

SOCIAL HOPELESSNESS  
AND  
PSYCHOLOGICAL ADJUSTMENT  
IN  
STRESSFUL LIFE SITUATIONS

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A dissertation submitted to the Faculty of Graduate Studies  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Graduate Programme in Psychology  
York University

Toronto, Ontario, Canada

August, 1997



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0-612-22905-X

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### **ABSTRACT**

The current dissertation research examined individual differences in personal beliefs about outcome expectancies in the social domain. Two studies were conducted to investigate the nature and correlates of the social hopelessness construct. The first study investigated rehabilitation clients who had suffered physical or emotional trauma stemming from work-related or motor vehicle accidents. The second study investigated first-time parents who were undergoing a major life stressor and psychosocial transition due to the birth of their first child assessed at two timepoints (e.g., during the third trimester of pregnancy and three months postpartum).

Psychometric tests conducted on the data from Study 1 confirmed that the Social Hopelessness Questionnaire has adequate internal consistency and validity. Results of Study 1 confirmed that there was a significant link between social hopelessness and depression in a rehabilitation sample. Further, social hopelessness was able to predict depression, over and above a general measure of hopelessness. Study 1 also explored personality factors as they related to social hopelessness.



Psychometric analyses for Study 2 attested to the reliability and validity of the Social Hopelessness Questionnaire in a sample of new parents. Overall, correlational results showed the link between social hopelessness and depression at both timepoints for both males and females. Results also showed the relationship between social hopelessness and trait pessimism. Overall, lower levels of optimism were significantly correlated with depression at both timepoints for both males and females. Additionally, social hopelessness was able to predict depressive symptomatology during the postpartum period over and above general pessimism, and levels of depression measured during the third trimester of pregnancy. Study 2 ultimately showed that social hopelessness can predict depression over time. Lastly, results of Study 2 showed that social hopelessness is significantly correlated with indices of postpartum adjustment in both males and females.

The results illustrate the importance of both assessing and treating social hopelessness when seeking to lessen depression experienced by individuals experiencing stress. The implications of these findings are discussed.

### ACKNOWLEDGEMENTS

First, I would like to thank my supervisor, Dr. Gordon Flett, for his constant support and guidance throughout my undergraduate and graduate career. Words cannot express the respect and admiration I have for him and I can only say that he has been the greatest mentor. I would also like to say thank you to Dr. Flett's wife, Kathy, for her patience and understanding during the final months of this dissertation. The Flett family holds a very special place in my heart and I will always remember their friendship, generosity and kindness.

Second, I would like to thank Dr. Harvey Brooker for his reassurance and guidance during my graduate career. Dr. Brooker has been a significant mentor in my clinical career. His humour and stability are never ending and I can only hope to emulate his kindness in my own work as a clinician. Special thanks also goes to Dr. Norman S. Endler whose guidance and ability to know when I needed a "gentle but firm" push will always be remembered. It has been a great pleasure to work with these talented people and I could not have asked for a better dissertation committee.

Third, I would like to thank the other members of my dissertation committee (Dr. Lester Krames, Dr. Joseph Levy and Dr. Anne Marie Wall) for their patience, flexibility and understanding during the final months of this process.

Last but not least, I would like to thank my mother for instilling in me the confidence to "reach for my dreams". The love and belief in me that my family (Mom, Dad, Celia, Ted, Tyler, Raymond, Carla, Troy, Cynthia, Grandma, Maria) have provided, have been the impetus to keep me going when my energy and optimism were low. They have celebrated even the smallest accomplishments - helping me to enjoy the varying degrees of successes along the way. My family's support of and sharing in my struggles let me know that I was never alone in this process.

I would also like to thank the many friends that have listened to my endless "chatter" about this dissertation. Their friendship, laughter and support have helped to encourage me to make it to the "finish line". I would also like to acknowledge and thank the many other friends and colleagues who have been supportive during this process. Special thanks goes to Tom Martin for his computer expertise and statistical consultation.

Finally, the present dissertation research was supported in part by a Doctoral Fellowship from the Social Science and Humanities Research Council of Canada and a research grant from Health Canada.

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## INTRODUCTION

There is little doubt that hopelessness is a very important variable in the psychological literature. Research has established that hopelessness is one of the most robust predictors of suicide ideation and completed suicides (Beck, Kovacs, & Weissman, 1975; Beck, Steer, Kovacs, & Garrison, 1985). Individuals suffering from a chronic lack of personal hope experience numerous types of stress, including family stress (Beavers, 1982), job stress (Sherwin et al., 1992), social stress (Alloy, Peterson, Abramson, & Seligman, 1984), and adverse reactions to unemployment (Platt & Dyer, 1987). Hopelessness has also been linked with such outcomes as persistent depression (McCranie & Riley, 1992), dysfunctional attitudes (Beck, Steer, & Brown, 1993), personality disorder diagnoses (Beck, Steer, & Newman, 1993) and psychiatric diagnoses (Abramson, Garber, Edwards, & Seligman, 1978). In addition to being associated directly with poor psychological adjustment, a chronic lack of hope is linked with poor coping strategies, and decreased utilization of social support (Nolen-Hoeksema, Parker, & Larson, 1994; Zeidner & Hammer, 1992) which include difficulties coping with illnesses or handicaps (DeVellis & Blalock, 1992). Several

authors have noted that this research is important to the study of psychological adjustment, but there is surprisingly little information about the nature of the hopelessness construct per se.

An important area of investigation is the link between hopelessness and depression. It is widely accepted that hopelessness is a typical feature of depression and early empirical studies such as that of Grinker, Miller and Sabshin (1961), Pichot and Lemperiere (1964), and Beck (1967) all found hopelessness and/or pessimism to be not merely typical, but an important feature of the depressive constellation. However, not one of these studies would indicate that hopelessness is always and necessarily an element in depressive disorders. For example, Beck (1967) found that 78% of his 50 depressed patients reported a negative outlook, implying that 22% did not.

In the 1960s, at the same time as these early empirical studies were being reported, there was an awakening of interest in the construction of psychological theories of the origins of depression. Initially, the two most influential theoretical approaches were Beck's cognitive theory of depression (Beck, 1967; Beck & Rush, 1978), and the Brown and Harris (1978) sociopsychological model of depression.

### Beck's Cognitive Theory of Depression

Beck's cognitive theory of depression, although first proposed in the 1960s, has retained its place as the cornerstone of the cognitive approach to depression in terms of both theory and therapy. Beck sees a negative view of the future as one of the elements of the "cognitive triad", a set of negative attitudes to the world, the self, and the future, which is seen to be characteristic of the thinking of the depressive. He refers to this element of the triad variously as a negative viewpoint, negative expectations about the future, pessimism, or hopelessness (Beck, Weissman, Lester, & Trexler, 1974). By 1979, when Cognitive Therapy of Depression was published, the term "hopelessness" was used almost exclusively (Beck, Rush, Shaw, & Emery, 1979). According to Beck and Rush (1978), the depressed patient anticipates that his/her current difficulties or suffering will continue indefinitely. As he/she looks ahead, he/she sees a life of unrelenting hardship, frustration and deprivation.

In terms of the origins of a negative attitude towards the future, Beck did not offer a specific causal theory. He clearly regarded the three elements of the cognitive triad as developing and functioning hand in hand. Beck offered no evidence as to why the development of the three

components should be similar. Beck, Steer, Kovacs, and Garrison (1985) came a little closer to a specific aetiological viewpoint concerning hopelessness. Episodes of hopelessness, they suggest, may reflect the activation of specific cognitive schemes organized in a matrix of negative expectations. When these negative schemes are activated by life experience, they tend to have a controlling effect on the nature of the patient's beliefs regarding the outcome of his/her immediate and future goals and well-being.

Although Beck would clearly expect that hopelessness is a more salient symptom in some depressed people than in others (he does, for example, suggest strategies for dealing with particularly hopeless clients (Beck, Rush, Shaw, & Emery, 1979)), in the main body of his theory, no room is given to the possibility that depression may exist without hopelessness (implying a cognitive dyad?) or vice versa. Beck et al. (1985) implied that some individuals who become depressed display more hopelessness than do other individuals at the same level of depression, and patients with psychiatric disorders other than depression may show a consistently high level of hopelessness associated with each episode. However, in the same paper, hopelessness is described as a core characteristic of

depression. Thus, from Beck's point of view, a negative view of the future is part of the triad of negative cognitions which produce the array of pathological changes typical of the depressive syndrome. Hopelessness is viewed by Beck as both a determinant and a component of the depressive condition.

#### The Brown and Harris Model of Depression

In Social Origins of Depression, Brown & Harris (1978) aimed to develop a causal model of depression. The nature of their investigation was shaped by their assumption that depression is an understandable response to adversity. Their complex model consists of vulnerability factors, symptom-formation factors, and provoking agents developed on the basis of data collected from a random sample of women living in Camberwell and from a sample of psychiatric inpatients and outpatients. In terms of the nature of provoking agents, they concluded that the common feature is loss. They observed that the implications of loss usually stretch far beyond the fact of the loss itself. Loss usually triggers a sense of hopelessness, but in some cases it is generalized. It is such generalization of hopelessness that may form the central core of a depressive disorder. The vulnerability factors already mentioned,

which in the Brown and Harris (1978) sample included low socio-economic status, have their effect by bringing about low self-esteem, in particular.

Depression, then, according to Brown and Harris (1978) arises in a context of hopelessness, consequent upon the loss of important sources of reward or positive value. There have been many attempts to assess the validity of the Brown and Harris model, some reviews of their methodology and some replications of their findings (Cochrane & Stopes-Roe, 1981; Tennant & Bebbington, 1978; Tennant, Bebbington, & Murray, 1981). These papers indicate that neither Brown and Harris nor their critics seem to have questioned the role of hopelessness in the aetiology of depression.

### Earlier Theories of Hopelessness

There were also other theories prior to Beck, Brown and Harris, in which hopelessness is seen to have a critical aetiological role in the development of depression. For example, Lichtenberg (1957) argued that depression can be seen as a manifestation of felt hopelessness regarding the attainment of goals when responsibility for the hopelessness is attributed to one's personal defects.

Stotland (1969) took the view that the individual's hopelessness about important goals results initially in anxiety, but that if the individual lessens the importance of the goal, he/she then tends to become depressed, apathetic, and withdrawn. Thus, Stotland viewed hopelessness as one step removed from depression, but as a crucial step in the sequence leading to it. His definition of hopelessness was based on a system of cognitive schema by which an individual develops negative expectations of one's self and one's future.

Melges and Bowlby (1969) also saw hopelessness as a defining characteristic of depression. In their view, the typical depressive: (a) believes skills and plans of action are no longer effective for reaching his/her goals, (b) sees failures as due to his/her own incompetence so that he/she must rely more on others; and (c) deems his/her previous involvements in long-range goals to have met with numerous frustrations and failures. Points (b) and (c) could be seen as relating more to helplessness than hopelessness, but all three points can be viewed as features of the type of hopelessness that leads to depression.

Seligman's theory of learned hopelessness (1975) was also an important development in the area of hopelessness

and depression. Furthermore, in work following the revision of the "learned helplessness (LH)" model of depression, Seligman, his co-workers, and other researchers working from the LH perspective, have placed increasing emphasis on the role of hopelessness in depression (Abramson, Seligman, & Teasdale, 1978; 1980; Hollon & Garber, 1980; Weiner & Litman-Adizes, 1980). Abramson, Seligman and Teasdale (1980) reported that affective changes result from the expectation that bad outcomes will occur and not from their expected uncontrollability. Weiner and Litman-Adizes (1980) observed that if one assumes that an absolutely low expectancy of goal attainment rather than just an independence of responses and outcomes is a key antecedent of depression, then hopelessness rather than helplessness would be the appropriate concept to emphasize. Hollon and Garber (1980) also agreed about the centrality of hopelessness rather than helplessness in the aetiology of depression. They noted that negative expectations about the future produce much of the depressive symptomatology.

It is argued that in a number of the theoretical accounts published in the 1960s and 1970s, and certainly in the most influential of these theories (Beck, 1967; Beck & Rush, 1978; Brown & Harris, 1978), hopelessness was



accorded unwarranted centrality and universality. Empirical data which have a bearing on the relationship between hopelessness and depression appear to have been neglected in the cause of theoretical neatness and cogency. However, there have been numerous empirical tests over the past two decades.

