 2. Responses to item 3 ranged from 1 representing "None at all" to 5 representing "A great deal of disapproval". Responses to item 4 ranged from 1 representing "Not at all attractive" to 5 representing "Extremely attractive". As each of these items measured a variable distinct from the others, the items were scored independently. Participants were

therefore capable of obtaining a minimum possible score of 1 and a maximum of 5 on each item. No other changes were made to Sprecher's (1988) investment and social support items, or to the instructions concerning these items.

No information was provided by Sprecher (1988) regarding the validity or reliability of these items, and as each item measured a separate construct in itself no measure of internal consistency was carried out on these items in the present study.

The Miller MLOC Scale (Miller, Lefcourt, & Ware, 1983)

Although the focus of the present study is not on marital satisfaction per se, it was considered important to assess women's views concerning internal versus external control of relationship satisfaction, which the Miller Marital Locus of Control Scale has been reported to measure reliably (Miller, Lefcourt, & Ware, 1983; Lefcourt, 1991). The Miller Marital Locus of Control Scale is a 44-item scale that measures beliefs about internal and external control of marital satisfaction. Of the six major areas of concern in marriage originally investigated by Miller, Lefcourt, and Ware (1983) those evaluating sexual functioning and child-rearing were considered irrelevant to the purposes of the present study. Items designed to measure these areas were therefore discarded from the scale used in the present study. The four remaining areas of major concern included communication, marital satisfaction, compatibility, and pleasant and unpleasant experiences in marriage.

Due to constraints on time and space it was necessary to further reduce the number of items taken from this scale for use in the present research. Only 16 of the most relevant items, maintaining the highest item-total correlations with the other items included in each of the subscales, were therefore selected for inclusion in the modified version of the scale used in the present study.

The original scale included indexes of internality measured by ability and effort subscales, and externality measured by context and chance or luck subscales. Equal numbers of items made up these subscales and indexes in Miller, Lefcourt, and Ware's (1983) original study and this balance was maintained in the modified version of the scale used in the present study. In the present study the ability

subscale of the internality index is made up of items 1, 5, 9, and 13, while the effort subscale of the internality index is made up of items 2, 6, 10, and 14. The context subscale of the externality index includes items 3, 7, 11, and 15, while the chance or luck subscale of the externality index includes items 4, 8, 12, and 16 in the present study.

The wording of a number of the items was altered slightly where Miller, Lefcourt, and Ware (1983) used the phrase "my spouse", which was changed to "my partner". The 6-point ratings scale utilized by Miller, Lefcourt, and Ware (1983) was maintained in the present study, and participants' responses to each item ranged from 1 representing "Strongly Agree" to 6 representing "Strongly Disagree". The minimum score possible across each of the subscales was 4 with the maximum being 16.

The internal consistency of the scale was verified by Miller, Lefcourt, and Ware (1983) and Lefcourt (1991), with Cronbach alpha coefficients of 0.83 and 0.82 respectively, being obtained for the overall scale. The internal consistency of each of the individual subscales was found to be low in the present research, with alpha coefficients of 0.45 for ability, 0.41 for effort, 0.66 for context, and 0.51 for the luck or chance subscales. However the internal consistency of the external indexes combined (the ability and effort subscales) was higher, with an alpha coefficient of 0.60. Similarly the internal consistency of the internal indexes combined (the context and luck subscales) was found to be higher, with a standardized item alpha coefficient of 0.69.

Social Support Scale (Maxwell, 1985; Maxwell & Coebergh, 1986)

The Social Support Scale combines various scales developed by Maxwell and others between 1984-1986. It was constructed to measure satisfaction with relationships, amount of contact with others, and the number of people to whom the subject feels very close.

Question 1 consists of five items (set out in parts "a" to "e") designed to measure satisfaction with relationships with others generally. These items were

adapted from Maxwell and Coebergh's (1986) "Satisfaction with Relationships Scale" and will be referred to as "Relationship Satisfaction" in the present study. Participants rated their responses to the five items on a 7-point ratings scale of 1 representing "Completely dissatisfied", to 7 representing "Completely satisfied". The minimum possible score participants were able to achieve overall on the items included in question 1 was 5, with the maximum possible being 35. Maxwell and Coebergh (1986) report finding this scale to be highly reliable (alpha=0.93), while failing to provide any data on its validity. That this scale was highly reliable, was confirmed in the present research with an alpha coefficient of 0.92.

Items 2 to 4 were developed by Maxwell and Coebergh (1986) which will be referred to as "Contact with Others" in the present study, measured the amount of time participants spent with other people. Participants rated their responses to items 2 to 4 on a 7-point ratings scale of 1 representing "Almost none", to 7 representing "A great deal". These items were scored together, with the minimum possible score being 3 and the maximum being 21 across these three items. Items 2 to 4 demonstrated high internal consistency (alpha=0.88) when their reliability was evaluated through the present research, while further evidence of their reliability, or their validity, was not available through Maxwell (1985) or Maxwell and Coebergh (1986).

The number of people to whom the subject felt very close (originally labelled item 14 in the Social Support Questionnaire), was situated beneath the Maxwell Relationships Scale in the present study due to spatial limitations (see Appendix I, p.). Responses to this item, referred to as "Number of Close Friends" in the present research, were made on a 7-point ratings scale with possible responses including "none", "1" to "5", and "more than five". No mention was made in the available literature of the validity or reliability of this item, and being a singular item reliability could not be assessed by measuring internal consistency.

Professional Guidance Information:

A final sheet was attached to the back of each questionnaire which thanked the participants for their co-operation. This sheet provided the names and contact telephone numbers of agencies where professional guidance could be obtained in the event that participants found the issues raised in the questionnaire to be traumatic or upsetting.

PROCEDURE:

Participants for this study were solicited through notices placed on notice-boards throughout the campuses of Massey University, the University of Auckland, Manawatu Polytechnic, and Manawatu Teachers Training College. Advertisements were also placed in Massey University's newspaper (Mμ) and over Massey University's campus radio station. Requests for participants were also made in undergraduate Psychology courses, and by word of mouth. Thus while the participants in this study were selected from the homogeneous group of students, recruiting participants from various campuses, and through various sources, meant that a cross-section of students was obtained.

The researcher gave a brief explanation of the nature and purpose of the study to potential participants. Those who were interested in taking part were provided with the introductory letter, the consent form and request for information sheet, a copy of the questionnaire, and two reply-paid envelopes. The potential participants were informed that the questionnaire should take approximately 30 minutes to complete and were given the option of filling the questionnaire out in the researcher's office or taking it away with them. Those who chose the second option were advised to attempt to fill the questionnaire out in private, in order to prevent possible conflict with their partners.

The questionnaire was originally designed solely for university students, but students from other tertiary institutions were later included to increase the sample size. It was therefore necessary to verbally instruct students from other tertiary institutions to regard the questions concerning university attendance in the

Background Information section of the questionnaire as if they were about their own course of study. However in some cases these instructions may not have sufficed which could account for some of the absent responses to these questions (e.g. 4 missing responses to "years at university" shown in Table 1).

Participants were instructed to remove the consent form from the introductory letter, fill it out, and place it in the smaller of the two envelopes provided. They were asked to next fill the questionnaire out. When finished they were instructed to place the completed questionnaire in the larger of the two envelopes provided and they were informed that the remaining introductory information and professional guidance information sheets were for them to keep.

Those participants who chose to fill the questionnaire out elsewhere were given the same instructions in advance. They were also informed that they could either return their consent forms and questionnaires via free-post or by hand to the Psychology department at Massey University. Participants who chose to fill the questionnaire out in the researcher's office were instructed to place each of the envelopes containing the relevant completed items onto two separate piles, one designated for the completed consent forms and the other for completed questionnaires.

The order of the majority of the scales included in the general questionnaire set was varied across each individual questionnaire so as to avoid the possible effects of order on the participants' responses. However the Relationship Commitment Scale was consistently placed after the Autonomy and Relatedness Inventory as financial limitations precluded using a separate page for this scale. Similarly the Maxwell Relationships Scale was consistently positioned after the Social Support Scale as item 14 of the Social Support Inventory was situated beneath it. Also these two scales were constructed to measure related constructs and their similarity warranted keeping them together in order to avoid confusing the participants.

One hundred and four of the 157 questionnaires initially distributed were returned to the researcher, yielding a response rate for this study of 66.24 percent.

This is an acceptable response rate for this type of study with much of the drop-out rate possibly being accounted for by the length of the questionnaire and the amount of time required to fill it out.

RESULTS

INCIDENCE RATES OF VERBAL AND PHYSICAL AGGRESSION FOR THE YEAR PRECEDING THE STUDY:

Verbal Aggression was experienced by 56.9 percent of the sample during the year preceding the study. This rate is only slightly lower than the rates of 67.6 and 77.2 reported in 2 American studies found to document Verbal Abuse rates over the same period (see Table 6). However a slightly lower rate is to be expected, as overall violence rates tend to be higher in the United States than in New Zealand (Straus & Gelles, 1988).

Table 6: Rates of Verbal Aggression During the Year Preceding the Study Across Various Studies:

Study & Type of Relationship	Sample	N	Percent
Present Study Dating to married female students	Volunteer	104	56.9
Hornung, McCullough, & Sugimoto (1981) Married couples	Probability	1,553	67.6
Brutz, & Allen (1986) Married Quaker Couples	Volunteer	289	77.2

Slightly less than one-quarter of the sample (23.33%) reported that there had been past verbal aggression (prior to the year leadingup to the study), with just over three-quarters of the sample (76.67%) reporting no verbal aggression in the past. There are a lack of comparative data regarding rates of past verbal and physical

Table 7: Rates of Physical Aggression During the Preceding Year Across Studies:

Study & Type of Relationship	Sample	N	Percent
Fergusson, Horwood, Kershaw & Shannon (1986)*			
N. Z. married & defacto mothers			
- First year of study	Birth Cohort	906	3.8
- After 6 years	Birth Cohort	906	9.4
Straus & Gelles (1986)			
U. S. married couples	Probability	6,002	11.6
U. S. dating couples	Probability	6,002	16.1
O'Leary, Barling, Arias, Rosenbaum, Malone, & Tyree (1987)			
U. S. married couples	Volunteer	393	24.0
U. S. dating couples	Volunteer	393	34.0
Present study			
N. Z. dating-married female students	Volunteer	104	36.5
Barling, O'Leary, Jouriles, Vivian, & MacEwen (1987)			
U. S. married couples	Therapy	187	74.0

* Data was obtained via interviews in contrast to the other studies where the Conflict Tactics Scales were used.

aggression, as these data may be subject to greater negative effects of retrospective recall bias than the yearly rates, and previous researchers have tended to overlook them for this reason. However they were included in the present analysis, as

perceptions of past abusive experiences may be of some relevance, taking into account the limitations on the reliability of these data.

Physical Aggression was experienced by 36.5 percent of the sample during the year preceding the study. This rate falls within the wide range of violence rates reported in the literature, although it may seem to be an unexpectedly high rate, in comparison to the low violence rates found in other New Zealand samples (see Fergusson, Horwood, Kershaw & Shannon, 1986). However it is considerably lower than rates found in couples seeking therapy (see Barling, O'Leary, Jouriles, Vivian, & MacEwen, 1987) and is more in line with rates found in samples made up of dating couples (see O'Leary, Barling, Arias, Rosenbaum, Malone, & Tyree, 1987 in Table 7; and also Arias, Samios, & O'Leary, 1987; Carlson, 1987).

VERBAL AGGRESSION DURING THE YEAR PRECEDING THE STUDY:

Correlation coefficients (Pearson r's) were calculated across Conflict Tactics Scales (CTS) scores of verbal aggression by a partner during the year preceding the study (referred to simply as "verbal aggression") and scores obtained on measures of psychosocial factors, relationship, and social support factors (see Table 8).

Total distress measured by the Hopkins Symptom Checklist-21 was not found to relate to verbal aggression, although scores obtained on the general feelings of distress subscale did correlate significantly with verbal aggression at the 0.05 level of significance.

Positive affect did not correlate significantly with verbal aggression, but a positive correlation was found between verbal aggression and negative affect. The positive feelings associated with a sense of well-being or general happiness were therefore not related with verbal aggression, while negative feelings that detract from this sense of well-being or happiness were associated with verbal aggression.

Shyness and sociability were not found to correlate significantly with verbal aggression, indicating that social interaction and verbal aggression are not related. Self-rated tendencies to use exit as a problem solving style correlated positively with

Table 8: Correlations Between Verbal Aggression During the Preceding Year and Psychosocial and Relationship Factors:

	Verbal Aggression/Past Year
Measure:	r
Symptoms of Distress	
General Feelings of Distress	0.21*
Somatic Distress	0.11
Performance Difficulty	0.04
Total Distress	0.18
Well-Being	
Positive Affect	-0.11
Negative Affect	0.21*
Social Interaction	
Shyness	0.06
Sociability	0.10

	Verbal Aggression/Past Year
Measure	r
Problem Solving	
Exit	0.39***
Voice	-0.02
Loyalty	-0.12
Neglect	0.26
Perceived Effectiveness	
Self	-0.34***
Partner	-0.42***
Autonomy & Relatedness	
Relatedness	-0.38***
Hostile Control	0.41***
Acceptance	-0.43***
Hostile Detachment	0.33***
Control	0.38***
Autonomy	-0.32***

	Verbal Aggression/Past Year
Measure	r
Relationship Commitment	-0.35***
Satisfaction with Partner	-0.21
Closeness to Partner	0.04
Consequence of Ending the Relationship	
Relationship Satisfaction	-0.26**
Investments	-0.05
Support for Relationship	-0.13
Alternatives	0.31**
Marital Locus of Control	
Internal LOC	
Ability	0.11
Effort	0.01
Internality	0.08
External LOC	
Context	-0.47***
Luck	-0.22*
Externality	-0.41***

Social Support	
Satisfaction with Contact	-0.09
Contact with Others	-0.07
Number of Close Friends	0.04

N = 83 to 99

* = Significant at 0.05 level (or greater)

** = Significant at 0.01 level (or greater)

*** = Significant at 0.001 level (or greater)

reports of verbal aggression, although significant correlations were not found between verbal aggression and the remaining problem solving styles. However a negative association was found between verbal aggression and the participant's ratings of the effectiveness of both their partner's and their own problem-solving strategies. Thus higher levels of verbal aggression were associated with both maladaptive problem solving styles (exit, or actively seeking separation from a partner) and problem-solving skills that the participants judged to be of limited success.

