SUPPORTIVE AND UNDERMINING RELATIONAL PATTERNS IN INDIVIDUALS VULNERABLE TO MAJOR DEPRESSION

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Abstract

Individuals with a history of major depression and in a committed romantic relationship completed personality questionnaires (Big-Five; John et al., 1991) and rated their mood (CES-D; Radloff, 1977) and perceptions of their partner's general support style (SAS-C; Trobst, 2000). They subsequently provided daily reports of their mood and perceptions of partner support and criticism over a 20-day period. Partners provided information about their own personality, general support style, and daily provisions of support and criticism over the same period. Regression analyses indicated that more Neurotic and less Extraverted target participants experienced greater depressive symptoms averaged over the 20-day period. Worse mood was also reported by those who perceived their partner as less supportive and more critical on a daily basis. "Open" partners were associated with more depressed daily mood in their vulnerable mates; this effect appeared to be mediated by greater criticalness by such partners. Neurotic and "Open" target participants were more likely to suffer recurrence of major depression over the next 18 months, while individuals who felt they received more "Accepting" support were at reduced risk. Participants with more Agreeable partners were similarly less likely to suffer a subsequent episode of depression, possibly because they saw these partners as providing more "Accepting" support. The results are discussed within the context of mechanisms through which the personal and interpersonal functioning of at-risk individuals either help protect against depression or increase their vulnerability to this disorder.

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Supportive and Undermining Relational Patterns in Individuals Vulnerable to Major Depression

Introduction

The current study was intended to expand on previous research demonstrating the impact of personality and interpersonal styles on the moods of individuals with a history of major depression. Specifically, five major personality variables (Neuroticism, Agreeableness, Openness [to Experience], Conscientiousness, and Extraversion) of vulnerable participants and their intimate partners were assessed to determine which traits might help either protect against or exacerbate negative mood or major depression over both a 20-day and 18-month period. At-risk graduate students' perceptions of their mate's self-reported provisions of support and criticism were similarly examined to investigate what specific interpersonal dynamics could lead to improved or impaired emotional functioning over the course of the study. Obtaining longitudinal data from both members of the relationship was expected to help clarify inconsistencies reported in earlier research concerning the effects of personality and social mechanisms on the mental health status of vulnerable individuals.

Beginning with a series of review papers in the 1970s on possible links between psychiatric disorders—including depression—and various factors such as marital status and social support (Caplan, 1974; Cassel, 1974, 1976; Cobb, 1976), interest in these possible associations has continued to garner great theoretical and research interest (Garfield, 1987). From these earlier publications, which often lacked clear operational definitions and relied heavily on inferential arguments to advance their main theses, research has focused increasingly on which specific social or interpersonal factors might

make individuals more prone or resistant to stressful life events and psychological distress, depression, and dysphoria (for reviews of such studies at various points in recent history, see, e.g., Coyne & Downey, 1991; Finch, Okun, Pool, & Ruehlman, 1999; House, Landis, & Umberson, 1988; Kessler, Price, & Wortman, 1985; Oatley & Bolton, 1985). Among the various psychiatric disorders investigated in this research, depression has received the most attention, likely due to its relatively high prevalence rate of approximately 17% (Andrade et al., 2003; Kessler et al., 1994). The impact on sufferers and those around them is substantial (e.g., Coyne, 1999), and the disorder tends to persist, with approximately 20% of sufferers developing a chronic depressive disorder of more than two-year's duration (Angst, 1988). Depression is extremely recurrent, with risk of relapse ranging from approximately 50% (Lewinsohn, Zeiss, & Duncan, 1989; Solomon et al., 2000) to as high as 70% (Angst, 1988) or 80% (Judd, 1997), with the average number of major depressive episodes estimated to be four (Judd, 1997). Finally, the increased risk of suicide among depressed individuals has been well documented (e.g., Oquendo, Lizardi, Greenwald, Weissman, & Mann, 2004).

Social Support

With respect to social factors that might promote psychological well-being, for instance by helping to prevent depression, social support initially received the most attention. Social support can be defined as one's perception (real or imagined) that others are available to value, assist, or care for oneself (e.g., Heller, 1979). This support can take the form of "expression of positive affect or emotional support; expression of agreement with a person's beliefs or feelings; encouraging the expression or "ventilation"

of feelings; provision of advice or information; and the provision of material aid" (Kessler, Price, & Wortman, 1985, p. 542). Relevant research has focused on two means by which social support might prevent depression. The first process is through main or direct effects, whereby real or perceived social support is negatively correlated with poor mental health (e.g., distress, depressed mood) and physical illness (see Cohen & Syme, 1985; Wills & Fegan, 2001). Based on data accumulated in a variety of populations, it has been argued that social support can exert its influences directly by reducing negative mood or distress (e.g., Feldman, Downey, & Schaffer-Neitz, 1999; Jamison & Virts, 1990; Manne & Zautra, 1989), increasing positive emotions, elevating one's self-esteem or well-being (Major, Zubek, Cooper, Cozzarelli, & Richards, 1997), and promoting a sense of predictability and control over one's environment (e.g., Thoits, 1985; see also Cohen & Wills, 1985; Rodin & Salovey, 1989).

Other researchers have demonstrated that the presence of social support inhibits the development of physical illness (e.g., Berkman & Syme, 1979), quality of support networks has been positively correlated with better physical health (e.g., Vandervoort, 1999), and chronically ill patients with spouses actively supportive in their treatment show better adjustment and faster recovery (Taylor et al., 1985). Conversely, lack of social support, as found in problematic marriages, has been associated with reduced immune system functioning (Kiecolt-Glaser, Fisher, Ogrocki, Stout, Speicher, & Glaser, 1987; for a review of earlier studies on direct links between social support and immunological functioning, see House et al., 1988; Jemmott & Locke, 1984).

More common than studies on direct effects of social support are those focusing on indirect effects of support on mental (and physical) health. In this area of investigation, the largest portion of research has focused on the "stress-buffering hypothesis," whereby stress is postulated to have weaker effects on depressive symptoms in individuals with more supportive social networks (e.g., Cohen & Wills, 1985). Numerous studies have accumulated evidence for the stress-buffering properties of social support. For instance, an early study by Brown and Harris (1978) reported that the presence of an intimate romantic relationship helped prevent urban women experiencing significant life stress from developing depression. Similar results were found in psychiatric samples (e.g., Miller & Ingham, 1976) and normal populations (e.g., Slater & Depue, 1981). Evidence for the stress-buffering hypothesis in romantic couples continued to accumulate over the next few decades, in a variety of contexts, such as dealing with medical illness (e.g., Coyne & Smith, 1996) or economic stressors (Conger, Rueter, & Elder, 1999). However, these studies have not been without their controversies, including questions over whether buffering effects derive from the actual provision of social support, or whether the perception that such support is available if needed helps reduce distress or depression during stressful circumstances (see Wills & Shinar, 2000). In short, a number of studies have provided evidence that individuals who believe they can count on others in times of need, regardless of whether such support is actually sought or offered, fare better physically and psychologically in the face of stress (for reviews of research on the stress-buffering hypothesis of social support, see Cohen, Gottlieb, & Underwood, 2000; Cranford, 2004; Finch et al., 1999).

Social Undermining and Expressed Emotion

At the same time, a smaller but growing body of researchers, influenced by Rook's (1984) work, have investigated the negative impact of interpersonal relations (see Cranford, 2004, for a review). These studies have concentrated on a variety of negative social factors, such as lack of social support (e.g., Brown & Harris, 1978) and negative outcomes of attempts to provide support (Ruehlman & Karoly, 1991). Detailed observations and extensive sequential analyses of the actual interactions of distressed and non-distressed married couples have provided compelling evidence for the harmful impact of specific types of poor social exchanges (Fitzpatrick 1988, Gottman 1979, Margolin & Wampold, 1981; Raush, Barry, Hertel, & Swain, 1974; Schaap 1982, Ting-Toomey 1982; for a review, see Gottman 1994).

In the field of depression research, the most commonly investigated aspect of negative social interactions has been criticalness or "expressed emotion" (e.g., Hooley & Teasdale, 1989; Vaughn & Leff, 1976), which is also one component of the broader construct of "social undermining," defined by Vinokur and van Ryn (1993) as:

> behaviors directed toward the target person that display (a) negative affect (anger or dislike), (b) negative evaluations of the person in terms of his or her attributes, actions, and efforts (criticism), and (c) behaviors that make difficult or hinder the attainment of instrumental goals (p. 350).

In contrast to the stress-buffering effects postulated to derive from social support, social undermining is theorized to exacerbate the effects of stress in individuals suffering from depression (Rook, 1998). More generally, the common theme among the preceding

research is that negative social relations can contribute to the development, maintenance, or relapse of emotional problems such as depression, especially within the context of romantic relationships (e.g., Coyne & DeLongis, 1986; Horwitz, McLaughlin, & White, 1998). Committed relationships in particular appear to magnify the deleterious effects of social undermining due to the increased interdependence and emotional intensity of such relationships, which typically play a major role in defining and impacting on the self-image and needs of the members of these dyads (Berscheid, 1983; Curtona, 1996; Horowitz et al., 1998; Vinokur & van Ryn, 1993).

Unresolved Issues Surrounding Social Support and Social Undermining

Despite the abundance of studies on the association between depression and positive or negative relationship dynamics, several controversial issues have remained unresolved. For instance, some studies have compared these phenomena together and found evidence for the stress-buffering effects of positive social relations but not for the stress-exacerbation effects of social undermining (Barrera, 1981; Okun, Melichar, & Hill, 1990). Conversely, other investigators have reported stress-exacerbation but not stress-buffering effects of social interactions (e.g., Ingersoll-Dayton, Morgan, & Antonucci, 1997; Kiecolt-Glaser, Dyer, & Shuttleworth, 1988). Some researchers have produced support for both effects, with the effect for undermining being significantly larger than that for support (e.g., Finch & Zautra, 1992; Horowitz et al., 1998; Manne, Taylor, Dougherty, & Kemeney, 1997; Schuster, Kessler, & Aseltine, 1990), while Finch et al.'s (1999) meta-analytic review indicated comparable main effects for social support and undermining on psychological distress, with effect sizes varying as a function of the

method of evaluating support and undermining (for further reviews of conflicting literature on the effects of positive and negative social exchanges, see Cranford, 2004; Okun & Keith, 1998).

One means of exploring the impact of supportive and undermining social relations together is a relatively new instrument entitled the *Support Actions Scale Circumplex* (*SAS-C*; Trobst, 2000). Based on the original interpersonal circle literature (Freedman, Leary, Ossario, & Coffey, 1951; Leary, 1957), the *SAS-C* identifies various ways by which a person offers support to his or her mate. In line with interpersonal circumplex models, the *SAS-C* is comprised of two orthogonal axes of "Dominance/Submission" and "Nurturance/Hostility." As detailed by Trobst (1999, 2000), these axes combine to produce an array of interpersonal behaviours by the partner: express concern, enthusiastically and actively provide support and information (Engaging); actively listen and patiently provide emotional support and affection (Nurturant); listen without judging, arguing, or advising (Deferential); avoid intruding, attempting to challenge or change partner's opinions or behaviours, giving advice, or stating opinions (Avoidant[1]); keep one's distance and avoid expressing concern or other signs of support (Distancing); blame and criticize partner, fail to encourage discussion or take problem seriously (Critical); take control and stress own expertise or qualifications to deal with problem, which one takes over while making decisions and actively trying to persuade partner to change behaviours (Arrogant); stress competence and resources while actively taking on

[1] Although this paper maintains the original label of "Avoidant" support, certain findings detailed in the Results section and elaborated on in the Discussion section suggest that "Accepting" support—used in the Abstract—would be a more accurate or appropriate descriptor for this octant.

problem and giving advice (Directive). Partners' actions are mapped onto each possible coordinate of *SAS-C*'s social exchange space, meaning that the additive or interactive effects of their positive and negative behaviours can be assessed and examined in relation to other variables of interest such as the personality and emotional state of each member of a romantic dyad.

Personality Correlates of Adaptive and Maladaptive Psychological, Emotional and Interpersonal Functioning

Associations among social dynamics and the characteristics of those involved in healthy and harmful romantic relationships have proven to be an essential avenue of research in the investigation of psychological functioning (e.g., Bradbury & Fincham, 1988; Caughlin, Huston, & Houts, 2000; Karney & Bradbury, 1995; Kelly & Conley, 1987). Specifically, are certain personality traits in people with a history of depression associated with a greater possibility of entering into either supportive or emotionally damaging intimate relationships? A related question would be what type of personal characteristics might lead someone to be either more supportive or undermining of his or her romantic partner, especially one at risk of relapsing into depression. Similarly, how do the personality traits in each member of a committed relationship contribute to either augmented or compromised mental health in the at-risk partner?

Five-Factor Model of personality. Research on links between personality and various elements of personal and interpersonal functioning has most commonly used the Five-Factor Model (FFM) of personality (Rossier, de Stadelhofen, & Berthoud, 2004). Developed from earlier factor analyses (see Cattell, 1950) of over 18,000 adjectives

describing personality features (Allport & Odbert, 1936), researchers extracted five major dimensions of personality (Fiske, 1949; Norman, 1963). Subsequent investigators (e.g., Costa & McCrae, 1992a; Goldberg, 1993; John, 1990) have proposed other five-factor models of personality very similar to those detailed in Norman's (1963) widely cited study on the topic. These five factors are typically referred to as Neuroticism (sometimes reverse coded and called emotional stability), Extraversion, Agreeableness, Conscientiousness, and Openness to Experience.

Effects of Neuroticism on psychological, emotional and interpersonal functioning. From among these traits, Neuroticism is both the most pervasive (Costa & McCrae, 1988) and has been most consistently linked with poor emotional functioning, including increased risk of depressed mood and major depression. This effect has been found in a variety of contexts, including psychiatric populations (e.g., Bagby, Joffe, Parker, Levitt, Kalemba, & Harkness, 1995; Bienvenu, Samuels, Costa, Reti, Eaton, & Nestadt, 2004; Harkness, Bagby, Joffe, & Levitt, 2002), non-clinical samples (e.g., Hayes & Joseph, 2002), university populations (e.g., Finch et al., 1999; Saklofske, Kelly, & Janzen, 1995) general representative samples of the US (e.g., Schmitz, Kugler, & Rollnik, 2003), and epidemiological samples of female twins (Kendler, Neale, Kessler, Heath, & Eaves, 1993; Roberts & Kendler, 1999).

It has been postulated that individuals high on Neuroticism experience more psychological distress or are more emotionally reactive to negative events in various contexts in their lives (Costa & McCrae, 1980; Watson & Clark, 1984). One theory proffered to explain this increased reactivity is a biological model suggesting that

Neuroticism is linked to an overly intense "behavioural inhibition system," which increases nonspecific arousal and is designed to help an individual detect, assess and respond to threats in the environment (Fowles, 1993; see also Gray, 1982, 1987). Other researchers have adopted similar positions with respect to the connection between Neuroticism and negative mood, pointing to evidence indicating that such congruence between trait and state feelings facilitates the evaluation of stimuli and events in one's environment (Tamir & Robinson, 2004; for more on this congruence hypothesis and cognitive processes, see Martin, Ward, Achee, & Wyer, 1993; Tamir, Robinson, Clore, Martin, & Whitaker, 2004). Longitudinal studies lend support to the relationship between Neuroticism and threat response, as well as a negative association between this personality trait and positive affect (see Murray, Allen, & Trinder, 2002).

Notwithstanding the proposed contributions of negative mood in people high on Neuroticism (Tamir & Robinson, 2004), several recent reviews illustrate that this personality style can contribute or lead to depression through negative cognitions and appraisals of self and others, as well as maladaptive social behaviours (Clark, Watson, & Mineka, 1994; Finch et al., 1999). Similarly, DeNeve and Cooper's (1998) meta-analysis of relevant research found that Neuroticism predicted lower subjective well-being, through the experience of more negative affect, less happiness, and reduced life satisfaction (see also Hayes & Joseph, 2002). Neuroticism has also been associated with poor outcome and chronicity in current or remitted depressed patients (Duggan, Lee, & Murray, 1990), regardless of therapy modality (Taylor & Mclean, 1993), as well as to a poor prognosis for the course of illness in general (Clark et al., 1994).

Despite the abundance of data indicating a strong link between Neuroticism and depression (for a brief review, see Enns & Cox, 1997), the meaning of this relationship has been questioned. For instance, Cox and colleagues reported that Neuroticism did not predict major depression in a large, nationally representative sample, when current emotional distress and other factors were controlled, even though they did find a significant effect for self-criticism under the same stringent conditions (Cox, McWilliams, Enns, & Clara, 2004). It has similarly been argued that features associated with high scores on Neuroticism reflect complications of state depression as opposed to underlying personality traits (see Barnett & Gotlib, 1988; Coyne & Gotlib, 1983; Meyer & Shack, 1989; Watson & Clark, 1984). Such claims are bolstered by the finding that Neuroticism scores in dysthymia patients decreased significantly over time as they remitted from their episode of major depression (McCullough et al., 1988; for reviews of similar findings, see Barnett & Gotlib, 1988; Enns & Cox, 1997; Segal & Ingram, 1994).

However, other research on patients with major depression demonstrated that, despite decreases in Neuroticism scores with remission of depression, these scores were still significantly higher than those recorded in a normative sample (Bagby et al., 1995). Another study found Neuroticism scores to be relatively stable over time, with changes not significantly accounted for by either self-reported or clinician-rated depressive severity (Santor, Bagby, & Joffe, 1997). Moreover, a specific facet of Neuroticism, "Angry Hostility," was found to be significantly higher in patients with a history of both chronic minor depression and major depression, compared with those with only major depression, even though both groups were in remission from their major depressive

episode (Harkness et al., 2002; for similar results in patients with both depression and dysthymia, see Klein, Taylor, Harding, & Dickstein, 1988). Harkness et al.'s (2002) study suggests that certain facets of Neuroticism (or possibly Neuroticism in general) represent trait vulnerabilities to the development, maintenance, and recurrence of depression.

Finch et al. (1999) employed structural equation analysis—which helps in the inference of direction or causal relationships—to examine the relationships among personality, depression, and several other personal and interpersonal variables. These researchers (Finch et al., 1999) reported that Neuroticism contributed to depression in a direct manner, as well as indirectly through negative social exchanges, lowered perceived support satisfaction, and ineffective, avoidant coping (Aldwin & Revenson, 1987; Amirkhan, 1990; McCrae & Costa, 1986). These findings are consistent with evidence showing that individuals high on Neuroticism reported more negative social interactions, appraised their daily events as more stressful, had less confidence in their ability to deal with daily stressors, employed less effective coping strategies, and reacted with greater distress to their appraisals and coping methods (Gunthert, Cohen, & Armeli, 1999). The preceding studies not only support the notion that Neuroticism is more than simply a marker of state depression, they also highlight that personality styles can exert their effects on mood both directly and via the manner in which one interacts with and interprets his or her environment (for more on the effects of negative social interactions on depression, see e.g., Finch & Zautra, 1992; Vinokur & van Ryn, 1993).

Effects of Extraversion on psychological, emotional and interpersonal functioning. Much of the aforementioned research involving Neuroticism has also investigated Extraversion. In contrast to the deleterious effects of this former trait, Extraversion has been found to relate to positive affect (e.g., Hayes & Joseph, 2002; Watson & Clark, 1997) and to correlate negatively with psychological distress and depression (Bienvenu et al., 2004; for reviews, see Clark et al., 1994; Enns & Cox, 1997; Finch et al., 1999). Earlier research similarly reported significantly lower Extraversion scores in individuals suffering from reactive depression versus those afflicted with endogenous depression (Benjaminsen, 1981), suggesting low Extraversion might make people more susceptible to stressors in their environments (Farmer et al., 2002). The combination of low Extraversion and high Neuroticism appears to be particularly characteristic of depressed patients (Clark et al., 1994; Petersen, Bottonari, Alpert, Fava, & Nierenberg, 2001).

However, the effects of Extraversion on depression are typically much weaker than what has been found for Neuroticism (Cox et al., 2004; see also Enns & Cox, 1997; Weissman & Klerman, 1977). Moreover, several studies have failed to find an association between Extraversion and major depression (Kendler et al., 1993), risk of onset of (Hirschfeld et al., 1989; Kendler et al., 1993), or recovery from depression (Scott, Eccleston, & Boys, 1992). Similarly, unlike the aforementioned "state-trait" controversy regarding Neuroticism, Extraversion scores appear to consistently increase to normal levels upon remission from depression. Such results suggest that features of Extraversion may be affected by depression, as opposed to influencing the development or course of this disorder (Bagby et al., 1995; Harkness et al., 2002; Santor et al., 1997).

Conversely, Finch et al.'s (1999) structural equation analyses indicated that Extraversion reduced depression both directly via improved positive emotional states, and indirectly through more positive social exchanges and support-seeking coping (see also Amirkhan, Risinger, & Swickert, 1995). These latter results are consistent with subsequent research showing that Extraversion may help protect against depression through enhanced social functioning (Ranjith, Farmer, McGuffin, & Cleare, 2005). Finally, some research has found a relationship between Extraversion and recovery from depression (Parker et al., 1992; Taylor & McLean, 1993), with Bagby and colleagues arguing that Extraversion may be the best predictor of treatment outcome in depressed patients (Bagby et al., 1995).