#### More Recent Approaches to the Study of Hopelessness

More recent approaches to the study of hopelessness have focused on hopelessness as a global construct. Existing measures such as The Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) and the Hope Scale (Snyder et al., 1991) tend to assess global beliefs about hopelessness or general facets of hope without attempting to measure outcome expectancy beliefs in specific life domains. Although this research has demonstrated the importance of hopelessness in several contexts, it has become increasingly apparent that there is a growing need for further investigation of the nature of the hopelessness construct (for discussions see Glanz, Haas, & Sweeney, 1995; Snyder et al., 1991). The current work is designed to extend literature in this area by investigating a domain-specific form of hopelessness.

### The Role of the Self-Concept in Hopelessness Versus Pessimism

A defining aspect of the current research was a desire to measure a social form of hopelessness as opposed to pessimism. How do hopelessness and pessimism differ? Attempts to distinguish hopelessness and pessimism at the trait level are limited by a lack of conceptual analysis and empirical investigation of the similarities and differences between hopelessness and pessimism (for a related discussion see Chang, D'Zurilla, & Maydeu-Olivares, 1994). The present research is based on the premise that hopelessness incorporates a sense of pessimism, but it differs in a number of important respects, most of which involves the self-concept. The conceptualization of hopelessness for the present research is a more extreme form of pessimism that involves a broader sense of resignation about the future of the self and a wider generalization of these negative expectancies in terms of their implications for the self-concept. A central distinguishing feature is that hopelessness, relative to pessimism, involves a longlasting sense of personal deficiency in the self, along with an overperception of the self as a target for negative social interactions in the future. Thus, hopelessness involves negative judgments

about future self-characteristics and abilities. This focus on the negative abilities of the self that are anticipated in the future is reflected in the item content of the Beck Hopelessness Scale (Beck et al., 1974) which is based, in part, on the personal statements of suicidal patients (e.g., I can't make things better). A focus on the capability of the self to generate positive future outcomes is also consistent with Snyder et al.'s (1991) description of the pathways subscale of hope (e.g., I can think of many ways to get out of a jam).

As suggested earlier, the strong link between outcome expectancies and the self-concept is especially evident in Beck's (1967) conceptualization of the cognitive triad. According to Beck, depression prone individuals have negative views about the self, the world, and the future. The negative self-schema of depressed individuals is believed to encompass a pervasive sense of hopelessness about events in the future that will be experienced by the self. Research has confirmed that there is indeed a close association between hopelessness and a negative self-concept. Hopelessness has been linked with negative thoughts about the self (Nottingham, 1992; Steer, Beck, Clark, & Beck, 1994), low estimates of self-worth (Hayslip, Lopez, & Nation, 1991; Kazdin, Rodgers, & Colbus, 1986;

Marciano & Kazdin, 1994; Petrie & Brook, 1992, Whisman & Kwon, 1993), and unfavourable social comparison judgments of core aspects of the self (Beck, Steer, Epstein, & Brown, 1990).

Although interpersonal approaches have not focused explicitly on hopelessness, the general association between low self-esteem and negative interpersonal outcomes is a central aspect of interpersonal models of depression (Klerman, 1989). Interpersonal theorists focus on a set of interrelated characteristics that predispose individuals to depression. According to Klerman (1989), the "depressed patient who emerges in this profile is introverted, lacking in self-confidence, unassertive, dependent, pessimistic, and self-perceived as inadequate" (p. 58).

#### Social Hopelessness: Trait or State?

Another defining feature of the current research on social hopelessness is that it was conceptualized and assessed as a stable and enduring personality trait. Previous research has suggested that hopelessness has both state and trait components (Glanz, Haas, & Sweeney, 1995), although hopelessness has been primarily assessed as a state variable that often covaries with fluctuations in levels of depression. This is reflected by the low

stability of hopelessness scores over time. For instance, test-retest studies with the Beck Hopelessness Scale (BHS; Beck et al., 1974), a state measure of hopelessness, have found that the scale has an acceptable level of internal consistency and reliability. Furthermore, results indicated that patients who are discharged have significantly lower levels of hopelessness when re-evaluated, and hopelessness scores decrease as the depression remits (Beck et al, 1974). Similarly, Schotte, Cools, and Payvar (1990) tested a group of patients on their first day of hospitalization and they were tested a second time only 8 days later. It was found that BHS scores decreased substantially from a mean of 15.2 to a mean of 7.2. Whisman and Kwon (1993) reported a test-retest reliability of .62 in a sample of students who were studied at two timepoints separated by a three month interval. Test-retest reliabilities ranging from .32 to .39 have also been obtained (Bonner & Rich, 1991; Tiggemann, Winefield, Winefield, & Goldney, 1991).

The findings with other hopelessness measures also reflect the operationalization of hopelessness as a state variable. Kazdin, Rodgers, and Colbus (1986) examined the psychometric characteristics of the Hopelessness Scale for Children (HSC). Test-retest reliability indicated that the

scale had an acceptable level of internal consistency and reliability. Test-retest reliability with a six-week interval was .52. Further, a test-retest value of .49 was reported by Spirito, Williams, Stark, and Hart (1988), who examined the 10 week test-retest reliability of the HSC in a convenience sample of 175 control subjects.

Clearly, the hopelessness construct should have a state component that varies as a function of life experiences. At the same time, however, most of the available research and theory on outcome expectancy variables such as optimism-pessimism and attributional style have tended to focus on outcome expectancies as enduring personality traits. In contrast, research on hopelessness, as assessed by original and expanded versions of the Beck Hopelessness Scale (BHS), treats hopelessness as a state variable. A recent study by Young et al. (1996) provided convincing evidence that the hopelessness construct has a trait component that is important to assess. This study involved multiple re-assessments of the Beck Hopelessness Scale to patients over several weeks. In this study, the researchers used sophisticated statistics (i.e., spectral analyses) to demonstrate that hopelessness has a stable component that is trait-like and has gone undetected in past research. Young et al. (1996) contend

that individuals have a baseline of hopelessness, but there is state variability that involves fluctuations in the upper and lower bands reflecting current life experiences. Overall, the Young et al. study represents the most conclusive evidence of the dispositional nature of hopelessness. Consistent with this research, the present research on social hopelessness will focus on the trait component of the construct because of the belief that social hopelessness is a relatively enduring characteristic that is involved in long-term susceptibility to maladjustment. This is in keeping with the view that a stable form of hopelessness may be associated with a persistent vulnerability to depression (Abramson, Alloy, & Metalsky, 1990).

#### Domains of Hopelessness

As alluded to earlier, past measures of outcome expectancy such as the Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) have focused primarily on the assessment of global and generalized beliefs. However, a growing trend is research that focuses on specific outcome expectancy domains. For instance, Harter, Marold, and Whitesell (1992) examined how two specific hopelessness facets (hopelessness about parental and peer

support) related to depression and suicide ideation in adolescents. Structural equation analyses by Harter et al. (1992) showed that: (1) levels of hopelessness about peer support led directly to a depression composite measure comprised of measures of self-worth, affect and hopelessness; and (2) levels of hopelessness about parental support led directly to the depression composite measure and a measure of suicidal ideation. Overall, these data illustrate the usefulness of distinguishing social hopelessness from a more generalized type of hopelessness.

Parallel research on the interpersonal components of perfectionism has identified socially prescribed perfectionism as a specific form of social hopelessness (Hewitt & Flett, 1991). Socially prescribed perfectionism has been defined as the perception that significant others are imposing perfectionistic demands on the self (Hewitt & Flett, 1991). Individuals with socially prescribed perfectionism should experience a sense of hopelessness because they endorse the perception that any approximation of perfect behaviour will only lead to a further increase in the expectation level that is imposed on the self (e.g., The better I do, the better I am expected to do). Moreover, individuals with high levels of socially prescribed perfectionism are hopeless in part because they



feel that they lack the personal efficacy to overcome life situations. It is this sense of hopelessness about the self that likely accounts for the empirical link between characterological measures of socially prescribed perfectionism and lack of hope (see Flett, Hewitt, & Gayle, 1997; Hewitt, Flett, & Weber, 1994).

Flett, Hewitt and Gayle (1997) have presented the argument that the hopelessness variable has been studied thus far in a cursory manner that tends to treat hopelessness as a unidimensional construct. Existing measures, such as the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974), have item content that is quite general and does not refer to specific forms of hopelessness (i.e., hopelessness in a social situation versus hopelessness in achievement situations). Flett et al. (1997) have focused on the development of a social hopelessness scale for various reasons. First, studies of suicide intent in psychiatric patients revealed that one component of social hopelessness (i.e., the belief that other people are imposing impossibly high expectations on the self) did account for unique variance in suicide ideation after removing variance associated with another measure of hopelessness (Hewitt & Flett, 1992; Hewitt, Flett, & Turnbull-Donovan, 1992). Second, Flett and Hewitt

focused on social hopelessness in light of evidence that negative social experiences tend to elicit inordinately high levels of negative cognitive rumination (Nolen-Hoeksema, Parker, & Larson, 1994; Nottingham, 1992; Steer, Beck, Clark, & Beck, 1994). Finally, it is important to focus on social hopelessness because social expectations are especially relevant not only to existing psychological theories, but also in terms of therapeutic applications with an interpersonal focus.

The Social Hopelessness Questionnaire (SHQ; Flett, Hewitt & Gayle, 1997) is a 20-item measure that assesses individual differences in personal beliefs about outcome expectancies in the social domain. The SHQ was developed and refined according to the construct validation approach (Jackson, 1970). The SHQ appears to be correlated with conceptually similar and/or relevant variables, yet many aspects of social hopelessness, as measured by the SHQ, remain to be tested.

### An Overview of Social Learning Theory

The above conceptualization of social hopelessness and interpersonal expectancies extends itself from the earlier work of the most influential social learning theorists, Bandura (1978), Mischel (1973) and Rotter (1972). First,

Rotter's (1972) work focused on expectancies concerning reinforcers in situations and attributions made concerning the causes of events. For example, there has been considerable research on Rotter's concept of internal-external locus of control (Lefcourt, 1982; Rotter, 1982) and on attributions associated with the experiences of learned helplessness and depression.

Bandura (1978) extended and went beyond Rotter's work by approaching the issues that surround "basic conceptions of human nature". Bandura points out that the behaviourists and the humanists, seemingly opposite in viewpoint, share one basic idea: the unidirectional causation of behaviour. That is, behaviourists see behaviour as a function of reinforcements in the environment [or (in Rotter's term) the situation]. At the opposite end, humanists see behaviour as a function of the person, his or her characteristics and, most importantly, his or her free choice. Bandura was able to seek a middle ground between these seemingly irreconcilable viewpoints by proposing the existence of a "self-system". This cognitive system, consisting of thoughts and feelings about the self, arises as a result of experience, but, once constructed, has its own important effects on behaviour (see Bandura, 1986).

Lastly, Mischel (1973) offers another important social learning theory. His ideas overlap with those of Rotter and Bandura, but take a distinctively more cognitive cast. Mischel is centrally concerned with the mental process by which people interpret their worlds, and so labels his theory a "cognitive social learning reconceptualization of personality". The "reconceptualization" part of this label refers to his rejection of the psychology of personality traits and his desire to formulate an alternative way of thinking about people. In Mischel's most influential theoretical article, published in 1973 (an update of this perspective was published in 1995), he breaks the self system into five components, which he labels "cognitive social learning person variables". These variables, meant to replace personality traits as ways of thinking about individual differences, are cognitive and behavioural construction competencies, encoding strategies and personal constructs, expectancies, subjective stimulus values, and self-regulatory systems and plans. We have already seen that self-regulatory systems are an important part of Bandura's theory, that subjective stimuli values are an important part of Rotter's, and that expectancies play a prominent role in both. Mischel's unique contribution is a

close focus on the cognitive processes by which people interpret their worlds and act accordingly.

### Nature and Overview Of The Present Research

The nature of the current dissertation research was to investigate the hopelessness construct by illustrating the usefulness of a domain-specific approach that focuses on hopelessness from an interpersonal perspective across different life events. This conceptualization of hopelessness is based on the premise that interpersonal expectancies are an important component of the hopelessness construct. The focus on a domain-specific approach follows from observations about the need to distinguish general beliefs and specific beliefs about outcome expectancies in distinct life domains (Bandura, 1986; Lefcourt, 1991). In addition, the need to focus on specific content areas (e.g., health outcome expectancies) is indicated by investigations which indicates that specific outcome expectancies in particular life domains do indeed predict specific outcomes (Scheier et al., 1989; Taylor et al., 1992).