Harmful interpersonal forces of the ARI, including hostile control (controlling, fault-finding behaviour/ARI items 2, 8, 14, 20), hostile detachment (rejecting, disapproving behaviour/ARI items 4, 10, 16, 22), and control (manipulative, self-serving behaviour/ARI items 5, 11, 17, 23) all correlated positively withverbal aggression. Conversely beneficial interpersonal presses of the ARI including relatedness (being close and sharing/ARI items 1, 7, 13, 19), acceptance (giving respect and encouragement/ARI items 3, 9, 15, 21), and autonomy (encouraging freedom of thought and action/ARI items 6, 12, 18, 24) all correlated negatively with verbal aggression. A strong association was therefore found between verbal aggression and the thwarting of needs for autonomy,

relatedness, and personal control by a partner, as all of the ARI scales correlated significantly with verbal aggression.

A significant negative correlation was found between relationship commitment and verbal aggression. However no relationship was found between verbal abuse and satisfaction with partner, or between verbal abuse and closeness to partner.

The cost of breaking-up in terms of losing a satisfying relationship (measured by Item 1 of the CER scale) correlated negatively with verbal aggression, while the attractiveness of alternatives to the relationship (measured by item 4 of the CER scale) correlated positively with verbal aggression during the year preceding the study. Higher levels of verbal aggression were therefore related to the perception that in the event of a break-up the cost of losing a satisfying relationship would be low and the attractiveness of alternatives to the relationship would be high. The remaining items, including the disapproval of others (CER item 2) and the loss of investments (CER item 3), were not significantly associated with verbal aggression though.

Measures of external marital locus of control were found to correlate significantly with verbal aggression. A significant negative correlation was found between overall externality (comprised of luck and context subscales) and verbal aggression, indicating that verbal aggression was associated with the belief that marital satisfaction cannot be attributed to forces external to the relationship such as luck or the context of the situation. No association was found between verbal aggression and the internal marital locus of control measures though.

Similarly none of the social support factors correlated significantly with verbal aggression. This indicates that, as hypothesized, no relationship exists between verbal abuse and social support (measured by amount of contact with others, and number of close friends). However it also indicates that no association was found between verbal aggression and satisfaction with this social support (measured by relationship satisfaction, and satisfaction with amount of contact), which was contrary to the expectation that a negative association would exist between satisfaction with social support and abuse.

VERBAL AGGRESSION PRIOR TO THE YEAR LEADING UP TO THE STUDY:

T-tests were carried out across mean scores obtained on measures of psychosocial, relationship, and social support factors, and CTS scores of verbal aggression occurring prior to the year leading up to the study (referred to as "past verbal aggression"). Responses were grouped according to reports of no verbal aggression (Group 1) and reports of past verbal aggression (Group 2). The means, standard deviations, and t-values for these two groups are presented in Table 9.

In all cases where t-tests were carried out, the comparisons were subjected to an F test of sample variances and pooled variance estimates of t were used if the 2-tail probability of F was greater than 0.05. Where the 2-tail probability of F was less than 0.05 separate variance estimates of t were used.

Just over three-quarters of the sample (75.96%, N = 79) had not been verbally abused in the past, while slightly less than one-quarter (23.08%, N = 24) had experienced verbal abuse in the past. The 2 groups varied significantly from each other at the 0.01 level of probability in the sociability aspect of social interaction, indicating that women who had been verbally abused prior to the year leading up to the study were less sociable than non-abused women. Otherwise no significant differences were found between the groups across any of the other factors (see Table 9). The prediction that abused women would not differ significantly from non-abused women in amount of contact with others and in the number of close friends they had was therefore upheld by the lack of a significant difference between the groups across these 2 factors, and the hypothesis that abused women are no more socially isolated than non-abused women was supported.

Table 9: Differences Between Non-Abused Participants (Group 1) and Participants who Experienced Past Verbal Abuse (Group 2) across Psychosocial and Relationship Factors:

Measure	Grp*	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Symptoms of Distress							
General Feelings of Distress	1	78	1.65	0.59	-0.28	100.00	0.78
	2	24	1.69	0.59			
Somatic Distress	1	78	1.42	0.42	0.64	99.00	0.52
	2	23	1.36	0.37			
Performance Difficulty	1	78	1.64	0.44	0.75	100.00	0.46
	2	24	1.56	0.46			
Total Distress	1	76	1.56	0.38	0.19	97.00	0.85
	2	23	1.54	0.39			
Well-Being							
Positive Affect	1	76	3.50	0.60	-0.13	98.00	0.90
	2	24	3.52	0.71			
Negative Affect	1	76	1.84	0.66	-0.19	98.00	0.85
	2	24	1.88	0.78			
Social Interaction							
Shyness	1	77	1.34	0.67	-1.34	98.00	0.18
	2	23	1.55	0.67			
Sociability	1	79	2.59	0.89	-3.03	60.23	0.00
	2	24	3.06	0.57			

* Grp denotes group.

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Problem Solving							
Exit	1	76	1.69	0.89	0.74	96.00	0.46
	2	22	1.54	0.74			
Voice	1	69	4.40	0.87	-0.14	85.00	0.89
	2	18	4.44	0.83			
Loyalty	1	75	3.61	0.89	0.44	95.00	0.66
	2	22	3.52	0.85			
Neglect	1	77	2.16	0.77	-0.71	99.00	0.48
	2	24	2.29	0.82			
Perceived Effectiveness							
Self	1	78	2.67	0.83	0.40	100.00	0.69
	2	24	2.59	0.55			
Partner	1	78	2.32	1.00	-0.24	100.00	0.81
	2	24	2.38	0.88			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
ARI							
Relatedness	1	79	4.09	0.69	0.94	101.00	0.35
	2	24	3.93	0.88			
Hostile Control	1	79	1.75	0.61	-1.66	101.00	0.10
	2	24	2.01	0.81			
Acceptance	1	78	4.08	0.64	0.00	100.00	1.00
	2	24	4.08	0.67			
Hostile Detachment	1	79	1.49	0.53	-0.43	29.20	0.67
	2	24	1.56	0.82			
Control	1	78	1.78	0.70	-1.26	100.00	0.21
	2	24	2.00	0.91			
Autonomy	1	78	3.96	0.70	0.10	100.00	0.92
	2	24	3.94	0.89			
Relationship	1	71	7.10	1.97	-0.29	91.00	0.77
Commitment	2	22	7.24	1.99			
Satisfaction With	1	78	5.83	0.73	-0.18	100.00	0.86
Partner	2	24	5.86	0.84			
Closeness to	1	78	6.22	0.85	0.79	100.00	0.43
Partner	2	24	6.06	0.96			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
CER							
Relationship	1	78	4.56	0.64	-0.42	100.00	0.68
Satisfaction	2	24	4.63	0.58			
Investments	1	78	4.15	0.87	-1.60	100.00	0.11
	2	24	4.46	0.59			
Support for	1	77	2.51	1.34	-1.49	99.00	0.14
Relationship	2	24	2.96	1.12			
Alternatives	1	78	1.69	0.89	0.12	100.00	0.90
	2	24	1.67	0.92			
MLOC							
Internal LOC							
Ability	1	73	2.59	0.75	-1.22	94.00	0.23
	2	23	2.82	0.81			
Effort	1	78	2.29	0.69	0.63	100.00	0.53
	2	24	2.19	0.61			
Internality	1	73	0.61	0.15	-0.30	94.00	0.76
	2	23	0.62	0.15			
External LOC							
Context	1	77	3.87	1.03	0.34	99.00	0.74
	2	24	3.79	1.10			
Luck	1	78	3.52	0.92	1.08	98.00	0.28
	2	22	3.27	1.02			
Externality	1	76	0.92	0.21	0.87	96.00	0.39
	2	22	0.88	0.21			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Social Support							
Satisfaction with	1	76	3.50	0.60	-0.13	98.00	0.90
Relationships	2	24	3.52	0.71			
Contact with	1	79	5.29	1.28	-1.44	101.00	0.15
Others	2	24	5.72	1.34			
Number of Close	1	79	4.35	1.62	0.17	101.00	0.87
Friends	2	24	4.29	1.60			

Group 1: N = 69 to 79

Group 2: N = 18 to 24

PHYSICAL ABUSE DURING THE YEAR PRECEDING THE STUDY:

Due to the skewness of the distribution physical abuse was converted from a continuous variable into a dichotomous variable, as mentioned earlier. Responses of participants reporting no abuse constituted group 1 responses, while the responses of participants who had been physically abused during the year preceding the study constituted group 2 responses. Close to two-thirds of the sample constituted group 2 (63.46%, N = 66), while slightly over one-third of the sample made up group 1 (36.54%, N = 38).

T-tests were carried out across mean scores obtained on measures of psychosocial, relationship, and social support factors, and CTS scores of physical aggression during the year preceding the study (referred to simply as "physical aggression") versus reports of no aggression. The means, standard deviations and t values for the two groups are presented in Table 10.

In all cases where t-tests were carried out, each of the comparisons was subjected to an F test of sample variances. Where the 2-tail probability of F was greater than 0.05 the sample variances were regarded as equal and t values based on

Table 10: Differences Between Non-Abused Participants (Group 1) and Participants who were Physically Abused during the Year Preceding the Study (Group 2), across Psychosocial and Relationship Factors:

Measure	Grp*	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Symptoms of Distress							
General Feelings of Distress	1	65	1.59	0.54	-1.59	101.00	0.12
	2	38	1.77	0.65			
Somatic Distress	1	64	1.37	0.38	-1.10	100.00	0.28
	2	38	1.46	0.45			
Performance Difficulty	1	65	1.63	0.43	0.32	101.00	0.75
	2	38	1.60	0.48			
Total Distress	1	62	1.52	0.37	-1.20	98.00	0.23
	2	38	1.61	0.39			
Well-Being							
Positive Affect	1	64	3.50	0.65	-0.05	99.00	0.96
	2	37	3.50	0.58			
Negative Affect	1	64	1.87	0.72	0.31	99.00	0.76
	2	37	1.82	0.63			
Social Interaction							
Shyness	1	64	1.46	0.70	1.37	99.00	0.17
	2	37	1.27	0.61			
Sociability	1	66	2.72	0.84	0.24	102.00	0.81
	2	38	2.67	0.87			

* Grp denotes group.

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Problem Solving							
Exit	1	62	1.54	0.75	-1.84	97.0	0.07
	2	37	1.86	0.98			
Voice	1	54	4.37	0.67	-0.57	48.54	0.57
	2	34	4.48	1.10			
Loyalty	1	60	3.63	0.87	0.61	96.0	0.54
	2	38	3.52	0.90			
Neglect	1	65	2.10	0.77	-1.63	100.00	0.11
	2	37	2.36	0.78			
Perceived Effectiveness							
Self	1	65	2.81	0.65	2.89	101.00	0.01
	2	38	2.38	0.87			
Partner	1	65	2.42	0.97	1.19	101.00	0.24
	2	38	2.19	0.94			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
ARI							
Relatedness	1	66	4.05	0.75	0.09	102.00	0.93
	2	38	4.04	0.71			
Hostile Control	1	66	1.77	0.67	-0.80	102.00	0.42
	2	38	1.88	0.67			
Acceptance	1	65	4.13	0.64	1.03	101.00	0.31
	2	38	4.00	0.65			
Hostile Detachment	1	66	1.51	0.64	0.25	102.00	0.80
	2	38	1.48	0.55			
Control	1	65	1.80	0.80	-0.42	101.00	0.68
	2	38	1.87	0.67			
Autonomy	1	66	4.05	0.71	1.73	101.00	0.09
	2	37	3.79	0.79			
Relationship	1	61	7.40	1.96	1.67	92.0	0.10
Commitment	2	33	6.70	1.91			
Satisfaction With	1	65	5.83	0.79	-0.17	101.00	0.87
Partner	2	38	5.85	0.68			
Closeness to	1	65	6.06	0.95	-2.02	96.96	0.05
Partner	2	38	6.39	0.68			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
CER							
Relationship	1	65	4.57	0.66	-0.28	101.00	0.78
Satisfaction	2	38	4.61	0.55			
Investments	1	65	4.25	0.97	0.86	97.01	0.39
	2	38	4.11	0.69			
Support for	1	65	2.71	1.32	1.03	100.00	0.31
Relationship	2	37	2.43	1.26			
Alternatives	1	65	1.62	0.84	-0.96	101.00	0.34
	2	38	1.79	0.96			
MLOC							
Internal LOC							
Ability	1	62	2.73	0.81	1.31	95.00	0.20
	2	35	2.52	0.68			
Effort	1	65	2.24	0.66	-0.42	101.00	0.67
	2	38	2.30	0.68			
Internality	1	62	0.62	0.16	0.43	95.00	0.67
	2	35	0.61	0.14			
External LOC							
Context	1	64	3.95	1.10	1.21	100.00	0.23
	2	38	3.70	0.91			
Luck	1	64	3.60	0.97	1.95	99.00	0.05
	2	37	3.22	0.85			
Externality	1	62	0.95	0.22	1.94	97.00	0.56
	2	37	0.86	0.19			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Social Support							
Satisfaction with Relationships	1	65	5.34	1.16	-0.48	100.00	0.63
	2	37	5.45	1.18			
Contact with Others	1	66	5.36	1.23	-0.25	102.00	0.80
	2	38	5.43	1.43			
Number of Close Friends	1	66	4.27	1.55	-0.53	102.00	0.59
	2	38	4.45	1.70			

Group 1: N = 54 to 66

Group 2: N = 38 to 33

pooled variance estimates were used. Where the 2-tail probability of F was less than 0.05 sample variances were considered unequal and t values based on separate variance estimates were used.