In short, despite the aforementioned questions regarding the relationship between Extraversion and depression, some features of this personality style appear to be related to healthier mood. Extraversion may exert its beneficial effects directly through more positive emotions (e.g., Hayes & Joseph, 2002; Watson & Clark, 1997), or indirectly via their more adaptive perceptions and social skills: in times of need, extraverts are likely assertive enough to elicit support from people who are more willing to assist these warm, gregarious individuals (e.g., DeNeve & Cooper, 1998; Finch et al., 1999). Actual or perceived support can then help protect extraverts from stress and consequent depression (e.g., Cohen & Wills, 1985).

Effects of Conscientiousness on psychological, emotional and interpersonal functioning. Although the remaining three Big Five personality variables have received far less attention in the study of mood disorders, some interesting findings have been

reported. For instance, Finch et al. (1999) noted the direct effects of increased Conscientiousness on reducing depression, as well as potential indirect effects via problem-focused coping (e.g., Lazarus & Folkman, 1984; McCrae & Costa, 1986). This personality style has also been shown to predict increased satisfaction with life (Hayes & Joseph, 2002), which could reflect Conscientious individuals' generally superior functioning in society and greater ability to achieve their goals (McCrae & Costa, 1990), with goal attainment hypothesized to lead to greater subjective well-being (e.g., DeNeve & Cooper, 1998; McGregor & Little, 1998).

Effects of Agreeableness on psychological, emotional and interpersonal functioning. Agreeableness has been postulated to mitigate the effects of depression through several internal and external processes related to social functioning (see Finch et al., 1999). For instance, Agreeable individuals devote more effort to modulating their emotions during social exchanges (Tobin, Graziano, Vanman, & Tassinary, 2000). In these exchanges, people high on Agreeableness infer less confrontation in others' social behaviours, while their own actions are more likely to promote intimacy (Graziano, Jensen-Campbell, & Hair, 1996). Agreeableness is further associated with perceived social support satisfaction (Finch et al., 1999) and fewer negative social interactions from others (Graziano, Hair, & Finch, 1997).

Effects of Openness to Experience on psychological, emotional and interpersonal functioning. Although no studies have indicated a connection between Openness to Experience and depression, this personality trait has been associated with various positive

relationship factors. The next section reviews research on such associations, along with data linking the other Big Five personality traits with functioning in intimate relationships.

Impact of Neuroticism on romantic relationships. With respect to personality effects on romantic relationships, the negative impact of Neuroticism has received the most attention (Caughlin et al., 2000), due in part to its association with general maladaptive interpersonal functioning. For instance, several features associated with Neuroticism—hostility, anger, irritability, resentment—have been shown to predict poor social adjustment (Dorz et al., 2002). Similarly, the link between Neuroticism and poor reaction to stressors is particularly evident in interpersonal contexts (Bolger & Schilling, 1991). Regarding romantic dyads, this personality trait has been implicated in lowered marital satisfaction or adjustment (e.g., Bouchard, Lussier, & Sabourin, 1999; Karney & Bradbury, 1995, 1997; Kelly & Conley, 1987; Kurdek, 1993; Russell & Wells, 1994), largely through the impact of negative communication patterns (Caughlin et al., 2000; for more on links between communication styles and marital adjustment, see Arellano & Markman, 1995). Neuroticism has also been shown to predict decreased relationship compatibility and stability (e.g., Doherty & Jacobson, 1982; Kelly & Conley, 1987; Zaleski & Galkowska, 1978), as well as usage of manipulation during conflicts in married couples (Buss, Gomes, Higgins, & Lauterbach, 1987). More recently, Donnellan, Conger, and Bryant (2004) reported that Neuroticism in both husbands and wives was associated with objective ratings of negative interactions and with lower reports of marital quality and sexual satisfaction. Similar effects have been found for one partner's self-reported Neuroticism on the other's ratings of marital adjustment (Bouchard et al.,

1999). Using a longitudinal methodology from adolescence to age 37, Möller (2004) demonstrated that Neuroticism predicted such negative relationship effects, as opposed to dissatisfaction with relationships leading to Neurotic behaviours.

Impact of Agreeableness on romantic relationships. In contrast to the negative effects of Neuroticism, the other four personality factors have typically been correlated with positive social outcomes, with Agreeableness possibly being as important as Neuroticism in determining the quality of relationships (Donnellan et al., 2004). For instance, this trait has been associated with relationship satisfaction in dating (Watson, Hubbard, & Wiese, 2000). In married couples, Agreeableness has been related to marital adjustment (Bouchard et al., 1999), as well as positive evaluations of the relationship and decreased negative interactions (Donnellan et al., 2004). Agreeableness in one spouse has been positively correlated with his or her marital satisfaction (Botwin, Buss, & Shackelford, 1997), as well as marital quality and sexual satisfaction in the other partner (Donnellan et al., 2004). Moreover, Agreeableness assessed in both the husband and wife predicted decreased levels of observable negative interactions in these couples four years later (Donnellan et al., 2004). More generally, Agreeableness has been related to lower frequency of negative interactions (Finch et al., 1999), as people high on Agreeableness appear to be less likely to be the targets of negative social exchanges (Graziano et al., 1997). The effects of Agreeableness may stem in part from the fact that, despite experiencing affect more strongly, individuals higher on this trait exert greater effort to regulate their emotions during social interactions (Tobin et al., 2000). Finally,

Agreeableness is associated with being sympathetic and cooperative, and may promote altruistic behaviours (Graziano & Eisenberg, 1997).

Impact of Openness to Experience on romantic relationships. Openness (to Experience) has also been linked to marital adjustment (Nemechek & Olson, 1996). Donnellan et al. (2004) reported that Openness in both husbands and wives was negatively correlated with observed negative interactions by each partner, while husbands' self-reported Openness predicted their marital adjustment (Bouchard et al., 1999). Moreover, husbands whose wives were high on Openness described themselves as more sexually satisfied (Donnellan et al., 2004). Such results are consistent with the work of Botwin et al. (1997), who found that both men and women were generally more satisfied with their relationship and perceived ample expression of love and affection in the marriage when their spouse scored high on Openness. The effects for Openness must be interpreted with caution, as this trait has been described as the most difficult to conceptualize of the five personality factors (McCrae & Costa, 1997; cf. Tobin et al., 2000). Nevertheless, Donnellan et al. (2004) postulated that the generally higher intelligence and mental flexibility associated with Openness (McCrae & Costa, 1997) might lead to superior means of dealing with conflicts in a relationship, which in turn reduce the level of distress for each member. These authors further suggested that the increased sexual satisfaction in men with more open wives (Donnellan et al., 2004) might reflect these women's greater willingness or desire to explore sexuality, in line with a more general Openness to new experiences (McCrae & Costa, 1997). Bouchard et al. (1999) reasoned that open individuals are more apt to listen to, understand, and respect

differences in opinions, as well as what their mates have to say in general. Such willingness to consider important differences in a partner would be expected to reduce potential tension and increase agreement in the relationship.

Impact of Conscientiousness on romantic relationships. Conscientiousness has been related to increased satisfaction in dating relationships (Watson et al., 2000), while greater self-reported Conscientiousness in husbands has been associated with marital adjustment (Bouchard et al., 1999) and general marital satisfaction (Botwin et al., 1997), as well as marital quality and sexual satisfaction in their wives (Donnellan et al., 2004). Because this personality trait is characterized by increased responsibility, reliability, and diligence (Goldberg, 1990), Conscientious individuals likely give their partner fewer practical issues to become distressed over; similarly, they may reduce interpersonal distress through positive behaviours such as contributing more to household chores or avoiding destructive behaviours such as drug or alcohol abuse (Donnellan et al., 2004).

Impact of Extraversion on romantic relationships. Although Extraversion has been linked to many desirable factors (McCrae & Costa, 1997), little evidence has been found to link this variable with positive relationship outcomes (Botwin et al., 1997; Bouchard et al., 1999; Eysenck & Wakefield, 1981; Russell & Wells, 1994). Moreover, effects of Extraversion on relationship variables have been contradictory. Some researchers have reported positive correlations between Extraversion and relationship satisfaction in dating (Watson et al., 2000) and married couples (Nemechek & Olson, 1996; Watson et al., 2000). Conversely, Extraversion has been found to predict instability (Cramer, 1993) and dissatisfaction (Lester, Haig, & Monello, 1989) in

marriages. That Karney and Bradbury's (1995) meta-analytic review revealed Extraversion to be mildly related to both satisfaction and marital instability highlights the need to investigate this phenomenon further. More generally, despite the abundance of research indicating that personality factors contribute to the success or dysfunction of intimate relationships, far more research on the matter is needed.

Summary of Research on Associations among Personality, Interpersonal Variables, and Psychological Functioning.

In short, several decades of research has produced contradictory evidence for the impact of personality and interpersonal variables on the course of major depression. Nevertheless, several relatively consistent findings have emerged over the years. First, Neuroticism appears to be associated with poorer emotional and psychological functioning, both directly and indirectly through compromised social relations. In contrast, the other four of the Big Five personality variables seem to contribute in varying degrees to more adaptive personal and interpersonal functioning. Such influences of personality have mostly been replicated in significant others; namely, individuals high on Neuroticism and low on the other four personality traits tend to exert harmful effects on their romantic partners. The exact nature of these effects remains to be elucidated, as some studies indicate that negative behaviours such as criticism leave partners particularly prone to depression, while other lines of research suggest that social support can help protect individuals from the onset or recurrence of this mood disorder. Finally, questions still remain over the specific types of mechanisms involved in such potentially harmful or protective factors.

Overview of the Current Study

This study sought to address the preceding issues while incorporating and improving on several methodological strengths of recent social support and depression research. First, a rigorous screening and diagnostic process was used to ensure that the large graduate student sample that was targeted had a documented history of major depression, as opposed to milder forms of distress or stress which comprise much of the depression literature (Coyne, 1994). Second, long-term partners of target participants were recruited in order to provide a more complete picture of the personal and social factors under investigation (e.g., McNulty & Karney, 2001; Robins, Caspi, & Moffitt, 2002; Teichman, Bar-El, Shor, & Elizur, 2001; Watson et al., 2000; Whisman, Uebelacker, & Weinstock, 2004). Such secondary sources of information were considered particularly important in light of negative perceptual biases associated with depression (see Bos et al., 2005). Of primary interest was whether certain personality traits in the at-risk participants or their partners (assessed with the Big-Five Inventory; John, Donahue, & Kentle, 1991) increased or protected against recurrence of major depression. The mediating role of perceived social support was also examined using the SAS-C (Trobst, 1998, 1999) and a two-item scale (Criticism and Support Perception Scale; CSPS) constructed for this study.

There were two main rationales for investigating participants with a history of depression in committed intimate relationships. First, the extremely recurrent nature of this disorder (e.g., Judd, 1997) made it likely that a sizable proportion of the sample would experience a major depressive episode over the course of the study (Coyne, Pepper,

& Flynn, 1999). Second, given the impact of romantic partners on the psychological health of vulnerable individuals (e.g., see Coyne, Burchill, & Stiles, 1991), the current work sought to investigate whether the personality and interpersonal styles of partners might contribute to further vulnerability and depressive recurrence in at-risk individuals. Relationship satisfaction (measured with a brief instrument adapted from Locke's (1951) Marital Adjustment Test [Franzoi, Davis, & Young, 1985]) was also tested as a possible mechanism through which these factors might exert their influence (e.g., Finch et al., 1999).

The third major strength of the present study was its inclusion of two different types of longitudinal components. The first was a diary methodology employed to document levels of perceived support and criticism received from one's partner in an ecologically valid manner over a 20-day period (for similar approaches, see Cote & Moskowitz, 1998; Neff & Karney, 2005). This information was collected via an online-version of the aforementioned CSPS. The second longitudinal element was an 18-month[2] follow up of the couples to determine which of the variables of interest might predict recurrence of major depression in individuals with a history of this disorder. Although this approach does not guarantee that the variables in question directly impact on risk of subsequent episodes of depression, it is considered a marked improvement over cross-sectional designs which severely limit the ability to make sound causal inferences (e.g., Dehle, Larsen, & Landers, 2001; Finch, 1998; Vinokur & van Ryn, 1993).

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[2] The larger project is, in fact, ongoing, but the recurrence data for the current study were last collected approximately 18 months after the initial interviews.

Attempts to avoid conflating effects of depressed mood and hypothesized risk factors constitute the study's final major methodological strength. Namely, when completing the measures of social support, criticism, and relationship satisfaction, participants also rated their mood on the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). This information was used to statistically partial out potential influences of negative mood on perceptions of partner behaviours and the relationship (e.g., Whisman et al., 2004).

Guiding Hypotheses

Based on previous research, it was expected that participants high on Neuroticism would report less satisfaction with their relationship and more daily depressed mood over a three-week period. The opposite effects were predicted for Agreeable, Conscientious, and Extraverted individuals (e.g., Finch et al., 1999); although the absence of data linking Openness and depression precluded hypothesizing on this relationship, Openness was expected to predict greater relationship satisfaction (see Bouchard et al., 1999; Donnellan et al., 2004). Negative partner interactions, as measured by the CSPS and SAS-C, were predicted to lead to reduced relationship satisfaction (e.g., Finch et al., 1999) and greater depressed mood (e.g., Cranford, 2004), and to increase the risk of recurrence of a major depressive episode over the course of the study (e.g., Coyne et al., 1991).

Similar results were expected for partner variables. Specifically, Neuroticism in partners was predicted to be associated with decreased relationship satisfaction, depressed mood, and increased risk of recurrence of major depression in their vulnerable mate; opposite effects were expected for the other Big-Five personality variables (e.g.,

Donnellan et al., 2004). Moreover, as with partner perceptions, partners' self-reported critical or non-supportive CSPS and SAS-C behaviours were expected to predict depressive symptoms and recurrence of the disorder in their mate (e.g., Hooley & Teasdale, 1989). Such effects were hypothesized to mediate the relationship between partner personality traits and negative outcomes in their vulnerable mates (e.g., Donnellan et al., 2004).

In light of the many contradictory hypotheses and findings previously reported among the variables under investigation, secondary exploratory analyses were planned to examine ways in which certain factors might interact with each other and contribute to healthy or harmful outcomes. For example, the hypothesized link between partner's social undermining (as measured daily via the CSPS or generally through the SAS-C) and risk of recurrence of depression may be mediated by the target individual's decreased satisfaction in the relationship (Beach, Sandeen, & O'Leary, 1990). Possible mechanisms through which the personality of the target participants or their partners might contribute to relationship satisfaction, depressed mood, or recurrence of depression were to be examined. For instance, what specific support behaviours might Agreeable partners engage in to increase their vulnerable mate's pleasure or contentment in the relationship (e.g., Graziano et al., 1996, 1997); and does this enhanced satisfaction help protect against subsequent episodes of depression? In short, following initial analyses of the relationships among the variables of interest, potential mediational effects were to be investigated to help elucidate significant findings.

Method

Participants and Procedure

Initial Contact and Depression Screen. Participants came from a sample of graduate students who had been recruited for a larger research project focusing on depression and interpersonal relationships. These students attended two Ontario universities, York University and the University of Toronto, at which packages were distributed in areas frequented by graduate students and hand delivered to their mailboxes when available. The packages contained a flyer offering a chance to win $1000 for returning the enclosed consent form, brief demographic questionnaire, and Inventory to Diagnose Depression, Lifetime Version (IDD-L; Zimmerman & Coryell, 1987; Zimmerman, Coryell, Corenthal, & Wilson, 1986) in addressed, postage-paid envelopes (see Appendix A for Screening Packet materials). A total of 835 students returned the packages, with 307 coming from York University and 528 from the University of Toronto. From this group, 258 met the inclusionary criteria of having had a past depressive episode as assessed by the IDD-L, and currently being in a committed romantic relationship. This step comprised the first stage of the screening procedure.

Phone Screen. Students whose IDD-L scores suggested a history of major depressive episode were contacted by phone to inquire about their interest in participating in the project. After giving informed consent, those who expressed interest and were currently in a committed relationship of at least six months were further screened for a history of major depression based on DSM-IV criteria, as outlined in the phone contact protocol (see Appendix B). They were also screened for the following exclusionary

criteria: bereavement as opposed to depression; suicidality; psychotic features; current substance or alcohol abuse; bipolar disorder; current eating disorder; schizoid, schizotypal, borderline, or antisocial personality disorder.[3] One hundred and sixty-six students remained eligible for the next stage of the study.

Diagnostic Interview. Students agreed to meet for an in-person diagnostic interview (Time 1) at either York University or University of Toronto, for which they were paid $35. Upon providing written, informed consent (see Appendix C), participants were once again assessed for a history of major depression using the Structured Clinical Interview for DSM-IV, Axis I Disorders (SCID I; First, Spitzer, Gibbon, Williams, & Benjamin, 1995). Other Axis I disorders were also assessed, as were potential personality disorders (Structured Clinical Interview for DSM-IV, Axis II Personality Disorders; SCID II; First, Spitzer, Gibbon, & Williams, 1994), to screen out individuals meeting the aforementioned exclusionary criteria, disqualifying another twenty students at this stage. An additional 22 students were excluded due to being clinically depressed at the time of the interview, which could potentially influence their responses on the other assessment tools.

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[3] Because the project intended to follow participants over several years, anti-social personality disorders were excluded due to their unstable, unpredictable, and unreliable nature. Borderline personality disorders were excluded over ethical concerns related to the suicidal gestures common in these individuals. Schizoid and schizotypal personality disorders were excluded due to extreme ideational patterns associated with these individuals, which could have skewed their responses on the various measures used in the study. However, very few participants were excluded based on any of these personality disorders. Presence of an eating disorder or alcohol or substance abuse precluded involvement in the study due to concerns that these disorders might significantly influence support, mood, or relationship satisfaction, thus confounding any interpretations of relationships among predictor and outcome variables. Bipolar Disorder was considered an exclusionary criterion for similar reasons, along with the possibility that correlates of the depressive episodes during Bipolar Disorder may vary from those present in Unipolar Depression (Mitchell et al., 2001).

Questionnaire Package Administration and Diary Measures. The remaining 144 participants completed a battery of questionnaires for various components of the project, including the measures described below. After receiving payment for their participation, students were given the opportunity to continue on to the next phase of the study involving an internet-based diary methodology to record their daily mood and level of perceived support and criticism. Participants and their partners were to log on daily for a period of 20 days, for which they would be paid $100. One hundred and two couples agreed to participate in this diary stage and were subsequently mailed instructions on how to access a web-site each night to rate depressive symptoms and perceived partner support/criticism on-line (see Appendix D). Target participants from these couples were not significantly different from the larger sample in terms of sex, age, ethnicity, severity of depressive symptomatology, or other Axis 1 diagnoses at the time of the interview. Those who completed the questionnaires for the current study were thus considered comparable to the larger sample of eligible participants in terms of demographics and psychopathology. Their partners received a similar package which included partner versions of questionnaires the target participants had previously filled out (see below); they used the internet to report on their own level of support and criticism over the same period.[4] Ninety-Nine partners provided all of this information, with no differences found on any of the variables of interest between these partners and the three who returned only part of the data.

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[4] Twenty-one target participants and 18 partners did not have daily access to the internet and were thus provided with a pen and paper version of the daily diary. Analyses indicated that these 39 participants did not differ significantly on any demographic or target variables from those who completed the online diary.

The Big Five Inventory (BFI; John et al., 1991) was also mailed to the 102 eligible couples in order to assess their personality styles. From this group, 80 target participants (78%) and 69 partners (68%) mailed back the Big-Five data in stamped, addressed, return envelopes provided to them. These individuals did not differ from those in their respective groups who did not return the Big-Five data, with respect to the variables of interest.

Among the 102 target participants who completed all of the original measures (prior to the BFI), 72 (71%) were women and 30 (29%) were men. The majority of the sample was Caucasian ($n = 85$), followed by Asian ($n = 3$), Hispanic ($n = 2$), and Black ($n = 2$), with the remaining 10 participants not indicating any specific cultural or ethnic identification. The vast majority of the participants identified themselves as heterosexual ($n = 97$), with the remainder indicating that they were in a homosexual relationship. The mean age of the sample was 29.41 years old (range 23-53 years; $SD = 5.41$ years), and the mean duration of the relationships was 52.48 months (range 6-204 months; $SD = 40.47$ months). Forty of the couples were married and the rest reported currently being in a committed relationship of at least six months. Finally, the majority of the couples had no children ($n = 86$), while eight had one child, five had two children, and the remaining three couples had three, four, and five children, respectively.

Follow-up Interview. Approximately 18 months after the diary portion of the study (range 11-19 months), participants were contacted by phone to assess for the recurrence of a major depressive episode since the previous stage of the research. This interview was again conducted using the SCID-I to ensure that any reported depression

met DSM-IV criteria for a major depressive episode that was not due to bereavement, substance use, or a general medical condition. Of the 102 target participants who began the study, 78 (77%) were reached and agreed to provide follow-up data. Seventy-four of these participants were still in the same relationship as at the start of the study. Analyses revealed no differences on any of the predictor or outcome variables of interest between a) the 78 participants who provided follow-up data and the 24 who could not be contacted or refused to participate further, and b) the 74 participants who remained in the original relationship at follow-up and the four who had broken up. From among the 78 remaining participants, 31 (40%) had suffered a recurrence of at least one major depressive episode between the diary and follow-up stage of the study .