The present dissertation research was an expansion on the previous theories of social learning. As stated previously, this research focused on hopelessness beliefs

in the social domain, specifically the link between social hopelessness and depressive symptoms in two different samples (e.g., rehabilitation clients and first-time parents pre and postpartum). The research involved a comparison of the results involving general measures of global outcome expectancies since it is important to determine whether social hopelessness is redundant with general measures of hopelessness and pessimism. Research on adjustment problems such as depression indicates that social variables play a central role in dysfunction. A vast amount of evidence indicates that there are theoretical and empirical links between depressive tendencies and significant levels of social impairment (Segrin & Abramson, 1994). A focus on social hopelessness is in keeping with the central role of interpersonal problems in maladjustment.

### Goals and Hypotheses of the Current Research

The general purpose of this research was to further explore the nature of the social hopelessness construct. The current research was specifically designed:

- (1) to examine the link between social hopelessness and self-reported depression in both Study 1 and Study 2. It was hypothesized that social

hopelessness would be correlated significantly with depressive symptoms;

- (2) to explore the relationship among social hopelessness, general hopelessness and specific personality traits in Study 1;
- (3) to explore the relationship between social hopelessness and personality variables (e.g., optimism-pessimism) in Study 2;
- (4) to investigate the unique ability of social hopelessness to predict depression, over and above general hopelessness (Study 1), and over and above general pessimism (Study 2); and
- (5) to examine the correlations between social hopelessness, optimism and depression as they relate to postpartum adjustment (Study 2). Study 2 involved a prospective analysis, with measures administered to both husband and wife prior to the birth of the child and three months postpartum. It was hypothesized that there would be significant correlations between measures of postpartum depression, adjustment and social hopelessness over time, following a stressful event, such as the transition to parenthood.

### The Link Between Study 1 and Study 2

It is important to provide a clear explanation of the link between Study 1 and Study 2. First, both Study 1 and Study 2 were designed to explore the relationship between social hopelessness and depression. As stated in the goals of this research, it was hypothesized that social hopelessness would be correlated significantly with depressive symptoms in both Study 1 and Study 2.

As for the differences in measures administered in Study 1 and Study 2, despite some variation in depression and personality measures (e.g., the BDI and 16 PF were administered in Study 1 vs. the CES-D and LOT which were administered in Study 2) the primary link was that both studies focus on the same personality construct with people in different samples facing different types of stressful events (e.g., Study 1: traumatic physical and/or emotional events such as work-related accidents or motor vehicle accidents vs. Study 2: the birth of a child in a couple's life). The negative stress associated with individuals in Study 1 was very clear whereas the stress associated with Study 2 remained less clear due to the positive connotations usually associated with the birth of a child. The main point with Study 2 was that regardless of whether the birth of a child is seen as a positive or negative



stress, it is nonetheless a major stressor involving a life transition that can produce a negative reaction for those individuals who have an increased vulnerability to depressive symptoms based on longstanding, pre-existing personality traits.

Therefore, the birth of a child can also be viewed negatively because it can lead to many adjustment difficulties prepartum and postpartum. The goal of this research was to explore fully the relationship between social hopelessness, depression, personality traits and adjustment over time to determine which individuals are most likely to develop depressive symptoms after the birth of a child.

### STUDY 1- Rehabilitation Psychology Sample

The main purpose and importance of investigating a rehabilitation psychology sample from a social hopelessness perspective was to examine how a domain-specific situation such as physical and/or emotional trauma can impact on a subject's pre-existing disposition to feel despondent and/or depressed when confronted with a life altering stressor such as physical immobilization, reduced physical/mental capabilities and in most cases, depression. A growing literature attests to the adjustment challenges that confront these individuals (see Atteberry-Bennett, Barth, Loyd, & Lawrence, 1986; Beaudet & Rasch, 1988; Craig, Hancock, & Dickson, 1994; Garske & Thomas, 1992; Lee, Giles, & Drummond, 1993; Philips & Grant, 1991; Spence, 1990; Summers, Rapoff, Varghese, & Porter, 1991). Some illustrative studies are described below.

Beaudet and Rasch (1988) studied the relationship of Beck Depression Inventory (BDI) scores to (a) work status (employed or unemployed) and (b) time since injury during the acute period of low back pain. The participants were 103 lower back injured men who were receiving outpatient treatment for pain complaints through an occupational health office and were within 6 months of the date of their reported injury. Findings showed that (a) work status was

not related to BDI scores; and (b) 5-6 months after injury, participants scored higher on the BDI than those with injuries of no more than 1 month duration.

Spence (1990) conducted a study with 20 female participants (aged 18-60 years) in each of 5 groups (acute patients with occupational limb pain, chronic patients with occupational upper limb pain, acute patients with accident injuries of the upper limbs, chronic patients with accident injuries of the upper limbs, and non-injured keyboard operators). Participants were administered the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979), State-Trait Anxiety Inventory (Spielberger, 1983), and the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975). Results provided no evidence of greater psychopathology among occupational upper limb pain patients compared with those with upper limb accident injuries. Both state and trait anxiety levels were found to be higher for acute and chronic cases of both diagnostic categories compared to non-injured controls. Depression levels were found to be higher for chronic cases of both diagnostic types compared with acute cases and non-injured controls.

Philips and Grant (1991) evaluated 117 people within 15 days of the first report of pain who had sustained acute back pain injuries. Participants showed no discal or

neural signs and had not experienced previous episodes of back or neck pain. All participants were given a structured interview and completed psychological instruments, including the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979), the State-Trait Anxiety Inventory (Spielberger, 1983), and a pain behaviour report. Results showed acute pain reactions to be comparable to those seen in chronic pain groups. The predominant emotion was one of frustration rather than anxiety or depression, and considerable behavioural disruption was evident from this early point.

Lee, Giles and Drummond (1993) measured psychological state, response to pain, and style of interpreting everyday experiences in 32 female patients who had suffered a whiplash injury 1-24 months previously and in 15 women (controls) without a history of chronic pain. Ratings of depression and anxiety, as measured by the State-Trait Anxiety Inventory and the Beck Depression Inventory, were greater in patients than in controls. Also, patients reported more cold-induced pain during a cold pressor test. Anxious patients gave the highest ratings of cold-induced pain. Those with the longest history of pain gave the highest ratings of whiplash injury pain and were most depressed.

Elliott and Shewchuk (1995) tested the mediating effects of depression on the association between social support (SS) and leisure activities (LAs) among men with severe physical disabilities. Measures of social support, depression, and leisure activities were administered to 104 men (mean age 42 years) receiving services at a spinal-cord injury unit in a Veteran's Administration Medical Center. Path analysis revealed depression and attachment support to be directly predictive of leisure activities; however, support that reassured the worth of the individual was related to leisure activities only when depression was taken into account. Separate analyses were nonsignificant.

Blanchard, Hickling, Taylor, and Loos (1995) examined the extent of psychiatric morbidity and comorbidity among 158 recent victims (aged 17-73 yrs) of motor vehicle accidents (MVAs) in comparison to 93 non-accident controls. Participants were assessed 1-4 months after the accident for acute psychiatric and psychosocial consequences and for pre-MVA psychopathology. 62 MVA participants met DSM-III-R criteria for Post Traumatic Stress Disorder (PTSD), and 55 met DSM-IV criteria for PTSD. The MVA participants who met the criteria for PTSD were more subjectively distressed and had more impairment in role function than the MVA participants who did not meet the PTSD criteria or the

controls. Overall, 53% of the MVA-PTSD participants also met the criteria for current major depression, with most of that developing after the MVA. A prior history of major depression appeared to be a risk factor for developing PTSD after an MVA.

Parker and Rosenblum (1996) conducted a study investigating intelligence and personality dysfunction after minor traumatic brain injury (TBI) (whiplash; slight head impact) incurred in a motor vehicle accident (MVA). Participants included adults after an average interval of 20 months post-MVA. Personality dysfunction of participants was also assessed and included cerebral personality disorder, psychiatric diagnosis (30 of 33 patients), post-traumatic stress disorder, persistent altered consciousness, and psychodynamic reactions to impairment. Results of this study showed that there was a mean loss of 14 points of Full Scale IQ from estimated pre-injury baseline IQ determined from the standardization group (WAIS-R) without evidence for recovery. Cognitive loss also appeared to be caused by interaction of brain injury with distractions such as pain and emotional distress. Unreported head impact and altered consciousness at the time of accident also contributed to the underestimation of brain trauma after minor TBI.

From the above overview of research related to rehabilitation patients and psychological issues, it is clear that most rehabilitation patients find themselves in a stressful situation that involves interpersonal strain, conflict and the need for social support following physical injury. Past research highlights the relevance of the current dissertation research as it would appear important to examine levels of social hopelessness in rehabilitation patients based on the probability that those rehabilitation patients who are higher in social hopelessness will likely experience greater psychological distress.

A search of the available literature in rehabilitation psychology reveals surprisingly few studies that focus directly on hope or hopelessness. The primary exception is a study by Elliott and his colleagues. Elliott, Witty, Herrick and Hoffman (1991) investigated the utility of different reality negotiation strategies among 57 persons who had traumatically acquired severe physical disabilities. It was predicted that a sense of hope involving goal-directed determination would predict lower depression and psychosocial impairment across scores soon after injury. To meet the demands of rehabilitation and social integration, however, it was hypothesized that a sense of ability to find ways to meet goals ("pathways")

would predict lower depression and psychosocial impairment among persons who had been disabled for a longer period. The 57 participants were administered Snyder's Hope Scale (Snyder, 1989), a depression measure and a psychosocial stress measure (as evaluated by the Sickness Impact Profile). Snyder's Hope Scale (1989) consists of two primary components, agency and pathways, that interact to provide a positive motivational state. The agency dimension is the individual's sense of determination to meet personal goals, which provides the energy for the process of personal goals, which provides the energy for the process of negotiation. The second component, pathways, is the person's sense of being able to meet personal goals successfully. In the Elliott et al. (1991) study, results established that an absence of hope was correlated with depression. Also, the depression and psychosocial stress measures were highly correlated ( $r=.83$ ). Overall, the expected interaction was significant in the prediction of psychosocial impairment but not of depression. The sense of pathways was predictive of impairment and depression regardless of the time since injury. Results suggest that the different components of hope have salient effects on perceptions of ability to function in social capacities. These findings point to the



potential importance of social hopelessness in the rehabilitation process.

### Overview of Study 1

The specific measures that were administered to rehabilitation clients in Study 1 included: the Social Hopelessness Questionnaire (SHQ; Flett, Hewitt, & Gayle, 1993; 1997), Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974), Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979), and the 16 Personality Factor Questionnaire - Form E (16 PF; Cattell, Eber, & Tatsuoka, 1970).

With respect to the Beck Depression Inventory (BDI) being used as a measure of depressive symptomatology, the researcher was required to work under the constraints of a private rehabilitation psychology clinic where data were being collected and was not given the flexibility of choosing another measure of depression. The BDI was the standard measure given to all clients at this particular clinic and the researcher agreed to follow the standard procedure. Therefore, it was agreed to by the examiner and the supervising psychologists at the clinic that the measure would remain in effect for this research. Permission was given by the supervising psychologists at

the clinic to administer the SHQ and BHS for the purposes of this study only.

The 16 Personality Factor Questionnaire (16 PF; Cattell, Eber, & Tatsuoka, 1970) was also another standard personality measure given during assessments at the clinic. Therefore, this measure was also used for the purposes of this research in order to explore the link between social hopelessness and specific personality variables. With respect to the rationale for the 16 PF predictions, past theoretical and empirical research by interpersonal theorists has focused on a set of interrelated personality characteristics that predispose individuals to depression. As noted previously, Klerman (1989) observed that, the "depressed patient who emerges in this profile is introverted, lacking in self-confidence, unassertive, dependent, pessimistic, and self-perceived as inadequate" (p. 58). In terms of social hopelessness, it seemed plausible that 16 PF personality characteristics such as submissiveness and self-blaming would be significantly correlated with a sense of social hopelessness and depression. It is important to note that there has been a lack of research on the 16 PF and hopelessness and thus, the 16 PF personality characteristics in relation to social hopelessness were exploratory in nature.

## STUDY 1

### METHOD

#### Subjects

The first sample consisted of 85 rehabilitation clients (N=85, Men=58, Women=27) who were participating in a one-day psychological assessment due to ongoing physical and/or emotional injuries stemming from work-related accidents or motor vehicle accidents. This assessment was conducted in a private psychological practice setting. A total of 50 subjects were referred due to work-related accidents/injuries (sample diagnoses included physical injuries such as: lower back, neck, shoulder, arms, legs, etc.). A total of 20 subjects were referred due to traumatic motor vehicle accidents resulting in physical injuries such as those described above, while 15 subjects were referred due to traumatic motor vehicle accidents resulting in psychological distress characterized by post traumatic stress symptomatology.