Significant differences were found between the groups in the perceived effectiveness of the participants' own problem solving strategies at the 0.01 level of probability, in their closeness to their partners at the 0.05 level of probability, and in luck at the 0.05 level of probability. Physically abused students therefore felt they were less lucky, perceived their own problem solving strategies to be less effective, and felt closer to their partners than did the non-abused students. Significant differences were not found between the groups in their amount of contact with others or in the number of close friends they had, which again supports the hypothesis that abused women are no more socially isolated than non-abused women.

PHYSICAL ABUSE PRIOR TO THE YEAR LEADING UP TO THE STUDY:

Differences between non-abused students (Group 1) and participants who had been physically abused prior to the year leading up to the study (Group 2) were examined across psychosocial, relationship, and social support factors using the t-test. The F test procedure carried out for the previous comparisons was applied again in this case. More than five-sixths of the sample (84.62%, N = 88) made up group 1, while slightly less than one-sixth (15.38%, N = 16) of the sample comprised group 2. The means, standard deviations, and t values for these groups are presented in Table 11.

The groups were found to differ significantly in the use of hostile control at the 0.05 level of probability, with more students who had experienced past physical abuse, than non-abused students, reporting that their partners were controlling in a malevolent manner. The groups were also found to differ significantly in the number of close friends they had at the 0.05 level of probability. Thus abused women were found to have significantly less close friends than non-abused women, refuting the hypothesis that abused women are no more socially isolated than non-abused women. This is in contrast to the finding that the groups did not differ significantly from each other in amount of contact with others, which in itself supports of the hypothesis that abused women are no more socially isolated than non-abused women. No other significant differences were found between the groups across any of the other factors.

Table 11: Differences Between Non-Abused Participants (Group 1) and Participants who were Physically Abused Prior to the Year Leading Up to the Study (Group 2), across Psychosocial and Relationship Factors:

Measure	Grp*	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Symptoms of Distress							
General Feelings of Distress	1	87	1.63	0.59	-1.10	101.00	0.27
	2	16	1.80	0.56			
Somatic Distress	1	87	1.39	0.41	-0.83	100.00	0.41
	2	15	1.49	0.41			
Performance Difficulty	1	87	1.60	0.43	-1.19	101.00	0.24
	2	16	1.74	0.51			
Total Distress	1	85	1.53	0.37	-1.58	98.00	0.12
	2	15	1.70	0.38			
Well-Being							
Positive Affect	1	86	3.49	0.59	-0.32	99.00	0.75
	2	15	3.55	0.82			
Negative Affect	1	86	1.86	0.67	0.47	99.00	0.64
	2	15	1.77	0.78			
Social Interaction							
Shyness	1	85	1.34	0.65	-1.65	99.00	0.10
	2	16	1.64	0.74			
Sociability	1	88	2.70	0.85	-0.13	102.00	0.90
	2	16	2.73	0.85			

* Grp denotes group.

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Problem Solving							
Exit	1	84	1.67	0.86	0.29	97.00	0.77
	2	15	1.60	0.81			
Voice	1	75	4.34	0.86	-1.76	86.00	0.08
	2	13	4.79	0.71			
Loyalty	1	83	3.57	0.91	-0.31	96.00	0.76
	2	15	3.65	0.69			
Neglect	1	87	2.20	0.78	0.36	100.00	0.72
	2	15	2.12	0.76			
Perceived Effectiveness							
Self	1	88	2.63	0.81	-0.97	34.33	0.34
	2	15	2.77	0.43			
Partner	1	87	2.35	0.97	0.25	101.00	0.80
	2	16	2.28	0.94			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
ARI							
Relatedness	1	88	4.09	0.67	1.05	17.41	0.31
	2	16	3.81	1.02			
Hostile Control	1	88	1.72	0.60	-2.39	17.63	0.03
	2	16	2.27	0.87			
Acceptance	1	87	4.10	0.61	0.47	101.00	0.64
	2	16	4.01	0.83			
Hostile Detachment	1	88	1.46	0.51	-1.13	16.59	0.28
	2	16	1.73	0.96			
Control	1	87	1.76	0.68	-1.61	17.55	0.13
	2	16	2.19	1.02			
Autonomy	1	87	3.98	0.71	0.58	101.00	0.57
	2	16	3.86	0.94			
Relationship	1	79	7.15	1.91	-0.07	92.00	0.95
Commitment	2	15	7.18	2.29			
Satisfaction With	1	87	5.85	0.72	0.41	101.00	0.68
Partner	2	16	5.77	0.90			
Closeness to	1	87	6.14	0.10	-1.83	31.17	0.08
Partner	2	16	6.45	0.57			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob
CER							
Relationship	1	88	4.58	0.62	-0.12	101.00	0.91
Satisfaction	2	15	4.60	0.63			
Investments	1	87	4.14	0.92	-1.53	101.00	0.13
	2	16	4.50	0.52			
Support for	1	87	2.47	1.26	-2.63	100.00	0.10
Relationship	2	15	3.40	1.30			
Alternatives	1	87	1.67	0.86	-0.34	101.00	0.73
	2	16	1.75	1.07			
MLOC							
Internal LOC							
Ability	1	82	2.67	0.77	0.49	95.00	0.62
	2	15	2.57	0.83			
Effort	1	87	2.28	0.69	0.68	101.00	0.50
	2	16	2.16	0.52			
Internality	1	82	0.62	0.15	0.65	95.00	0.52
	2	15	0.59	0.14			
External LOC							
Context	1	86	3.92	1.06	1.38	100.00	0.17
	2	16	3.53	0.84			
Luck	1	86	3.45	0.96	-0.18	99.00	0.86
	2	15	3.50	0.84			
Externality	1	84	0.92	0.22	0.85	97.00	0.40
	2	15	0.87	0.15			

Measure	Grp	N	$\bar{x}$	s.d.	t value	d.f.	prob.
Social Support							
Satisfaction with Relationships	1	86	5.41	1.14	0.63	100.00	0.53
	2	16	5.21	1.30			
Contact with Others	1	88	5.41	1.14	0.63	100.00	0.53
	2	16	5.21	1.30			
Number of Close Friends	1	88	4.47	1.61	1.96	102.00	0.05
	2	16	3.63	1.36			

Group 1: N = 75 to 88

Group 2: N = 13 to 16

SUMMARY:

A number of relationships were found between verbal aggression encountered during the year preceding the study and the psychosocial and relationship factors assessed. Significant positive correlations were found between verbal aggression encountered during the year preceding the study and general feelings of distress, negative affect, and the use of exit as a problem solving style. Significant positive correlations were also found between verbal abuse and partners' use of hostile control, hostile detachment, control, and finding alternatives to the relationship unattractive.

Verbal abuse encountered during the year preceding the study was found to correlate significantly in a negative direction with the perceived effectiveness of the participants' own problem solving styles, and the problem solving styles used by their partners. Significant negative correlations were also found between verbal abuse during this interval and the fulfilment of autonomy, relatedness, and acceptance needs; commitment to the relationship; satisfaction with the relationship;

and the context, luck, and overall externality of locus of control regarding marital satisfaction.

Women who had encountered verbal abuse prior to the year leading up to the study reported being sociable significantly less often than non-abused women. Women who had been physically abused during the year preceding the study were found to perceive their own problem solving styles as effective, and to attribute their satisfaction with the relationship to luck, significantly more often than non-abused women. Women who were physically abused during this interval were also found to be close to their partners significantly more often than non-abused women, whereas women who were physically abused prior to the year preceding the study reported having significantly fewer close friends, and reported that their partners used more hostile control than non-abused women.

DISCUSSION:

RATES OF ABUSE:

Rates of aggression against women by their partners were found to be high in the present sample compared to those reported in some other studies. It is unlikely that women in New Zealand encounter more abuse than women in other countries such as the USA though, where the overall rates of violence greatly exceed those found in New Zealand, according to Straus and Gelles (1988). Lower rates of physical aggression have also been recorded in other New Zealand samples (Fergusson, Horwood, Kershaw, & Shannon, 1986), although the reliability of these results which were generated from a single item, is questionable.

It is therefore possible that characteristics of the present sample account for the high rates of aggression produced. As previously stated, O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree (1989) report that higher rates of violence are found in 18 to 24 year olds, and as the average age of the women in the present sample was 23-and-a-half years, it is not surprising that high rates of aggression were also found within this group. Furthermore many previous studies of partner violence, where lower rates of physical aggression have been found, were carried out on samples of married women. However as noted earlier, higher rates of aggression have been recorded in samples made up of couples involved in dating relationships (Arias, Samios, & O'Leary, 1987; Carlson, 1987), and since well over half of the present sample were dating their partners (see Table 3), higher rates of aggression were to be expected.

Many researchers have also failed to clearly establish the living arrangements of the women they sampled, and it is possible that more abused women in the present study lived apart from their partners than in other studies. Approximately half of the women involved in the present research stated that they did not live with their partners, or that they lived with them only sometimes, and the higher rates of aggression found in this sample may therefore be related to the stresses of living

apart. It is possible for example, that the abuser's ability to control his partner is impaired by living separately, and that he may use aggressive behaviours to establish greater control.

This could be the case for the high number of women who reported living in different cities from their partners as well (approximately 27 percent of the women stated living in other cities from their partners all or some of the time). In this case more verbal aggression may also be applied to exert control from a distance, which is supported by Tolman's (1989) observation that abusive men may exchange physical abuse for psychological aggression when their use of physical force has been impeded. This may therefore have contributed to the higher than expected verbal aggression rates found in the present sample.

As mentioned earlier, extremely high rates of physical aggression have been found in special populations, such as psychiatric patients and women seeking marital therapy (Carmen, Rieker, & Mills, 1984; Barling, O'Leary, Jouriles, Vivian, & MacEwen, 1987). Rates of physical aggression recorded in various overseas studies employing student samples have also been found to be as high as 36 percent (Arias, Samios, & O'Leary, 1987) and the rate of 36.5 percent produced by the present sample falls within the upper limits of this range. It may therefore be possible that the pressures of student life are associated with a high risk of abuse.

A final possibility is that abused women were attracted by the prospect of participating in a study based on their relationships with their partners. One of the drawbacks of recruiting volunteers, is that those who feel they have something to gain from participating in the research may be more likely to come forward (Tuckman, 1978). While steps were taken to reduce this effect in the present research, it is still possible that abused women were drawn to participate in a study where they might have the opportunity to vent their feelings about their relationship without fear of recrimination.

PSYCHOLOGICAL DISTRESS AND WELL-BEING:

Little evidence was found in the present study of a relationship between psychological distress and partner abuse, or poorer well-being and partner abuse. No relationships were found between psychological symptoms of distress and all contingencies of aggression, except verbal aggression during the year preceding the study and general symptoms of distress. No relationships were found between positive affect and partner abuse of any contingency of abuse either, and apart from a positive correlation found between negative affect and verbal aggression during the year preceding the study, no relationships were found between abuse and negative affect.

This indicates that almost universally, abused women displayed no more symptoms of distress or negative affect than non-abused women, which was contrary to the expectation that abused women would experience more of these symptoms than non-abused women. Thus the findings of earlier studies showing differences between abused and non-abused women in the number of psychiatric consultations they had received and in symptoms of depression (Bergman, Larsson, Brismar, & Klang, 1987) were largely unsupported by the present research. The findings of research carried out on clinical samples, where abused women were found to display symptoms of anxiety, depression, and general psychological distress (see Jaffe, Wolfe, Wilson & Zak, 1986; Romans-Clarkson, Walton, Herbison, & Mullen, 1990; Walker, 1987), were also largely unsupported by these results.

A number of factors could account for these conflicting results, including the possibility that women in clinical samples who have sought assistance are more distressed and display more negative affect than women who do not seek outside help. It is possible for example, that in encountering abuse of a greater frequency and severity, more symptoms of psychological distress and negative affect are produced in the women who make up clinical samples. Gelles' (1976) and Rounsaville's (1978) findings indicating that more frequently and severely abused

women will be represented in specific samples also support this point.

The frequency of abuse was only assessed in relation to verbal aggression during the preceding year in the present study, as dichotomized scores were used for the other contingencies of abuse. The possibility that the frequency of the abuse might be related to distress in physically abused women could therefore not be fully explored. However a positive correlation was found between general feelings of distress and the frequency of verbal abuse encountered during the preceding year, and this may well be the case across other contingencies of abuse also.