Measures

Structured Clinical Interview for DSM-IV, Axis I Disorders (SCID I; First et al., 1995) and Axis II Personality Disorders (SCID II; First et al., 1994). The SCID I and SCID II are structured clinical interviews to diagnose DSM-IV Axis I and Axis II personality disorders. The SCID interviews were conducted by graduate students involved in the project and trained in proper administration of this assessment procedure. All of the interviews were audio taped and one-third was rated by an expert coder. Inter-rater reliability was very high at 98% and 93% for Axis I and Axis II disorders, respectively. There was 95% agreement for the diagnosis of past depression.

Inventory to Diagnose Depression, Lifetime Version (IDD-L; Zimmerman & Coryell, 1987; Zimmerman et al., 1986). The IDD-L assesses for the incidence of a history of major depression by asking respondents about 22 symptoms they may have

experienced during the worst period of depression in their life. Each symptom is rated on a scale with five choices in ascending order of severity: 0 (no symptom), 1 ("subclinical severity"), and 2 through 4 (the symptom is present and causing clinically significant impairment). This questionnaire inquires whether each symptom was present for at least two weeks, as required for a diagnosis of major depression. The respondent must also indicate what, if anything, precipitated the depression; this allows for ruling out depression due to bereavement (see Appendix A).

Zimmerman and Coryell (1987) reported high internal consistency within the IDD-L (Cronbach's alpha = .92), as well as strong split-half reliability (Spearman-Brown coefficient = .90). Sato and colleagues (Sato, Uehara, Sakado, Sato, Nishioka, & Kasahara, 1996) also obtained good test-retest reliability results. Finally, the IDD-L has demonstrated good sensitivity (74%) and specificity (93%) when compared with the Diagnostic Interview Schedule (Zimmerman & Coryell, 1987), and even better agreement with the SCID (Kappa = .75, sensitivity = .78, specificity = .97; Sato et al., 1996).

The Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). The CES-D asks respondents to indicate how often ("Rarely or none of the time," "Some or a little of the time," "Occasionally or a moderate amount of the time," or "Most or all of the time") they have felt 20 symptoms of depression over the past week (see Appendix E); for the daily diary, participants were asked about that day (see Appendix H). These symptoms include emotional disturbances (e.g., "I felt depressed"), negative cognitions (e.g., "I thought my life had been a failure"), cognitive impairment (e.g., "I had trouble keeping my mind on what I was doing"), physiological or physical dysfunction (e.g., "I

could not 'get going'"), and decline in social functioning (e.g., "I felt lonely"). Four of the items are positive descriptors (e.g., "I was happy") and reverse coded.

Radloff (1977) reported good internal consistency in the general population (alpha of .85) and in a clinical sample (alpha of .90). Similar results were obtained by Concoran and Fisher (1987) in the general population (alpha of .84); these researchers also reported good split-half reliability coefficients ranging from .77 to .92. The CES-D has also demonstrated good convergent validity (see Gotlib & Cane, 1989; Priel & Shahar, 2000), and better sensitivity than the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) to depressive severity in both clinical and college samples (Santor, Zuroff, Ramsay, Cervantes, & Palacios, 1995). In the current study, internal consistency was acceptable, with a Cronbach's alpha of .87. Participants' mean CES-D score was 32.76 (*SD* = 10.93; range = 20-66) out of a possible maximum of 80, suggesting they were not reporting particularly depressed mood at the time of the interview.

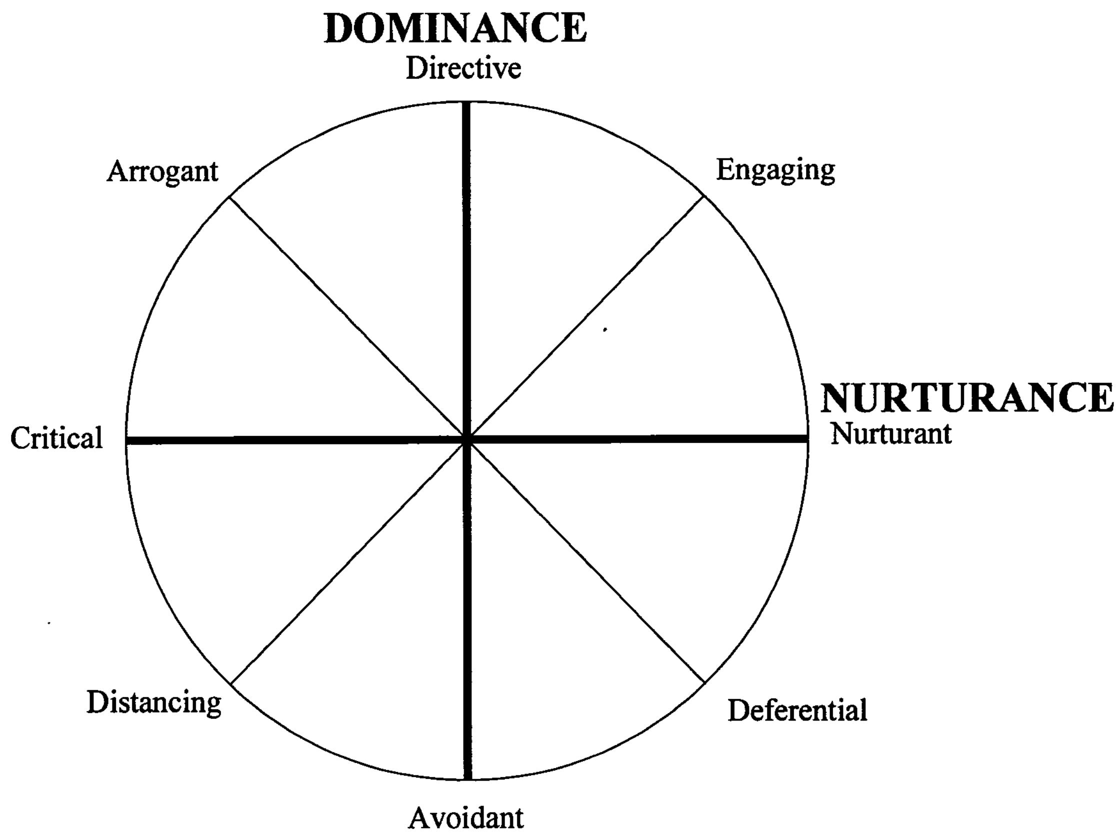
Support Actions Scale Circumplex (SAS-C; Trobst, 2000). The SAS-C was developed based on the original interpersonal circle literature (Freedman, Leary, Ossario, & Coffey, 1951; Leary, 1957; see also, Sullivan, 1953) and describes different ways one might provide or withhold support when a partner is in need. Over the course of three studies, Trobst (2000) employed a series of geometric procedures and statistical analyses to arrive at octant scales comprised of eight items each. These items were selected from a larger pool generated by three interpersonal circumplex model experts instructed "to assess social support behaviors likely to be undertaken by prototypic individuals of dispositional circumplex types" (Trobst, 2000, p. 975).

The resultant octants lie along the interpersonal axes of "Dominance" and "Nurturance." These axes are orthogonal to each other and refer, respectively, to the degree to which one is either dominant or submissive, and warm/loving or cold/hateful in their provision of support (Trobst, 1999, 2000 see Figure 1). To complete the SAS-C, respondents rate, on a scale of 1 ("never") to 7 ("always"), how often their partner responds to their needs for help or support in ways that reflect varying levels of nurturance and dominance. Working counter-clockwise from the "Dominance" axis, prototypical support behaviours for each scale include: 1) Directive – "give advice," 2) Arrogant – "make decisions for me," 3) Critical – "suggest that I not complain too much," 4) Distancing – "try not to show too much concern," 5) Avoidant – "avoid giving any advice," 6) Deferential – "not give their opinions unless asked," 7) Nurturant – "provide me with emotional support," and 8) Engaging – "enthusiastically help out." In the present study, romantic partners also rated their own support styles using a corresponding questionnaire (for target participant and partner versions of the SAS-C, see Appendices F and G, respectively).

Trobst (2000) demonstrated that the SAS-C generally relates to a variety of other interpersonal circumplex models, support scales, and personality characteristics, providing construct validity for this measure. In the current study, internal consistencies for the octants ranged from 0.83 to 0.89 for target participants, and from 0.77 to 0.89 for partners, with mean alpha coefficients of 0.86 and 0.83, respectively.

The Criticism and Support Perception Scale (CSPS). Adapted from the work of Hooley and Teasdale (1989) and Davila and colleagues (Davila, Bradbury, Cohan, &

Figure 1. *Circumplex structure of the Support Actions Scale Circumplex (SAS-C). Adapted from Trobst (2000), with author's permission.*



Tochluk, 1997), this two-item measure asked participants to rate how critical and supportive their partners were toward them that day. The likert-type scales ranged from 1 ("not at all critical/not at all supportive") to 9 ("very critical indeed/very supportive indeed"), with intermediary descriptors ("slightly," "moderately," and "quite a bit") at every other interval (see Appendix H). Partners themselves indicated how critical and supportive they were of the participants each day on the same nine-point scale, with the wording adjusted accordingly (see Appendix I).

Each respondent's scores for the two scales were averaged over the 20-day period to create one composite score each for partner's criticism and support. A paired samples t-test indicated that partners rated themselves as significantly more critical ($M = 2.37$, $SD = .91$) than target participants perceived them as being ($M = 2.13$, $SD = .95$), $t(100) = -2.59$, $p < .05$. Conversely, target participants reported receiving significantly more support ($M = 6.75$, $SD = 1.40$) than their partners described providing ($M = 6.42$, $SD = 1.51$), $t(100) = 2.61$, $p < .01$.

Although there was overlap between the questions asked by the CSPS and SAS-C, the former was included because previous research has shown that the single best predictor of relapse was patients' responses to the question "How critical is your spouse of you?" (Hooley & Teasdale, 1989). These authors further noted that this single variable accounted for more of the variance in risk of relapse than that explained by the more general construct of Expressed Emotion, together with marital distress. Another reason for including the CSPS was that it was completed on 20 occasions as part of the daily diary measure, described below, whereas the SAS-C was administered only once. In

short, the two CSPS items were expected to provide a reliable assessment of criticism and support to compare to the results obtained with the SAS-C.

Relationship Satisfaction Questionnaire (RSQ; Franzoi et al., *1985).* This eight-item scale is a shortened, modified version of Locke's (1951) Marital Adjustment Test. It is comprised of four questions assessing, on five-point, Likert-type scales, partners' degree of agreement ("Always agree" to "Always disagree") on issues of importance in romantic relationships (i.e., time spent together, friends, goals in life, finances). The remaining four items pertain to relationship happiness, as respondents indicate, on five-point, Likert-type scales, how often ("Almost always" to "Almost never") they and their partner get on each other's nerves and wish they were not going out with or married to their partner; and how happy and satisfying (e.g., "Very unsatisfying" to "Very satisfying") they rate their relationship (see Appendix J). Scores are summed to provide a single score for each respondent from 0 to 32. Franzoi et al. (1985) reported that principal components factor analyses on the eight items produced single-factor solutions, whether each sex was analyzed separately or together. These results indicated that the harmony and happiness components of the scale could be combined to create a single "relationship satisfaction" score. Similar findings were obtained in the current sample. Moreover, a paired samples *t*-test revealed no statistically significant difference between level of relationship harmony and satisfaction reported by participants ($M = 23.63$, $SD = 4.59$) and their partners ($M = 24.27$, $SD = 4.75$).

The Big Five Inventory (BFI; John et al., 1991). The BFI is comprised of 44 items designed to assess the "Big Five" personality traits. McCrae and Costa (1990) summarized each trait thusly:

> In general, Neuroticism represents the proneness of the individual to experience unpleasant and disturbing emotions and to have corresponding disturbances in thoughts and actions....Extraversion...concerns differences in preference for social interaction and lively activity. Openness...refers to a receptiveness to new ideas, approaches, and experiences....Agreeableness is seen in selfless concern for others and in trusting and generous sentiments....Conscientiousness is a dimension of individual differences in organization and achievement. Highly Conscientious people are dutiful and self-disciplined, but also ambitious and hardworking...(pp. 41-42)

On the BFI, respondents indicate, on a 5-point scale of 1 ("strongly disagree") to 5 ("strongly agree"), how well each phrase describes their personality and behaviours (see Appendix K). Prototypical BFI items, along with adjectives contrasting low and high levels of each of the five personality traits (from Costa & McCrae, 1990) are as follows: "I see myself as someone who...": 1) Neuroticism – "worries a lot" (even-tempered—temperamental, self-satisfied—self-pitying, unemotional—emotional, comfortable—self-conscious); 2) Extraversion – "has an assertive personality" (reserved—affectionate, loner—joiner, quiet—talkative, sober—fun-loving); 3) Openness – "is original, comes up with new ideas" (conventional—original, prefer routine—prefer variety, uncurious—curious, conservative—liberal); 4) Agreeableness – "is helpful and

unselfish with others" (ruthless—soft-hearted, suspicious—trusting, antagonistic—acquiescent, irritable—good-natured); and 5) Conscientiousness – "does a thorough job" (lazy—hardworking, disorganized—well-organized, aimless—ambitious, quitting—persevering).

Scores were calculated for each subscale by averaging across the items for each dimension and are presented for students and their partners, respectively: Neuroticism (8 items, *M*s = 3.25, 2.85; *SD*s = 0.61, 0.53), Extraversion (8 items, *M*s = 3.27, 3.01; *SD*s = 0.40, 0.40), Conscientiousness (9 items, *Ms* = 3.77, 3.67; *SDs* = 0.54, 0.55), Agreeableness (9 items, *M*s = 3.66, 3.84; *SD*s = 0.36, 0.40), and Openness to Experience (10 items, *M*s= 4.01, 3.87; *SD*s = 0.31, .23). Alpha reliabilities have ranged from .75 to .90, and three-month test-retest reliability has ranged from 0.80 to 0.90 (Benet-Martinez & John, 1998). In the current sample, the internal consistencies for students ranged from .79 (Agreeable) to .85 (Extraversion), with a mean alpha coefficient of .82, while for partners they were from .77 (Agreeable) to 0.86 (Extraversion), with a mean alpha coefficient of 0.81.

Daily Depressive Symptoms. Target participants rated their mood for 20 days using the CES-D described above, with the only difference being that they endorsed depressive symptoms for each day they completed the diary, as opposed to for the prior week (see Appendix G). Each participant's daily ratings were averaged over the 20-day period to produce a single Diary CES-D score ($M = 30.72$, $SD = 7.68$), which was marginally lower than their one-time CES-D score at Time 1 reported previously, as indicated by a paired samples *t*-test, $t(115) = -1.78$, $p < .08$.

Results

Demographic Variables that Might Influence Results

The demographic variables of sex, age, sexual orientation, number of children, length of relationship, and university attended were each tested to determine whether any of them were significantly related to the variables under investigation. Only sex and age were significantly related to depressive symptoms, personality variables, SAS-C support styles, and daily provisions of support and criticism. For sex, independent samples *t*-tests indicated that, compared with their male counterparts, vulnerable female participants rated themselves as more Conscientious, $t(78) = 3.01, p < .01$; saw their partners as more Avoidant, $t(100) = 3.09, p < .01$, and Deferential, $t(100) = 2.77, p < .01$, in their support; and had partners who described themselves as more Critical , $t(97) = 2.79, p < .01$, Arrogant , $t(97) = 2.14, p < .05$), and Distant , $t(97) = 2.55, p < .05$, in their support. At-risk male participants had partners who described themselves as more Open to Experience on the BFI, $t(67) = -4.24, p < .0001$. Correlations revealed that increased age was associated with lower depression scores on the CES-D at the start of the project ($r = -.24, p < .05$) and throughout the diary portion of the study ($r = -.20, p < .05$). Older participants also perceived their partners as more supportive ($r = .29, p < .01$) and less critical ($r = -.22, p < .05$) during the diary period, and rated their partners as more Avoidant on the SAS-C support measure ($r = .21, p < .05$). Sex and age were therefore controlled statistically in analyses involving the preceding factors, in order to better assess the unique variance in the outcome variable accounted for by the predictor variables.

Controlling for Vulnerable Participants' Mood While Completing Questionnaires.

Mood, particularly negative affect, has been shown to influence interpretations of social relations (e.g., Forgas, 2000, Segal, 1988). Accordingly, depressive symptomology (assessed via the CES-D at the start of the study) was statistically controlled when analyzing participants' responses.

Due to the large number of predictor variables in relation to the study's sample size, analyses were conducted separately for data obtained for target participants and their partners. Similarly, within each partner's recorded data, models were tested separately for effects of personality, CSPS Criticism and Support, and SAS-C support styles, respectively. The results are presented in the following order of outcome variables: 1) relationship satisfaction, 2) depressed mood over the course of the 20-day diary period, and 3) risk of recurrence of a depressive episode over the subsequent 18-month period. Because risk of recurrence was a categorical variable ("Recurrence" or "No Recurrence"), binary logistic regression analyses were conducted on this variable, whereas linear regression analyses were performed on the outcome variables of relationship satisfaction and mood during the diary portion of the study.

As mentioned, relevant demographic variables and mood were statistically controlled by forcing them into hierarchical regression models first. Personality, CSPS Criticism and Support, and SAS-C support styles were then entered separately and Stepwise selection procedures indicated which, if any, of these variables improved the regression models statistically significantly. Any such improvements are denoted by "ΔR," which for the first variable selected refers to its explanatory ability over and above

the effects of any demographic variables and/or mood already forced into the model hierarchically.

Vulnerable Participants' Relationship Satisfaction

Personality. Target participants' relationship satisfaction, assessed at Time 1, was regressed onto the Big Five personality variables after controlling for sex and mood. Stepwise regression analysis failed to reveal any statistically significantly associations between participants' personality and their relationship satisfaction (for zero order correlations between target participants' personality and relationship satisfaction, along with other predictor and outcome variables, see Table 1). Nor were significant associations obtained between participants' relationship satisfaction and their partners' Big Five personality variables (for zero order correlations between partners' personality and target participants' relationship satisfaction and other predictor and outcome variables, see Table 2).

Provision of support. Controlling for sex, age, and mood, relationship satisfaction was regressed separately onto vulnerable students' perceptions of their partner's daily support and criticism over the 20-day diary period (via the CSPS), and their general perception of the partner's support style (assessed with the SAS-C at Time 1). Stepwise selection indicated that perceptions of partner's daily CSPS Support ($\beta = .34$, $R^2 = .30$, $\Delta R^2 = .19$, $p < .01$) and Criticism ($\beta = -.22$, $R^2 = .33$, $\Delta R^2 = .03$, $p < .05$), as well as SAS-C Nurturant ($\beta = .34$, $R^2 = .25$, $\Delta R^2 = .18$, $p < .0001$) and Distancing ($\beta = -.20$, $R^2 = .28$, $\Delta R^2 = .03$, $p < .05$) support accounted for significant variances in relationship satisfaction (see Table 3 for correlations among the different support and outcome

Table 1

Correlations among Target Participant's Personality Variables and Perceptions of Support, Mood, Recurrence of Depression, and Relationship Satisfaction (N = 80)

	Personality Variables[a]				
	Neuroticism	Extraversion	Agreeableness	Openness	Conscientiousness
1. Daily Criticism[b]	.23*	-.14	-.21	-.03	-.28**
2. Daily Support	-.24*	.32**	.16	.21	.36***
3. Directive Support[c]	-.08	.20	.11	.20	.18
4. Arrogant Support	.19	-.05	-.17	.22*	-.04
5. Critical Support	.23*	-.02	-.37***	.03	.08
6. Distancing Support	.26*	-.32**	-.20	-.08	-.06
7. Avoidant Support	-.05	.04	.13	-.15	.14
8. Deferential Support	-.08	.05	.23*	-.08	.18
9. Nurturant Support	-.18	.16	.28*	.08	.27*
10. Engaging Support	-.10	.30**	23*	.13	.27*
11 CES-D[d] at Time 1	.40***	-.27*	-.20	.15	-.10
12. Diary CES-D	.52***	-.36***	-.26*	.10	-.23*
13. Recurrence of Depression[e]	.06	-.01	-.03	23	-.13
14. Relationship Satisfaction[f]	-.11	.11	.16	.09	.22*

Note. [a]From the Big Five Inventory (John et al., 1991). [b]From the Criticism and Support Perception Scale Daily Diary data. [c]From the Support Actions Scale Circumplex (Trobst, 2000). [d]Center for Epidemiological Studies Depression Scale (Radloff, 1977). [e]This variable (n=57) was coded as 0 = "no recurrence" and 1 = "recurrence of major depression." [f]Relationship Satisfaction Questionnaire (Franzoi et al., 1985).
* p <.05, ** p < .01, *** p < .001.