The average age of the sample was 35.93 years (range of 23 to 66 years). The average time since the onset of injury was 2.14 years (range of 6 months to 5 years). The level of education for all subjects ranged from Grade 9 to completion of an undergraduate university degree.

A total of 35 rehabilitation clients were married with an average of 14.57 years married (range of 1 year to 33 years married). A total of 44 clients indicated that they were single. A total of 6 clients reported that they were divorced. Clinical interview data revealed that most married clients reported a supportive family and friendship network (33 out of 35 clients). A majority of single rehabilitation clients reported an unsupportive social network (41 out of 44). All divorced clients reported an unsupportive social network (6 out of 6).

All clients were administered a measure of intellectual functioning and reading comprehension in order to assess their ability to understand self-report questionnaires administered to them during the assessment process. All clients included in this study obtained a minimum level of intellectual functioning ranging from average to superior on the Wechsler Adult Intelligence Scale - Revised (WAIS-R) and a minimum Grade 9 level of reading as assessed by the Wide Range Achievement Test - Revised (WRAT-R).

### Measures

The Social Hopelessness Questionnaire (SHQ; Flett, Hewitt, & Gayle, 1997) is a 20-item measure that assesses individual differences in personal beliefs about outcome expectancies in the social domain. The SHQ was developed and refined according to the construct validation approach (Jackson, 1970). It includes items that tap the intensity of negative outcome expectations involving the self with respect to such interpersonal themes as the type and availability of relationships, exposure to mistreatment, lack of support, exposure to criticism, negative social comparisons, and direct estimates of hopelessness (e.g., Some people do little to inspire hope in me). Each item is scored from 1 to 5, 1 representing strongly disagree to 5 representing strongly agree.

Sample items from the SHQ include: (1) I will always be powerless to get away from the people who bother me; (2) I will always have a hard time coping with some people; (3) People are bound to get angry at me, no matter what I do; and (4) Some people do little to inspire hope in me.

The Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974) is a 20-item true-false measure of general beliefs about hopelessness. Extensive research has shown that the scale is valid in a variety of contexts.

Reliability and validity are adequate and are summarized in Beck, Brown, Berchick, Stewart, and Steer (1990).

Sample items from the BHS include: (1) I look forward to the future with hope and enthusiasm; (2) I might as well give up because I can't make things better for myself; (3) My future seems dark to me; and (4) When I look ahead to the future, I expect I will be happier than I am now.

The Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) is a 21-item instrument measuring the behavioural, cognitive, motivational, and vegetative symptoms of depression. A recent study conducted by Endler, Rutherford and Denisoff (1997) explored the Beck Depression Inventory and its multidimensionality. Results of this study uncovered two factors which may be useful in interpreting scores on this widely-used self-report instrument: cognitive-affective and physiological.

The BDI is one of the most widely used measures of the severity of depression symptoms and many studies have demonstrated its reliability and validity (Beck, Steer, & Garbin, 1988; Bumberry, Oliver, & McClure, 1978). It has good psychometric properties and has been used frequently in research on general depression (Rehm, 1988) and postpartum depression (Cutrona, 1983; O'Hara, Neunaber, & Zekoski, 1984). Each item is scored from 0 to 3, 0

representing the least severity to 3 representing severe symptomatology.

Sample items from the BDI include: (1) I do not feel sad, I feel sad, I am sad all the time and I can't snap out of it, I am so sad or unhappy that I can't stand it; (2) I am not particularly discouraged about the future, I feel discouraged about the future, I feel I have nothing to look forward to, I feel that the future is hopeless and that things cannot improve; (3) I don't feel I am being punished, I feel that I may be punished, I expect to be punished, I feel that I am being punished; and (4) I don't feel disappointed in myself, I am disappointed in myself, I am disgusted in myself, I hate myself.

The 16 Personality Factor Questionnaire - Form E (16 PF; Cattell, Eber, & Tatsuoka, 1970) consists of 128 true-false items that are used to assess 16 specific personality factors (e.g., Factor A: aloof vs. warm, outgoing; Factor B: less intelligent vs. more intelligent; Factor C: emotional immaturity vs. emotional maturity; Factor E: submissive, humble vs. dominant, assertive; Factor F: sober vs. enthusiastic; Factor G: expedient vs. conscientious; Factor H: shy vs. adventurous; Factor I: tough minded vs. sensitive; Factor L: trustful vs. suspicious; Factor M: practical vs. imaginative; Factor N:

simple vs. sophisticated; Factor O: confident vs. anxious; Factor Q1: cautious vs. experimenting; Factor Q2: group dependent vs. self-sufficient; Factor Q3: uncontrolled vs. self-controlled; and Factor Q4: stable vs. restless. All 16 specific personality factors were factor analytically derived to reflect the major trait dimensions of human personality comprehensively from young adulthood to later maturity.

Sample items from the 16 PF include: (1) Would you rather help children play games or help fix watches; (2) Do you make smart remarks that hurt people's feelings when they deserve it or do you never do that; (3) Do you have times when you feel sorry for yourself or does that never happen to you; and (4) Are you afraid of something for no particular reason or do you never feel that way.

### Procedure

Clients were selected for a psychological assessment based on the initial referral to the clinic which included a variety of presenting problems (physical injury from work-related accidents or motor vehicle accidents; emotional sequelae following traumatic events; and/or a combination of both types of trauma). At the outset of the psychological assessment, each client received a full



explanation of the assessment process and limits of confidentiality were discussed. Each client was then asked to sign a consent form provided by the clinic confirming their voluntary participation in psychological testing. The above-mentioned measures (SHQ, BHS, BDI and 16 PF) were then administered in the context of a one-day psychological assessment. Clients responded to the measures independently without time constraint.

Clients were also advised at the outset of the assessment that a code number would be assigned to their questionnaire data to ensure confidentiality at all times. The client files were stored in a locked file cabinet and room in the rehabilitation clinic to ensure complete anonymity and privacy.

## RESULTS

Unless otherwise specified, all analyses described herein were performed using SPSS-X.

### Study 1

#### Reliabilities

Cronbach Alpha (Cronbach, 1951) reliabilities for the scales were calculated and remained high for all scales. The Beck Depression Inventory obtained a reliability of .90. Both The Social Hopelessness Questionnaire and The Beck Hopelessness Scale obtained reliabilities of .89.

#### Means, Standard Deviations and Gender Differences in Mean Scores

Means and standard deviations for the entire sample, for males, and for females may also be found in Table 1. A multivariate analysis of variance (MANOVA) was conducted on the various measures to examine for possible gender differences. No significant multivariate effect of gender was obtained.

The measure of social hopelessness yielded means of 56.50 (males), 52.56 (females) and 55.25 (total sample). According to studies conducted by Flett, Hewitt and Gayle

(1997), the present means differ slightly in that they are slightly higher than those obtained with a university sample (e.g., 54.75 for female university students and 50.00 for male university students) and non-cases of depression (e.g., 52.18 for non-cases of depression). The means for the current study were slightly lower than those means obtained for chronic unipolar depression (e.g., a mean of 68.19 was achieved for chronic unipolar patients) and chronic bipolar depression (e.g., a mean of 63.77 was achieved for chronic bipolar depression) (Flett et al., 1997).

The measure of depression yielded means of 14.42 (males), 15.70 (females) and 14.82 (total sample). These means are indicative of a sample with moderate levels of major depression incidence. According to Beck and Steer (1987), BDI scores ranging from 0 to 9 are considered normal or asymptomatic, scores ranging from 10 to 18 indicate mild-moderate depression, score ranging from 19 to 29 indicate moderate to severe depression and scores of 30 to 63 indicate severe depression. Normative sample means range around the 18.10 mark (Watson, Clark, & Tellegen, 1988).

The general measure of hopelessness yielded means of 6.38 (males), 5.81 (females) and 6.20 (total sample). These means are indicative of a sample with low to moderate levels of general hopelessness. The current means are similar to those means obtained for forensic psychiatric patients ( $M = 6.62$ ,  $SD = 4.88$ ) and general psychiatric patients ( $M = 6.04$ ,  $SD = 4.67$ ) (Durham, 1982) although they differ substantially from those obtained for college students ( $M = 2.32$ ,  $SD = 2.25$ ) (Durham, 1982).

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Insert Table 1 about here

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Table 1

Means and Standard Deviations for Males, Females and Total Sample - Study 1: Rehabilitation Sample

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	<u>Males</u> (N=58)		<u>Females</u> (N=27)		<u>Total</u> (N=85)	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Beck Depression	14.42	9.60	15.70	12.01	14.82	10.38
Beck Hopelessness	6.38	5.21	5.81	4.59	6.20	5.00
Social Hopelessness	56.50	15.00	52.56	15.59	55.25	15.22

---

Note: A multivariate analysis of variance (MANOVA) was conducted on the various measures to examine for possible gender differences. No significant multivariate effect of gender was obtained.

Intercorrelations for the Total Sample Between Age, Sex, Depression, A General Measure of Hopelessness and Social Hopelessness (N=85)

The next analyses focused on the Pearson correlations involving social hopelessness. For the total sample, social hopelessness was positively correlated with the general measure of depression ( $r = .59$ ,  $p < .001$ ) and the general measure of hopelessness ( $r = .54$ ,  $p < .001$ ). The general measure of hopelessness was also positively correlated with depression ( $r = .69$ ,  $p < .001$ ). Overall, these results indicate that social hopelessness is substantially correlated with both depression and general hopelessness.

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Insert Table 2 about here

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For the female sample (N=27), social hopelessness was positively correlated with general hopelessness ( $r = .39$ ,  $p < .05$ ) and depression ( $r = .58$ ,  $p < .001$ ). The general measure of hopelessness was also positively correlated with depression ( $r = .73$ ,  $p < .001$ ).

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Insert Table 3 about here

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For the male sample (N=58), social hopelessness was positively correlated with general hopelessness ( $r = .59$ ,  $p < .001$ ) and depression ( $r = .62$ ,  $p < .001$ ). Overall, these results also support the hypotheses that social hopelessness is associated with depression and general hopelessness. The general measure of hopelessness was also positively correlated with depression ( $r = .69$ ,  $p < .001$ ).

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Insert Table 4 about here

---

Table 2

Intercorrelations for the Total Sample Between Age, Sex, Depression, A General Measure of Hopelessness and Social Hopelessness - Study 1: Rehabilitation Sample (N=85)

---

	1	2	3	4	5
Age	1.00				
Sex	-.03	1.00			
BDI	-.09	-.06	1.00		
BHS	-.17	.05	.69***	1.00	
SHQ	-.19	.12	.59***	.54***	1.00

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire.



Table 3

Intercorrelations for Female Sample Between Age, Depression,  
A General Measure of Hopelessness and Social Hopelessness -  
Study 1: Rehabilitation Sample (N=27)

---

	1	2	3	4
Age	1.00			
BDI	.09	1.00		
BHS	-.05	.73***	1.00	
SHQ	-.15	.58**	.39*	1.00

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire.

**Table 4**

Intercorrelations for Male Sample Between Age, Depression,  
A General Measure of Hopelessness and Social Hopelessness -  
Study 1: Rehabilitation Sample (N=58)

---

	1	2	3	4
Age	1.00			
BDI	-.21	1.00		
BHS	-.22	.69***	1.00	
SHQ	-.20	.62***	.59***	1.00

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire.

Correlations for the Total Sample Between Social  
Hopelessness, A General Measure of Hopelessness, Depression  
and Personality Factors (N=39)

To assist the reader in the interpretation of correlational analyses, a brief description of the 16 Personality Factors is provided below:

Factor 1:	cool, reserved vs. warm, easygoing
Factor 2:	dull vs. bright
Factor 3:	easily upset vs. calm, stable
Factor 4:	not assertive vs. dominant
Factor 5:	sober, serious vs. happy-go-lucky
Factor 6:	expedient vs. conscientious
Factor 7:	shy, timid vs. venturesome
Factor 8:	tough-minded vs. tender-minded
Factor 9:	trusting vs. suspicious
Factor 10:	practical vs. imaginative
Factor 11:	forthright vs. shrewd
Factor 12:	self-assured vs. apprehensive
Factor 13:	conservative vs. experimenting
Factor 14:	group-oriented vs. self-sufficient
Factor 15:	undisciplined vs. self-disciplined
Factor 16:	relaxed vs. tense, driven

Exploratory correlational analyses were conducted on the data from the subset of participants (N=39) who completed the 16 PF in order to further explore the correlates of hopelessness and depression.