The fact that general feelings of distress and negative affect correlated positively with verbal abuse encountered during the year preceding the study, indicates that the more frequent the verbal abuse, the poorer was the psychological health and well-being of the women. These symptoms of distress and negative affect were not found in women who had been verbally abused prior to the year leading up to the study though, indicating that psychological distress and negative affect may not be stable or consistent characteristics of abused women. However as the present study was cross-sectional in design it is not possible to conclude that a causal link existed between symptoms of distress, psychological well-being, and abuse.

The reasons for general feelings of distress being the only symptoms of psychological distress associated with verbal abuse during the previous year, remain unclear. The results indicate that being verbally attacked leaves the victims feeling hurt, misunderstood, and blaming themselves, but that they do not experience physical distress and their ability to carry out their daily tasks is not impaired. This contradicts Walkers (1984; 1987) and Rybak and Bassuk's (1986) observations that abused women display somatic symptoms, such as back-pain, headaches, and numbness, as well as various difficulties in performing tasks, such as having trouble concentrating, and being unable to eat or sleep properly. However it also provides support for Walker's (1984) and Mill's (1985) claims that abused women may internalize blame for the abuse, and for the theory that learned helplessness may play a role in partner abuse.

That a relationship was also found between the frequency of verbal aggression encountered during the year preceding the study and negative affect further supports this theory and indicates that feelings of helplessness, depression, and withdrawal, are not only present in abused women in clinical samples. However the fact that abused and non-abused women were not found to differ from each other in positive affect indicates that general feelings of distress and negative affect, are not necessarily associated with low levels of confidence, satisfaction, and good-humour. In concentrating on the negative effects of abuse, researchers have failed to consider the possibility that abused women may be able to maintain a sense of purpose and a healthy appreciation of life. Yet it is possible that the perception of abused women as being down-trodden, helpless victims with little to be happy about, only applies to a minority of women who seek clinical help in response to more frequent and severe abuse, and at the distressing point of ending their relationships. This is an area that is yet to be explored, and the implications are far reaching, especially in regard to developing an understanding of why women remain in abusive relationships.

SOCIABILITY AND SHYNESS:

With only one exception, neither shyness nor sociability were related to any of the contingencies of abuse measured in the present study. The hypothesis that abused women are less sociable and shyer than non-abused women was therefore largely unsupported. Various studies indicate that abused women show signs of timidity, withdrawal, and social anxiety, that they experience difficulties in coping with social pressure, and that they have few social support networks available to them (Gelles, 1985; Kuhl, 1984; Launius & Lindquist, 1988; Walker, 1984, 1987; Wodarski, 1987). These signs were considered to be suggestive of an underlying tendency towards shyness and unsociability. However as shyness and sociability were found to be largely unrelated to abuse in the present sample, these symptoms may not in fact relate to shyness or a lack of sociability in abused women. It is

possible for example that abused women are anxious in social situations and yet still prefer the company of others.

On the other hand, since previous research in this regard was largely carried out across clinical samples, it is possible that the women making up these groups were shyer and less sociable than other abused women. Women requiring assistance from refuges, for example, may be less likely to have social support networks to rely on for help and are therefore less likely to be sociable than other abused women. Abuse of a greater frequency or severity may also be associated with high levels of shyness and unsociability, but again these aspects of abuse were not adequately assessed in the present study and firm conclusions cannot be made in this regard.

The exception to these findings was the relationship between acts of verbal aggression encountered prior to the year leading up to the study and sociability, with women who reported verbal abuse during this interval being found to be less sociable than non-abused women. As verbal abuse encountered during the year preceding the study was not related to lower sociability, it is possible that a decline in sociability occurs when verbal abuse is encountered over a long period of time, or that as sociability decreases so too does abuse. Again however, these conclusions cannot be reached based on the results of the present study.

PROBLEM SOLVING:

The results of the present study indicate that the problem solving styles employed by abused women may differ only slightly from those used by non-abused women. Only women who had been verbally abused during the year preceding the study were found to use exit as a problem solving style more than non-abused women, which was contrary to the prediction that abused women would rely on passive problem solving styles, rather than active problem solving styles. Otherwise abuse was not found to relate to a greater use of the passive problem solving styles of neglect or loyalty, or to the lesser use of the active problem solving

style of voice. The hypothesis that abused women employ more passive, and fewer active problem solving styles was therefore not supported by the present research.

Claerhout, Elder, and Janes' (1982) finding that abused women employed a narrower range of problem solving styles than non-abused women in their sample, was not upheld by the results of the present study. However the relationship Claerhout, Elder, and Janes (1982) found between the use of avoidant problem solving styles and abuse was partially supported by the relationship found between the frequency of verbal abuse during the year preceding the study and the use of exit as a problem solving style. Finn's (1985) conclusion that abused women employ more avoidant strategies, and that they avoid meeting their problems head on, was also partially supported by this result, although the passive element Finn (1985) describes in the problem solving styles of abused women, was not indicated in the findings of the present study.

While it was hypothesized that abused women would rely on passive rather than active problem solving strategies, using exit as a problem solving style may in fact be the most sensible approach to take in an abusive situation. The fact that the use of exit was only related to verbal abuse during the preceding year and that physically abused women weren't also found to rely on this strategy more often may therefore seem illogical. However as mentioned earlier, Walker (1979, 1984) claims that abused women become helpless and powerless to act as a result of the abuse, indicating that abused women should be expected to use fewer exit strategies than non-abused women. In the present study physically abused women were not found to use exit behaviours significantly less than non-abused women either though. Thus Walker's (1979, 1984) explanation does not fully account for the fact that no differences were found between physically abused and non-abused women in their use of exit strategies.

As several of the exit items included in the Rusbult (1986a, 1986b) questionnaire relate to actively seeking an end to the relationship, while others relate to merely thinking about leaving, it is possible that physically abused women's scores reflected their inability to act on the desire to leave the relationship. Church's

(1984) observation that abused women fear the consequences of leaving their husbands, and the fact that rates of violence have often been cited as being highest following separation (see Gaquin, 1978; Smith, 1987, cited in Ellis, 1989), suggest that it is possible physically abused women wont take active steps to leave their partners, even though they may wish to do so. Thus physically abused women may have responded positively to items measuring a desire to leave the relationship, and negatively to items associated with actively attempting to leave.

However as the use of exit as a problem solving style increased in relation to the frequency of verbal abuse it is possible that verbally abused women felt less threatened by the abuse. They may therefore have felt able to take steps to exit from the situation, rather than simply thinking about leaving. Whether or not this is the case though, it is clear that both physically and verbally abused women were not the passive recipients of abuse that Mills (1985) and Walker (1979, 1984) have made them out to be.

The frequency of the abuse encountered may have also played a role in the failure to find the expected differences between physically abused and non-abused women in the use of exit as a problem solving style. Again the frequency of physical aggression wasn't assessed in the present study, but Gelles' (1976) claim that more frequently and severely abused women tend to leave abusive relationships, and the correlation found between frequency of verbal aggression and the use of exit strategies in the present study, suggest that this may be the case.

However the frequency of the abuse is unlikely to account for the absence of any differences found between the abused and non-abused women in the use of voice and loyalty as problem solving styles, as no correlations were found between the frequency of verbal abuse and the use of these problem solving styles in the present study. Therefore Markman, Floyd, Stanley, and Storaasli's (1988) discovery that improving the problem solving skills of maritially distressed individuals resulted in fewer problems later in the relationship, is not likely to apply in the case of abused women. The only problem solving strategy abused women were found to use more often than non-abused women was exit, and as this would

appear to be an appropriate strategy to use, attempting to reduce this behaviour may in fact be counter-productive. The results of the present study therefore suggest that the problem solving skills of abused women require little modification or improvement.

Perceived Effectiveness of Problem Solving Skills:

However the perceptions of abused women in regard to the effectiveness of these problem solving skills may be somewhat misguided. It was predicted that abused women would perceive their own problem solving styles to be effective less often than non-abused women, which was confirmed in the cases of women who had been verbally and physically abused during the year preceding the study. Abused women were also expected to find their partners' problem solving skills to be effective more often than non-abused women. However in the case of women who had been verbally abused during the year preceding the study the opposite was result was found, and the women perceived their partners' problem solving skills to be less effective as the frequency of verbal abuse increased.

No other differences were found between abused and non-abused women in the perceived effectiveness of their partners' or their own problem solving skills though. Physical and verbal abuse encountered prior to the year leading up to the study were not related to differences in the perceived effectiveness of these problem solving skills, and again it would appear that perceptions of the effectiveness of problem solving skills vary in relation to abuse occurring in the immediate past but not to abuse occurring prior that. Thus these perceptions may change over time, but again it is not possible to ascertain whether or not causal relationship exists between these perceptions and abuse.

As no differences were found between the abused and non-abused women in their problem solving styles of neglect, loyalty, and voice, it would seem that physically and verbally abused women identify themselves as being ineffective in solving their relationship problems, when in fact they are applying the same set of skills to their problems that non-abused women apply to theirs. This indicates that

abused women may be inappropriately internalizing blame for their problems, as Walker (1979, 1984), Strube and Barbour (1984b), and Dobash and Dobash (1979) have suggested. However as verbally abused women also felt their partner's problem solving skills were effective less often than non-abused women, the theory that abused women attribute the cause of their problems to factors external to themselves was also partially substantiated.

Whether or not physically and verbally abused women's perceptions of their partner's problem solving skills are accurate though, it is clear that verbally abused women do not resort to simply applying blame-oriented attributions to their partner's problem solving style, or to their own problem solving style. Rather, it would seem that attributions of joint cause are made by these women, or that the relationship itself may be considered to be the seat of the problem. Fincham's (1985) discovery that in couples receiving therapy, distressed partners are more likely to attribute the cause of the problem to the relationship, also suggests that this theory may be correct. On the other hand it would appear that as physically abused women found their own but not their partner's problem solving skills to be ineffective, they may indeed be experiencing learned helplessness as Walker (1979, 1984) suggests.

AUTONOMY AND RELATEDNESS:

As anticipated a relationship was found to exist between verbal abuse during the year preceding the study and the thwarting of autonomy and relatedness needs. The frequency of verbal aggression during the year preceding the study correlated significantly in a positive direction with the use of hostile control, hostile detachment, and control. Significant negative correlations were also found between verbal abuse during this interval and the feeling that autonomy, relatedness, and acceptance needs had not been fulfilled by the participants' partners. However relationships were not found between these factors and past verbal or physical abuse, in contrast to the prediction that differences would exist. Women who had encountered physical abuse prior to the year leading up to the study reported that

their partners used hostile control significantly more often than non-abused women, but otherwise physical abuse during this interval was unrelated to the thwarting of autonomy and relatedness needs also.

These results partially support previous research findings which indicate that abused women perceive their partners behaviour to be controlling, and stifling to their needs for autonomy and relatedness (Church, 1984; Romero, 1985; Walker, 1984). However as these results were only found in women who were verbally abused within the year preceding the study it is possible that by blaming themselves for their plight, physically abused participants were able to maintain the illusion that they were not being controlled by their partners, or that the control they were under was legitimate. Straus' (1986) observation that acts considered to be legitimate may be under-reported, indicates that this may indeed have been the case. Rieker and Carmen's (1986, cited in Hamilton, 1989) suggestion that self-blame can restore the illusion of control, and theories that self-blame keeps the victim trapped in the relationship may also help to explain this result.

However it appears that the thwarting of autonomy and relatedness needs may be related to encountering abuse of a greater frequency, as correlations were found between the frequency of verbal abuse and reports that these needs had been unmet. It cannot be concluded without further investigation, that physical abuse of a greater frequency also relates to autonomy and relatedness needs being unfulfilled, but this could explain the lack of evidence of a difference between abused and non-abused women in their reports of having these needs met.

These findings also demonstrate that being controlled, and having one's needs for autonomy and relatedness unmet may not necessarily be integral aspects of the abuse process as Walker (1979, 1984) and Dobash and Dobash (1979) suggest. This conclusion may have been drawn from the fact that women in clinical samples, may encounter more controlling behaviours from their partners, and the nature of the abuse they encounter may be different to that experienced by women who have not sought such assistance, as Gelles (1976) results suggest. Church's (1984) findings for example, that abused women seeking counselling reported feeling controlled,

and restricted could be associated with encountering a greater frequency of abuse, which may have prompted them to seek assistance in the first place.

The use of control and restrictions to the autonomy and relatedness needs of women may therefore be related to abuse, but such behaviours have not been established as integral aspects of abuse. The results of the present research suggest that it is possible for physical aggression to occur in the absence of controlling behaviours that reduce the women's autonomy. While it is possible that these findings were the result of self-blame and under-reporting, it is also possible that such behaviours increase as the frequency and severity of abuse increases, or their relationship to abuse may be completely arbitrary. Further investigation of the relationship between aggression, the use of control, and autonomy and relatedness needs is therefore called for, as is the assessment of abused women's perceptions of how these factors may be related to their experiences of abuse.

RELATIONSHIP COMMITMENT:

The findings of this research indicate that it is unlikely women remain in abusive relationships because they are more committed to them than non-abused women. In fact in the opposite was found to apply in the case of women who had encountered verbal aggression during the year preceding the study, as these women were found to be less, rather than more, committed to their relationships. This conflicts with Strube and Barbour's (1984b) finding that abused women were more committed to their relationships, and also with Cate, Henton, Koval, Christopher, and Lloyd's (1982) discovery that women who chose to stay with their partners after being abused were more committed to their relationships. However as mentioned earlier, the results of these previous studies may have been related more to relationship longevity and intimacy, than commitment, and it is likely that in assessing relationship commitment more precisely the lack of a true relationship between commitment and abuse was revealed by the present study.