Table 2

Correlations between Partner's Self-Reported Behaviours and Personality Variables, and Target Participant's Personality, Perceptions, Mood, Recurrence of Depression, and Relationship Satisfaction (N = 99)

Partner's Self-Reported Behaviour	Target Participant's Reports			
	Corresponding Perception of Partner Behaviour	Daily CES-D Score[a]	Recurrence of Depression[b] (*n* = 69)	Relationship Satisfaction[c]
1. Daily Criticism[d]	.51***	.23*	.12	-.37***
2. Daily Support	.58***	-.23*	-.04	.44***
3. Directive Support[e]	.22*	.01	.01	-.08
4. Arrogant Support	.33**	-.08	-.12	-.11
5. Critical Support	.44***	.07	-.04	-.17
6. Distancing Support	.33***	.15	-.14	-.23
7. Avoidant Support	.27**	.15	-.07	-.11
8. Deferential Support	.15	.07	.06	.12
9. Nurturant Support	.38***	-.05	.11	.17
10. Engaging Support	.33***	-.01	.19	.02
Partner's Personality[f] (n=69)	**Target Participant's Reports**			
	Corresponding Personality Trait (n=65)	Daily CES-D Score	Recurrence of Depression (n=52)	Relationship Satisfaction
11. Neuroticism	.05	.05	.07	-.06
12. Extraversion	.04	-.04	-.02	.14
13. Agreeableness	.11	-.31**	-.36**	.08
14. Openness	.27*	.40***	.30*	-.11
15. Conscientiousness	-.07	-.13	.14	-.07

Note. [a]Center for Epidemiological Studies Depression Scale (Radloff, 1977). [b]This variable was coded as 0 = "no recurrence" and 1 = "recurrence of major depression." [c]Relationship Satisfaction Questionnaire (Franzoi et al., 1985). [d]From the Criticism and Support Perception Scale Daily Diary data. [e]From the Support Actions Scale Circumplex (Trobst, 2000). [f]From the Big Five Inventory (John et al., 1991). * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3

Correlations among Target Participant's Mood, Recurrence of Depression, Relationship Satisfaction, and Perceptions of Partner's Behaviours (N = 102)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CES-D[a] at Time 1													
2. Diary CES-D	.55***												
3. Recurrence of Depression[b]	.13	.13											
4. Relationship Satisfaction[c]	-.32***	-.31***	-.12										
5. Daily Criticism[d]	.32***	.48***	.05	-.49***									
6. Daily Support	-.26**	-.48***	-.06	.47***	-.61***								
7. Directive Support[e]	.01	-.04	.14	.10	-.12	.38***							
8. Engaging Support	-.06	-.14	.09	..25**	-.27**	.38***	.67***						
9. Nurturant Support	-.19*	-.15	.06	.39***	-.53***	.40***	.30**	.58***					
10. Deferential Support	-.04	.03	-.21	.30***	-.38***	.16	-.10	.22*	.60***				
11. Avoidant Support	-.13	.06	-.24*	.12	-.10	-.03	-.28**	-.05	.20*	.62***			
12. Distancing Support	.18	.27**	-.05	-.34***	.30**	-.33***	-.24*	-.47***	-.42***	-.04	.36***		
13. Critical Support	.23*	.17	.03	-.32***	.37***	-.25**	.16	-.17	-.49***	-.46***	-.20*	.48***	
14. Arrogant Support	.23*	.19*	.12	-.29*[k]	.29**	-.03	.61***	.24*	-.26**	.03	-.32***	.19*	.54***

Note. [a]Center for Epidemiological Studies Depression Scale (Radloff, 1977). [b]This variable (n = 78) was coded as 0 = "no recurrence" and 1 = "recurrence of major depression." [c]Relationship Satisfaction Questionnaire (Franzoi et al., 1985). [d]From the Criticism and Support Perception Scale Daily Diary data. [e]From the Support Actions Scale Circumplex (Trobst, 2000) completed at Time 1. * p <.05, ** p < .01, *** p < .001.

variables). Not surprisingly, participants who perceived their partners as more supportive and nurturing, and less critical and distant, reported greater satisfaction with their relationship.

Vulnerable participants' relationship satisfaction was regressed onto their partners' self-reports of how critical and supportive they were during the 20-day diary period, as well as these partners' descriptions of their general SAS-C support styles. Stepwise analysis indicated that only partners' daily support ($\beta = .42$, $R^2 = .27$, $\Delta R^2 = .18$, $p < .0001$) and SAS-C Critical support ($\beta = -.29$, $R^2 = .21$, $\Delta R^2 = .07$, $p < .01$) accounted for vulnerable individuals' relationship satisfaction after controlling for their sex, age, and CES-D scores. In other words, participants were more satisfied with the relationship when their partner reported being more supportive and less critical toward them. These results provide some validity for the diary support measure and converge somewhat with the data obtained from the vulnerable participants (see Table 2 for correspondence between each partner's ratings of CSPS and SAS-C variables).

Summary of Results for Relationship Satisfaction

Statistically controlling for vulnerable participants' level of depressed mood and relevant demographic variables, it was found that reported relationship satisfaction was highest among those who perceived their partners as more supportive and nurturant, and less critical and distant in their support. Satisfied individuals similarly had partners who reported being more supportive and less critical.

Depressed Mood Over the Diary Period

Personality. Students' CES-D scores averaged over the course of the 20-day diary period were regressed onto their Big Five personality variables after controlling for age and sex. Given the recurrent nature of depression (e.g., Judd, 1997), CES-D scores obtained during the initial in-person interview were also forced into the model to allow for a more conservative test of the effects of personality on mood over the 20-day period. Although the two CES-D scores were highly correlated (see Table 3), Neuroticism was selected first via Stepwise analysis (β = .29, R^2 = .42, ΔR^2 = .09, $p < .01$), followed by Extraversion (β = -.19, R^2 = .45, ΔR^2 = .03, $p < .05$). More Neurotic and less Extraverted participants experienced more depressed mood throughout the 20-day period.

Participants' average CES-D mood during the diary period was regressed onto their partners' Big Five personality variables, controlling for sex, age, and level of depressed mood at Time 1. Stepwise analysis selected only Openness (β = .27, R^2 = .38, ΔR^2 = .05, $p < .05$), indicating that vulnerable individuals whose partners described themselves as being more Open to Experience reported increased depressed mood over the 20-day diary period.

Provision of support. Controlling for sex, age, and level of depressed mood at Time 1, vulnerable participants' daily depressive symptoms were regressed onto their perceptions of partners' support and criticism over the same period, as well as onto perceptions of general SAS-C support styles. For average CSPS scores, the Stepwise analysis selected Support first (β = -.23, R^2 = .42, ΔR^2 = .12, $p < .05$), followed by Criticism (β = .22, R^2 = .45, ΔR^2 = .03, $p < .05$), indicating that participants who felt their

partners were less supportive and more critical over the course of the diary study experienced increased depressed mood during that time. From among the SAS-C variables, only Distancing support was selected (β = .19, R^2 = .52, ΔR^2 = .03, p < .01), indicating that participants who generally perceived their partners to be more distant reported increased depressed mood throughout the diary component of the study.

Conversely, partners' daily CSPS ratings and SAS-C support variables failed to predict their vulnerable mate's daily mood when controlling for age, sex, and mood at Time 1.

Mediation between partner's personality and daily mood in vulnerable participants.[5] It was expected that partners' support or criticism may help account for the relationship between their personality and vulnerable participants' depressed mood over the diary period. Baron and Kenny (1986) demonstrated how to test whether a statistically significant relationship between two variables (X and Y) might be better explained by a mediating variable (Z). That is, the first variable (X) influences a third variable (Z), which in turn, produces the observed effect on the final or outcome variable (Y). In the current study, partners' Openness predicted their vulnerable mate's depressed mood during the diary period, as indicated above. One of the requirements of Baron and Kenny's (1986) three-chain causal model is that any potential mediating variable (Z) must be predicted by partners' Openness. A second requirement would be that the mediating variable predicted the outcome variable, target participants' daily CES-D mood.

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[5] Potential mediating variables were planned to be investigated for relationship satisfaction as well, but the lack of significant effects for either mate's personality precluded that set of analyses.

A review of the data revealed perceptions of partner's daily CSPS Criticism as a potential mediating variable, as it was positively correlated with both the partner's Openness score ($r = .40, p < .001$) and target participant's daily mood ($r = .48, p < .0001$). In line with Baron and Kenny's (1986) criteria, Openness in partners was associated with perceptions of higher levels of criticalness, controlling for sex, age, and mood at Time 1, $\beta = .34$, $R^2 = .20$, $\Delta R^2 = .08, p < .05$. The second requirement was also satisfied since daily mood was predicted by perceptions of partner's CSPS Criticism, $\beta = .33$, $R^2 = .41$, $\Delta R^2 = .10, p < .01$.[6]

Having satisfied the preceding two conditions, the next step in demonstrating a full mediation model was to demonstrate that the relationship between partner's Openness and vulnerable participant's mood would become non-significant if perception of criticism was entered into the model (Baron & Kenny, 1986). When average CES-D mood was regressed onto the independent and mediator variables simultaneously, the hypothesized mediated model was supported: perceived CSPS Criticism remained statistically significant ($\beta = .24$, $R^2 = .42$, $\Delta R^2 = .09, p < .01$), while partner's Openness did not ($\beta = .20, p = .16$). As final evidence that partner's Openness exerted its effect on depressed mood indirectly via increased CSPS Criticism, an optional and conservative direct test of this mediation model was performed (see Baron & Kenny, 1986; Sobel, 1982, 1988). This multi-step indirect path was found to be statistically significant

[6] The number of partners who had completed the Big-Five questionnaire was lower than the number of target participants who had completed the other relevant measures; accordingly, only target participants whose mates had completed the Big-Five were included in the analyses in this section.

($t(68) = 2.03, p < .05$), further indicating that Open partners were perceived as more critical by their vulnerable mate, who consequently reported worse mood over the diary period.

Summary of Results for Depressed Mood over the Diary Period

Over the 20-day Diary period, average depressed mood was most pronounced among participants who were high on Neuroticism and low on Extraversion, who saw their partners as more critical, less supportive and more Distancing in their support, and whose partners described themselves as more Open to Experience. The relationship between partner's Openness and target participants' depressed symptoms was mediated by perceptions of more criticism throughout the diary portion of the study.

Recurrence of a Major Depressive Episode

Binary logistic regression analyses were performed on students' recurrence of depression, with a value of "0" assigned to no recurrence within the 18-month period following the start of the study, and "1" denoting the recurrence of a subsequent major depressive episode.[7] Positive Beta coefficients indicate that higher levels of a variable predicted recurrence, while negative coefficients are associated with reduced risk.

Personality. Controlling for sex, binary logistic regression (Forward Likelihood Ratio selection) indicated that vulnerable participants' Openness ($B = 1.24$, 95% Confidence Interval (CI) = 1.36 - 8.81, *Nagelkerke* $R^2 = .13$, Δ*Nagelkerke* $R^2 = .09$, $p < .01$) and Neuroticism ($B = 0.84$, 95% CI = 1.19 - 4.46, *Nagelkerke* $R^2 = .21$,

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[7] Analyses were run with relationship satisfaction forced into the model predicting recurrence of depression, but it did not correlate significantly with the outcome variable, nor did its inclusion have any noticeable impact on the results (for similar findings, see Shaver, Schachner, & Mikulincer, 2005, cf. Joiner, Metalsky, Katz, & Beach, 1999).

Δ*Nagelkerke* $R^2 = .08, p < .05$) predicted recurrence 18 months after the start of the study. The Hosmer and Lemeshow Goodness of Fit Test ($\chi^2(8) = 6.87, p = .55$) indicated that this model adequately fit the data, as it correctly classified 67.35% of the participants as suffering a subsequent episode of depression or not (see Hosmer & Lemeshow, 1989). In short, vulnerable participants who were more Open to Experience and Neurotic had a greater chance of suffering a subsequent episode of depression.[8]

From among partners' Big Five personality characteristics, only Agreeableness was selected by binary logistic regression as a predictor of target participants' recurrence of depression (B = -0.99, 95% CI = 0.15 - 0.95, *Nagelkerke* $R^2 = .19$, Δ*Nagelkerke* $R^2 = .13, p < .05$). The Hosmer and Lemeshow Goodness of Fit Test ($\chi^2(8) = 4.66, p = .79$) indicated that this model adequately fit the data, correctly classifying 67.35% of the vulnerable participants as suffering a later episode of depression or not, with individuals whose partners were more Agreeable being less at risk.

Provision of support. Controlling for target participants' age, sex, and mood when completing the relevant measures, perception of Avoidant support was significantly associated with recurrence of a major depressive episode (B = -0.07, 95% CI = 0.87 - 1.00, *Nagelkerke* $R^2 = .07$, Δ*Nagelkerke* $R^2 = .06, p < .05$). The Hosmer and Lemeshow Goodness of Fit Test ($\chi^2(8) = 4.25, p = .83$) indicated that this model adequately fit the data, as it correctly classified 61.54% of the vulnerable participants, with those who saw their partners as more Avoidant in their support less likely to suffer a

[8] Given the highly recurrent nature of depression, logistic regression analyses were repeated with the target participant's number of previous episodes of major depression forced into the model. The new results were no longer statistically significant for target participants' personality. However, all other predictors of recurrence of depression listed below remained statistically significant even after forcing number of prior episodes into the respective logistic regression models.

subsequent episode of depression. This was the only measure of perceived support predicting recurrence of depression.

No measures of partners' own reports of their daily provisions of CSPS Criticism and Support nor SAS-C support styles predicted recurrence of major depression when controlling for vulnerable participants' sex.

Mediation between partner's personality and recurrence of depression. The data were re-examined for possible mediating variables to help explain the associations between personalities of target participants and their partners and risk of depressive recurrence. From among the statistically significant relationships, one potential three-chain causal model had already met at least two criteria outlined by Baron and Kenny (1986): Partner's Agreeableness → target participant's perception of SAS-C Avoidant support → reduced risk of depression. That is, as reported above, partner's Agreeableness (predictor) and target participant's perception of Avoidant support (hypothesized mediator) each predicted lowered risk of subsequent episodes of major depression (outcome variable). The third requirement was satisfied when the relationship between partner's Agreeableness and target participant's perceptions of Avoidant support (controlling for sex and CES-D mood at the time of ratings) was shown to be statistically significant, $\beta = .26$, $R^2 = .24$, $\Delta R^2 = .07$, $p < .05$. Finally, when depressive recurrence was regressed simultaneously onto partner's Agreeableness and perception of Avoidant support, the hypothesized mediator remained statistically significant ($\beta = -.17$, $R^2 = .31$,

$\Delta R^2 = .22, p < .05$), while the original predictor did not ($p = .41$).[9] These results suggest that vulnerable participants with more Agreeable partners were at reduced risk of recurrence, in part, because they perceived more Avoidant support from their mates.

Summary of Results for Vulnerable Participants' Risk of Recurrence of Depression

Individuals with a history of depression were more likely to suffer another episode of this mood disorder within an 18-month period when they were more Neurotic and Open to Experience, and had a partner describing his or her personality as less Agreeable. Interestingly, the social support data suggested that those who saw their partner as providing more Avoidant support were less likely to experience a recurrence of depression. Subsequent analyses on mediating effects indicated that this Avoidant support was more commonly observed in Agreeable partners.

Overall Summary of Findings

Personality and social support contributed independently to vulnerable individuals' relationship satisfaction, daily mood, and risk of recurrence of a major depressive episode. Relationship satisfaction was highest among participants who perceived their partners as more supportive and nurturant, and less critical and distant, and whose partners also rated themselves as more supportive and less critical. Although neither partner's personality style was related to relationship satisfaction, this variable did influence vulnerable participants' mood over the 20-day Diary period. Specifically, participants high on Neuroticism and low on Extraversion, and whose partners were high

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[9] It was not possible to directly test the indirect path between predictor and outcome variable through the hypothesized mediator because statistics required for this analysis cannot be calculated with dichotomous variables such as depressive recurrence. However, this is only an optional step and is not part of Baron and Kenny's (1986) necessary criteria for testing mediation in three-chain causal models.

on Openness, reported the most depressive symptoms averaged over 20 days. Open partners were seen as more critical in their daily interactions, which was associated with worse mood in target participants. More generally, participants who saw their partner as providing more criticism and less support on a daily basis, as well as more distant support in general, experienced worse depressive symptoms during the Diary portion of the study. Recurrence of major depression over the 18 months following the start of the project was predicted by Neuroticism and Openness to Experience in at-risk individuals, and by lower Agreeableness in their partners. More Agreeable partners were seen as providing more Avoidant support, which was associated with reduced risk of subsequent episodes of a major depressive episode.

Discussion

The current study was intended to expand on previous research demonstrating links among personality, social support, mood, and depressive disorders. It sought to improve on earlier methodologies by using a longitudinal design, information from both members of a serious romantic relationship, and involving a partner with a documented history of major depression. Moreover, mood while completing questionnaires was statistically partialled out of all analyses to enable a purer test of the aforementioned associations.

The obtained findings were, for the most part, in line with the study's hypotheses. Namely, vulnerable participants high on Neuroticism reported more depressive symptoms averaged over a 20-day period. Moreover, the combination of Neuroticism and Openness to Experience predicted the recurrence of major depression over the subsequent 18

months. Such negative outcomes support past research on the link between Neuroticism and depression (e.g., Finch et al., 1999; for a review of similar findings, see Enns & Cox, 1997); the unexpected finding with respect to Openness is discussed below.

Conversely, as hypothesized, Extraversion predicted lower depressive symptoms during the diary period, in line with previous data demonstrating the negative association between this personality style and mood disorders (e.g., Bienvenu et al., 2001, 2004; for a review, see DeNeve & Cooper, 1998). Having an Agreeable mate reduced the risk of recurrence of a major depressive episode, which might be expected, in light of the pro-social behaviours displayed by Agreeable individuals in intimate relations (e.g., Graziano et al., 1996, 1997). Follow-up analyses suggested that Agreeable partners exerted their protective influence through the provision of what target participants perceived as more Avoidant support; in fact, perceptions of Avoidant support from partners in general (i.e., not only Agreeable ones) were associated with reduced risk of a recurrence of a major depressive episode.

Although Avoidant support as a protective factor against depression might appear somewhat counter-intuitive at first, an examination of the SAS-C items comprising this support style helps shed some light on the results. First, Avoidant support is geographically located farthest from the dominant octants on the SAS-C, as it involves refraining from stating opinions, giving advice, trying to change the other's view of the situation, and so on (Trobst, 2000). It is thus possible that target participants interpreted Avoidant support as acceptance, for instance as "being there" for them in a nonjudgmental fashion; the large correlation (Cohen, 1988) between perceptions of

Avoidant and Deferential support, which includes items such as "remain nonjudgmental" (see Appendix F), lends credence to this possibility (see Table 3)[10]. Moreover, none of the items in the Avoidant octant (see Appendix F) depicts a necessarily negative interaction. That is, not giving advice or assuming a domineering role in no way precludes the display of concern and empathy (see Pasupathi, Carstensen, Levenson, & Gottman, 1999). Especially for Agreeable partners, such non-confrontational behaviours would be expected to be complemented by other demonstrations of positive support (e.g., Graziano et al., 1996, 1997).

Other forms of social support were mostly associated with outcome variables in the expected manner. For instance, target participants were more satisfied with their relationship when they saw their partner as more supportive and Nurturant, and less critical and Distancing in their support. This latter result is understandable, given that Distancing support is described as a tendency to reject another person and to disregard his or her feelings (Trobst, 2000). Information from partners provided converging evidence for these findings, as their own depictions of greater daily support and less Critical support style was associated with their mate's relationship satisfaction. These results add to the growing literature highlighting the impact of partner support on the quality of romantic relationships (e.g., Dehle et al., 2001).

Similar effects were found for target participants' mood during the diary portion of the study. On the one hand, daily perceptions of partners' support were associated

[10] In fact, data obtained by Trobst subsequent to her initial work in constructing the SAS-C (1999, 2000) supported the notion that "Avoidant" was not an appropriate term for this octant (Trobst, personal communication, January, 2006).

with reduced depressive symptoms (e.g., Druley & Townsend, 1998). On the other hand, depressed mood was predicted by not only daily perceptions of criticism (e.g., Hooley & Teasdale, 1989) but also more specific depictions of cold and rejecting (SAS-C Distancing) partner support behaviours recorded at Time 1 (e.g., Manne et al., 1997). In other words, with relatively simple daily measures, both social support and undermining effects on mood were obtained. However, SAS-C's more detailed assessments of typical partner responses to their mate's need for support or assistance yielded evidence for only harmful impacts of negative social behaviours. Although the SAS-C and CSPS correlated with each other in mostly an expected manner (see Table 3), the preceding discrepant results are consistent with Finch et al.'s (1999) assertion that different means of measuring social support and undermining can contribute to the controversy surrounding their postulated impacts on well-being (for a review of this issue, see Cranford, 2004). Nevertheless, the current study's findings support the notion that vulnerable individuals' subjective impressions of their intimate interpersonal environments can have both protective and deleterious effects on their functioning.

Several unexpected results were also obtained from the present data. First, as mentioned, target participants high on Openness to Experience were more likely to suffer a subsequent episode of depression over the course of the study. The lack of any significant correlations between this personality trait and the other variables currently under investigation make it difficult to speculate on the nature of this relationship. More generally, Openness has been described as the most poorly defined and least understood of the Big Five personality traits (e.g., McCrae & Costa, 1997), which might help account

for the lack of consistent research findings pertaining to this variable relative to the other four. For instance, although some research has reported a negative relationship between Openness to Experience and depression (e.g., Van den Berg & Pitariu, 2005), other studies have indicated that this personality variable is significantly associated with not only positive but also negative components of affect as well (Gutiérrez, Jiménez, Hernández, & Puente, 2005). Instead of clarifying potential effects of Openness on the maintenance or recurrence of depression, the present results highlight the need for more research to better understand the nature of this relationship.