Some individuals received the 16 PF to explore personality factors as they related to their current adjustment situation in relation to rehabilitation. The

instrument was used at the discretion of the examiner according to whether it would yield beneficial information in the context of the specific referral question and overall assessment process. The 16 PF was specifically used as this was the measure of choice at the rehabilitation psychology practice where data were being collected.

To control for experiment wise inflation of alpha error, a Bonferroni-adjusted probability level was calculated on the correlations involving social hopelessness, a general measure of hopelessness, depression and 16 PF factors for the total sample, females and males. The experiment wise alpha of .05 was divided by 16 (the number of 16 PF factors correlated with dependent measures). After performing the above calculations, the Bonferonni-adjusted probability level was  $p < .003$ . Based on the Bonferroni-adjusted probability, only those correlations with a significance level which met or were below this value were reported and interpreted as significant.

Social hopelessness was positively correlated with Factor 12 (self-assured vs. apprehensive) ( $r = .47$ ,  $p < .003$ ), indicating that higher levels of social

hopelessness are associated with greater apprehension. No other correlations involving the SHQ were significant.

The general measure of depression was positively correlated with Factor 4 (not assertive vs. dominant) ( $r = .48$ ,  $p < .003$ ), indicating that a higher level of depression is associated with greater levels of unassertiveness.

The general measure of hopelessness was not significantly correlated with any of the 16 PF factors.

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Insert Table 5 about here

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Table 5

Correlations for the Total Sample Between Social Hopelessness, A General Measure of Hopelessness, Depression and Personality Factors - Study 1: Rehabilitation Sample (N=39)

---

	BDI	BHS	SHQ
<u>Cattell's</u>			
<u>16PF Factors</u>			
Factor 1	.09	.09	-.12
Factor 2	.08	.05	-.24
Factor 3	-.31	-.38	-.30
Factor 4	.48**	.40	.27
Factor 5	-.16	-.45	-.13
Factor 6	-.10	-.09	-.07
Factor 7	-.08	-.12	-.20
Factor 8	.06	-.13	-.06
Factor 9	.38	.27	.14
Factor 10	.37	.01	.09
Factor 11	.06	.01	-.10
Factor 12	.43	.38	.47**
Factor 13	.17	-.11	-.22
Factor 14	-.09	-.09	-.08
Factor 15	-.41	-.25	-.24
Factor 16	.40	.25	.27

---

Note: \*\*Bonferroni-adjusted probability  $p < .003$

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire; 16 Personality Factors: Factor 1 = cool vs. warm; Factor 2 = dull vs. bright; Factor 3 = easily upset vs. calm; Factor 4 = not assertive vs. dominant; Factor 5 = sober vs. happy-go-lucky; Factor 6 = expedient vs. conscientious; Factor 7 = shy vs. venturesome; Factor 8 = tough-minded vs. tender-minded; Factor 9 = trusting vs. suspicious; Factor 10 = practical vs. imaginative; Factor 11 = forthright vs. shrewd; Factor 12 = self-assured vs. apprehensive; Factor 13 = conservative vs. experimenting; Factor 14 = group-oriented vs. self-sufficient; Factor 15 = undisciplined vs. self-disciplined; Factor 16 = relaxed vs. tense.

Correlations for the Female Sample Between Social  
Hopelessness, A General Measure of Hopelessness, Depression  
and Personality Factors (N=14)

Social hopelessness was positively correlated with Factor 12 (self-assured vs. apprehensive) ( $r = .77$ ,  $p < .001$ ), indicating that higher levels of social hopelessness are associated with greater apprehension among females. No other correlations involving the SHQ were significant.

The general measure of hopelessness and the general measure of depression were not correlated with any of the 16 PF factors among females.

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Insert Table 6 about here

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Table 6

Correlations for the Female Sample Between Social Hopelessness, A General Measure of Hopelessness, Depression and Personality Factors - Study 1: Rehabilitation Sample (N=14)

	BDI	BHS	SHQ
<u>Cattell's</u>			
<u>16PF Factors</u>			
Factor 1	.01	.34	-.45
Factor 2	.06	-.06	-.52
Factor 3	-.16	-.30	.04
Factor 4	.33	.53	.15
Factor 5	-.21	-.41	-.12
Factor 6	.26	-.12	.04
Factor 7	-.11	.05	-.27
Factor 8	-.20	-.27	-.15
Factor 9	-.00	.20	-.15
Factor 10	.48	-.17	.12
Factor 11	.44	.28	-.23
Factor 12	.50	.46	.77***
Factor 13	.10	-.26	-.42
Factor 14	.17	.02	-.02
Factor 15	-.41	-.35	-.02
Factor 16	.47	.37	.28

Note: \*\*Bonferroni-adjusted probability  $p < .003$ , \*\*\* $p < .001$

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire; 16 Personality Factors: Factor 1 = cool vs. warm; Factor 2 = dull vs. bright; Factor 3 = easily upset vs. calm; Factor 4 = not assertive vs. dominant; Factor 5 = sober vs. happy-go-lucky; Factor 6 = expedient vs. conscientious; Factor 7 = shy vs. venturesome; Factor 8 = tough-minded vs. tender-minded; Factor 9 = trusting vs. suspicious; Factor 10 = practical vs. imaginative; Factor 11 = forthright vs. shrewd; Factor 12 = self-assured vs. apprehensive; Factor 13 = conservative vs. experimenting; Factor 14 = group-oriented vs. self-sufficient; Factor 15 = undisciplined vs. self-disciplined; Factor 16 = relaxed vs. tense.



Correlations for the Male Sample Between Social  
Hopelessness, A General Measure of Hopelessness, Depression  
and Personality Factors (N=25)

Social hopelessness and the general measure of hopelessness were not significantly correlated with any 16 PF factors among men.

The general measure of depression was positively correlated with Factor 4 (not assertive vs. dominant) ( $r = .59$ ,  $p < .003$ ), indicating the higher levels of depression are associated with unassertiveness in men.

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Insert Table 7 about here

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**Table 7**

**Correlations for the Male Sample Between Social Hopelessness, A General Measure of Hopelessness, Depression and Personality Factors - Study 1: Rehabilitation Sample (N=25)**

	BDI	BHS	SHQ
<u>Cattell's 16PF Factors</u>			
Factor 1	.12	-.02	.06
Factor 2	.09	.12	-.08
Factor 3	-.43	-.44	-.55
Factor 4	.59**	.32	.38
Factor 5	-.15	-.50	-.11
Factor 6	-.33	-.09	-.12
Factor 7	-.06	-.27	-.13
Factor 8	.24	-.04	.00
Factor 9	.55	.31	.27
Factor 10	.35	.10	.07
Factor 11	-.12	-.12	-.04
Factor 12	.39	.34	.30
Factor 13	.20	-.06	-.14
Factor 14	-.23	-.16	-.10
Factor 15	-.41	-.20	-.39
Factor 16	.36	.19	.29

Note: \*\*Bonferroni-adjusted probability  $p < .003$

The following abbreviations were used: BDI = Beck Depression Inventory; BHS = Beck Hopelessness Scale; SHQ = Social Hopelessness Questionnaire; 16 Personality Factors: Factor 1 = cool vs. warm; Factor 2 = dull vs. bright; Factor 3 = easily upset vs. calm; Factor 4 = not assertive vs. dominant; Factor 5 = sober vs. happy-go-lucky; Factor 6 = expedient vs. conscientious; Factor 7 = shy vs. venturesome; Factor 8 = tough-minded vs. tender-minded; Factor 9 = trusting vs. suspicious; Factor 10 = practical vs. imaginative; Factor 11 = forthright vs. shrewd; Factor 12 = self-assured vs. apprehensive; Factor 13 = conservative vs. experimenting; Factor 14 = group-oriented vs. self-sufficient; Factor 15 = undisciplined vs. self-disciplined; Factor 16 = relaxed vs. tense.

### Multiple Regression

Two hierarchical regression analyses were conducted to predict levels of depression. The purpose of the first analyses was to determine whether social hopelessness could account for unique variance in BDI scores, over and above the variance associated for by the BHS.

The entry order for the first regression equation is as follows. The first block consisted of a measure of general hopelessness followed by the second block which consisted of a measure of social hopelessness.

The entry order for the second regression equation consisted of the first block which consisted of sex, the second block consisting of a general measure of hopelessness and the third block consisting of a measure of social hopelessness. Thus, the analysis was repeated after controlling for gender differences. The entry order used in the current dissertation has been derived for various reasons. First, it allowed for the examination of variation in the dependent variables that could be explained by logically related variables acting together. In addition, the primary focus of the current dissertation is social hopelessness as a unique predictor of depression.

### Multiple Regression Equations Predicting Depression

As indicated above, the outcome measure in the first analysis was the Beck Depression Inventory (BDI) score. Results are shown in Table 20. In this analysis, a hierarchical regression analysis examined whether the Social Hopelessness Questionnaire (SHQ) could account for variance in depression scores after removing variance due to other predictors. The main purpose of this analysis was to demonstrate that the SHQ is not redundant with the Beck Hopelessness Scale (BHS) when both are used to predict depression. In the first analysis, the BHS was entered as the first predictor and it accounted for 48% of the variance in depression symptoms,  $F$  Change = 75.24,  $p < .001$ . Subsequent entry of the SHQ in the next predictor block found that it was a significant predictor accounting for 7% of the remaining variance,  $F$  Change = 12.64,  $p < .001$ .

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Insert Table 8 about here

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The analyses were repeated but gender was entered as the first predictor block. This analysis showed that gender accounted for virtually no variance in the BDI,  $F$  Change = 0.28, ns. The second entry of the BHS in the next predictor block found that it was a significant predictor

accounting for 48% of the variance,  $F$  Change = 76.52,  $p$  < .001. Subsequent entry of the SHQ in the last predictor block found that it was also a significant predictor accounting for 8% of the variance,  $F$  Change = 14.14,  $p$  < .001.

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Insert Table 9 about here

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Table 8

Regression Equation Predicting Depression - Study 1:  
Rehabilitation Sample

Variable	$R^2$	$R^2$ Change	F Change	Beta
Beck Hopelessness	0.48	0.48	75.24***	0.690
Social Hopelessness	0.55	0.07	12.64***	0.313

Note: \*\*\* $p < .001$

Table 9

Regression Equation Predicting Depression - Study 1:  
Rehabilitation Sample

Variable	$R^2$	$R^2$ Change	F Change	Beta
Sex	0.00	0.00	0.28	-0.058
Beck Hopelessness	0.48	0.48	76.52***	0.695
Social Hopelessness	0.56	0.08	14.14***	0.330

Note: \*\*\* $p < .001$

### SUMMARY OF RESULTS FOR STUDY 1

Results of Study 1 revealed that reliabilities were high for all scales used in this investigation. Furthermore, a multivariate analysis of variance (MANOVA) was conducted on the various measures to examine for possible gender differences and no significant multivariate effect of gender was obtained.

Results of correlational analyses indicated that social hopelessness was significantly correlated with both depression and general hopelessness for the total sample, females, and males.

Exploratory correlational analyses were conducted from a subset of participants (N=39) who completed the 16 PF in order to further explore the correlates of hopelessness and personality variables. Correlational analyses indicated that higher levels of social hopelessness are associated with greater apprehension. No other correlations involving social hopelessness were significant.

Multiple regression analyses were performed and demonstrated that the Social Hopelessness Questionnaire (SHQ) is not redundant with the Beck Hopelessness Scale (BHS) when both are used to predict depression. The analyses also showed that gender accounted for virtually no



variance in the Beck Depression Inventory (BDI) although when the BHS and SHQ were subsequently entered they were significant predictors of the BDI. Collectively, these findings indicate that higher levels of depressive symptomatology are reported by individuals who are high in both general and social hopelessness and social hopelessness has predictive utility, over and above the general measure of hopelessness.

### DISCUSSION FOR STUDY 1

The initial goal of Study 1 was to examine the link between social hopelessness and self-reported depression in rehabilitation clients (e.g., individuals who have suffered a traumatic physical and/or emotional event). Overall, the results supported the hypothesis that there is a significant relationship between social hopelessness and depression in this sample. Social hopelessness was highly correlated with depression for the entire sample, males and females. These results were obtained despite minimal item overlap. The current results attest to the generalizability of earlier work by Flett et al. (1997). Past research has established that social hopelessness is correlated with depression, but most of this research has focused on college student samples. The current results indicate that social hopelessness and depression are also correlated significantly in rehabilitation patients.