It is further possible that a lack of commitment to the relationship is moderated by the frequency and severity of abuse, as again commitment was found to decrease in relation to verbal aggression of increasing frequency in the present study, but no such relationships were found across the other contingencies of abuse. In general though, these findings suggest that rather than being tied to the relationship by greater commitment to it, abused women may be as committed, or less committed than non-abused women. In the case of verbal aggression this could indicate that verbally abused women reacted appropriately to being abused by becoming less committed to the relationship. The absence of the same result in physically abused women suggests that they remain just as committed to their partners as non-abused women in spite of being abused, which may in itself be considered an inappropriate response deserving of further investigation.

EXCHANGE FACTORS:

Support for the hypothesis that abused women have more invested in the relationship was scarce. As anticipated a positive correlation was found between verbal abuse encountered during the year preceding the study and the participants' perceptions of alternatives to the relationship being unattractive.[4] Women who had been physically abused during the year leading up to the study also felt close to their partners significantly more often than non-abused women, as predicted. However contrary to prediction, a significant negative correlation was found between satisfaction with the relationship and verbal aggression encountered during the year preceding the study. No other relationships were found between aggression and the exchange factors across the remaining contingencies of abuse, and the evidence of an association between these factors and abuse was therefore weak. While there was evidence in support of only two of the exchange factors assessed in the present research, the exchange model itself still offers a viable explanation for the reasons women may stay in abusive relationships. It is possible for example that other

[4] The afore-mentioned recoding of scores for this item must be taken into account when interpreting these results.

exchange factors, play a more crucial role in the process of abuse, and these deserve further investigation in future research.

Satisfaction with the Relationship and Partner:

Contrary to the prediction that abused women would be more satisfied with their relationships, satisfaction with the relationship was found to decrease as verbal aggression increased. No other significant differences were found between abused and non-abused women in satisfaction with their relationships across any of the other contingencies of abuse though. No interactions were found between satisfaction with one's partner and abuse either across any of the contingencies of abuse. Thus only satisfaction with the relationship, but not one's partner decreased as the frequency of verbal abuse increased. Otherwise the participants' satisfaction with their partners and relationships were no different to the satisfaction expressed by non-abused women.

This indicates that abused women do not have more invested in the relationship due to finding their partners more satisfying or the relationship itself more satisfying, as hypothesized. Rather, verbally abused women tend to be less satisfied with the relationship as the frequency of the abuse increases. Again this may indicate that frequency could play a moderating role in this process where other contingencies of abuse are concerned. However the fact that satisfaction with one's partner was completely unrelated to abuse of any type suggests that this factor is not associated with abuse in any way. This may be considered unusual in itself though, as satisfaction with one's partner may be expected to either increase if investments in the relationship were a reason for staying as hypothesized, or to decrease in response to being abused.

Social Support for the Relationship and Investment Factors:

No relationships were found between partner abuse and either investments in the relationship, or social support for the relationship from family, friends, and others. This indicates that abused women felt they had no more investments (friends, memories, resources, and so on), or social support for the relationship to

lose if the were to relationship end, than non-abused women. This is contrary to the hypothesis that abused women have high investments in the relationship, and therefore more to lose in the event of a break up.

However if, as Walker (1979, 1984) and others (see Cazenave & Straus, 1979; Hilberman & Munson, 1978; Kennedy, Ford, Smith & Dutton, 1991) suggest, abused women lack social support, it is not surprising that these women may not be as threatened by the potential for disapproval from others over the dissolution of the relationship, or by the potential loss of friends, as they were expected to be. It is surprising though that these women did not report having more invested in terms of resources and material goods though, as past research has shown these that these factors were related to abuse (see Gelles, 1976; Sullivan & Davidson, 1991). The reasons for abused women having no more or less investments in, or social support for, the relationship than non-abused women therefore remain unclear, but these findings do indicate that these exchange factors are unlikely to be related the decision to remain in an abusive relationship.

Attractiveness of Alternatives:

As anticipated, a positive correlation was found between verbal abuse and the attractiveness of alternatives, indicating that as verbal abuse increased alternatives to the relationship became more unattractive. This may initially seem illogical, as abuse may be expected to be accompanied by an increased desire to seek out better alternatives. However these results are in line with the exchange theories set out earlier, suggesting that women who are prepared to tolerate being abused may have more to lose in the event of a break up of the relationship than those who will not tolerate such abuse (Breines & Gordon, 1983; Gelles, 1985). Cate, Henton, Koval, Christopher, and Lloyd's (1982) findings that abused women considered themselves to have fewer alternative partners than women who wouldn't withstand being abused, were therefore supported by the findings of the present study. Gelles' (1976) report that abused women who feel they have few alternatives to the relationship are less likely to leave, was also supported by these findings.

However Walker's (1979, 1984) theory of learned helplessness, offers another possible interpretation of these results. It is possible for example, that being abused coloured the outlook of the women, and that in blaming themselves for their situation these women could conceive of no other alternative that would offer a better prospect. This ties in with the fact that abused women were found to have more negative affect than non-abused women. The fact that other investment and commitment factors were not also found to relate to abuse in the expected directions, further suggests that Walker's (1979, 1984) theory may provide a more viable interpretation of these results than the exchange model.

As no other significant differences were found between abused and non-abused women in social support for the relationship and investments in the relationship, across the other contingencies of abuse, it is possible that only women who have encountered verbal aggression in the immediate past find alternatives to the relationship unappealing. However it is also possible that the frequency of abuse moderates the perception of alternatives to the relationship as being unattractive. Again though, the frequency of abuse was not assessed across these contingencies, and it would be impossible to judge the effects of the frequency of abuse on these perceptions without further investigation.

Closeness to Partner:

Relationships were not found between closeness to one's partner and physical or verbal abuse prior to the year leading up to the study. Verbal abuse during the year preceding the study was also unrelated to closeness to one's partner in the present sample. However a relationship was found between physical aggression during the year preceding the study and closeness to one's partner, with physically abused women reporting greater closer to their partners than non-abused women. This result provides partial support for the hypothesis, and indicates that in being closer to their partners physically abused women may have more invested in the relationship and more reason to continue with it.

As suggested earlier, being socially isolated may increase the importance of maintaining closeness with one's partner. Thus a relationship between physical abuse during the year preceding the study and a lack of social support would lend further credence to the theory that abused women have a great deal invested in maintaining the closeness they have with their partners. In the present study women who had encountered physical abuse in the year leading up to the study were found to have fewer close friends than non-abused women (the details of this are outlined further in the following social support section), and further support for the exchange theory interpretation is therefore provided by these results.

However the cycle of relationship violence described by Walker (1979, 1984) may account for these results to some degree also, as the loving contrition phaze between acts of aggression may promote greater closeness between partners than the closeness experienced in non-abusive relationships. Indeed the intense closeness of the relationship may contribute to the aggression itself, as the abuse could be an attempt to disengage from the potentially stifling effects of being too close.

On the other hand family therapists suggest that aggression may be used to achieve greater closeness between family members rather than to reduce it. Goldenberg and Goldenberg (1985) point out for example, that in enmeshed relationships clear boundaries between individuals have not been established. In this situation family members can become extremely involved in each-others lives to the point where any separation from the relationship is considered to be an act of betrayal (Goldenberg & Goldenberg, 1985). It is therefore possible that abuse, reduced social support, and greater closeness to one's partner are all related to the dysfunction of the family or relationship system, and that developing interventions aimed at establishing more functional transactions within abusive relationships may prove useful.

The lack of evidence of any other relationships between closeness to one's partner and the other contingencies of abuse suggests that physical abuse in the recent past may differ to some extent from other forms of abuse. Verbal abuse may

for example, be a more continuous process, and appears from the results of the present study to have different consequences for the victim than physical abuse. Closeness to one's partner may also develop over time as the abuse continues, since women who had been physically abused in the past were not found to be closer to their partners than non-abused women.

LOCUS OF CONTROL OF MARITAL SATISFACTION:

Contrary to the hypothesis that abused women attribute their satisfaction with the relationship to forces external to themselves, significant negative correlations were found between verbal abuse encountered during the year preceding the study and external locus of control of relationship satisfaction. Thus as the frequency of verbal abuse increased, the perception that satisfaction with the relationship was contingent upon external forces such as luck and the context of the situation decreased, rather than showing the expected increase. Women who had been physically abused during the year preceding the study were also found to report perceiving their satisfaction with the relationship to be contingent upon luck significantly less often than non-abused women, although they did not differ from non-abused women across any of the other externality or internality measures. The prediction that internal locus of control of relationship satisfaction would be inversely related to abuse was also unsupported by the findings of the present study, as no relationships were found between internal locus of control and any of the contingencies of abuse.

The results obtained in the present study regarding the relationship between abuse and locus of control of relationship satisfaction therefore conflict with those generated across previous studies assessing generalized locus of control. As mentioned earlier, abuse has either been found to be unrelated to generalized locus of control, or has been associated with having an external locus of control in past research (see Edleson, Eisikovits, Guttmann, & Sela-Amit, 1991). The fact that a negative relationship was found between external locus of control of relationship satisfaction and abuse in the present study may therefore seem unusual. However

these results may be accounted for by Miller, Lefcourt, and Ware's (1983) claim that in assessing locus of control in the relationship specifically, more accurate information regarding the role locus of control plays in relationship functioning may be obtained.

It is also possible that the results of studies assessing the generalized locus of control of abused women, reflect the women's feelings that they are powerless to control their own lives, as proponents of learned helplessness theory would suggest (Walker, 1979, 1984). On the other hand, the fact that abused women were found to have less, rather than more, external locus of control than non-abused women in the present study, indicates that the same cognitions may not be made in regard to the functioning of the relationship itself. Miller, Lefcourt, and Ware's (1983) argument has therefore been vindicated by the results of the present research, and it would appear that an important distinction between the cognitions of abused women regarding their lives in general, and their relationships specifically, may have been found.

As previously mentioned, no differences were found between women who had encountered abuse prior to the year leading up to the study and non-abused women in locus of control of relationship satisfaction. The cognitions of women encountering abuse in the year preceding the study were therefore different to those of women who had been abused prior to that time. Again there is no way to establish that causal relationships exist between abuse and locus of control of relationship satisfaction from the results of the present study, but these results do suggest that the cognitions of abused women in regard to the forces controlling their relationships, may not be stable over time, and that further research is required in this area.

While the expected relationships between abuse and locus of control of relationship satisfaction were not found in the present research, the results obtained do have important implications for the treatment of abused women and for understanding the cognitions these women have in regard to their relationships. As negative relationships were found between external locus of control and both verbal

and physical abuse during the year preceding the study, Finn's (1986), O'Leary, Barling, Arias, Rosenbaum, Malone, and Tyree's (1989), and Pagelow's (1984, cited in Edleson, Eisikovits, Guttmann, & Sela-Amit, 1991) findings that abused women consider their lives to be controlled by external forces were not supported. However as a corresponding increase in internal locus of control was not found, the theory that internal forces are associated with relationship satisfaction was not supported either.

It is therefore possible that the cognitions of abused women are more complex in this regard than previous research findings suggest. These results indicate that while abused women may not perceive their relationship satisfaction to be contingent upon internal forces associated with ability and effort any more than non-abused women do, they may simply fail to consider the possible influence of external forces on their relationships as well. Thus the argument that abused women focus more on the internal forces governing the functioning of their relationship, based on Strube and Barbour's (1984b) finding that abused women tend to internalize blame for the abuse, may be partially accurate in that these women do consider internal influences, but fail to consider the impact of external forces on their relationships. However it would be misguided to assume from these findings that taking internal forces as well as external forces into account is inappropriate, or to conclude that it is necessary to encourage abused women to focus their attention only on the external forces affecting their relationships.

Rather, these results suggest that in treating abused women it may be most appropriate to praise them for their insight into the role their own efforts and abilities play in the functioning of the relationship, and to reframe their perceptions of their contributions to the functioning of the relationship in a positive light wherever possible. Assuring abused women that they are in no way responsible for their problems in the relationship in an attempt to shift their focus away from self-blame, may backfire if their role in the relationship is not also acknowledged. In feeling that they contributed something to their relationship problems abused women may subliminally reject the help of clinicians who try to convince them otherwise. Also,

keeping in mind Rieker and Carmen's (1986, cited in Hamilton, 1989) point that self-blame may help to maintain a sense of control, it is possible that attempting to reverse abused women's perceptions of their role in the situation may in fact remove any sense of personal control they feel they have left, and undermine the value of their own perceptions at the same time. This may have a negative impact on their already poor self-concept at a point when it is crucial to boost their self-esteem and their confidence in their ability to survive on their own if they make the decision to leave the relationship. It may therefore be appropriate instead, to encourage these women to look for the external forces that contribute to the problem, as well as acknowledging the internal forces that they feel they may have contributed, and to gradually shift them towards a more balanced view of the situation without disempowering them.

SOCIAL SUPPORT:

The findings of this study concerning the relationship between social support factors and partner abuse were relatively consistent. Except for the number of close friends reported by women who had encountered physical aggression in the past, no significant differences were found between abused and non-abused women in social support, as predicted. Little evidence was found to suggest that abused women have less contact with others than non-abused women, which contradicts the observations of various researchers that abused women tend to be socially isolated (see Dobash & Dobash, 1979; Rybak & Bassuk, 1986; Walker, 1984). As previously mentioned, many of these earlier findings were based on the reports of women in clinical samples though, and as most of these were refuge-based samples, disproportionate numbers of isolated women with nowhere else to go for help may have been represented in these results. Few studies have attempted to establish a sound basis for the claim that abused women are more socially isolated using non-clinical samples, and the results of the present study indicate that there is little evidence that abused women are more socially isolated than non-abused women.