Openness to Experience in the target participant's partner was also associated with unexpected results. In contrast to positive interpersonal dynamics theorized to relate to this personality style (e.g., Bouchard et al, 1999; Donnellan et al., 2004), partners high on Openness were seen as more critical throughout the diary portion of the study. Partner's CSPS Criticism, in turn, was associated with increased depressive symptoms in vulnerable participants during this period. The lack of data collected on partners precludes formulating tenable hypotheses for this surprising finding.

Strengths and Limitations

The current project's use of data from both members of the romantic dyad provided converging evidence for the social support findings. The mostly medium to large correlations (Cohen, 1988) among each partner's reports (see Table 2) suggest that target participants' perceptions of support and criticism were relatively accurate, or at least in line with their mate's beliefs about their own behaviours. In fact, subsequent analyses suggest that partners did not attempt to present themselves in an overly

favourable light, as their self-report data were no more positive than the target participants' perceptions of the same behaviours.

Another important set of comparisons available from the present data is between the 20-day ratings of the single-item CSPS partner support and criticism questions and the more complex, multi-item SAS-C scales completed at Time 1. As demonstrated by the patterns of correlations in Table 3, these considerably different measures appear to be tapping into similar constructs. Moreover, perceptions of mates' Distancing support at Time 1 predicted subsequent daily depressive symptoms (controlling for mood during completion of the SAS-C). This paralleled the results for the CSPS data, suggesting that perceptions of daily support and criticism influenced target participants' moods, as opposed to depressed affect biasing their impressions of partner behaviours. However, the methodology and statistical analyses employed did not allow for a clear inference about causal relationships between the predictor and outcome variables. Alternative explanations for the obtained results therefore cannot be ruled out.

Nevertheless, daily ratings did help ensure an ecologically valid and representative assessment of vulnerable individuals' interpersonal and emotional experiences. The aforementioned strong correlations between each member's reports of daily support and criticism (see Table 2) further support the validity and utility of this methodology. Although more complex analyses of daily reports (e.g., mixed models investigating patterns of mood fluctuations in response to specific levels of support and criticism) might yield even more informative findings, this was not the focus of the current study. The mood and support/criticism ratings were consequently averaged over

the diary portion of the study. These data did help elucidate possible processes through which vulnerable individuals might be either more susceptible to or protected against daily depressive symptoms that can put them at increased risk for a subsequent episode of major depression (e.g., Flett, Vredenburg, & Krames, 1997). Namely, daily perceptions of more critical and less supportive partners were associated with more negative affect over a three-week period. More Neurotic and less Extraverted participants also reported increased depressive symptoms over this period.

Participants' personality and perceptions of partner support contributed independently to predictions of both daily mood during the diary period and recurrence of major depression over the following 18 months. More Neurotic individuals Open to Experience were more likely to suffer a subsequent episode of this disorder. Conversely, risk of recurrence was lower among participants whose partners were more Agreeable and seen as less likely to give advice or try to challenge or change their opinions and behaviours when offering support.

One potential limitation of this study was its reliance on graduate student participants who arguably comprise a special population that generally has many advantages over both depressed and non-depressed individuals, including higher intelligence, better socio-economic statuses, and brighter futures (Coyne, 1994). As Nolen-Hoeksema (1987) stated with respect to female university students, "[they] are self-selected for positive mental health" (p. 265). Such a sample was deemed necessary, as this study required a large pool of participants from which to screen those vulnerable to major depressive disorder. Moreover, in contrast to the typically used convenience

sample of undergraduate students, the current participants were older, in longer-term or more committed relationships (and living with their partner), less reliant on parents' finances, closer to entering their careers, and diagnosed with a history of major depression; in short, they were more representative of the modal sufferer of depression in professional samples. In other words, graduate students were chosen as an acceptable compromise between a sample of convenience and a sample relatively representative of the general population of interest.

A related limitation pertains to the final composition of the study's sample. In contrast to the hundreds of participants recruited for the larger project, not everyone from the initial pool was willing or able to enlist his or her partner in the present study. Although no statistically significant differences on various demographic and other relevant data were found between people who did and did not participate with their mates, these groups may have differed in some important manner not captured by the instruments employed in the current study. Participants were further lost through attrition during the project, raising the possibility that the couples who provided follow-up data were different with respect to factors related to recurrence of depression compared with those who left the study prematurely. For example, in light of the relatively positive descriptions of partner behaviours and relationship satisfaction by both members of the romantic dyads, it is plausible that healthier couples were over-represented in the study, perhaps even more so by the follow-up period. Such a possibility might help explain the failure to find any associations between personality variables and relationship satisfaction. That is, the hypothesized personality effects on relationship satisfaction may be evident

in more distressed couples, who might have been less likely to participate due to the negative nature of their relationships.

Another possible explanation for the lack of significant correlations between personality and relationship harmony pertains to the measures used. Because the current study was part of a larger project involving numerous questionnaires, assessment tools were chosen, in part, for their ease of completion. The eight-item relationship scale might have been too broad in item content to detect specific elements of the couples' ongoing dynamics that could be influenced by their personality traits. Similarly, in spite of its general utility, the BFI is a considerably shorter version of the more comprehensive tools designed to assess the Five Factor Model of personality (e.g., *Revised NEO-Personality Inventory, NEO Five-Factor Inventory;* Costa & McCrae, 1992b). This simpler instrument could have failed to tap into relevant facets of the personality styles of target participants or their partners. Although either questionnaire on its own might not have significantly obscured potential findings, the combination of these two relatively brief tools may partially account for the lack of expected relationships between the constructs they were intended to assess.

Efforts to rule out alternative explanations for the effects under investigation may further account for unexpected results. That is, individuals with one psychological or emotional disorder are at increased risk for another Axis I or Personality Disorder (e.g., Farabaugh et al., 2005; Rush et al., 2005). However, the exclusionary criteria ensured that target participants did not suffer from certain other serious disorders (e.g., substance abuse, Borderline Personality Disorder) which could contribute to conflict in the

relationship or increase risk for recurrence of depression (see Kendler, Gardner, & Prescott, 2002). As a result, the apparent impact of partner's support and criticism on daily mood observed over the 20-day diary period may not have been strong enough in the present sample to make vulnerable participants more prone to subsequent episodes of depression. Or, more serious deleterious partner effects may take longer to manifest than the 18-month follow-up period chosen for this study.

Another limitation is the lack of information clearly linking relationship difficulties to subsequent episodes of major depression. Although the obtained results allow for inferences about relationships between the predictor variables and risk of recurrence, specific life-event data to confirm such inferences would be more beneficial. These data were not collected as a result of the many other pieces of information required from the couples' participants in the larger project. Even if such data had been obtained at follow-up, it would be impossible to determine whether this information differentiated couples who terminated their participation early from those who remained. In other words, certain life events might predict not only healthier or poorer psychological or relationship outcomes for vulnerable individuals, but also their decision to leave or continue with the project.

The reduction in sample size over the course of the study also precluded certain analyses. For instance, instead of statistically controlling for variables such as sex—in light of the significant differences between men and women's personality variables and perceptions of support—a preferred analytic strategy would have been to examine male and female target participants separately. Similarly, more complex models integrating

the different sets of predictor variables could have been tested. More generally, the relatively small sample size reduced statistical power, which, in turn, reduced the probability of obtaining statistically significant results when true effects were present (e.g., Howell, 1999).

Future Directions

Notwithstanding the preceding limitations, the current study adds to the growing body of research indicating that both social support and undermining can influence one's psychological functioning (e.g., Finch et al., 1999; see also Cranford, 2004). Data from this ongoing project will continue to be collected and analyzed to explore whether the apparent protective and maladaptive personality and interpersonal variables will continue to exert their effects in a similar manner as presently observed. Although the obtained results support Hooley and Teasdale's (1989) contention that simple questions about a partner's criticalness can predict negative consequence, the SAS-C provides more specific explications of the types of relationship dynamics that can help protect vulnerable individuals from such outcomes or put them at greater risk. As suggested by the present findings, even more precise assessment of the meanings and effects of perceptions of partner interactions would further elucidate these processes in vulnerable individuals.

Moreover, specific data on break-ups as the study progresses might provide further insights into the impact of personality and impressions of partner behaviours on relationship status and mental health. For instance, it would be interesting to assess whether the removal of harmful interpersonal dynamics via relationship dissolution serve

to reduce the probability of subsequent episodes of depression. Conversely, could the loss of a committed mate—even one who engages in maladaptive support behaviours—in and of itself put these individuals at increased risk?

Along these lines, future research should continue to explore not only how each partner's personal and interpersonal processes might contribute to a vulnerable mate's wellbeing over time, but also the reciprocal relationships among these variables and their effects on each member of a romantic dyad. Such a line of investigation can help produce a more comprehensive and interactive model of the myriad factors involved in the development, maintenance, and recurrence of debilitating mood disorders within the context of social functioning (e.g., Coyne, Thompson, & Palmer, 2002). Another avenue of exploration would be to assess whether certain personality styles might be associated with discrepancies between partner ratings of social behaviours in the relationship.

Improved understanding of these issues is necessary for practical applications of such knowledge (Kuehner & Buerger, 2005), for instance more effective treatment strategies. Depressed individuals and their partners would benefit from being able to recognize and avoid or modify potentially maladaptive relationship patterns, both general and specific to their own experiences. The current study is intended to contribute to the literature on such dynamics. It also serves as a call for continued efforts to improve on and implement methodologically rigorous approaches to examining mood disorders in an ecologically sound manner.

References

Aldwin, C. M., & Revenson, T. A. (1987). Does coping help? A reexamination of the relation between coping and mental health. *Journal of Personality and Social Psychology,* 53, 337–348.

Allport, G. W., & Odbert, H. S. (1936). Trait-names. A psycho-lexical study. *Psychological Monographs, 47,* (1, Whole No. 211).

Amirkhan, J. H. (1990). A factor analytically derived measure of coping: The coping strategy indicator. *Journal of Personality and Social Psychology,* 59, 1066–1074.

Amirkhan, J. H. Risinger, R. T., & Swickert, R. J. (1995). Extraversion: A "hidden" personality factor in coping? Journal of Personality, 63, 189-212

Andrade, L., Caraveo-Anduaga, J. J., Berglund, P., Bijl, R. V., De-Graaf, R., Vollebergh, W., et al. (2003). The epidemiology of major depressive episodes: Results from the International Consortium of Psychiatric Epidemiology (ICPE) Surveys. *International Journal of Methods in Psychiatric Research, 12,* 3-21.

Angst, J. (1988). Clinical course of affective disorders. In T. Helgasen & R. J. Daily (Eds.), *Depressive illness: Prediction of course and outcome* (pp. 1-45). Berlin: Springer.

Arellano, C. M., & Markman, H. J. (1995). The managing affect and differences scale (MADS): A self-report measure assessing conflict management in couples. *Journal of Family Psychology, 9,* 319-334.

Bagby, R. M., Joffe, R. T., Parker, J. D. A., Levitt, A., Kalemba, V., & Harkness, K. L. (1995). Major depression and the five-factor model of personality. *Journal of Personality Disorders, 9,* 224–234.

Barnett, P. A., & Gotlib, I. H. (1988). Psychosocial functioning and depression: Distinguishing among antecedents, concomitants, and consequences. *Psychological Bulletin, 104,* 97–126.

Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology,51,* 1173-1182.

Barrera, M., Jr. (1981). Social support in the adjustment of pregnant adolescents: Assessment issues. In B. H. Gottlieb (Ed.), *Social networks and social support* (pp. 69–96). Beverly Hills, CA: Sage.

Beach, S. R. H., Sandeen, E., & O'Leary, K. D. (1990). *Depressionin marriage*. New York: Guilford Press.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 561-571.

Benet-Martinez, V. & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology, 75,* 729-750.

Benjaminsen, S. (1981). Primary non-endogenous depression and features attributed to reactive depression. *Journal of Affective Disorders, 3,* 245–59.

Berkman, L. F., & Syme, S. L. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents. *American Journal of Epidemiology, 109,* 186-204.

Berscheid, E. (1983). Emotion. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, et al. (Eds.), *Close relationships* (pp. 110–168). New York: Freeman.

Bienvenu, O. J., Brown, C., Samuels, J. F., Liang, K-Y, Costa, P. T., Eaton, W. W., et al. (2001). Normal personality traits and comorbidity among phobic, panic and major depressive disorders. Psychiatry Research, 102, 73-85.

Bienvenu, O. J., Samuels, J. F., Costa, P. T., Reti, I. M., Eaton, W. W., & Nestadt, G. (2004). Anxiety and depressive disorders and the five-factor model of personality: A higher- and lower-order personality trait investigation in a community sample. *Depression and Anxiety, 20,* 92–97.

Bolger, N., & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of Neuroticism in exposure and reactivity to daily stressors. *Journal of Personality, 59*, 355–386.

Bos, E. H., Bouhuys, A. L., Geerts, E., Van Os, T. W. D. P., Van der Spoel, I. D., Brouwer, W. H., et al. (2005). Cognitive, physiological, and personality correlates of recurrence of depression. *Journal of Affective Disorders, 87*, 221-229.

Botwin, M. D., Buss, D. M., & Shackelford, T. K. (1997). Personality and mate preferences: Five factors in mate selection and marital satisfaction. *Journal of Personality, 65,* 107-136.

Bouchard, G., Lussier, Y., & Sabourin, S. (1999). Personality and marital adjustment: Utility of the .five-factor model of personality. *Journal of Marriage and the Family, 61,* 651–660.

Bradbury, T. N., & Fincham, F. D. (1988). Individual di.erence variables in close relationships: A contextual model of marriage as an integrative framework. Journal of Personality and Social Psychology, 54, 713–721.

Brown, G. W., & Harris, T. (1978). *Social origins of depression.* New York: Free Press.

Buss, D. M., Gomes, M., Higgins, D. S., & Lauterbach, K. (1987). Tactics of manipulation. *Journal of Personality and Social Psychology,* 52, 1219-1229.

Caplan, G. (1974). *Support systems and community mental health.* New York: Behavioral Publications.

Cassel, J. (1974). Psychosocial processes and "stress": Theoretical formulations. *International Journal of Health Services, 4,* 471-482.

Cassel, J. (1976). The contribution of the social environment to host resistance. *American Journal of Epidemiology, 104,* 107-123.

Cattell, R. B. (1950). *Personality: A systematic, theoretical and factual study.* New York: McGraw-Hill.

Caughlin, J. P., Huston, T. L., & Houts, R. N. (2000). How does personality matter in marriage. An examination of trait anxiety, interpersonal negativity, and marital satisfaction. *Journal of Personality and Social Psychology, 78,* 326–336.

Clark, L. A., Watson, D., & Mineka, S. (1994). Temperament, personality, and the mood and anxiety disorders. *Journal of Abnormal, Psychology, 103,* 103-116.

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38,* 300-314.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.).* Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, S., Gottlieb, B. H., & Underwood, L. G. (2000). Social relationships and health. In S. Cohen, L. G. Underwood, & B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 3–25). Oxford: Oxford University Press.

Cohen, S., & Syme, S. L. (Eds.). (1985). *Social support and health.* New York: Academic Press.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.

Conger, R. D., Rueter, M. A., & Elder, G. H. Jr. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology, 76*, 54-71.

Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood. *Journal of Personality and Social Psychology, 54*, 853-863.

Costa, P. T., & McCrae, R. R. (1992a). Four ways five factors are basic. *Personality and Individual Differences, 13,* 653-665.

Costa, P. T., & McCrae, R. R. (1992b). *Revised NEO-Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI): Professional manual.* Odessa, FL: Psychological Assessment Resources.

Côté , S., & Moskowitz, D. S. (1998). On the dynamic covariation between interpersonal behavior and affect: Prediction from Neuroticism, extraversion, and Agreeableness. *Journal of Personality and Social Psychology, 75,* 1032-1046.

Cox, B. J., McWilliams, L. A., Enns, M. W., & Clara, I. P. (2004). Broad and specific personality dimensions associated with major depression in a nationally representative sample. *Comprehensive Psychiatry,* 45, 246-253.

Coyne, J. C. (1994). Self-reported depression: Analog or ersatz depression? *Psychological Bulletin, 116,* 29-45.

Coyne, J. C. (1999). Thinking interactionally about depression: A radical restatement. In T. Joiner & J. C. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 365-392). Washington, DC: American Psychological Association.

Coyne, J. C., Burchill, S. A. L., & Stiles, W. B. (1991). An interactional perspective on depression. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective* (pp. 327-349). New York: Pergamon Press.

Coyne, J. C., & DeLongis, A. (1986). Going beyond social support: The role of social relationships in adaptation. *Journal of Consulting and Clinical Psychology, 54,* 454–460.

Coyne, J. C., Downey, G. (1991). Social factors and psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 42*, 401-425.

Coyne, J. C., Gotlib, I. H. (1991). The role of cognition in depression: A critical appraisal. *Psychological Bulletin, 94*, 472-505.

Coyne, J. C., Pepper, C. M., & Flynn, H. (1999). Significance of prior episodes of depression in two patient populations. *Journal of Consulting & Clinical Psychology, 67*, 76-81.

Coyne, J. C., & Smith, D. A. F. (1996). Couples coping with a myocardial infarction: Contextual perspective on patient self-efficacy. *Journal of Family Psychology, 8,* 43-54.

Coyne, J. C., Thompson, R., & Palmer, S. C. (2002). Marital quality, coping with conflict, marital complaints, and affection in couples with a depressed wife. *Journal of Family Psychology, 16,* 26-37.

Cranford, J. A. (2004). Stress-buffering or stress-exacerbation? Social support and social undermining as moderators of the relationship between perceived stress and depressive symptoms among married people. *Personal Relationships, 11*, 23–40.

Cutrona, C. E. (1996). Social support in couples: Marriage as a resource in times of stress. Thousand Oaks, CA: Sage.

Davila, J., Bradbury, T. N., Cohan, C. L., & Tochluk, S. (1997). Marital functioning and depressive symptoms: Evidence for a stress generation model. *Journal of Personality and Social Psychology, 73*, 849-861.

Dehle, C., Larsen, D., & Landers, J. (2001). Social support in marriage. *The American Journal of Family Therapy, 29*, 307–324.

DeNeve, K., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin, 124*, 197–229.

Doherty, W. J., & Jacobson, N. S. (1982). Marriage and the family. In B. B. Wolman (Ed.), *Handbook of developmental psychology* (pp.667-679). Englewood Cliffs, NJ: Prentice-Hall.

Donnellan, M. B., Conger, R. D., & Bryant, C. M. (2004). The Big Five and enduring marriages. *Journal of Research in Personality, 38,* 481–504.

Dorz, S., Borgherini, G., Cognolato, S., Conforti, D., Fiorellini, A. L., Scarso, C., et al., (2002). Social adjustment in inpatients with affective disorders: predictive factors. *Journal of Affective Disorders, 70*, 49–56.

Druley, J. A., & Townsend, A. L. (1998). Self-esteem as a mediator between spousal support and depressive symptoms: A comparison of healthy individuals and individuals coping with arthritis. *Health Psychology, 17*, 255 -261.

Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2003). Self-Critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology, 84,* 234–252.

Duggan, C. F., Lee, A.S., & Murray, R. M. (1990). Does personality predict long-term outcome in depression? *British Journal of Psychiatry, 157*, 19-24.

Enns, M. W., & Cox, B. J. (1997). Personality dimensions and depression: Review and commentary. *Canadian Journal of Psychiatry, 42*, 274–284.

Eysenck, H. J., & Wake.eld, J. A. (1981). Psychological factors as predictors of marital satisfaction. Advances in Behavior Research and Therapy, 3, 151–192.

Farabaugh, A., Fava, M., Mischoulon, D., Sklarsky, K., Petersen, T., Alpert, J. (2005). Relationships between major depressive disorder and comorbid anxiety and personality disorders. *Comprehensive Psychiatry, 46,* 266-271.

Farmer, A., Redman, K., Harris, T., Mahmood, A., Sadler, S., Pickering, A., et al. (2002). Neuroticism, extraversion, life events and depression. The Cardiff depression study. *British Journal of Psychiatry 181*, 118–122.

Feldman, S. I., Downey, G., & Schaffer-Neitz, R. (1999). Pain, negative mood, and perceived support in chronic pain patients: A daily diary study of people with reflex sympathetic dystrophy syndrome. *Journal of Consulting and Clinical Psychology, 67,* 776–785.

Finch, J. F., Okun, M. A., Pool, G. J., & Ruehlman, L. S. (1999). A Comparison of the Influence of Conflictual and Supportive Social Interactions on Psychological Distress. *Journal of Personality* 67, 581-621.

Finch, J. F., & Zautra, A. J. (1992). Testing latent longitudinal models of social ties and depression among the elderly: A comparison of distribution-free and maximum likelihood estimates with non-normal data. *Psychology and Aging, 7,* 107–118.

First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1995). Structured clinical interview for DSM-IV Axis I Disorders – Research version (SCID-I, Version 2.0, January 1995, Final Version). NY: Biometrics Research.

First, M. B., Spitzer, R. L., Gibbon, M., Williams, J. B. W., & Benjamin, L. (1994). Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II, Version 2.0). NY: Biometrics Research.

Fiske, D.W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal Social Psychology, 44*, 329-344.

Fitzpatrick, M. A. (1988). Negotiation, problem solving and conflict in various types of marriages. In P. Noller, & M. A. Fitzpatrick (Eds.), *Perspectives on marital interaction. Monographs in social psychology of language, No. 1* (pp. 245-270). Clevedon, England: Multilingual Matters.