The results of the present dissertation also extend and expand the work of Elliott, Witty, Herrick, & Hoffman (1991) who established that an absence of hope, as assessed by Snyder's Scale, was correlated with depression. The primary difference between the work of Elliott et al. (1991) and the present research is that Elliott et al.'s

study assessed global beliefs about hopelessness or general facets of hope without attempting to measure outcome expectancy beliefs in specific life domains. As noted previously, the current research has attempted to view social hopelessness as a domain-specific construct and as a stable, enduring personality trait.

A second goal of Study 1 was to explore the relationship between social hopelessness and general hopelessness. Results showed that for the entire sample, social hopelessness was related to the Beck general measure of hopelessness although no gender differences were apparent for males and females.

Moreover, social hopelessness was able to predict depression, over and above the Beck measure of hopelessness. Once again, this finding suggests that hopelessness can no longer be viewed as a unidimensional construct. It appears that social hopelessness encompasses a broader scope of domain-specific issues which relate to how a person views their social world and copes with a stressful situation.

A third goal of Study 1 was to explore the relationship between social hopelessness and personality traits, as assessed by the 16 PF. This investigation was exploratory in nature and results showed that social

hopelessness was related to an apprehensive, anxious personality type. It would seem likely that individuals experiencing higher levels of anxiety would also experience greater social hopelessness due to their lack of current and anticipated efficacy in life situations. Note however that anxiety was not directly assessed in this study but indirectly measured by Factor 12 of the 16 PF.

Although the main focus of the current research is on social hopelessness and depression, the significant correlation involving the 16 PF subscale suggests that social hopelessness is also associated with anxiety. Indeed, research on general hopelessness and various forms of negative affectivity indicates that hopelessness is associated jointly with anxiety and depression with slightly stronger links evident with hopelessness and depression (Ahrens & Haaga, 1993; MacLeod, Byrne, & Valentine, 1996; Waiker & Craske, 1997). The results with the 16 PF in the current study underscore the fact that individuals with high social hopelessness may be apprehensive about the future because of the negative outcomes that are anticipated. However, given the exploratory nature of the current work, it is evident that this finding needs to be replicated in subsequent research.

The psychometric characteristics of the Social Hopelessness Questionnaire demonstrated adequate internal consistency in Study 1, especially as compared to the previous studies conducted by Flett et al. (1997). Also, as noted earlier, Study 1 demonstrated adequate validity in that the Social Hopelessness Questionnaire was significantly correlated with the Beck Hopelessness Scale.

#### Clinical Implications, Assessment, and Treatment

The primary outcome of Study 1 indicates that there was a significant association between social hopelessness and depression in rehabilitation clients (see Tables 2, 3 and 4). Given this finding, it would seem important to highlight the benefits of identifying social hopelessness as early into the rehabilitation process as possible to prevent clients from becoming entrenched in a negative view of their interpersonal world. Therefore, it is suggested that the Social Hopelessness Questionnaire be used as a psychometric test to identify levels of hopelessness early in the rehabilitation process. This would enable caregivers to identify and intervene with those individuals experiencing a moderate to severe level of social hopelessness and isolation stemming from their physical and/or emotional incapacities.

With respect to treatment, the identification of social hopelessness at the beginning of the rehabilitation process would enable psychotherapists to target this area with the client. Clients who have experienced emotional and/or physical trauma tend to view their worlds negatively as the rehabilitation process can often be long and without immediate gain. This outlook may enhance a person's sense of social hopelessness. Therefore, therapy could be conducted from a cognitive standpoint whereby the psychotherapist helps the client to integrate a more adaptive cognitive schema comprised of positive thoughts about their health, well-being and progress in rehabilitation.

Consistent with Beck et al.'s (1979) Cognitive Therapy of Depression, the development of depression begins with an experience connoting loss to the client. In the case of Study 1, the loss to rehabilitation cases included physical and/or emotional loss. In either case, this loss may be exaggerated and perceived as permanent and irreversible and may be viewed as a reflection on oneself, one's attributes, or one's competence, leading to a negative self-concept. As a result, negative views of the self may lead to negative views of the future whereby pessimism pervades the client's outlook on life and hopelessness results in loss

of motivation. Therefore, by identifying social hopelessness during the rehabilitation process, the therapist can aim to show the client that there are other interpretations of his/her present and future and other choices than the current maladaptive behaviour.

Identification of negative thought patterns may then lead to the formation of adaptive coping strategies (e.g., how to stop negative thought patterns which contribute to the clients feelings of hopelessness) which will enhance the rehabilitation process for the client (Beck et al., 1979).

It is often the case that rehabilitation clients will become more depressed as they become increasingly entrenched in pain behaviour or emotional difficulties stemming from their injuries (Ash & Goldstein, 1995; Fierro & Leal, 1988; Seff, Gecas & Ray, 1992). This may ultimately lead to withdrawal and isolation as a way of coping which in turn, increases their overall sense of social hopelessness. It would also be beneficial to encourage clients with high social hopelessness to engage in interpersonal therapy whereby they can learn to reach out and ask others for help. Often rehabilitation clients feel alone and isolated with their experiences which further exacerbates their physical and/or emotional symptomatology.

Another therapeutic intervention that could be applied to individuals experiencing significant levels of social hopelessness is Rotter's (1972) Social Learning Approach. As mentioned earlier, social hopelessness can be viewed as a negative outcome expectancy. The goals of therapy accepted by Rotter's (1972) social learning theory focus on how a patient can lead a more constructive life, to contribute to society, to maximize his/her potential for achievement, to maximize his/her feeling of affection or contribution to others and for the client to reach a state of greater happiness, comfort or pleasure. According to this theory, the therapist expects his or her behaviour, as well as goals and ethical judgments, to influence the client's behaviour and accepts some responsibility for these changes; the therapist seeks to direct the client's behaviour to goals that the client values or that will provide the client with satisfaction; the therapist avoids or seeks to eliminate goals that he or she feels are clearly detrimental to others in society; and the therapist believes that the client should make some contribution to society in return for the satisfaction received (Rotter, 1954, 1970).

Overall, in an expectancy-reinforcement theory of social learning, the therapist's function is to increase



freedom of movement and to reduce need value. This is accomplished by changing expectancies and reinforcement values, which result in changes in unrealistic minimum goal levels (Rotter, 1954, 1970).

#### Limitations and Directions For Future Research for Study 1

A direction for future research for Study 1 stems from a limitation of the study. One limitation of Study 1 is the fact that the rehabilitation clients were only assessed on one occasion, at one timepoint. Therefore, it would be helpful to assess this same population over time to determine the usefulness of social hopelessness in overall prediction of vulnerability to psychological distress and recovery of rehabilitation clients. Furthermore, Study 1 consisted of individuals who were referred for psychological assessment at varying points in the rehabilitation process. Due to this variation, it would be beneficial to conduct additional research projects focusing on individuals at specific points in their rehabilitation. Overall, it would seem likely that if social hopelessness could be identified at an early stage in the rehabilitation process, early intervention strategies could be implemented to help expedite the rehabilitation process.

Another limitation of Study 1 was sample size. Due to the varying referral source questions, only selected individuals were required to complete the 16 PF. Specifically, those individuals who completed the 16 PF, did so to help the examiner determine certain personality factors in relation to future suitability for upgrading or retraining opportunities. In the present research, a small sample of clients completed the 16 PF and results showed very little correlation between the 16 PF and social hopelessness. Therefore, it would be advantageous to test a larger sample with another personality measure to see if more personality factors are associated with social hopelessness. This information would provide caregivers involved in the rehabilitation process with a broader knowledge of their clients and how to target their specific emotional needs.

## STUDY 2 - Couples Pre and Postpartum

The second study in this research was similar in many respects to Study 1. The similarities include the fact that, as in Study 1, the participants found themselves in a stressful situation (e.g., the stress associated with the transition to parenthood, even though it is recognized as a joyous event by most parents) (Campbell, Cohn, Flanagan, & Popper, 1992; Fleming, Ruble, Flett, & Van-Wagner, 1990; Hock, Schirtzinger, Lutz, & Widaman, 1995; Mercer & Ferketich, 1990; Richman, Rospenda, & Kelley, 1995; Stamp, 1994). Research on the stress associated with the transition to parenthood is outlined below to illustrate the challenges associated with this family transition.

Mercer and Ferketich (1990) tested a theoretical causal model to determine the effects of stress on family functioning at 8 months postpartum for 4 groups of parents who had experienced high and low-risk pregnancies, 87 high risk women, 45 male partners of high risk women, 139 low risk women, and 82 male partners of low risk women were tested to find how predictors might differ by gender and risk status. Postpartum family functioning at 8 months did not differ significantly from family functioning measured during pregnancy. However, family functioning was significantly less optimal at 8 months from low risk men

and women's perspectives. Data support the concept that all families experience some family functioning changes during the transition to parenthood.

Fleming et al. (1990) conducted a longitudinal study which investigated changes in the content of mood and in mood levels of primiparous mothers. Interview responses were collected from a core sample of 32 women during pregnancy and at 1, 3, and 16 months postpartum. Correctional analyses of interview mood scores across time indicated consistency in mothers' moods from one point to the next, although mothers felt considerably better at 3 and 16 months postpartum than at earlier time points. Despite this overall improvement in mood, mothers showed different temporal patterns in relation to the different categories. It was found that positive feelings about the infant increased linearly, whereas positive feelings about the spouse showed a U-shaped function, with least positive feelings experienced during the first and third postpartum months. Self-directed affects remained relatively constant throughout the 16-month postpartum period. The results were discussed in terms of changes, including stressful circumstance, over time that occur during the transition to parenthood.

Stamp (1994) investigated appropriation of the parental role during the transition to parenthood. A total of 10 married couples (aged 25-37 years) were interviewed separately and together before and after the birth of a first child. Interviews were analyzed via constant comparison of individual interview incidents and analysis of selected couple conversational excerpts. Analysis revealed 3 dimensions salient to the appropriation of the parental role: role expectations, role enactment, and role negotiation. Within each dimension a particular tension emerged which made expectations, enactment, and negotiation about the role of parent difficult. The dilemmas involved the accuracy/inaccuracy of one's role expectations, other's facilitation/inhibition of self's role enactment, and openness/closedness in negotiating the parental role with one's spouse.

Richman, Rospenda, and Kelley (1995) assessed the extent to which gender role-related stressors lead to increased problem drinking across the transition to parenthood. A total of 55 couples (aged 18-45 years) who were expecting their first child were surveyed during the second trimester of pregnancy and at six months following childbirth. Questionnaires included sociodemographic information and measures of role overload, social support,

and alcohol-related outcomes. Motives for drinking were also measured to examine the link between drinking to deal with distress and alcohol-related problems. Problem and non-problem drinkers were contrasted following parenthood, with regard to role overload, deprivation and deterioration. Results showed that there was an increase in problem drinking for both mothers and fathers, but significant changes were not found for role overload and deprivation. There was role deterioration during the transition period.

Hock, Schirtzinger, Lutz, and Widaman (1995) examined the importance of the marital context in predicting maternal depressive symptomatology, as assessed with marital satisfaction and the endorsement of traditional sex role beliefs about the marriage, in 142 first-time mothers and their husbands or partners. Data were collected during pregnancy and at 6 weeks and 9 months infant age. Maternal and paternal reports about the marriage were assessed, and analyses were done on the way in which marital context scores interacted with earlier and concurrent levels of maternal depressive symptomatology. A hierarchical multiple regression analysis revealed that the final model explained 57% of the variance; marital context contributed 18% of the variance beyond that of earlier symptom levels

in predicting mothers' depressive symptoms 9 months after the birth of the first child.

### Postpartum Depression in New Mothers

One general line of research on postpartum depression has focused on levels of postpartum depression, as well as the nature of the depression itself (i.e., the comparability of the symptoms in women with postpartum depression versus women with major depression, not in the postpartum period). A recent meta-analysis was conducted on the data from 59 studies (O'Hara & Swain, 1996). This study found that the average prevalence rate of non psychotic postpartum depression was 13%, with a substantially greater number of women experiencing milder forms of depression that did not meet diagnostic criteria. A recent telephone survey conducted in Canada with 1,559 childbearing women found that the prevalence of postpartum depression was 6.2%, as determined by the Edinburgh Postnatal Depression Scale (see Zelkowitz & Milet, 1995).