However as women who had been physically abused prior to the year leading up to the study reported having fewer close friends than non-abused women, it would appear that the social support networks of these women in particular, may be smaller than those of non-abused women. This result is in line with Cazenave and Straus' (1979), and Brown's (1986, cited in Coley & Beckett, 1988) findings that black abused women were less embedded in their social networks than non-abused women.

Furthermore, while past experiences of physical aggression were associated with having fewer close friends, physical aggression occurring during the previous year was not associated with having fewer close friends. It is therefore possible that over time the social isolation of physically abused women increases. This would be in keeping with Church's (1984) findings that abused women felt their partners' behaviour had caused their social withdrawal and the theory that abused women become isolated over time may indeed be correct (Breines & Gordon, 1983; Dobash & Dobash, 1979; Kennedy, Ford, Smith & Dutton, 1991; Rybak & Bassuk, 1986; Walker, 1984; Wayland, Roth, & Lochman, 1991). Again this cannot be confirmed by the results of the present study, but it is an issue that is worthy of further investigation. The reasons for this isolation (self-imposed, partner-inflicted, by-product of the abuse, and so on) have not been addressed in previous research either, and these require further investigation also.

Contrary to the expectation that abused women would be less satisfied with their relationships with others than non-abused women, no association was found between relationship satisfaction and abuse. Both abused and non-abused women found their relationships satisfying even in the case of women experiencing past physical aggression, who had fewer close friends than non-abused women. Therefore while the prediction that abused women would have as many social supports as non-abused women was upheld in all but one instance, the hypothesis that abuse is under-reported due to relationship dissatisfaction was not supported.

Other possible reasons for the under-reporting of abuse therefore need to be explored. As the number of supportive relationships physically abused women have

may decrease temporally, the relationship between frequency and severity of abuse and social isolation also requires investigation, as these factors may have contributed to the inconsistencies found in the results of the present study and other studies (for example Brown, 1986, cited in Coley & Beckett, 1988; Cazenave & Straus, 1979). More frequently or severely abused women may for instance become isolated out of shame and self-blame as Wayland, Roth, and Lochman (1991) suggest, or their partners may force them to limit their contacts, as Rybak and Bassuk (1986), and Walker (1984) propose. It is therefore possible that in more extreme cases of abuse the victims' social contacts have been more severely restricted, and that women in clinical samples are more frequently or severely abused and thus also more socially isolated.

LIMITATIONS OF THE PRESENT STUDY:

While it was possible through the present research to make important advances towards identifying factors associated with partner abuse, the study was also limited in a number of ways. The characteristics of the sample and the methodological procedures employed, while appropriate for the purposes of this research, have certain limitations.

One of these limitations is associated with the small size of the sample. Only 104 participants were included in the final sample and although the proportion of students participating may have been high enough to establish a representative sample, this may still limit the generalizability of the research findings.

The volunteer method of sample selection was also used in the present research and it is possible that students who offered to take part in the study differed from other students in specific ways, thereby biasing the sample. For example, students in distressed relationships may have been more attracted to the prospect of participating in a study concerning their relationships than students in stable relationships, and this may have influenced the results obtained in the present research.

Also, as previously mentioned, the over-use of clinical samples in past research has made it imperative for further research to be carried out using non-clinical samples so that accurate information about the ways in which abused women differ from non-abused women can be generated. By recruiting a sample of tertiary students this was accomplished to some degree in the present research. However, while there were advantages to employing this sample, the fact that it was comprised solely of students made it non-representative nevertheless, and the results obtained may therefore have limited generalizability.

By extending the sample to include women in all types of intimate heterosexual relationships, rather than focusing on married women in particular, the generalizability of the findings was increased. The argument was made earlier that researching spouse abuse and courtship violence as separate issues may be inappropriate (see p. 12), but the differences and similarities between abused women in these groups are yet to be fully explored. Therefore while it is warranted for research samples to include women in all types of intimate heterosexual relationships, further analyses of the different responses made across these groups may be useful. However in analysing the data obtained in the present study it was not possible to differentiate between responses made by the women in these different types of relationships due to the limited amount of data generated and the uneven distribution of women across the different relationship categories (see Table 3, p. 45).

Another limitation of the present research is associated with the fact that only women were sampled. As mentioned earlier collecting data from both the perpetrators and victims of abuse may facilitate in identifying the patterns of behaviour associated with abuse. However as the aim of the present research was to assess abused women's perceptions of their relationships and their own psychosocial functioning, collecting data from their partners, was deemed less important. Nevertheless collecting data from the perpetrators of the abuse may

have provided further insight into the problem and a more balanced account of the abuse occurring within these relationships may have been produced.

Furthermore measuring the responses of both members of the couple could have provided some protection against the effects of self-report bias, which was another limitation of the present study. Without corroborating evidence from other sources such as partners' reports, medical records, and so on, it is also impossible to conclude that the results of this study reflect the actual conditions of these women's relationships rather than simply their subjective opinions of the situation. The operationalizing abuse in narrow terms to include only physical and verbal acts of aggression is another related limitation of the present study, and again corroborating evidence of abuse from other sources such as medical records, would have enabled a more comprehensive assessment of abuse.

It is further possible that the responses made by women reporting past experiences of abuse were affected by retrospective recall bias. As it was pointed out earlier, memory decay and the reframing of events over time can lead to distortions in the way events are recalled. This memory decay increases over time, and as the contingencies of past verbal and physical aggression measured in the present study related to abuse occurring prior to the year leading up to the study, these results are likely to have been affected by retrospective recall bias. Thus the past abuse scores cannot be considered to be reliable or accurate reflections of the abuse encountered during this interval, although as the mean length of the participants' relationships was just under three years (see Table 1, p. 42) the distortion may have been minimal in most cases.

A cross-sectional research design was employed in the present study so that a range of contingencies of abuse could be assessed in a relatively short space of time. However one of the drawbacks of this approach is that causal relationships between variables cannot be determined unequivocally. Thus while the results of the present study indicate that relationships do exist between partner abuse and many of the factors assessed, the direction of causal relationships between these factors and abuse could not be determined. It is possible for example that being abused affected

the psychosocial functioning of the participants and their relationships, or that psychosocial and relationship factors had an influence on the abuse occurring within these relationships. It is also possible that interaction effects occur between these factors and abuse and that they both influence each-other, or that various factors have moderating effects on each-other and the abuse. The results of the present study and previous research suggest that this may well be the case.

The association between locus of control and relationship satisfaction found by Miller, Lefcourt, and Ware (1983) was further indicated by the results of the present study in relation to partner abuse. However the method of assessing relationships between abuse and independent factors used in the present research, and much of the previous research in this area, makes it impossible to identify the possible interactions occurring between these factors and abuse. The use of Miller, Lefcourt, and Ware's (1983) scale provided some evidence of an interaction between relationship satisfaction, locus of control, and partner abuse, but otherwise the study was limited in it's potential to identify interaction effects occurring between different variables and abuse.

Also, while it was pointed out earlier that there has been an over-reliance on qualitative research and that there is a need for more generalizable quantitative research in this area, the methods used to collect data across wider samples in quantitative research limit the depth of the data obtained. Thus the survey method used in the present study may have failed to uncover other valuable information concerning the abuse encountered by individual women in the sample. Related to this is the fact that non-standardized measures and single items were used to assess some of the constructs such as the social support, exchange, and commitment, which may have reduced both the validity and reliability of the findings in regard to these factors.

FUTURE RESEARCH DIRECTIONS:

More wide-scale research into the rates of partner abuse occurring across a broad cross-section of New Zealanders is called for in the future. In the absence of such research accurate estimates of the rates of partner abuse occurring in New Zealand cannot be generated. Projected rates based on the results of small-scale research such as the present study, crime statistics, and so on, offer a less than satisfactory alternative, as they do not provide a complete picture of the extent of the problem. Data collected from a broad cross-section of New Zealanders would establish a base-rate against which other researchers could compare their findings and the results of small-scale research could be viewed in context.

More research into the possible moderating effects of the frequency and severity of abuse across psychosocial and relationship factors is also needed, as many of the significant results obtained in the present study were associated with correlations between the frequency of verbal abuse and the various factors. As mentioned earlier, Gelles (1976) found relationships between the frequency and severity of abuse, and divorce, separation, and the use of women's refuges and the police. As more frequent and severe abuse is linked with the decision to leave abusive relationships, it stands to reason that psychosocial and relationship factors that may be related to the decision to remain in abusive relationships will also vary in accordance with the frequency and severity of the abuse.

However it may be difficult to accurately assess the frequency and severity of physical abuse. As Straus and Gelles (1988) point out, the low rates of abuse detected in most societies make it difficult to obtain data that are normally distributed, and the instruments available at present are not sensitive enough to detect varying levels of abuse with enough accuracy to produce useful results. The frequency and severity of past abusive experiences is also difficult to assess for the same reason, and the effects of retrospective recall bias could further limit the usefulness of this information (Widom, 1989). Assessing the relationship between partner abuse of varying frequency, and the range of psychosocial and

relationship factors may therefore be a more difficult task than it might at first appear, and future research must also centre on developing ways in which these aspects of abuse may be measured more sensitively.

Factors associated with psychological distress also need to be researched further as the findings of the present study were ambiguous and conflicted with the findings of other studies which suggest that abused women experience greater psychological symptoms of distress. The factors that give meaning to the lives of abused women also require further research attention. The discovery that abused women in the present study did not differ from non-abused women in positive affect suggests that abused women may enjoy life as much as other women do and the ways in which this may contribute to their decision to remain in the abusive relationship need to be further investigated.

Further research into physically abused women's cognitions in regard to exiting from their relationships is also necessary, as the discovery that these women did not use exit as a problem solving style more than non-abused women in the present research suggests that they may have the desire to leave their relationships but feel that they cannot. The desire and intent to leave therefore need to be assessed separately in future research.

Abused women's perceptions regarding the seat of their relationship problems also require further assessment. The discovery that abused women found both their partner's and their own problem solving skills to be ineffective suggests that they attribute their problems to joint cause, rather than to themselves or their partners specifically as previously suggested.

Further investigation of the needs for autonomy and relatedness of abused women is also warranted. The results of the present study suggest that verbally abused women felt these needs were not being met by their partners, but that women who were physically abused, or abused in the past, felt that these needs were being met by their partners as much as non-abused women did. The possibility that physically abused women's perceptions of their partner's behaviour were distorted, and that their needs for autonomy and relatedness

really were being unmet therefore requires investigation. Before any firm conclusions can be made in this regard it is necessary to first assess the actual presence of controlling behaviours in the relationship objectively, using methods that cannot be affected by self-report bias, such as the use of controlled experiments or observation techniques.

The direction of the relationship between commitment to the relationship and abuse also warrants investigation. While a negative relationship was found between verbal abuse and commitment to the relationship, the results of the present study do not specify the nature of this relationship. It is therefore possible that abuse increases as commitment to the relationship decreases, or that as a result of being abused commitment to the relationship decreases. Similarly the directions of the relationships between closeness to one's partner and abuse, and finding alternatives to the relationship unattractive and abuse need to be investigated. Again abused women may become closer to their partners and less interested in alternatives to the relationship as a consequence of the abuse, or these factors may be characteristic of abused women prior to their being abused.

Further research into the possible association between locus of control and relationship functioning is also called for. The results of the present research indicate that a more complex relationship exists between the attributions women make regarding the factors affecting their relationships and abuse. Rather than focusing on the external forces controlling their relationships, or over-emphasizing internal forces, abused women in the present research simply failed to fully consider the impact external forces may have on their relationships. This is a scenario that has not been previously considered and as it's implications for the treatment of abused women are far reaching, further corroborative evidence of a relationship between locus of control, relationship functioning, and abuse is required. Further advances could be made in this area through the develop of a measure that has the power to assess locus of control in regard to relationship distress also. Such a device may offer further valuable information concerning the attributions abused women make in regard to their relationship problems

specifically, rather than their satisfaction with the relationship. This may have more relevance to the attributions abused women make regarding the abuse and their reasons for choosing to tolerate it.

The reasons behind the lack of social support reported by women who had been physically abused prior to the year leading up to the study also need to be addressed, and relationships between various types of social support (such as support from friends, family, community, colleagues, and so on) and abuse also require further investigation. The means by which this lack of social support is brought about (self-imposed, partner inflicted, and so on) should also be addressed, as should the extent to which abused women feel they would benefit from further social support, versus a desire for less social contact.

The possibility that relationships exist between sociability, social support, and partner abuse, also requires further investigation. In the present study women who had been verbally abused prior to the year leading up to the study were found to be less sociable than non-abused women, while women who had been physically abused during this time reported having fewer close friends than non-abused women. Although these two types of abuse differ, they may be interrelated aspects of "global" abuse, or the process of abuse that Walker (1979, 1984) describes. An association between a lack of sociability, abuse, and reduced social support may therefore exist. As mentioned earlier one of the limitations of research in this area has been the focus on identifying relationships between individual factors and abuse, and in future more research into the possible inter-relationships between factors such as these is called for. Possible relationships between social support, closeness to one's partner, locus of control, and abuse also deserve investigation.