Flett, G. L., Vredenburg, K., & Krames, L. (1997). The continuity of depression in clinical and nonclinical samples. *Psychological Bulletin, 121*, 395-416.

Forgas, J. P. (2000). Feeling and thinking: The role of affect in social cognition. New York: Cambridge University Press.

Fowles, D. C. (1993). Biological variables in psychopathology: A psychobiological perspective. In P. B. Sutker, & H. E. Adams (Eds.), *Comprehensive handbook of psychopathology* (2nd ed.) (pp. 57-82). New York: Plenum Press.

Franzoi, S. L.; Davis, M. H.; Young,, R. D. (1985). The effects of private self-consciousness and perspective taking on satisfaction in close relationships. *Journal of Personality and Social Psychology, 48,* 1584-1594.

Freedman, M. B., Leary, T. F., Ossario, A. G., & Coffey, H. S. (1951). The interpersonal dimension of personality. *Journal of Personality, 20,* 143-161.

Garfield, E. (1987). The 1983 articles most cited in the SSCI 1983-1985. *Current Contents, 43,* 3-9.

Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor Structure. *Journal of Personality and Social Psychology, 59,* 1216-1229.

Gotlib, I. H., & Cane. D. B. (1989). Self-report assessment of depression and anxiety. In P. C. Kendall, & D. Watson, (Eds.), *Anxiety and depression: Distinctive and overlapping features. Personality, psychopathology, and psychotherapy* (pp. 131-169). San Diego, CA: Academic Press,

Gottman, J.M. (1979). *Marital interaction: Empirical investigations.* New York: Academic Coding System (MICS).

Gottman, J. M. (1994). What predicts divorce? *The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Erlbaum.

Gottman, J. M. (1999). *The marriage clinic: A scientifically based marital therapy.* New York, NY: W. W. Norton & Co, Inc.

Graziano, W. G., & Eisenberg, N. (1997). Agreeableness: A dimension of personality. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 795-824). San Diego: Academic Press.

Graziano, W. G., Hair, E. C., & Finch, J. F. (1997). Competitiveness mediates the link between personality and group performance. *Journal of Personality and Social Psychology,* 73, 1394–1408.

Graziano,W. G., Jensen-Campbell, L.A., & Hair, E. C. (1996). Perceiving interpersonal conflict and reacting to it: The case for Agreeableness. *Journal of Personality and Social Psychology,* 70, 820–835.

Gray, J. A. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system.*New York: Clarendon Press/Oxford University Press.

Gray, J. A. (1987). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality, 21*, 493-509.

Gutiérrez, J. L. G., Jiménez, B. M., Hernández, E. G., & Puente, C. P. (2005). Personality and subjective well-being: Big five correlates and demographic variables. *Personality and Individual Differences, 38,* 1561-1569.

Gunthert, K. C., Cohen, L. H., & Armeli, S. (1999). The role of Neuroticism in daily stress and coping. *Journal of Personality and Social Psychology, 77*, 1087-1100.

Harkness, K. L., Bagby, R. M., Joffe, R. T., & Levitt, A. (2002). Major depression, chronic minor depression, and the Five-Factor Model of Personality. *European Journal of Personality, 16*, 271–281.

Hayes, N., & Joseph, S. (2002). Big 5 correlates of three measures of subjective well-being. *Personality and Individual Differences 34* 723–727.

Heller, K. (1979). The effects of social support: Prevention and treatment implications. In A. P. Hosmer, D. W., & Lemeshow, S. (1989). Applied logistic regression. New York: Wiley.

Hirschfeld, R. M., Klerman, G. L., Lavori, P., Keller, M., Griffith, P., & Coryell, W. (1989). Premorbid personality assessments of first onset of major depression. *Archives of General Psychiatry, 46,* 345–50.

Hooley, J. M., & Teasdale, J. D. (1989). Predictors of relapse in unipolar depressives: Expressed emotion, marital distress, and perceived criticism. *Journal of Abnormal Psychology*, 98, 229-235.

Horwitz, A. V., McLaughlin, J., & White, H. R. (1998). How the negative and positive aspects of partner relationships affect the mental health of young married people. *Journal of Health and Social Behavior, 39*, 124–136.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science, 241*, 540-545.

Howell, D. C. (1999). *Fundamental statistics for the behavioral sciences.* Pacific Grove, CA: Duxbury Press.

Ingersoll-Dayton, B., Morgan, D., & Antonucci, T. (1997). The effects of positive and negative social exchanges on aging adults. *Journals of Gerontology: Series B: Psychological Sciences & Social Sciences, 52B*, S190-S199.

Jamison, R. N., & Virts, K. L. (1990). The influence of family support on chronic pain. *Behaviour Research and Therapy, 28*, 283-287.

Jemmott, J. B., & Locke, S. E. (1984). Psychosocial factors, immunologic mediation, and human susceptibility to infectious diseases: How much do we know? *Psychological-Bulletin, 95,* 78-108.

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The "Big Five" Inventory—Versions 4a and 54* (Technical Report). Berkeley: Institute of Personality and Social Research, University of California.

Joiner, T. E., Metalsky, G. I., Katz, J., & Beach, S. R.H. (1999). Depression and excessive reassurance seeking. *Psychological Inquiry, 10*, 269-278.

Judd, L. J. (1997). The clinical course of unipolar major depressive disorders. *Archives of General Psychiatry* 54, 989–991.

Karney, B., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. Psychological Bulletin, 118, 3–34.

Karney, B. & Bradbury, T. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology, 5,* 1075–1092.

Kelly, E. & Conley, J. (1987). Personality and compatibility: A prospective analysis of marital stability and marital satisfaction. *Journal of Personality and Social Psychology, 52,* 27–40.

Kendler, K. S., Gardner, C. O., & Prescott, C. A. (2002). Toward a comprehensive developmental model for major depression in women. *American Journal of Psychiatry, 159,* 1133-1145.

Kendler, K. S., Neale, M. C., Kessler, R. C., Heath, A. C., & Eaves, L. J. (1993). A longitudinal twin study of personality and major depression in women. *Archives of General Psychiatry, 50,* 853-862.

Kessler R.C., McGonagle K., Zhao, S., Nelson, C., Hughes, M., Eshleman, S., et al., (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. *Archives of General Psychiatry, 51,* 8–19.

Kessler, R. C., Price, R. H., & Wortman, C. B. (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review of Psychology, 36,* 531-572.

Kiecolt-Glaser, J. K., Dyer, C. S., & Shuttleworth, E. C. (1988). Upsetting social interactions and distress among Alzheimer's disease family care-givers: A

replication and extension. *American Journal of Community Psychology*, 16, 825–837.

Kiecolt-Glaser, J. K., Fisher, L. D., Ogrocki, P., Stout, J., Speicher, C. E., & Glaser, R. (1987). Marital quality, marital disruption, and immune function. *Psychosomatic Medicine, 49,* 13-34.

Klein, D. N., Taylor, E. B., Harding, K., & Dickstein, S. (1988). Double depression and episodic major depression: Demographic, clinical, familial, personality, and socioenvironmental characteristics and short-term outcome. *American Journal of Psychiatry, 145,* 1226–1232.

Kuehner, C., & Buerger, C. (2005). Determinants of subjective quality of life in depressed patients: The role of self-esteem, response styles, and social support. *Journal of Affective Disorders, 86,* 205–213.

Kurdek, L.A. (1993). Predicting marital dissolution: A 5-year prospective longitudinal study of newlywed couples. *Journal of Personality and Social Psychology,* 64, 221-242.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York: Springer.

Leary, T. F. (1957). *Interpersonal diagnosis of personality.* New York: Ronald Press.

Lester, D., Haig, C., & Monello, R. (1989). Spouses' personality and marital satisfaction. *Personality and Individual Differences, 10,* 253-254.

Lewinsohn, P., M., Zeiss, A., M., & Duncan, E., M. (1989). Probability of relapse after recovery from an episode of depression. *Journal of Abnormal Psychology, 98,* 107-116.

Locke, H. J. (1951). *Predicting adjustment in marriage: a comparison of a divorced and a happily married group*. Oxford, England: Henry Holt.

Major, B., Zubek, J. M., Cooper, M. L., Cozzarelli, C., Richards, C. (1997). Mixed messages: Implications of social conflict and social support within close relationships for adjustment to a stressful life event. *Journal of Personality and Social Psychology, 72,* 1349-1363.

Manne, S. L., Taylor, K. L., Dougherty, J., & Kemeney, N. (1997). Supportive and negative responses in the partner relationship: Their association with psychological adjustment among individuals with cancer. Journal of Behavioral Medicine, 20, 101–125.

Manne, S., & Zautra, A. J. (1989). Spouse criticism and support: Their association with psychological adjustment among women with rheumatoid arthritis. *Journal of Personality and Social Psychology*, 56, 608–617.

Margolin, G., & Wampold, B. E. (1981). Sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology, 49,* 554-567.

Martin, L. L.,Ward, D. W., Achee, J. W., & Wyer, R. S. (1993). Mood as input: People have to interpret the motivational implications of their moods. *Journal of Personality and Social Psychology, 64,* 317-326.

McCrae, R. R., & Costa, P. T., Jr. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54, 385–405.

McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood.* New York: Guilford.

McCrae, R. R., & Costa, P. T., Jr. (1991). Adding Liebe und Arbeit: The full five-factor model and well-being. *Personality and Social Psychology Bulletin,* 17, 227-232.

McCrae, R. R., & Costa, P. T. (1997). Conceptions and correlates of openness to experience. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 825–847). San Diego: Academic Press.

McCullough, J. P., Kasnetz, M. D., Braith, J. A., Carr, K. F., Cones, J. H., Fielo, J., et al. (1988). A longitudinal study of an untreated sample of predominantly late onset characterological dysthymia. *Journal of Nervous and Mental Disease, 176*, 658–667.

McGregor, I., & Little, B. R. (1989). Personal projects, happiness, and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology,* 74, 494-512.

McNulty, J. K., & Karney, B. R. (2001). Attributions in marriage: Integrating specific and global evaluations of a relationship. *Personality and Social Psychology Bulletin, 27*, 943-955.

Meyer, G. J., & Shack, J. R. (1989). Structural convergence of mood and personality: Evidence for old and new directions. *Journal of Personality and Social Psychology, 57*, 691–706.

Miller, P., & Ingham, J. G. (1976). Friends, confidants and symptoms. *Social Psychiatry, 11,* 51-58.

Mitchell, P .B., Wilhelm, K., Parker, G., Austin, M., Rutgers, P., Malhi, G. S. (2001). The clinical features of bipolar depression: A comparison with matched major depressive disorder patients. *Journal of Clinical Psychiatry, 62,* 212-216.

Möller, K. (2004). The longitudinal and concurrent role of Neuroticism for partner relationships. *Scandinavian Journal of Psychology, 45,* 79–83.

Murray, S. L. (2001). Seeking a sense of conviction: Motivated cognition in close relationships. In G.J.O. Fletcher & M.S. Clark (Eds.), *Blackwell handbook of social psychology: Interpersonal processes.* Malden, MA: Blackwell.

Murray, G., Allen, N. B., & Trinder, J. (2002). Longitudinal investigation of mood variability and the ffm: Neuroticism predicts variability in extended states of positive and negative affect. Personality and Individual Differences, 33, 1217-1228.

Neff, L. A., & Karney, B. R. (2005). Gender differences in social support: A question of skill or responsiveness? *Journal of Personality and Social Psychology, 88*, 79-90.

Nemechek, S., & Olson, K. R. (1996). Personality and marital adjustment. *Psychological Reports, 78,* 26.

Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. *Psychological Bulletin, 101,* 259-282.

Norman, W.T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, *66*, 574-583.

Oatley, K., & Bolton, W. (1985). A social-cognitive theory of depression in reaction to life events. *Psychological Review, 3,* 372-388.

Okun, M. A., & Keith, V. M. (1998). Effects of positive and negative social exchanges with various sources on depressive symptoms in younger and older adults. Journal of Gerontology: Psychological Sciences, 53, 4–20.

Okun, M. A., Melichar, J. F., & Hill, M. D. (1990). Negative daily events, positive and negative social ties, and psychological distress among older adults. *The Gerontologist, 30,* 193–199.

Oquendo, M. A., Lizardi, D., Greenwald, S., Weissman, M. M., & Mann, J. J. (2004). Rates of lifetime suicide attempt and rates of lifetime major depression in different ethnic groups in the United States. *Acta Psychiatrica Scandinavica, 110,* 446–451.

Parker, G., Hadzi-Pavlovic, D., Brodaty, H., Boyce, P., Mitchell, P., Wilhelm, K., et al. (1992). Predicting the course of melancholic and non–melancholic depression. *Journal of Nervous Mental Disorders, 60,* 693–702.

Pasupathi, M., Carstensen, L. L., Levenson, R. W., & Gottman, J. M. (1999). Responsive listening in long-married couples: A psycholinguistic perspective. *Journal of Nonverbal Behavior, 23,* 173 -193.

Petersen, T., Bottonari, K., Alpert, J. E., Fava, M., & Nierenberg, A. A. (2001). Use of the Five-Factor Inventory in characterizing patients with major depressive disorder. *Comprehensive Psychiatry, 42,* 488-493.

Priel, B., & Shahar, G. (2000). Dependency, self-criticism, social context and distress: Comparing moderating and mediating models. *Personality and Individual Differences,28*, 515-525.

Radloff, L. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1,* 385-401.

Ranjith, G., Farmer, A., McGuffin, P., & Cleare, A. J. (2005). Personality as a determinant of social functioning in depression. *Journal of Affective Disorders, 84*, 73–76.

Raush, H. L., Barry, W. A., Hertel, R. K., & Swain, M A (1974). *Communication, conflict, and marriage.* San Francisco: Jossey-Bass.

Roberts, S. B., & Kendler, K. S. (1999). Neuroticism and self-esteem as indices of the vulnerability to major depression in women. *Psychological Medicine, 29*, 1101-1109.

Robins, R. W., Caspi, A., & Moffitt, T. E. (2002). It's not just who you're with, it's who you are: Personality and relationship experiences across multiple relationships. *Journal of Personality, 70,* 925-964.

Rodin, J., & Salovey, P. (1989). Health Psychology. *Annual Review of Psychology, 40,* 533-579.

Rook, K. (1984). The negative side of social interaction: Impact on psychological well-being. *Journal of Personality and Social Psychology, 46*, 1097–1108.

Rook, K. S. (1998). Investigating the positive and negative sides of personal relationships: Through a lens darkly? In B. H. Spitzberg & W. R. Cupach (Eds.), *The dark side of close relationships* (pp. 369–393). Mahwah, NJ: Erlbaum.

Rossier, J., Meyer de Stadelhofen, F., & Berthoud, S. (2004). The hierarchical structures of the NEO PI-R and the 16 PF 5. *European Journal of Psychological Assessment, 20,* 27–38.

Ruehlman, L. S., & Karoly, P. (1991). With a little flak from my friends: Development and preliminary validation of the Test of Negative Social Exchange (TENSE). *Psychological Assessment, 3*, 97–104.

Rush, A J., Zimmerman, M., Wisniewski, S. R., Fava, M., Hollon, S. D., Warden, D., et al. (2005). Comorbid psychiatric disorders in depressed outpatients: Demographic and clinical features. *Journal of Affective Disorders, 87*, 43-55.

Russell, R. & Wells, P. (1994). Predictors of happiness in married couples. *Personality and Individual Differences, 3*, 313–321.

Saklofske, D. H., Kelly, I. W., Janzen, B. L. (1995). Neuroticism, depression, and depression proneness. *Personality and Individual Differences, 18,* 27-31.

Santor, D. A., Bagby, R. M., & Joffe, R. T. (1997). Evaluating stability and change in personality and depression. *Journal of Personality and Social Psychology, 73*, 1354–1362.

Santor, D. A. Zuroff, D. C., Ramsay, J. O., Cervantes, P., & Palacios, J. (1995). Examining scale discriminability in the BDI and CES-D as a function of depressive severity. *Psychological Assessment*, *7*, 131-139.

Schaap, C. (1982). *Communication and adjustment in marriage.* Netherlands: Swets Zeitlinger.

Schmitz, N., Kugler, J., & Rollnik, J. (2003). On the relation between Neuroticism, self-esteem, and depression: Results from the National Comorbidity Survey. *Comprehensive Psychiatry, 44*, 169-176.

Schuster, T. L., Kessler, R. C., & Aseltine, R. H., Jr. (1990). Supportive interactions, negative interactions, and depressed mood. *American Journal of Community Psychology, 18*, 423–438.

Scott, J., Eccleston, D., & Boys, R. (1992). Can we predict the persistence of depression? *British Journal of Psychiatry, 161,* 633–637.

Segal, Z. V. (1988). Appraisal of the self-schema construct in cognitive models of depression. *Psychological Bulletin, 103,* 147-162.

Segal, Z. V., & Ingram, R. E. (1995). Mood priming and construct activation in tests of cognitive vulnerability to unipolar depression. *Psychology Review, 14,* 663-695.

Seligman, M. E. P. (1998). The prediction and prevention of depression. In D. K. Routh, & R. J. DeRubeis, (Eds.), *The science of clinical psychology: Accomplishments and future directions* (pp. 201-214). Washington, DC: American Psychological Association.

Seligman, M. E. P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York, NY: Free Press.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55,* 5-14.

Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin, 31,* 343–359.

Slater, J., & Depue, R. A. (1981). The contributions of environmental events and social support to serious suicide attempts in primary depressive disorder. *Journal of Abnormal Psychology, 90,* 275-85.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhart (Ed.), *Sociological methodology 1982* (pp. 290-312). San Francisco: Jossey-Bass.

Sobel, M. E. (1988). Direct and indirect effects in linear structural equation models. In J. S. Long (Ed.), *Common problems/proper solutions: Avoiding error in quantitative research* (pp. 46-64). Beverly Hills, CA: Sage.

Solomon, D. A., Keller, M. B., Leon, A. C., Mueller, T. I., Lavori, P. W., Shea, M. T., et al. (2000). Multiple recurrences of major depressive disorder. *American Journal of Psychiatry, 157,* 229-233.

Tamir, M., & Robinson, M. D. (2004). Knowing good from bad: The paradox of Neuroticism, negative affect, and evaluative processing. *Journal of Personality and Social Psychology, 87,* 913–925.

Tamir, M., Robinson, M. D., Clore, G. L., Martin, L. L., & Whitaker, D. (2004). Are we puppets on a string? The contextual meaning of unconscious expressive cues. *Personality and Social Psychology Bulletin, 30,* 237–249.

Taylor, S. E. (1989). *Positive illusions: Creative self-deception and the healthy mind.* New York: Basic Books.

Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions, and health. *American Psychologist, 55,* 99-109.

Taylor, S., & McLean, P. (1993). Outcome profiles in the treatment of unipolar depression. Behavior Research Therapy, 31, 325–330.

Taylor, S. E., Lichtman, R. R., Wood, J. V., Bluming, A. Z., Dosik, G. M., & Leibowitz, R. L. (1985). Illness-related and treatment-related factors in psychological adjustment to breast cancer. *Cancer, 55,* 2506-1513.

Teichman, Y., Bar-El, Z., Shor, H., & Elizur, A. (2001). Cognitive, interpersonal, and behavioral predictors of patients' and spouses' depression. *Journal of Affective Disorders, 74,* 247–256.

Ting-Toomey, S. (1982). An analysis of verbal communication patterns in high and low marital adjustment groups. *Human Communication Research, 9,* 306-319.

Tobin, R. M., Graziano, W. G., Vanman, E. J., & Tassinary, L. G. (2000). Personality, emotional experience, and efforts to control emotions. *Journal of Personality and Social Psychology, 79,* 656–669.

Trobst, K. K. (1999). Social support as an interpersonal construct. *European Journal of Psychological Assessment, 15,* 246-255.

Trobst, K. K. (2000). An interpersonal conceptualization and quantification of Social Support Transactions. *Personality and Social Psychology Bulletin, 26,* 971-986.

Van den Berg, P. T., & Pitariu, H. (2005). The relationships between personality and well-being during societal change. *Personality and Individual Differences, 39,* 229-234.

Vandervoort, D. (1999). Quality of social support in mental and physical health. *Current Psychology: Developmental, Learning, Personality, Social, 18,* 205-222.

Vaughn, C. E., & Leff, J. P. (1976). The influence of family and social factors on the course of psychiatric illness: A comparison of schizophrenic and depressed Neurotic patients. *British Journal of Psychiatry, 129,* 125-137.

Vinokur, A. D., & van Ryn, M. (1993). Social support and undermining in close relationships: Their independent effects on the mental health of unemployed persons. *Journal of Personality and Social Psychology, 65,* 350–359.

Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96,* 465–490.

Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology.* San Diego: Academic Press.

Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. *Journal of Personality and Social Psychology, 78,* 546-558.

Weissman, M. M., & Klerman, G. L. (1977). The chronic depressive in the community: Unrecognized and poorly treated. *Comprehensive Psychiatry, 18*, 523-532.

Whisman, M. A., Uebelacker, L. A., & Weinstock, L. M. (2004). Psychopathology and marital satisfaction: The importance of evaluating both partners. *Journal of Consulting amd Clinical Psychology, 72,* 830-838.

Wills, T. A., & Fegan, M. (2001). Social networks and social support. In A. Baum, T. A. Revenson, & J. E. Singer (Eds.), *Handbook of health psychology* (pp. 209-234). Mahwah, NJ: Erlbaum.