The meta-analyses conducted in this area (Beck, 1996; O'Hara & Swain, 1996) identify level of depression during pregnancy as a significant risk factor for postpartum depression, leading some authors to suggest that postpartum depression reflects a pre-existing history of depressive

symptomatology predating childbirth. The symptoms of the postpartum depression tend to be milder than the symptoms experienced by people with major depression, though the differences are more a matter of magnitude rather than qualitative differences (see Flett, Vredenburg, & Krames, 1997, Whiffen, 1992), consistent with the continuity view of depression. The meta-analyses have confirmed that significant predictors of postpartum depression include life stress, childcare stress, low social support, and marital problems (Beck, 1996; O'Hara & Swain, 1996). An illustrative example of a relevant study is provided below.

Campbell et al. (1992) studied 70 depressed women and 59 demographically matched non-depressed women delivering their first child and then followed them longitudinally through 24 months. Although the majority of depression had remitted by 6 months postpartum, some participants were depressed throughout the follow-up period, and others continued to evidence subclinical symptoms, indicating that depression in postpartum participants can be relatively chronic. Depressed participants differed from comparison participants on measures of personal and family history, their adaptation to pregnancy, and minor pregnancy and delivery complications. They also perceived their infants as more difficult to care for and their husbands as less



supportive. A combination of these variables accounted for 49% of the variance in depression severity scores at 2 months. Depressed participants also showed less positive engagement and more negative affect when observed with their infants at 2 months.

The experience of new mothers is aptly summarized in a review article by Lee (1997) on social context, depression and the transition to motherhood. Lee described cultural assumptions about motherhood that create an artificial dichotomy between the normal, happy, mother and the pathological experience of postpartum depression. However, she noted that the evidence suggests that it is more reasonable to see postpartum depression as one end of a continuum of normal adjustments to motherhood. The paper reviews the evidence on postpartum depression and on the normal experiences of new mothers, showing that new motherhood is a major life event which poses extensive adjustment problems for most women. Cultural expectations that family caring is naturally women's work, and that it is easy and free of stress cause many mothers to suffer from a combination of work overload and guilt. Lee suggests that a change in social expectations, greater involvement by fathers, and more flexible work practices to allow parents to care for their children would contribute

greatly to the alleviation of distress in the postpartum and early motherhood years.

### Postpartum Depression in New Fathers

A distinguishing aspect of the current study is that it is one of the few investigations that focuses jointly on adjustment problems in both the new father and new mother. The few studies that have been conducted thus far indicate that the same factors which predict postpartum depression in mothers also tend to predict postpartum depression in fathers. For instance, Areias, Kumar, Barrios and Figueirido (1996) found that elevated depression prior to the child's birth predicted postpartum depression in fathers.

Overall, studies tend to vary in that some studies find higher levels of postpartum depression in mothers versus fathers, while other studies find no significant differences. Some of these studies are described below. It is becoming evident from this research that the husband is especially at-risk if his spouse suffers from depression or if he has experienced a pre-existing history of depressive symptomatology.

Lovestone and Kumar (1993) conducted a study where out of 24 spouses of women with postnatal psychiatric illness

admitted to a mother and baby unit over 12 months, 12 were found to be psychiatrically ill, as defined by RDC or DSM-III criteria. The rate of psychiatric disorder was higher in these men than in a control group of men whose partners remained well after childbirth and a group of men whose partners were admitted to a psychiatric hospital with non-puerperal illness. The onset of psychiatric illness in the men typically followed admission of their wives to the mother and baby unit. Other associations with illness in the men were a history of chronic social problems, previous psychiatric episodes, and a poor relationship with his own father.

Ballard et al. (1994) examined the prevalence of postnatal psychiatric morbidity in mothers and fathers. In the first study to systematically examine postnatal depression in fathers, the researchers examined depression in 200 postnatal couples, using a two-stage design. The prevalence of depression ascertained by the 13-item Edinburgh Postnatal Depression Scale (EPDS), using a cut-off score for "caseness" of 13 or more in an unselected postnatal sample, was 27.5% in mothers at six weeks postpartum, 25.7% in mothers at six months postpartum, 9.0% in fathers at six weeks postpartum, and 5.4% in fathers at six months postpartum. The prevalence did not differ

significantly in either mothers or fathers from a control group of parents with children between three and five years of age. As expected, mothers had a significantly higher prevalence of psychiatric "caseness" at both six weeks and six months postpartum than fathers. Fathers were significantly more likely to be cases if their partners were also cases. The hypothesis that different aetiological factors would be important in brief and persistent disorders in mothers was upheld.

In one of the most recent studies, Zelkowitz and Milet (1996) examined the mental health and marital quality of husbands with wives who did or did not suffer from postpartum disorder. The husbands with distressed wives reported greater adjustment problems including greater marital distress. Zelkowitz and Milet (1996) concluded that certain husbands (e.g., those men with a previous history of depression or personality characteristics which may predispose them to depression) are especially at risk for postpartum adjustment difficulties.

#### Similarities and Differences Between Study 1 and Study 2

First, both Study 1 and Study 2 were designed to explore the relationship between social hopelessness and depression. It was hypothesized that social hopelessness

would be correlated significantly with depressive symptoms in both rehabilitation patients and prepartum/postpartum couples.

The next similarity of Study 2, as in Study 1, was to examine the extent to which social hopelessness and a general measure of outcome expectancy predicted maladjustment. However, Study 2 extended Study 1 in several meaningful ways. First, Study 2 examined the generalizability of results obtained in Study 1 (i.e., the link between social hopelessness and depression), albeit with the use of a different depression measure (i.e., the CESD), and in a very different kind of stressful situation. Second, Study 2 extended research in this area by examining the role of social hopelessness in vulnerability to depression over time, over and above pregnancy levels of depression. Finally, Study 2 examined the stability of social hopelessness over time because the SHQ is administered at both timepoints (pre and postpartum). It is noteworthy that although it is postulated that social hopelessness is a stable trait, the stability issue has not been addressed or evaluated.

### Pessimism and Depression

Before describing the few studies that have examined trait pessimism and postpartum depression, it is first necessary to provide some background information on pessimism and depression in general.

General research on trait pessimism and depression suggests that hopelessness and pessimism in new parents should be linked with depression. Regarding this more general research, Scheier and Carver (1985) created the Life Orientation Test to measure individual differences in optimism-pessimism. This measure has been used in many studies, including those looking at pessimism and depression. For example, Andersson (1996) conducted a meta-analysis of 42 studies that included the LOT and a measure of psychological distress, usually in the form of depression. The average correlation between optimism and negative affect was  $r = -.43$ ,  $p < .01$ . Andersson also included a separate meta-analysis of five studies with the LOT and BDI and found that the average correlation was  $-.45$ . On the basis of this study, it is clear that there should be a link between optimism and depression, but the question is whether optimism is associated with risk of increased distress in new parents.

A complex question is: Why would parents feel a sense of hopelessness about the birth of their child, when it is normally perceived as a joyous event? The answer to this question can best be answered by providing an explanation of the many different fears and expectations that new parents often feel. Many new parents worry before the arrival of the baby about whether or not they will be able to handle the responsibility of a small child and/or whether they will perform their previous activities (e.g., work) or relationships as effectively as before the baby arrived. These fears and worries can then be accentuated or magnified by pre-existing personality traits which may predispose them to feelings of hopelessness and ultimately depression (Ballard, Davis, Handy, & Mohan, 1993; Cutrona, 1983; Kendell et al., 1984; Levy-Skiff, 1994; Whitton, Appleby, & Warner, 1996).

It is noteworthy that new parents may be overwhelmed by other factors after the birth of their child such as fatigue, tiredness or sleeplessness. These physiological factors also tax the ability of the new parents to cope effectively and may exacerbate a pessimistic, negative outlook. Therefore, these factors must also be taken into account when attempting to understand the stress associated with the arrival of a new baby. A recent study conducted

by Green and Kafetsios (1997) examined women's postnatal experiences. A sample of 1,285 women received questionnaires approximately 6 weeks after delivery. For most, motherhood was a positive experience: for example, two-thirds gave the maximum score of 5 for enjoying looking after the baby and 79% for being proud of being a mother, while 72% had no disappointments about motherhood. Preliminary analysis indicated that answers to these questions were related to concurrent measures of relevance, such as support from partner, depression scores and tiredness. These were also related to each other. Perceptions of the baby, tiredness and dysphoria also made independently significant contributions.

### Pessimism and Postpartum Depression

With respect to social hopelessness, this sample was important to the study as the birth of a couple's first child often creates a sense of isolation from previously experienced social expectations. Although hopelessness and postpartum depression have not been investigated in past research, two investigations have examined trait pessimism and postpartum depression in new parents. The first study conducted by Carver and Gaines (1987) examined the role of dispositional optimism versus pessimism as a moderator of



the tendency to become depressed after a specific stressful life change: the birth of a child. The optimism-pessimism dimension was operationally defined as generalized expectancies for favourable versus unfavourable life outcomes, as measured by the Life Orientation Test (Scheier & Carver, 1985). Both pessimism and depressive mood were assessed several weeks before childbirth. Depressive mood was measured again three weeks postpartum. Even after statistically controlling for initial dysphoria, pessimism was inversely correlated with subsequent dysphoria. The effect of optimism versus pessimism was most pronounced among women who initially were not depressed, suggesting that optimism confers resistance to the development of depressive symptoms.

Additionally, a study conducted by Fontaine and Jones (1997) was conducted to assess the predictive utility of self-esteem and dispositional optimism to postpartum depression. Forty-five British women completed standard measures of self-esteem (Rosenberg Self-Esteem Scale), optimism (Life Orientation Test) and postpartum depression (Edinburgh Postnatal Depression Scale) several weeks before childbirth. Depression was again measured at two and six weeks postpartum. Pessimism was associated with greater depressive symptoms during pregnancy and at two weeks

postpartum, while self-esteem was associated with lower depression over all three administrations. After controlling for pessimism and earlier levels of depressive symptoms, self-esteem remained associated with lower levels of depressive symptoms two weeks postpartum. This suggests that self-esteem and not pessimism appears to be a reliable contributing factor to the differential susceptibility to depression in the early postpartum period.

It is noteworthy to highlight the inconsistent findings across studies and to mention the shortcomings of the previous studies. The main inconsistency is that the LOT predicted vulnerability and depression in the study conducted by Carver and Gaines (1987) but not in the Fontaine and Jones (1997) study. The main shortcomings of the previously discussed studies are: (1) the use of small samples, which, in the study conducted by Fontaine and Jones (1997) included new parents and second-timers; (2) no fathers were studied; and (3) there was a limited assessment of outcome expectancies because social hopelessness was not included. All of these problems were addressed in the current study.

With respect to issues related to Study 2 using a different depression measure (i.e., the Center for Epidemiological Studies of Depression (CES-D)), from Study

1 which utilized the BDI, the decision to use another depression measure in Study 2 was made because the CES-D, relative to other measures, yields fewer false positives when administered to first-time parents (i.e., people with a high self-report score who do not warrant a diagnosis of clinical depression when interviewed by a clinician) (Campbell & Cohn, 1991; Hock, Schirtzinger, Lotz, & Widaman, 1995). Furthermore, the present research was focused on the association with constructs, not specific measures. Therefore, if the SHQ is related to depression, it should be detectable with both the BDI and CES-D. Additionally, as stated previously, the researcher was requested to work under the constraints of the private rehabilitation psychology practice in Study 1 whereby the BDI is utilized in all psychological assessments, without variation.

#### Postpartum Adjustment Questionnaire As A Related Issue

A related purpose of this research was to examine the association between the Postpartum Adjustment Questionnaire (PPAQ) factors and levels of depressive symptoms. In Study 1, O'Hara et al. (1992) reported a significant correlation between the Beck Depression Inventory (BDI) and total PPAQ scores, indicating that depression is associated with lower

postpartum adjustment. Results for the PPAQ subscales were not reported. In Study 2, O'Hara et al. (1992) compared PPAQ scores in a sample of 18 women with diagnoses of major or minor depression and 18 women without a history of depression. Depressed women, relative to the nondepressed women, reported poorer postpartum adjustment in terms of the adjustment involving the new baby and the spouse. There were no differences in terms of the other measures (i.e., work in home, family, friends). Note that this research did not examine postpartum adjustment and depression in fathers. In the current study, the link between the PPAQ and depressive symptoms was examined separately for mother and fathers to determine the replicability of the original findings by O'Hara et al. (1992).