Variations were found in the relationships between nearly all of the factors assessed in the present study and the four contingencies of abuse. Thus women who were abused in the past often differed from women abused more recently across the same factors, as did physically and verbally abused women. However as the direction of causal relationships could not be established using the cross-

sectional technique employed in this research, these findings indicate that further longitudinal research of these factors in relation to abuse would be advised. There has been a general lack of longitudinal research in this area to date, although an obvious need for it exists, and the results of the present study indicate that for advances to be made in this area more extensive research of the factors associated with abuse must be undertaken, through longitudinal research in particular.

Important differences were found between abused and non-abused women across the relationship and psychosocial factors investigated in the present research. While not all of the hypotheses were supported, these results do offer new insight into the impact of abuse on the psychosocial functioning of abused women and the functioning of their relationships. The fact that the findings of the present research often contradicted those found in earlier qualitative studies demonstrates the necessity in backing up quantitative data with hard evidence from quantitative research. These findings suggest that differences do exist between women in "normal" and clinical populations, and that assumptions cannot be made regarding the factors associated with abuse from the reports of women in highly select clinical samples. The generalizability of the findings of the present research may also be limited to some degree by the fact that the sample was comprized of a small number of New Zealand tertiary students. However an important step has been through the present research towards bridging the gap between the use of unsubstantiated data, and firm evidence of the relationships that exist between these factors and abuse. The results of the present research also provide valuable information regarding partner abuse encountered by women in a New Zealand sample, and make important contributions towards the development of appropriate intervention strategies for abused women.

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APPENDIX I:

(Reduced Copy of the Questionnaire)

INTERPERSONAL CONFLICT IN HETEROSEXUAL RELATIONSHIPS:

INFORMATION SHEET:

Who are the researchers?

The study is being carried out by Kim Verzyde, who is a student working on a Masters degree in Psychology at Massey University. This research is being carried out under the supervision of Dr Mandy Morgan and Dr Ross Flett who are both lecturers in the Psychology Department at Massey University.

Where can they be contacted?

Kim Verzyde	Psychology Department Massey University Home Phone: 355-0938
Dr Mandy Morgan	Psychology Department Massey University Phone: 356-9099 ext. 8149
Dr Ross Flett	Psychology Department Massey University Phone: 356-9099 ext. 8010

What is the study about?

The aim of the study is to find out about the participants' experiences of conflict with their partners in close personal relationships and to see how these relate to other aspects of their lives.

What will the participant(s) have to do?

If you agree to take part in this study you will be asked to write down your answers to the questions given to you in a questionnaire. Your name will not be written on the answer sheet so that no one can tell which answers you gave and which were given by someone else. Later in the year the results of the study will be made available to you.

How much time will be involved?

The questionnaire should take about ten to twenty minutes to fill out.

What can I expect from the researcher?

If you take part in this study you have the right to:

* refuse to answer any particular question, and to withdraw from the study at any time

* ask any further questions about the study that occur to you during your participation

* provide information on the understanding that it is completely confidential to the researchers. All information is collected anonymously, and it will not be possible to identify you in any reports prepared from the study

* be given access to a summary of the findings from the study when it is concluded

If the study brings up any concerns or issues that are distressing to you please feel free to contact the researcher or either of the research supervisors who will be able to refer you to an appropriate agency or support service.

If you would like to take part in the study please fill out the two Consent Forms you have been given, keep one copy for yourself and return the other copy to the researcher. You may then begin to answer the questions provided in the questionnaire.

INTERPERSONAL CONFLICT IN HETEROSEXUAL RELATIONSHIPS:

CONSENT FORM:

I have read the information sheet for this study and my questions about the study have been answered to my satisfaction. I also understand that I may ask further questions at any time.

I understand that I am free to withdraw from the study at any time, or to decline to answer any questions in the study. I agree to provide information to the researchers on the understanding that it is completely confidential.

I wish to participate in this study under the conditions set out on the Information Sheet.

Signed: _____

Name: _____

Date: _____

Background Information

Write your response in the space provided below:

What age are you? (in years)..... _____

What is your relationship to your current partner?
He is my (e.g., husband, boyfriend, defacto)..... _____

How long have you been in your current relationship?.....

_____ (years) _____ (months)

Do you attend university full time or part time?..... _____

How many years have you been at (any) university?..... _____

Is your partner also a student?..... _____

Does your partner currently have a job for which he is being paid?..... _____

If yes, what type of job does your partner have?..... _____

Do you currently have a job for which you are being paid?..... _____

If yes, what type of job is this?..... _____

Whose job contributes the most to the income in your household?
(e.g. your partner's, your own, your mother's, your father's)..... _____

Do you live in the same house as your partner? (e.g. yes, no, sometimes) _____

Do you live in the same city as your partner? (e.g. yes, no)..... _____

Approximately how much time would you and your partner spend together in a week, not including time spent sleeping? (in hours)..... _____

Conflict Tactics Scale

No matter how well a couple get along, there are times when they disagree, get annoyed with the other person, or just have spats or fights because they are in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. I would like you to read some things that both you and your spouse or partner might do when you have an argument. I would like you to circle the number of times (Once, Twice, 3-5 times, 6-10 times, 11-20 times, or more than 20 times) in the past twelve months you...

	Qi You In The Past Year 1 = Once 2 = Twice 3 = 3-5 Times 4 = 6-10 Times 5 = 11-20 Times 6 = More than 20 0 = Never	Qii Your Partner In The Past Year 1 = Once 2 = Twice 3 = 3-5 Times 4 = 6-10 Times 5 = 11-20 Times 6 = More than 20 0 = Never	Qiii For Items Marked "Never" on Both Qi *and* Qii Has it Ever Happened? 1 = Yes 0 = No
A. Discussed an issue calmly.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
B. Got information to back up your/his side of things.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
C. Brought in, or tried to bring in, someone to help settle things.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
D. Insulted or swore at him/ you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
E. Sulked or refused to talk about an issue.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
F. Stomped out of the room or house or yard.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
G. Cried.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
H. Did or said something to spite him/you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
I. Threatened to hit or throw something at him/you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
J. Threw or smashed or hit or kicked something.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
K. Threw something at him/ you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
L. Pushed, grabbed, or shoved him/you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
M. Slapped him/you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0

	Qi You In The Past Year 1 = Once 2 = Twice 3 = 3-5 Times 4 = 6-10 Times 5 = 11-20 Times 6 = More than 20 0 = Never	Qii Your Partner In The Past Year 1 = Once 2 = Twice 3 = 3-5 Times 4 = 6-10 Times 5 = 11-20 Times 6 = More than 20 0 = Never	Qiii For Items Marked "Never" on Both Qi *and* Qii Has it Ever Happened? 1 = Yes 0 = No
N. Kicked, bit, or hit him/ you with a fist.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
O. Hit or tried to hit him/you with something.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
P. Beat him/you up.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
Q. Choked him/you.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
R. Threatened him/you with a knife or gun.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0
S. Used a knife or fired a gun.....	1 2 3 4 5 6 0	1 2 3 4 5 6 0	1 0

Hopkins Symptom Checklist

We would like to know how you have been feeling over the past seven days, including today. Below is a list of things you may have been feeling over this time. Please circle the appropriate number to describe how distressing you have found these things over this time.

	Not at all	A little	Quite a bit	Extremely
A. Difficulty speaking when you are excited	1	2	3	4
B. Trouble remembering things	1	2	3	4
C. Worried about sloppiness or carelessness	1	2	3	4
D. Blaming yourself for things	1	2	3	4
E. Pains in the lower part of your back	1	2	3	4
F. Feeling lonely	1	2	3	4
G. Feeling blue	1	2	3	4
H. Your feelings being easily hurt	1	2	3	4
I. Feeling that others do not understand you or are unsympathetic	1	2	3	4
J. Feeling that people are unfriendly or dislike you	1	2	3	4
K. Having to do things very slowly in order to be sure you are doing them right	1	2	3	4
L. Feeling inferior to others	1	2	3	4
M. Soreness of your muscles	1	2	3	4
N. Having to check and double check what you do	1	2	3	4
O. Hot or cold spells	1	2	3	4
P. Your mind going blank	1	2	3	4
Q. Numbness or tingling in parts of your body	1	2	3	4
R. A lump in your throat	1	2	3	4
S. Trouble concentrating	1	2	3	4
T. Weakness in parts of your body	1	2	3	4
U. Heavy feelings in your arms and legs	1	2	3	4

Affectometer Two (Short Form)

These next questions are concerned with HOW OFTEN you have had certain positive and negative feelings over the PAST FEW WEEKS. For each feeling there are 5 possible choices. The choices for how often you have had each feeling are:

CHOICES:
5 = All of the time
4 = Often
3 = Some of the time
2 = Occasionally
1 = Not at all

For each item write your number on the line to the right.

OK, OVER THE PAST FEW WEEKS, HOW OFTEN have you felt...	Write in your choice:
A. Satisfied	_____
B. Free-and-easy	_____
C. Helpless	_____
D. Depressed	_____
E. Good-natured	_____
F. Discontented	_____
G. Insignificant	_____
H. Confident	_____
I. Useful	_____
J. Withdrawn	_____

Cheek and Buss Social Interaction Scale

These next items are about YOUR interactions with other people and your feelings of shyness or sociability. For each question, please circle the number that best applies to you.

	Extremely uncharacteristic of me				Extremely characteristic of me
1. "I am socially somewhat awkward".....	0	1	2	3	4
2. "I don't find it hard to talk to strangers"..	0	1	2	3	4
3. "I feel tense when I'm with people I don't know well".....	0	1	2	3	4
4. "When conversing I worry about saying something dumb".....	0	1	2	3	4
5. "I feel nervous when speaking to someone in authority".....	0	1	2	3	4
6. "I am often uncomfortable at parties and other social functions".....	0	1	2	3	4
7. "I feel inhibited in social situations".....	0	1	2	3	4
8. "I have trouble looking someone right in the eye".....	0	1	2	3	4
9. "I am more shy with members of the opposite sex".....	0	1	2	3	4

	Extremely uncharacteristic of me				Extremely characteristic of me
1. "I like to be with people".....	0	1	2	3	4
2. "I welcome the opportunity to mix socially with other people".....	0	1	2	3	4
3. "I prefer working with others rather than alone".....	0	1	2	3	4
4. "I find people more stimulating than anything else".....	0	1	2	3	4
5."I'd be unhappy if I were prevented from making many social contacts".....	0	1	2	3	4

Rusbult Questionnaire

These next items are about reactions to problems in close relationships. For each item consider your relationship with your partner and choose a number from the choices to show HOW OFTEN or HOW MUCH OF THIS TIME you REACT LIKE THAT.

CHOICES:
1 = not at all
2 = occasionally
3 = sometimes
4 = about half of the time
5 = often
6 = usually
7 = all of the time

For each item write your number on the line to the right.

Write in your choice:
---

1. "When I'm unhappy with my partner, I consider breaking up"..... _____
2. "When we have problems in our relationship, I patiently wait for things to improve"..... _____
3. "When I'm upset with my partner I sulk rather than confront the issue".. _____
4. "When my partner says or does things I don't like, I talk to him about what's upsetting me"..... _____
5. "When I'm bothered about something my partner has done, I criticise him for things that are unrelated to the real problem"..... _____
6. "When I'm angry at my partner, I talk to him about breaking up"..... _____
7. "When my partner and I have problems, I discuss things with him"..... _____
8. "When I'm upset about something in our relationship, I wait a while before saying anything to see if things will improve on their own"..... _____
9. "When I'm upset with my partner I ignore him for a while"..... _____
10. "When we have serious problems in our relationship, I take action to end the relationship"..... _____
11. "When I'm unhappy with my partner, I tell him what's bothering me".. _____
12. "When my partner hurts me, I simply say nothing and simply forgive him"..... _____
13. "When things are going well between us, I suggest changing things in the relationship in order to solve the problem"..... _____
14. "When I'm really angry I treat my partner badly (for example, by ignoring him or saying cruel things)"..... _____

CHOICES:
1 = not at all
2 = occasionally
3 = sometimes
4 = about half of the time
5 = often
6 = usually
7 = all of the time

Write in your choice:

15. "When I'm irritated with my partner, I think about ending our relationship"..... _____

16. "When there are things about my partner I don't like, I accept his faults and weaknesses and don't try to change him"..... _____

17. "When my partner and I are angry with one another, I suggest a compromise solution"..... _____

18. "When we have problems, I discuss ending our relationship"..... _____

19. "When we have a problem in our relationship, I ignore the whole thing and forget about it"..... _____

20. "When my partner and I are angry with one another, I give things some time to cool off on their own rather than take action"..... _____

21. "When we've had an argument, I work things out with my partner right away"..... _____

22. "When things are going really poorly between us, I do things to drive my partner away"..... _____

23. "When my partner is inconsiderate I give him the benefit of the doubt and forget about it"..... _____

24. "When I'm angry at my partner, I spend less time with him (for example, I spend more time with my friends, watch a lot of television, work longer hours, etc.)"..... _____

25. "When I'm dissatisfied with our relationship I consider dating other people"..... _____

26. "When we have serious problems in our relationship, I consider getting advice from someone else (friends, parents, minister, or counsellor)"..... _____

27. "When we have troubles, no matter how bad things get I am loyal to my partner"..... _____

28. "When my partner and I have problems, I refuse to talk to him about it"..... _____

These next items are about the way YOU PERSONALLY handle problems in your relationship with your partner. For each item, choose a number from the choices to show HOW OFTEN or HOW MUCH OF THE TIME you feel like that.