Wills, T. A., & Shinar, O. (2000). Measuring perceived and received social support. In S. Cohen, L. G. Underwood, B. H. Gottlieb (Eds.), Social support measurement and intervention: A guide for health and social scientists (pp. 86–135). Oxford: Oxford University Press.

Zaleski, Z., & Galkowska, M. (1978). Neuroticism and marital satisfaction. *Behaviour Research and Therapy, 16,* 285-286.

Zimmerman, M., & Coryell, W. (1987). The inventory to diagnose depression, lifetime version. *Acta Psychiatrica Scandinavica, 75,* 495-499.

Zimmerman, M., Coryell, W., Corenthal, C., & Wilson, S. (1986). A self-report scale to diagnose major depressive disorder. *Archives of General Psychiatry, 43,* 1076-1081.

Appendix A: Screening Packet – Mood Assessment Project Flyer

Mood Assessment Project (MAP)

- Project director: Dr. Myriam Mongrain, York University

Win $1,000!

- Fill-out the included forms, and become eligible for a $1,000 draw!
- If selected for the project, you could make an additional $120!
- Fill this out now, insert in white envelope, and mail. *TURN OVER*

Appendix A (continued): Screening Packet – Initial Informed Consent Form

INFORMED CONSENT FORM
DEPARTMENT OF PSYCHOLOGY, YORK UNIVERSITY

Participant name & code:________________________________

Study title: "Mood Assessment Project (MAP)"

Our research team is interested in the functioning of individuals who have suffered from depressive symptoms. The team is headed by Dr. Myriam Mongrain from the psychology department at York. The procedure that you will follow involves an audiotaped and videotaped interview regarding some of your current and past symptoms. You may also be asked to answer daily measures over the internet for 20 consecutive days. Finally, we are asking permission to invite your partner to participate, if you meet the requirements of the study. You do not have to participate in all aspects of this project, and may refrain from components that do not interest you. Your estimated participation time will be 2 hours for the initial interview, and 5-10 minutes a day for the diary section (Phase 2 of the project).

Risks and Benefits

The Research Ethics Committee of University of Toronto has approved the study. There are no evident risks inherent in it, aside from the time involved in filling-out the forms and answering numerous questions. There are some benefits which may reasonably be expected to result from the study: 1) you may gain a greater understanding of your moods, and will have the opportunity to consult with Dr. Mongrain for any questions you may have about current or past difficulties (416 736-5115, Ext. 66193). 2) You will also be paid $35 for your participation in the initial interview, and up to $100 for Phase 2 of the project.

All information, including your responses in the interview and on the questionnaires will be kept confidential. For example, we will use participant code numbers and not names in our files which we keep in our custody and which are unavailable to others. All information derived by the study will be used only for research purposes, and the data obtained will be destroyed within a year of the final publication. We will attempt to send a summary and an explanation of the results for the participants of the project only.

Participant Consent

I have been informed about the nature and procedures of the study, and understand it in full. I know that **I may withdraw from the study at any time without any penalty.** I agree to serve as a participant in the study.

________________________________ ________________

Signature of participant Date

________________________________ ________________

Signature of witness Name of witness

____

Mailing address (for your compensation in Phase 2, and to mail results of the project) ________________

(Keep 1 copy for your records.) ________________

Appendix A (continued):

Screening Packet – Inventory to Diagnose Depression, Lifetime Version

INSTRUCTIONS: **ID:**

1. Think about **A TIME IN YOUR LIFE WHEN YOU FELT MOST DEPRESSED.**
2. Now read each of the following statements carefully, and circle the number next to the statement that best describes how you felt. **PICK ONLY ONE.**
3. For every question in which you circled #1, 2, 3 or 4, circle whether you felt that way for more OR less than 2 weeks.

1) 0 I did not feel sad or depressed.
 1 I occasionally felt sad or down.
 2 I felt sad most of the time, but I was able to snap out of it.
 3 I felt sad all the time, and I couldn't snap out of it.
 4 I was so sad or unhappy that I couldn't stand it.
 *** If you circled #1,2, 3 or 4: Did you feel sad or down for more or less than 2 weeks? **more** **less**

2) 0 My energy level was normal.
 1 My energy level was occasionally a little lower than normal.
 2 I got tired more easily or had less energy than usual.
 3 I got tired from doing almost anything.
 4 I felt tired or exhausted almost all of the time.
 ***If you circled #1, 2, 3 or 4: Was your energy level lower than usual for more or less than 2 weeks? **more** **less**

3) 0 I was not feeling more restless and fidgety than usual.
 1 I felt a little more restless or fidgety than usual.
 2 I was very fidgety, and I had some difficulty sitting still in a chair.
 3 I was extremely fidgety, and I paced a little bit almost every day.
 4 I paced more than an hour per day, and I couldn't sit still.
 ***If you circled #1, 2, 3 or 4: Did you feel restless and fidgety for more or less than 2 weeks? **more** **less**

4) 0 I did not talk or move more slowly than usual.
 1 I talked a little slower than usual.
 2 I spoke slower than usual, and it took me longer to respond to questions, but I could still carry on a normal conversation.
 3 Normal conversations were difficult because it was hard to start talking.
 4 I felt extremely slowed down physically, like I was stuck in mud.
 ***If you circled #1, 2, 3 or 4: Did you feel slowed down for more or less than 2 weeks? **more** **less**

5) 0 I did not lose interest in my usual activities.
 1 I was a little less interested in 1 or 2 of my usual activities.
 2 I was less interested in several of my usual activities.
 3 I lost most of my interest in almost all of my activities.
 4 I lost all interest in all of my usual activities.
 ***If you circled #1, 2, 3 or 4: Was your interest in your usual activities low for more or less than 2 weeks? **more** **less**

6) 0 I got as much pleasure out of my usual activities as usual.
 1 I got a little less pleasure from 1 or 2 of my usual activities.
 2 I got less pleasure from several of my usual activities.
 3 I got almost no pleasure from most of the activities which I usually enjoyed.
 4 I got no pleasure from any of the activities which I usually enjoyed.
 ***If you circled #1, 2, 3 or 4: Was your enjoyment in your usual activities low for more or less than 2 weeks? **more** **less**

7) 0 My interest in sex was normal.
 1 I was only slightly less interested in sex than usual.
 2 There was a noticeable decrease in my interest in sex.
 3 I was much less interested in sex.
 4 I lost all interest in sex.
 ***If you circled #1, 2, 3 or 4: Was your interest in sex low for more or less than 2 weeks? **more** **less**

Appendix A (continued):

Screening Packet – Inventory to Diagnose Depression, Lifetime Version

8) 0 I did not feel guilty.
1 I occasionally felt a little guilty.
2 I often felt quite guilty.
3 I felt quite guilty most of the time.
4 I felt extremely guilty most of the time.
***If you circled #1, 2, 3 or 4: Did you have guilt feelings for more or less than 2 weeks? **more** **less**

9) 0 I did not feel like a failure.
1 My opinion of myself was occasionally a little low.
2 I felt like I was inferior to most people.
3 I felt like a failure.
4 I felt I was a totally worthless person.
***If you circled #1, 2, 3 or 4: Were you down on yourself for more or less than 2 weeks? **more** **less**

10) 0 I didn't have any thoughts of death or suicide.
1 I occasionally thought life was not worth living.
2 I frequently thought of dying in passive ways (such as going to sleep and not waking up), or that I'd be better off dead.
3 I had frequent thoughts of killing myself.
4 I tried to kill myself.
***If you circled #1, 2, 3 or 4: Did you think about dying or killing yourself for more or less than 2 weeks? **more** **less**

11) 0 I could concentrate as well as usual.
1 My ability to concentrate was slightly worse than usual.
2 My attention span was not as good as usual and I had difficulty collecting my thoughts, but this didn't cause any problems.
3 My ability to read or hold a conversation was not as good as usual.
4 I could not read, watch TV, or have a conversation without great difficulty.
***If you circled #1, 2, 3 or 4: Did you have problems concentrating for more or less than 2 weeks? **more** **less**

12) 0 I made decisions as well as usual.
1 Decision making was slightly more difficult than usual.
2 It was harder and took longer to make decisions, but I did make them.
3 I was unable to make some decisions.
4 I couldn't make any decisions at all.
***If you circled #1, 2, 3 or 4: Did you have problems making decisions for more or less than 2 weeks? **more** **less**

13) 0 My appetite was not less than normal.
1 My appetite was slightly worse than usual.
2 My appetite was clearly not as good as usual, but I still ate.
3 My appetite was much worse.
4 I had no appetite at all, and I had to force myself to eat even a little.
***If you circled #1, 2, 3 or 4: Was your appetite decreased for more or less than 2 weeks? **more** **less**

14) 0 I didn't lose any weight.
1 I lost less than 5 pounds.
2 I lost between 5-10 pounds.
3 I lost between 11-25 pounds.
4 I lost more than 25 pounds.
***If you circled #1, 2, 3 or 4: Were you dieting and deliberately trying to lose weight? Circle **Yes** or **No**
***If you circled #1, 2, 3 or 4: Were you losing weight for more or less than 2 weeks? **more** **less**

15) 0 My appetite was not greater than normal.
1 My appetite was slightly greater than usual.
2 My appetite was clearly greater than usual.
3 My appetite was much greater than usual.
4 I felt hungry all the time.
***If you circled #1, 2, 3 or 4: Was your appetite increased for more or less than 2 weeks? **more** **less**

Appendix A (continued):

Screening Packet – Inventory to Diagnose Depression, Lifetime Version

ID: ____________

16) 0 I didn't gain any weight.
1 I gained less than 5 pounds.
2 I gained between 5-10 pounds.
3 I gained between 11-25 pounds.
4 I gained more than 25 pounds.
***If you circled #1, 2, 3 or 4: Were you gaining weight for more or less than 2 weeks? **more** **less**

17) 0 I was not sleeping less than normal.
1 I occasionally had slight difficulty sleeping.
2 I clearly didn't sleep as well as usual.
3 I slept about half my normal amount of time.
4 I slept less than 2 hours per night.
***If you circled #1, 2, 3 or 4: Did you have sleep problems for more or less than 2 weeks? **more** **less**

18) 0 I was not sleeping more than normal.
1 I occasionally slept more than usual.
2 I frequently slept at least 1 hour more than usual.
3 I frequently slept at least 2 hours more than usual.
4 I frequently slept at least 3 hours more than usual.
***If you circled #1, 2, 3 or 4: Did you sleep extra for more or less than 2 weeks? **more** **less**

19) 0 I did not feel anxious, nervous, or tense.
1 I occasionally felt a little anxious.
2 I often felt anxious.
3 I felt very anxious most of the time.
4 I felt terrified and near panic.
***If you circled #1, 2, 3 or 4: Did you feel anxious, nervous or tense for more or less than 2 weeks? **more** **less**

20) 0 I did not feel discouraged about the future.
1 I occasionally felt a little discouraged about the future.
2 I often felt very discouraged about the future.
3 I felt very discouraged about the future most of the time.
4 I felt that the future was hopeless and that things would never improve.
***If you circled #1, 2, 3 or 4: Did you feel discouraged for more or less than 2 weeks? **more** **less**

21) 0 I did not feel irritated or annoyed.
1 I occasionally got a little more irritated than usual.
2 I got irritated or annoyed by things that usually don't bother me.
3 I felt irritated or annoyed almost all of the time.
4 I felt so depressed that I didn't get irritated at all by things that would normally bother me.
***If you circled #1, 2, 3 or 4: Did you feel this way for more or less than 2 weeks? **more** **less**

22) 0 I was not worried about my physical health.
1 I was occasionally concerned about bodily aches and pains.
2 I was worried about my physical health.
3 I was very worried about my physical health.
4 I was so worried about my physical health that I could not think about anything else.
***If you circled #1, 2, 3 or 4: Did you worry about your physical health for more or less than 2 weeks? **more** **less**

The following questions are about the period of depression you just described.

1) Did anything cause the depression? **Yes** **No**
IF YOU CIRCLED YES, DESCRIBE BRIEFLY (in one sentence):

Appendix A (continued):

Screening Packet – Inventory to Diagnose Depression, Lifetime Version

2) How long did the depression last? (CIRCLE ONE)
   a. less than 1 week
   b. at least 1 week, but less than 2 weeks
   c. at least 2 weeks, but less than 1 month
   d. at least 1 month, but less than 6 months
   e. at least 6 months, but less than 1 year
   f. at least 1 year, but less than 2 years
   g. 2 years or more

3) Did the depression affect your schoolwork, job, social life, performance of household chores, or anything else? Yes No

4) Did you see a physician, counsellor, psychologist, or psychiatrist about how you were feeling? Yes No

5) Did you receive any medication for how you were feeling? Yes No

6) Were you hospitalized for depression? Yes No

Appendix B: Phone Screen

PHONE SCREEN (MAP)

Date:__________
Interviewer: ______________ Participant ID:__________

INTRODUCTION: Hi, my name is ________. I'm a senior Ph.D. student in clinical Psychology at York University. I'm calling in regards to a research project on mood. Do you remember filling-out a questionnaire for this project? (It was called "MAP.")Well, I'm calling to ask you a few questions to determine if you might be suitable for the next phases of the study. I will explain the study, and will also ask you further screening questions. This should take 10-15 minutes. Can we do this now? (IF NO: When can I call back?)

Relationship Status: First, I just need to verify: Are you still in a relationship? ______ A *heterosexual relationship?* _____ If YES: How long have you been dating/married?______________ (If 6 months or more, continue.)
If homosexual say: "We are studying heterosexual couples at this time. Because we need to keep the sample homogeneous, we won't be able to include you."
If single, or less than 6 month relationship, disqualify. If close to 6 months, tell them we will call back when this requirement has been met.

UPCOMING STUDY: This project involves an interview, and some questionnaires that are completed at York. It takes around 2 hours, and you will be paid $35 for your participation. Some sections of the interview are audiotaped and videotaped for research and training purposes. Your name will not appear on any of the research material. Is this O.K.? (IF YES:) Then we can continue to find-out if you are suitable for the study...
(IF NO: We can make an exception and not videotape your interview. However, we will need to audiotape it for reliability purposes. Is this O.K.? If YES, continue and make a note to yourself to not videotape this participant).

Alcohol screen: First, we need to ask about your drinking habits.
How much do you drink? ____________ How often?__________
Do you take recreational drugs?____ If YES: How often?__________
Have drugs or alcohol created problems in your life?__________
(If YES, ask if caller is currently abstinent (e.g. in AA or NA) or if they are still active. If the substance abuse problem has been going on fairly regularly over the last year, disqualify. Suggest ARF: 595-6000, or AA: 487-5591.)

This research project we are conducting is specifically concerned with depressed mood. You may remember answering some questions to that effect in the questionnaire you filled-out. I'd like to ask you similar questions with respect to that time in your life where you felt particularly depressed. Do you remember that time? (Make sure the episode is clear in their minds.)

Appendix B (continued): Phone Screen

(ASK):Before we begin, is there a time in your life when you felt worse, (or which lasted longer?) If YES, please refer to that time in answering my questions. So try to imagine yourself during that time in your life... How old were you? ______

A. You were feeling depressed or down... Was it most of the day? How long did it last? (2 weeks)_____ (More, or less than half the time?)

B. During that time, did you lose interest in things, or were you unable to enjoy the things hat you used to enjoy? (More, or less than half the time? For 2 weeks?)
____

C. How was your sleep? (Trouble falling asleep, waking too early or sleeping too much.) How long did it last? (2 weeks)__________

D. Were you eating more or less than usual? OR Was there a change in your appetite? Was that nearly every day? (2 weeks) __________

E. Was your energy like? Tired all the time? (Same as above.)
____

F. Were you agitated, or restless? (IF NO:) Or were you feeling slowed-down? (More, or less than half the time, for 2 weeks?)_____

G. What was your concentration like? Did you have trouble making decisions? (Same as above.)__________

H. Did you feel worthless or guilty? (More, or less than half the time? 2 weeks?)______________

I. Did you have thoughts of hurting yourself? __________
If so, did you do anything to hurt yourself OR Did you have a plan? ______________________

What about now? Do you have thoughts of hurting yourself? ______
If so, would you do anything to hurt yourself? Do you have a plan? ______________________
*** If currently suicidal, disqualify and refer (see next page).

J. Were you ever diagnosed by a professional as having a psychiatric or emotional disorder? When? ________

What was it? __________ Diagnosed by whom? ______________

Were you treated for it? ______ How?____________________

Note to interviewers: Disqualify if participant clearly is:
-currently suicidal -current eating disorder -current substance abuse
-has had/ or has clear symptoms of psychotic or bipolar disorder
-borderline, antisocial, schizoid, or schizotypal PD

Appendix B (continued): Phone Screen

DISQUALIFICATION: Thank you for taking this time to answer my questions. Unfortunately, you don't meet the criteria for our study, but keep in mind that you are entered in our $1,000 draw! The draw will take place once we have contacted everybody, and we will be sure to call you if you win. (Odds are about 1/500.)

Those who qualify: Note: You are still eligible for the $1,000 draw! You also qualify for the next phase of the study. As I've mentioned, the project involves an interview and some questionnaires that you will do here at York. We will need about 3 hours of your time, and you will receive $30 for your participation. We also pay you $5.00 for your parking or transportation (total $35). Can we book a time?

Date & Time:________________
Location: ________________

Here's how you get to our lab!
TTC: From Downsview station: Take the 196 Express bus to York.
From Finch station: Take the 60C or 60F bus to York.
The bus lets you off very close to the BSB building. Just walk towards the main building, and you will see a sign on your right for the BSB building. Go in, and follow the arrows on the "MAP" signs. (You will make a left as you go in the BSB, and walk to the elevators. Take the elevators to the 4th floor, and make a left to the waiting room #406. We will meet you there.)

By car: Get to Keele and Finch, and go north on Keele. Take the main entrance to York at the lights (you will see a Canadian flag.) For parking, ask for directions at the information booth along the main entrance. You can get instructions to get to the BSB. (It's in the right-hand corner at the top of the crescent.)

PARTNER SOLICITATION:
We are also running a concurrent couples' study. We're wondering if your partner and yourself would like to participate. It will involve filling-out short questionnaires over the internet for a period of 3 weeks. You would each get $100 for your participation. You will find-out if you qualify after your initial interview. But for now, can we have your permission to get in touch with your partner? (We would only do so after your interview.) If YES:

What's his name?________________

Where do we reach him? #________________

When's a good time to get a hold of him? ________________________

****

Appendix B (continued): Phone Screen

Referrals if person is currently in a crisis:

Emergency of their local hospital 535-8501
The Clarke Institute of Psychiatry →
- MOOD DISORDERS CLINIC x6983
- ANXIETY DISORDERS CLINIC x6819
- INTERPERSONAL THERAPY CLINIC x6825
- WOMEN'S THERAPY CLINIC x2405

Distress Centres: 598-1121; 486-1456; Scarborough: 751-4888
Gerstein Centre 929-5200
Barbara Schlifer Clinic
Rape Crisis Centre 597-8808
Women's Sexual Assault Care Centre 323-6040
Family Services Association for battered women and abusive men 595-9618
Family Services Association for Couples and Individuals 595-9618; for families undergoing separation, divorce and remarriage 595-9151;
Jewish Family and Child Service 638-7800; South Branch: 961-9344
Women's Counselling Referral and Education Service 534-7501
Toronto East General, Crisis Intervention 469-6200
DISPOSITION OF CALL

Bereaved Families of Ontario 440-0290

North York General Psych. Dept. 756-6316

REGISTERED PSYCHOLOGISTS:
- Dr. Joan Hulbert: 544-8223
- Dr. Jonathan Quick: 733-8503
- Dr. Evelyn Sommers: 260-5497
- Dr. Lynne Angus: 736-2100 x 33615 (for referrals in the Beaches)

Trillium Health Centre in Mississauga Psych. Dept. (905) 848-7387

Other referrals (from the wall in [illegible]) that you can add to the list:
also at Trillium Health Centre - Anger Management: 905-848-7580
* Dr. [illegible] (psychotherapist covered by OHIP): 170 St. George St., [illegible]
Dr. [illegible] ([illegible]): [illegible] - good for older clients, religious issues
Pam McRoberts (reg. psychologist): 207-[illegible], Etobicoke
National Eating Disorders Centre: 340-4156
Women's College Hospital Psychiatry Dept.: 323-6230
Toronto East General Psychiatry Dept.: 469-6204
(or call Jean Edwards' voice mail: 469-6310)
East End Community Health Centre: 694-[illegible]
Peel Rape Crisis Centre: 905-273-9337
Chronic Pain - Dr. R. Miller (private practice): 962-4500
* Mindfulness Based Stress Reduction Clinic (good for chronic pain, mild depression):
- Dr. Lawrence Bailen & wife Geraldine Bailen
- fee for assessment, treatment covered by OHIP
- → 923-7287

Chinese Referrals - Dr. Tat Thang (social worker): 979-8817
- Dr. Cathleen Lung (reg. psychologist): 734-[illegible]

Appendix C: Consent Form for Target Participants

INFORMED CONSENT FORM
DEPARTMENT OF PSYCHOLOGY, YORK UNIVERSITY

Participant name & code:______________________________

Study title: "Mood Assessment Project (MAP)"

Our research team is interested in the functioning of individuals who have suffered from depressive symptoms. The team is headed by Dr. Myriam Mongrain from the psychology department at York. The procedure that you will follow involves an audiotaped and videotaped interview regarding some of your current and past symptoms. You may also be asked to answer daily measures over the internet for 20 consecutive days. Finally, we are asking permission to invite your partner to participate, if you meet the requirements of the study. You do not have to participate in all aspects of this project, and may refrain from components that do not interest you. Your estimated participation time will be 2 hours for the initial interview, and 5-10 minutes a day for the diary section (Phase 2 of the project).