CHOICES:
0 = not at all
1 = occasionally
2 = some of the time
3 = often
4 = all of the time

For each item write your number on the line to the right.

Write in your choice:

1. Do you think your method of solving problems works?..... _____

2. Do you think that you respond to problems in your relationship in a healthy manner?..... _____

3. Does your method of solving problems make you feel good afterwards?..... _____

4. Does the way in which you react to periods of dissatisfaction make your relationship stronger?..... _____

These next items are about the way YOU THINK YOUR PARTNER handles problems in your relationship. For each item, choose a number from the choices to show HOW OFTEN or HOW MUCH OF THE TIME you feel like that.

CHOICES:
0 = not at all
1 = occasionally
2 = some of the time
3 = often
4 = all of the time

For each item write your number on the line to the right.

Write in your choice

1. Do you think your partner's method of solving problems works?..... _____

2. Do you think your partner responds to problems in your relationship in a healthy manner?..... _____

3. Does your partner's method of solving problems make you feel good afterwards?..... _____

4. Does the way in which your partner reacts to periods of dissatisfaction make your relationship stronger?..... _____

Autonomy and Relatedness Inventory

Each of the following statements might describe your boyfriend/partner. Please write the number that best describes your boyfriend/partner's behaviour with you, on the line following each statement.

CHOICES:
1 = Not at all like my boyfriend/partner
2 = Very little like my boyfriend/partner
3 = Somewhat like my boyfriend/partner
4 = Much like my boyfriend/partner
5 = Very much like my boyfriend/partner

For each statement write your number on the line to the right.

Descriptions of your boyfriend/partner:	Write in your choice:
1. Talks over his problems with me.....	_____
2. Is always trying to change me.....	_____
3. Respects my opinion.....	_____
4. Acts as though I'm in the way.....	_____
5. Wont take no for an answer when he wants something.....	_____
6. Gives me as much freedom as I want.....	_____
7. Is always thinking of things that would please me.....	_____
8. Argues back no matter what I say.....	_____
9. Encourages me to follow my own interests.....	_____
10. Makes fun of me.....	_____
11. Wants to have the last word on how we spend our time.....	_____
12. Lets me make up my own mind.....	_____
13. Has a good time with me.....	_____
14. Wants to control everything I do.....	_____
15. Is happy to go along with my decisions.....	_____
16. Says I'm a big problem.....	_____
17. Expects me to do everything his own way.....	_____
18. Thinks it's okay if I disagree with him.....	_____
19. Asks me to share things he enjoys.....	_____

CHOICES:
1 = Not at all like my boyfriend/partner
2 = Very little like my boyfriend/partner
3 = Somewhat like my boyfriend/partner
4 = Much like my boyfriend/partner
5 = Very much like my boyfriend/partner

20. Finds fault with me..... _____

21. Considers my point of view..... _____

22. Doesn't think about me very much..... _____

23. Acts as if he doesn't know me when he is angry..... _____

24. Let's me do anything I want to do..... _____

Relationship Commitment Scale

These next items are concerned with the degree of commitment to your partner. To show how you feel, place an X in any space between the two phrases for each question (the mid-point space has a double line).

1. How committed are you to your partner?

Extremely uncommitted ___ ___ ___ ___ ___ ___ ___ ___ ___ Extremely committed
-----

2. How often have you seriously considered ending your relationship with your partner?

Several times ___ ___ ___ ___ ___ ___ ___ ___ ___ Never

3.How likely is it that you will try to end the relationship with your partner during the next year?

Extremely likely ___ ___ ___ ___ ___ ___ ___ ___ ___ Extremely unlikely
-----

4. How likely is it that you will try to end the relationship with your partner in the next 5 years?

Extremely likely ___ ___ ___ ___ ___ ___ ___ ___ ___ Extremely unlikely
-----

Satisfaction With Partner Scale

These next items are concerned with how you feel about certain characteristics of your current partner. To show how you feel, choose a number from 1 to 7 where each number has this meaning:

7 = delighted
6 = pleased
5 = mostly satisfied
4 = mixed (about equally satisfied and dissatisfied)
3 = mostly dissatisfied
2 = unhappy
1 = terrible

For each area write your number on the line to the right.

"How do you feel about YOUR PARTNER'S..."	Write in your choice
1. Ability to be kind and understanding	_____
2. Similarity of activity interests	_____
3. Similarity of attitudes and values	_____
4. Social status	_____
5. Financial resources	_____
6. Physical attractiveness	_____
7. Ability to provide emotional support	_____
8. Sexual attractiveness	_____
9. Stability and pleasantness of personality	_____
10. Reliability/trustworthiness	_____
11. Ability to be close and intimate	_____

Maxwell Relationships Scale

These next items are concerned with how YOU FEEL about your relationship with YOUR PARTNER. For each item choose a point on the scale that best illustrates how you feel and circle the corresponding number.

a. How close would you say your relationship is?

Not at all close	1	2	3	4	5	6	7	Very close

b. Do you miss your partner when you cannot be together for a prolonged period of time?

Not at all	1	2	3	4	5	6	7	A great deal

c. Do you disclose to your partner things that are important and personal to you?

Not at all	1	2	3	4	5	6	7	A great deal

d. Do you share important attitudes and values?

Not at all	1	2	3	4	5	6	7	A great deal

e. Do you spend a lot of time with your partner?

Hardly any	1	2	3	4	5	6	7	A great deal

Consequences of Ending the Relationship Scale

Some relationships are very easy to break off, while for other relationships it would be very difficult to end things. In this next section, we want you to imagine that you decided to break off the relationship with your partner. Think about how costly it would be to end the relationship with your partner.

1. Would this be a loss of a very satisfying relationship?

1 = Not at all
2 = It would be a slight loss
3 = It would be a moderate loss
4 = It would be a considerable loss
5 = It would be an extreme loss

Your choice _____

2. To what extent would you lose important investments associated with him (for example: time, mutual friends, material goods, activities, memories, emotions)?

1 = Not at all
2 = It would be a slight loss
3 = It would be a moderate loss
4 = It would be a considerable loss
5 = It would be an extreme loss

Your choice _____

3. How much disapproval would you get from friends, family, and those people who are important to you?

1 = None at all
2 = A slight amount of disapproval
3 = A moderate amount of disapproval
4 = A considerable amount of disapproval
5 = A great deal of disapproval

Your choice _____

4. How attractive would the alternative be compared to your relationship (alternatives could be to begin a relationship with another person, seeing several people, or spending time alone)?

1 = Not at all attractive
2 = Slightly attractive
3 = Moderately attractive
4 = Very attractive
5 = Extremely attractive

Your choice _____

The Miller MLOC Scale

These next items are about what you feel may contribute to the achievement of a satisfying relationship. For each question, please circle the number that best applies to you.

	Strongly Agree					Strongly Disagree
1. "My partner and I get along well because we have the interpersonal skills; not because of things like luck or temperament...	1	2	3	4	5	6
2. "My partner and I can get along happily in spite of the most trying circumstances if we decide to".....	1	2	3	4	5	6
3. "How well I get along with my partner depends very much on how he is feeling that day".....	1	2	3	4	5	6
4. "If my relationship were a long, happy one I'd say that I must be very lucky".....	1	2	3	4	5	6
5. "It seems to me that maintaining a smooth functioning relationship is simply a skill; things like luck don't come into it".....	1	2	3	4	5	6
6. "Even with the most loving couples a mutually satisfying emotional relationship doesn't just happen, it is the result of the couple working at it".....	1	2	3	4	5	6
7. "The unhappy times in our relationship just seem to happen regardless of what I am doing".....	1	2	3	4	5	6
8. "Couples who don't run into any conflict at some point in their relationship have simply been very lucky".....	1	2	3	4	5	6
9. "Good communication between partner's is simply a matter of learning and applying the skills; nothing can really interfere with good communication".....	1	2	3	4	5	6
10. "Couples who have a satisfying emotional relationship are constantly trying to improve their relationship; a good relationship doesn't just develop spontaneously".....	1	2	3	4	5	6
11. "I find that external circumstances like day-to-day events can have considerable influence on how my partner and I get along"	1	2	3	4	5	6
12. "Something more than a couple's intentions and abilities is needed to bring about a mutually satisfying emotional relationship; it's really a kind of special magic that is there or isn't".....	1	2	3	4	5	6
13. "There are always things I can do that will help to end an argument with my partner that leave us feeling better".....	1	2	3	4	5	6
14. "Circumstances play a very limited role in causing relationship satisfaction; it is largely effort and concern that matter".....	1	2	3	4	5	6
15. "At times there doesn't seem to be any way out of a disagreement with my partner".....	1	2	3	4	5	6
16. "Difficulties with my partner often start with chance remarks"....	1	2	3	4	5	6

Social Support Scale

The following questions are about your relationship with other people, and your networks of social support. For each question, please circle the number that best applies to you.

1. To what extent are you satisfied with your relationships with others?

	Completely dissatisfied						Completely satisfied
a. The extent to which there are people to whom you can communicate your true feelings?.....	1	2	3	4	5	6	7
b. The companionship you receive from others?....	1	2	3	4	5	6	7
c. The amount of interests you share in common with others?.....	1	2	3	4	5	6	7
d. The extent to which you are appreciated by others?.....	1	2	3	4	5	6	7
e. Overall, to what extent are you currently satisfied with your relationships?.....	1	2	3	4	5	6	7

	Almost none						A great deal
2. In your daily working life how much contact do you have with people?.....	1	2	3	4	5	6	7
3. In your leisure time activities how much contact do you have with people?.....	1	2	3	4	5	6	7
4. In general how much contact do you have with people?.....	1	2	3	4	5	6	7

Close Friends:

If a "close friend" is someone with whom you would do any 3 of the following:

i. Discuss important things
ii. Visit uninvited
iii. Ask for help if needed
iv. Ring up for (or seek out) a chat when you feel lonely

How many people would you call close friends?

none 1 2 3 4 5 more than 5

These are all the questions I have. Thank you for your co-operation.

If you would like professional guidance regarding issues raised in the questionnaire, sources you can contact are:

* Your G. P.

* Student Counselling Service ph. 3569099 ext. 8310

* ACROSS Social Services ph. 3583813

* Methodist Social Services ph. 3573277

(THIS PAGE IS FOR YOUR OWN USE. PLEASE DETACH IT AND TAKE IT WITH YOU IF YOU FEEL IT MAY BE OF USE.)

APPENDIX II

Reliability of the Measures

Means, Standard Deviations, and Standardized Item Alpha Reliability Coefficients of the Measures

Measure/Variable	No. of Cases	$\bar{x}$	s.d.	alpha*
Conflict Tactics				
Rating of Self				
Reasoning	104	1.02	0.68	
Verbal Abuse	104	3.41	1.62	
Physical Abuse	104	1.01	1.52	
Rating of Partner				
Reasoning	104	0.92	0.69	
Verbal Abuse	104	2.99	1.81	
Physical Abuse	104	0.69	1.31	
Prior to Previous Year				
Ever Reasoning	104	0.23	0.63	
Ever Verbal	103	0.49	1.17	
Ever Physical	104	0.36	1.08	

* Alpha reliability coefficients were not calculated for the CTS or the CER scale items, as the items were measuring separate, albeit related, acts.

Measure/Variable	No. of Cases	$\bar{x}$	s.d.	alpha
Symptoms of Distress				
General Feelings of Distress	103	11.59	4.08	0.85
Somatic Distress	102	9.83	2.87	0.67
Performance Difficulty	103	11.34	3.11	0.70
Total Distress	100	32.66	7.90	0.85
Well-being				
Positive Affect	101	17.50	3.12	0.81
Negative Affect	101	9.25	3.42	0.79
Social Interaction				
Shyness	101	12.49	6.05	0.80
Sociability	104	13.50	4.23	0.84
Couple Problem-Solving				
Exit	99	11.62	5.96	0.86
Voice	88	30.88	5.98	0.63
Loyalty	98	25.08	6.14	0.62
Neglect	102	15.33	5.44	0.69
Perceived Effectiveness				
Self	103	10.60	3.07	0.85
Partner	103	9.35	3.85	0.89

Measure/Variable	No. of Cases	$\bar{x}$	s.d.	alpha
Autonomy & Relatedness				
Relatedness	104	16.19	2.92	0.73
Hostile Control	104	7.22	2.86	0.73
Acceptance	103	16.34	2.57	0.70
Hostile Detachment	104	6.00	2.42	0.73
Control	103	7.31	3.01	0.68
Autonomy	103	15.84	2.98	0.69
Relationship Commitment	94	28.61	7.85	0.81
Satisfaction with Partner	103	64.21	8.24	0.87
Closeness to Partner	103	30.92	4.34	0.80
Consequence of Ending the Relationship				
Relationship Satisfaction	103	4.58	0.62	
Investments	103	4.19	0.88	
Support for Relationship	104	2.61	1.30	
Alternatives	103	1.68	0.89	
Marital Locus of Control				
Internal LOC				
Ability	97	10.63	3.09	0.45
Effort	103	9.04	2.66	0.41
Internality	99	29.27	6.65	0.69
External LOC				
Context	102	15.43	4.74	0.66
Luck	101	13.84	3.77	0.51
Externality	97	19.68	4.85	0.60

Measure/Variable	No. of Cases	$\bar{x}$	s.d.	alpha
Social Support				
Relationship Satisfaction	102	26.90	5.81	0.92
Contact with Others	104	16.16	3.89	0.88
Number of Close Friends	104	4.34	1.60	