Risks and Benefits

The Research Ethics Committee of University of Toronto has approved the study. There are no evident risks inherent in it, aside from the time involved in filling-out the forms and answering numerous questions. There are some benefits which may reasonably be expected to result from the study: 1) you may gain a greater understanding of your moods, and will have the opportunity to consult with Dr. Mongrain for any questions you may have about current or past difficulties (416 736-5115, Ext. 66193). 2) You will also be paid $35 for your participation in the initial interview, and up to $100 for Phase 2 of the project.

All information, including your responses in the interview and on the questionnaires will be kept confidential. For example, we will use participant code numbers and not names in our files which we keep in our custody and which are unavailable to others. All information derived by the study will be used only for research purposes, and the data obtained will be destroyed within a year of the final publication. We will attempt to send a summary and an explanation of the results for the participants of the project only.

Participant Consent

I have been informed about the nature and procedures of the study, and understand it in full. I know that I **may withdraw from the study at any time without any penalty.** I agree to serve as a participant in the study.

______________________________ ______________________________
Signature of participant Date

______________________________ ______________________________
Signature of witness Name of witness

Mailing address (for your compensation in Phase 2, and to mail results of the project) ______________________________

____

(Keep 1 copy for your records.) ______________________________

Appendix D: Web Instructions for Daily Diaries

Web Instructions to Participants and Partners

Thank you very much for agreeing to participate in our study. The information you provide will help us greatly in our understanding of the interpersonal experiences of romantic couples.

Every night, please logon to: http://www.psych.yorku.ca/map/

Fill-out the mandatory quiz: *every night* before you go to bed. Do the next quiz if you've had a negative interaction with your partner that day.

All the instructions are available on the first page of the web site.

Your ID and password are identical. They are ____ (Ask the experimenter if unclear.)

You are not to discuss or share any of your questions or answers with your partner or anyone else until after the study.

At the end of the 20 days, we will receive your results and will pay you according to the number of days where you have done the mandatory quiz. (You are paid $5 *for each daily questionnaire, for a maximum total of $100 over the 20 days*).

Appendix E: The Center for Epidemiologic Studies Depression Scale

Using the scale below, indicate the number which best describes how often you felt or behaved this way, **DURING THE PAST WEEK.**

1= Rarely or none of the time (less than 1 day)
2= Some or a little of the time (1-2 days)
3= Occasionally or a moderate amount of time (3-4 days)
4= Most or all of the time (5-7 days)

DURING THE PAST WEEK:

____ 1. I was bothered by things that usually don't bother me.

____ 2. I did not feel like eating; my appetite was poor.

____ 3. I felt that I could not shake off the blues even with help from my family or friends.

____ 4. I felt that I was just as good as other people.

____ 5. I had trouble keeping my mind on what I was doing.

____ 6. I felt depressed.

____ 7. I felt that everything I did was an effort.

____ 8. I felt hopeful about the future.

____ 9. I thought my life had been a failure.

____ 10. I felt fearful.

____ 11. My sleep was restless.

____ 12. I was happy.

____ 13. I talked less than usual.

____ 14. I felt lonely.

____ 15. People were unfriendly.

____ 16. I enjoyed life.

____ 17. I had crying spells.

____ 18. I felt sad.

____ 19. I felt that people disliked me.

____ 20. I could not get "going."

Appendix F:

Support Actions Scale Circumplex – Target Participant Version

Instructions

People respond in various ways when someone is in need of help or support. In answering the questions that follow, please try to be as accurate as possible in assessing how your partner/spouse responded to your need for help or support. For each of the items listed, please indicate how often this person performed behaviors like these and circle the number that best corresponds to your answer.

Example:

1	2	3	4	5	6	7
Never	Almost never	Seldom	Sometimes	Frequently	Almost always	Always

1. Lent me money. 1 2 3 4 5 6 7

Circle "1" if he or she never did something like this. 1 2 3 4 5 6 7
Circle "2" if he or she almost never did something like this. 1 2 3 4 5 6 7
Circle "3" if he or she seldom did something like this. 1 2 3 4 5 6 7
Circle "4" if he or she sometimes did something like this. 1 2 3 4 5 6 7
Circle "5" if he or she frequently did something like this. 1 2 3 4 5 6 7
Circle "6" if he or she almost always did something like this. 1 2 3 4 5 6 7
Circle "7" if he or she always did something like this. 1 2 3 4 5 6 7

He or she...

1. ...told me that my problem was their problem too. 1 2 3 4 5 6 7
2. ...advised me to pay attention to what he or she had to say. 1 2 3 4 5 6 7
3. ...told me that they had to learn to live with it. 1 2 3 4 5 6 7
4. ...tried to not show too much concern. 1 2 3 4 5 6 7
5. ...avoided giving any advice. 1 2 3 4 5 6 7
6. ...did not give an opinion unless asked. 1 2 3 4 5 6 7
7. ...did not put any demands on me. 1 2 3 4 5 6 7
8. ...attempted to keep in regular contact with me. 1 2 3 4 5 6 7
9. ...gave advice. 1 2 3 4 5 6 7
10. ...emphasized how well qualified he or she was to help. 1 2 3 4 5 6 7
11. ...reminded me that whining doesn't help. 1 2 3 4 5 6 7
12. ...distanced himself or herself. 1 2 3 4 5 6 7
13. ...avoided making recommendations. 1 2 3 4 5 6 7
14. ...let me make all the decisions. 1 2 3 4 5 6 7
15. ...let me deal with things at my own pace. 1 2 3 4 5 6 7
16. ...tried to involve me in social activities. 1 2 3 4 5 6 7
17. ...advised me to take advantage of the resources he or she could provide. 1 2 3 4 5 6 7
18. ...told me explicitly what to do step-by-step. 1 2 3 4 5 6 7
19. ...reminded me that people sometimes get what they deserve. 1 2 3 4 5 6 7
20. ...tried to stay "at arms' length". 1 2 3 4 5 6 7
21. ...shied away from making suggestions. 1 2 3 4 5 6 7

Note. : Each octant is comprised of items in multiples of eight, starting with "Directive" and moving counter-clockwise. Thus,
1) Directive = 1, 9, 17, 25, 33, 41, 49, 57; 2) Arrogant = 2, 10, 18, 26, 34, 42, 50, 58;
3) Critical = 3, 11, 19, 27, 35, 43, 51, 59; 4) Distancing = 4, 12, 20, 28, 36, 44, 52, 60;
5) Avoidant = 5, 13, 21, 29, 37, 45, 53, 61; 6) Deferential = 6, 14, 22, 30, 38, 46, 54, 62;
7) Nurturant = 7, 15, 23, 31, 39, 47, 55, 63; 8) Engaging = 8, 16, 24, 32, 40, 48, 56, 64.

Appendix F (continued):

Support Actions Scale Circumplex – Target Participant Version

1	2	3	4	5	6	7
Never	Almost never	Seldom	Sometimes	Frequently	Almost always	Always

He or she...

22. ...let me do all the talking.	1 2 3 4 5 6 7
23. ...was careful not to pressure me.	1 2 3 4 5 6 7
24. ...enthusiastically helped out.	1 2 3 4 5 6 7
25. ...told me I came to the right person.	1 2 3 4 5 6 7
26. ...made decisions for me.	1 2 3 4 5 6 7
27. ...told me that they weren't surprised that I have these problems.	1 2 3 4 5 6 7
28. ...told me that they didn't want to get involved.	1 2 3 4 5 6 7
29. ...avoided trying to change my view of the situation.	1 2 3 4 5 6 7
30. ...did not impose their values on me.	1 2 3 4 5 6 7
31. ...let me know they were listening.	1 2 3 4 5 6 7
32. ...checked up on me frequently	1 2 3 4 5 6 7
33. ...told me to let them help with my problem.	1 2 3 4 5 6 7
34. ...insisted that I let them take care of things.	1 2 3 4 5 6 7
35. ...told me that nobody likes a cry-baby.	1 2 3 4 5 6 7
36. ...tried to keep me from leaning on them too much.	1 2 3 4 5 6 7
37. ...kept from stating any opinions.	1 2 3 4 5 6 7
38. ...refrained from any criticism.	1 2 3 4 5 6 7
39. ...was patient with me.	1 2 3 4 5 6 7
40. ...told me that they were worried about me	1 2 3 4 5 6 7
41. ...told me what they would do.	1 2 3 4 5 6 7
42. ...tried to persuade me to change my behavior.	1 2 3 4 5 6 7
43. ...suggested that I not complain too much.	1 2 3 4 5 6 7
44. ...avoided getting too involved.	1 2 3 4 5 6 7
45. ...avoided intruding on my problem.	1 2 3 4 5 6 7
46. ...did not argue with me.	1 2 3 4 5 6 7
47. ...gave me a hug.	1 2 3 4 5 6 7
48. ...eagerly helped in any way they were asked to.	1 2 3 4 5 6 7
49. ...told me that they were in a good position to help.	1 2 3 4 5 6 7
50. ...told me to let them take care of everything.	1 2 3 4 5 6 7
51. ...told me that they don't like discussing personal matters.	1 2 3 4 5 6 7
52. ...did not comment on my situation.	1 2 3 4 5 6 7
53. ...avoided challenging my point of view.	1 2 3 4 5 6 7
54. ...remained non-judgmental.	1 2 3 4 5 6 7
55. ...just tried to be there.	1 2 3 4 5 6 7
56. ...did their best to protect me.	1 2 3 4 5 6 7
57. ...took over any matters they felt I couldn't deal with.	1 2 3 4 5 6 7
58. ...took control of the situation.	1 2 3 4 5 6 7
59. ...told me that they have their own problems to deal with.	1 2 3 4 5 6 7
60. ...helped in any way that didn't get them personally involved.	1 2 3 4 5 6 7
61. ...avoided influencing my course of action.	1 2 3 4 5 6 7
62. ...just listened quietly.	1 2 3 4 5 6 7
63. ...provided me with emotional support.	1 2 3 4 5 6 7
64. ...learned whatever they could about the problem and passed this knowledge on to me.	1 2 3 4 5 6 7

Appendix G: Support Actions Scale Circumplex – Partner Version

Instructions

People respond in various ways when someone is in need of help or support. In answering the questions that follow, please try to be as accurate as possible in assessing the kinds of actions you performed in response to your partner's/spouse's needs for help or support. For each of the items listed, please indicate how often you have performed behaviors like these and circle the number that best corresponds to your answer.

Example:

1	2	3	4	5	6	7
Never	Almost never	Seldom	Sometimes	Frequently	Almost always	Always

1. Lent money. 1 2 3 4 5 6 7

Circle "1" if you never did something like this. 1 2 3 4 5 6 7
Circle "2" if you almost never did something like this. 1 2 3 4 5 6 7
Circle "3" if you seldom did something like this. 1 2 3 4 5 6 7
Circle "4" if you sometimes did something like this. 1 2 3 4 5 6 7
Circle "5" if you frequently did something like this. 1 2 3 4 5 6 7
Circle "6" if you almost always did something like this. 1 2 3 4 5 6 7
Circle "7" if you always did something like this. 1 2 3 4 5 6 7

I...

1.	...told them that their problem was my problem too.	1 2 3 4 5 6 7
2.	...advised them to pay attention to what I had to say.	1 2 3 4 5 6 7
3.	...told them that they had to learn to live with it.	1 2 3 4 5 6 7
4.	...tried to not show too much concern.	1 2 3 4 5 6 7
5.	...avoided giving any advice.	1 2 3 4 5 6 7
6.	...did not give my opinion unless asked.	1 2 3 4 5 6 7
7.	...did not put any demands on them.	1 2 3 4 5 6 7
8.	...attempted to keep in regular contact with them.	1 2 3 4 5 6 7
9.	...gave advice.	1 2 3 4 5 6 7
10.	...emphasized how well qualified I was to help.	1 2 3 4 5 6 7
11.	...reminded them that whining doesn't help.	1 2 3 4 5 6 7
12.	...distanced myself.	1 2 3 4 5 6 7
13.	...avoided making recommendations.	1 2 3 4 5 6 7
14.	...let them make all the decisions.	1 2 3 4 5 6 7
15.	...let them deal with things at their own pace.	1 2 3 4 5 6 7
16.	...tried to involve them in social activities.	1 2 3 4 5 6 7
17.	...advised them to take advantage of the resources I could provide.	1 2 3 4 5 6 7
18.	...told them explicitly what to do step-by-step.	1 2 3 4 5 6 7
19.	...reminded them that people sometimes get what they deserve.	1 2 3 4 5 6 7
20.	...tried to stay "at arms' length".	1 2 3 4 5 6 7
21	...shied away from making suggestions.	1 2 3 4 5 6 7

Appendix G (continued):

Support Actions Scale Circumplex – Partner Version

1	2	3	4	5	6	7
Never	Almost never	Seldom	Sometimes	Frequently	Almost always	Always

22. ...let them do all the talking. 1 2 3 4 5 6 7
23. ...was careful not to pressure them. 1 2 3 4 5 6 7
24. ...enthusiastically helped out. 1 2 3 4 5 6 7
25. ...told them they came to the right person. 1 2 3 4 5 6 7
26. ...made decisions for them. 1 2 3 4 5 6 7
27. ...told them that I'm not surprised that they have these problems. 1 2 3 4 5 6 7
28. ...told them that I didn't want to get involved. 1 2 3 4 5 6 7
29. ...avoided trying to change their view of the situation. 1 2 3 4 5 6 7
30. ...did not impose my values on them. 1 2 3 4 5 6 7
31. ...let them know I was listening. 1 2 3 4 5 6 7
32. ...checked up on them frequently. 1 2 3 4 5 6 7
33. ...told them to let me help with their problem. 1 2 3 4 5 6 7
34. ...insisted that they let me take care of things. 1 2 3 4 5 6 7
35. ...told them that nobody likes a cry-baby. 1 2 3 4 5 6 7
36. ...tried to keep them from leaning on me too much. 1 2 3 4 5 6 7
37. ...kept from stating any opinions. 1 2 3 4 5 6 7
38. ...refrained from any criticism. 1 2 3 4 5 6 7
39. ...was patient with them. 1 2 3 4 5 6 7
40. ...told them that I was worried about them. 1 2 3 4 5 6 7
41. ...told them what I would do. 1 2 3 4 5 6 7
42. ...persuaded them to change their behavior. 1 2 3 4 5 6 7
43. ...suggested that they not complain too much. 1 2 3 4 5 6 7
44. ...avoided getting too involved. 1 2 3 4 5 6 7
45. ...avoided intruding on their problem. 1 2 3 4 5 6 7
46. ...did not argue with them. 1 2 3 4 5 6 7
47. ...gave them a hug. 1 2 3 4 5 6 7
48. ...eagerly helped in any way they asked me to. 1 2 3 4 5 6 7
49. ...told them that I'm in a good position to help. 1 2 3 4 5 6 7
50. ...told them to let me take care of everything. 1 2 3 4 5 6 7
51. ...told them that I don't like discussing personal problems. 1 2 3 4 5 6 7
52. ...did not comment on their situation. 1 2 3 4 5 6 7
53. ...avoided challenging their point of view. 1 2 3 4 5 6 7
54. ...remained non-judgmental. 1 2 3 4 5 6 7
55. ...just tried to be there. 1 2 3 4 5 6 7
56. ...did my best to protect them. 1 2 3 4 5 6 7
57. ...took over any matters I felt they couldn't deal with. 1 2 3 4 5 6 7
58. ...took control of the situation. 1 2 3 4 5 6 7
59. ...told them that I have my own problems to deal with. 1 2 3 4 5 6 7
60. ...helped in any way that didn't get me personally involved. 1 2 3 4 5 6 7
61. ...avoided influencing their course of action. 1 2 3 4 5 6 7
62. ...just listened quietly. 1 2 3 4 5 6 7
63. ...provided them with emotional support. 1 2 3 4 5 6 7
64. ...learned whatever I could about the problem and passed this knowledge on to them. 1 2 3 4 5 6 7

Appendix H: Daily Diary – Target Participant Version

1. How critical was your partner/spouse toward you today?

1----------2----------3----------4----------5----------6----------7----------8----------9

not at all critical	slightly	moderately	quite a bit	very critical indeed

2. How supportive was your partner/spouse of you today?

1----------2----------3----------4----------5----------6----------7----------8----------9

not at all	slightly	moderately	quite a bit	very supportive indeed

3. Using the scale below, indicate the number which best describes how you felt or behaved today.

1=Rarely or none of the time
2=Some or a little of the time
3=Occasionally or a moderate amount of time
4=Most or all of the time

____ 1. I was bothered by things that usually don't bother me.
____ 2. I did not feel like eating; my appetite was poor.
____ 3. I felt that I could not shake off the blues even with help from my family or friends.
____ 4. I felt that I was just as good as other people.
____ 5. I had trouble keeping my mind on what I was doing.
____ 6. I felt depressed.
____ 7. I felt that everything I did was an effort.
____ 8. I felt hopeful about the future.
____ 9. I thought my life had been a failure.
____ 10. I felt fearful.
____ 11. My sleep was restless.
____ 12. I was happy.
____ 13. I talked less than usual.
____ 14. I felt lonely.
____ 15. People were unfriendly.
____ 16. I enjoyed life.
____ 17. I had crying spells.
____ 18. I felt sad.
____ 19. I felt that people disliked me.
____ 20. I could not get "going"

Appendix I: Daily Diary – Partner Version

CSPS

1. How critical were you toward your partner/spouse today?

1----------2----------3----------4----------5----------6----------7----------8----------9

not at all critical	slightly	moderately	quite a bit	very critical indeed

2. How supportive were you of your partner/spouse today?

1----------2----------3----------4----------5----------6----------7----------8----------9

not at all	slightly	moderately	quite a bit	very supportive indeed

Appendix J: Relationship Satisfaction Questionnaire

A. Please use the scale below to indicate how well each of the following four statements describes you and your partner.

Always agree **Always disagree**

|---------------------|---------------------|---------------------|---------------------|
0 1 2 3 4

___1. Do you and your partner agree on amount of time spent together?
___2. Do you and your partner agree on friends?
___3. Do you and your partner agree on aims, goals, and things believed important in life?
___4. Do you and your partner agree on handling finances?

B. Please use each scale below to indicate how well each of the following four statements describes you and your partner.

Almost always **Almost never**

|---------------------|---------------------|---------------------|---------------------|
0 1 2 3 4

___1. How frequently do you and your partner get on each other's nerves?

Almost always **Almost never**

|---------------------|---------------------|---------------------|---------------------|
0 1 2 3 4

___2. Have you ever wished you were not going out with or married to your partner?

Very unhappy **Very happy**

|---------------------|---------------------|---------------------|---------------------|
0 1 2 3 4

___3. How happy do you rate your relationship?

Very unsatisfying **Very satisfying**

|---------------------|---------------------|---------------------|---------------------|
0 1 2 3 4

___4. How satisfying to you is your relationship with your partner?

Appendix K: Big Five Inventory

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.
1. Disagree strongly, 2. Disagree a little, 3. Neither agree nor disagree, 4. Agree a little, 5. Agree Strongly

I see myself as someone who...

___1. Is talkative
___2. Tends to find fault with others
___3. Does a thorough job
___4. Is depressed, blue
___5. Is original, comes up with new ideas
___6. Is reserved
___7. Is helpful and unselfish with others
___8. Can be somewhat careless
___9. Is relaxed, handles stress well
___10. Is curious about many different things
___11. Is full of energy
___12. Starts quarrels with others
___13. Is a reliable worker
___14. Can be tense
___15. Is ingenious, a deep thinker
___16. Generates a lot of enthusiasm
___17. Has a forgiving nature
___18. Tends to be disorganized
___19. Worries a lot
___20. Has an active imagination
___21. Tends to be quiet
___22. Is generally trusting
___23. Tends to be lazy
___24. Is emotionally stable, not easily upset
___25. Is inventive
___26. Has an assertive personality
___27. Can be cold and aloof
___28. Perseveres until the task is finished
___29. Can be moody
___30. Values artistic, aesthetic experiences
___31. Is sometimes shy, inhibited
___32. Is considerate and kind to almost everyone
___33. Does things efficiently
___34. Remains calm in tense situations
___35. Prefers work that is routine
___36. Is outgoing, sociable
___37. Is sometimes rude to others
___38. Makes plans and follows through with them
___39. Gets nervous easily
___40. Likes to reflect, play with ideas
___41. Has few artistic interests
___42. Likes to cooperate with others
___43. Is easily distracted
___44. Is sophisticated in art, music, or literature

Note. Each personality variable is comprised of the following items—for the most part in multiples of five—with "R" denoting that the item is reverse-coded for scoring:
1) Neuroticism = 4, 9R, 14, 19, 24R, 29, 34R, 39
2) Extraversion = 1, 6R, 11, 16, 21R, 26, 31R, 36
3) Agreeableness = 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42
4) Conscientiousness = 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R
5) Openness to Experience = 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44