### Summary of Hypotheses

A summary of the main hypotheses for Study 2 are as follows:

- (1) the Social Hopelessness Questionnaire (SHQ) will be positively related to the pessimism variable of the Life Orientation Test (LOT) in new mothers and new fathers;

- (2) the Social Hopelessness Questionnaire (SHQ) will predict depression (pre and postpartum) in mothers and fathers;
- (3) the Social Hopelessness Questionnaire (SHQ) will predict Postpartum Adjustment Questionnaire (PPAQ) scores;
- (4) the Social Hopelessness Questionnaire (SHQ) will predict increases in the Centre for Epidemiological Studies of Depression (CES-D) scores from Time 1 to Time 2, since social hopelessness is regarded as a vulnerability factor for depression in times of stress; and
- (5) the Postpartum Adjustment Questionnaire (PPAQ) and depression will be correlated in new mothers and new fathers consistent with the previous rationale presented by O'Hara et al. (1992).

## STUDY 2

### METHOD

#### Subjects

The second sample tested consisted of first-time parents (new fathers = 173 and new mothers = 191) who were undergoing a major life stressor and psychosocial transition due to the birth of their first child. Couples were tested at two timepoints: (1) in the third trimester of pregnancy, and (2) three months postpartum.

The average age for new mothers was 29.30 years. The average age for new fathers was 32.01. The average number of years married was 7.73 years and the mean family income per couple was \$46,000.00 per year. The education level for 80% of the couples included completion of university, college or community college. The majority of new mothers and new fathers held full-time employment prior to the birth of the child. Most new mothers took maternity leave after the birth of their child with the expectation of returning to their employment after 6 months postpartum.

### **Measures**

The specific measures that were used with this sample included: the Social Hopelessness Questionnaire (SHQ; Flett, Hewitt, & Gayle, 1993; 1997), the Life Orientation Test (LOT; Scheier & Carver, 1985), Center for Epidemiological Studies of Depression (CES-D; Radloff, 1977) and Postpartum Adjustment Questionnaire (PPAQ; O'Hara, Hoffman, Philipps, & Wright, 1992). In addition to utilizing a different type of sample than was used in Study 1, the generalizability of findings were tested by using a different measure of outcome expectancy (e.g., LOT) and a different measure of depressive symptoms (e.g., CES-D).

The Social Hopelessness Questionnaire (SHQ; Flett, Hewitt, & Gayle, 1997). As noted earlier, the SHQ is a 20-item measure that assesses individual differences in personal beliefs about outcome expectancies in the social domain. The SHQ was developed and refined according to the construct validation approach (Jackson, 1970). It includes items that tap negative outcome expectations involving the self with respect to such interpersonal themes as the type and availability of relationships, exposure to mistreatment, lack of support, exposure to criticism, negative social comparisons, and direct estimates of hopelessness (e.g., Some people do little to inspire hope

in me). Each item is scored from 1 to 5, 1 representing strongly disagree to 5 representing strongly agree.

The Life Orientation Test (LOT) (Scheier & Carver, 1985) is an 8-item self-report scale (plus 4 fillers) on which respondents are to indicate their degree of agreement or disagreement with statements such as the following: "I'm always optimistic about my future", "Things never work out the way I want them to". Ratings are made on 5-point scales, with 1 representing strong agreement and 5 representing strong disagreement. After appropriate reversals to compensate for direction of item wording, a composite optimism score is created by adding the 8 items.

The revised Life Orientation Test (1994) was not used in this research as some of the current data were collected before the revised LOT became available. Also, the two earlier studies used the original LOT (i.e., Carver & Gaines, 1987; Fontaine & Jones, 1997). Furthermore, the differences between the two measures are not large and are potentially immaterial (e.g., two problematic items). In a study conducted by Scheier, Carver and Bridges (1994), data from 4,309 subjects showed that associations between optimism and both depression and aspects of coping were significant. Thus, the Life Orientation Test does appear



to possess adequate predictive and discriminant validity in its original form.

Sample items from the LOT include: (1) In uncertain times, I usually expect the best; (2) If something can go wrong for me, it will; (3) I'm always optimistic about my future; and (4) I rarely count on good things happening to me.

The Center for Epidemiological Studies of Depression (CES-D) Scale (Radloff, 1977) is a 20-item state inventory with items that measure the affective and somatic symptoms of depression. Scores may range from 0 to 60, with higher scores indicating greater depressive symptomatology. The CES-D is well-suited for administration to adults drawn from the general population. Subjects are asked to indicate the frequency with which they have experienced each symptom over the past week.

As stated previously, the CES-D was not used in Study 1 for various reasons. Firstly, the researcher was required to work under the constraints of a private psychology practice in Study 1 whereby administration of the CES-D was not approved. Secondly, it is important to reiterate that the purpose of this research was to explore the association with constructs, not specific measures. Therefore, if the SHQ is related to depression, it should

be detectable with both the BDI and CES-D. It is important to emphasize the need to test generalizability in the present dissertation research, not specific measures.

Also, the CES-D is the measure that is used commonly in research on postpartum, as opposed to the BDI, because it has fewer items that are influenced by the new mother's physical status. Concerns have been expressed about the likelihood that the BDI has items that are not specific to depression and these items may be influenced by somatic complications common to pregnancy (Salamero, Marcos, Gutierrez & Rebull, 1994).

Sample items from the CES-D include: (1) I was bothered by things that usually don't bother me; (2) I had trouble keeping my mind on what was going on; (3) I was happy; and (4) I had crying spells.

The Postpartum Adjustment Questionnaire (PPAQ; O'Hara, Hoffman, Philipps & Wright, 1992) is a 61-item measure that was designed to assess the social adjustment of women during the first year postpartum. It focuses on major role areas, including (a) work in the home (8 items, 2 domains); (b) work outside the home (4 items, 1 domain); (c) relationship with friends (8 items, 2 domains); (d) relationships with relatives (12 items, 3 domains); (e) relationship with baby (9 items, 3 domains);

(f) relationships with other children (8 items, 2 domains); and (g) relationship with spouse (12 items, 3 domains). For each domain, four questions are posed regarding (a) the amount of time spent in the activity, (b) the parent's self-evaluation of performance adequacy, (c) the parent's perception of others' evaluation of performance adequacy, and (d) any change in performance adequacy since the birth of the baby. Each of these questions was designed to assess the woman's perception of her behavioural performance from a different perspective (i.e., amount of time required, self-evaluation of performance adequacy, perception of others' evaluations, and perception of change in performance). The PPAQ yields scores for each of the role areas as well as the total scale. Because not all role areas are applicable for every woman (e.g., "other children" for a woman having her first child), the total score is the mean of completed items. Each item is scored between 1 and 5, with 1 representing better than average or optimal functioning and 5 representing very poor functioning. The exceptions are the items that ask about how much time a woman spends in each of the activities. For these items, response option 1, too much time is scored as equal to response option 3, not quite enough time.

It is noteworthy that this scale was also used with new fathers for the first time, since it was possible to adapt it for the current dissertation research. New fathers were administered the same version of the PPAQ as new mothers.

Sample items from the PPAQ include: (1) How much time do you spend cooking/preparing meals for your family? (work in the home subscale); (2) How much time do you spend working outside of the home? (work outside the home subscale); (3) How much time do you spend with close friend(s) on the phone or in person? (relationships with friends subscale); (4) How have others (i.e., family and relatives) evaluated the quality of your relationship(s) with your sibling(s)? (relationship with family/relatives subscale); (5) How much time do you spend caring for your baby's needs (i.e., bathing, feeding, changing diapers)? (relationship with baby subscale); and (6) How much time do you and your spouse spend displaying affection toward one another (i.e., holding hands, hugging, kissing)? (relationship with spouse subscale).

### Procedure

Couples were obtained via The Toronto Department of Public Health who agreed to allow the researcher into their pre-natal classes at various locations (e.g., Doctors Hospitals, The Wellesley Hospital, The Toronto Hospital, Head Office of The Department of Public Health and private Lamaze classes) to solicit volunteers for the study. At the beginning of each class, the basic concept of the study was explained and couples were advised that they may participate in the study on a voluntary basis. Copies of the consent form and initial questionnaire battery (SHQ, CES-D & LOT) were given to both husband and wife during the third trimester of pregnancy and were picked up approximately one to two weeks after the initial meeting. Participants were asked to complete the questionnaires independently without guidance from their spouse. It is noteworthy that a subset of husbands were unwilling to participate which accounts for the differences in sample size over the two timepoints. Couples received a stipend of \$15.00 per couple after completing the initial questionnaire battery.

The researcher then re-established contact with couples at a second timepoint: three months postpartum. At this time, a second questionnaire battery was delivered

to both husband and wife consisting of two measures administered in the third trimester of pregnancy (SHQ and CES-D) plus one additional adjustment measure (PPAQ). Once again, couples were asked to individually complete their respective questionnaires. The questionnaires were then picked up approximately one to two weeks later and the couples received an additional \$15.00 for their participation.

Couples were advised at the outset of their participation in the study that their responses to questionnaire data would remain confidential and would only be viewed by the researcher and other designated research personnel. Code numbers were assigned to all data to ensure confidentiality at all times. Questionnaire data are stored in a locked file cabinet located in the research laboratory of the primary dissertation supervisor to ensure complete anonymity and privacy.

It is noteworthy that expectant mothers and fathers in this study were not assessed for clinical depression or postpartum depression during this research.

## RESULTS

### Study 2

#### Reliabilities

Cronbach Alpha (Cronbach, 1951) reliabilities for the scales were calculated separately for new mothers and new fathers. The Social Hopelessness Questionnaire (SHQ) as measured during the third trimester of pregnancy yielded reliability of .90 for new mothers and .88 for new fathers. Furthermore, the SHQ was measured at three months postpartum and yielded reliability of .92 for new mothers and .91 for new fathers.

For new mothers, The Center for Epidemiological Studies of Depression (CES-D) during the third trimester of pregnancy yielded reliability of .87. For new fathers at the same timepoint, the CES-D yielded reliability of .87. The CES-D measured at three months postpartum yielded reliability of .87 for new mothers and .90 for new fathers.

The Life Orientation Test measured during the third trimester of pregnancy yielded reliability of .80 for new mothers and .78 for new fathers.

The Postpartum Adjustment Questionnaire measured at three months postpartum was calculated separately for new fathers and new mothers. The reliabilities for each of the

seven subscales for new mothers were as follows: work in the home = .77; work outside the home = .65; relationships with friends = .79; relationships with relatives/family = .68; relationships with baby = .73; relationship with spouse = .87; and adjustment = .84. The reliabilities for the corresponding subscales for new fathers were: work in the home = .74; work outside the home = .53; relationships with friends = .72; relationships with relatives/family = .74; relationship with baby = .83; relationships with spouse = .86; and adjustment = .89. Most of the obtained values indicate an adequate level of internal consistency. The exception is the work outside the home subscale, which had relatively low alphas. However, it should be acknowledged that this measure has only 4 items, and subscales with fewer items tend to yield lower internal consistency values due to the manner in which the statistical value is calculated. The alphas were acceptable, but results involving work outside the home should be interpreted with caution for both new fathers and new mothers, due to the relatively low alphas obtained for all measures at both timepoints.



### Means, Standard Deviations and Gender Differences in Mean Scores

Means and standard deviations for new fathers and new mothers can be found in Table 10. Repeated measures  $t$ -tests were conducted to compare new fathers and new mothers. These data were collected using the parenting couple as the unit of analysis, therefore the new father's data was considered to be repeated measures of the new mother's data. Ordinarily, the assumption is that observations are independent of each other, that is any one respondent's scores will not be correlated with another's scores. With couples, this is not a valid assumption, and this has important implications for the types of statistical analyses that may be performed. For instance, it is not valid to conduct correlational analyses with the data for husbands and wives included in one overall group analysis. However, it is acceptable to conduct comparisons of the scores for husbands versus wives when the focus is on group differences in mean scores. Therefore, each couple was treated as the unit of analysis (instead of the individual), and matched pairs or dependent sample  $t$ -tests were performed to look at score differences between new fathers and new mothers.

The results of the  $t$ -tests are as follows: new mothers had higher mean depression scores during the third trimester of pregnancy than new fathers ( $t(1,211) = 3.30$ ,  $p < .001$ ) ( $M = 10.18$ ,  $SD = 8.01$  for new mothers and  $M = 7.51$ ,  $SD = 7.12$  for new fathers).

On the PPAQ adjustment subscales, new fathers had higher relationship problems with family/relatives than did new mothers ( $t(1,175) = -6.45$ ,  $p < .001$ ) ( $M = 24.23$ ,  $SD = 5.54$  for new fathers and  $M = 21.63$ ,  $SD = 5.20$  for new mothers). New fathers had higher PPAQ total scores than new mothers ( $t(1,177) = -13.55$ ,  $p < .001$ ) ( $M = 114.68$ ,  $SD = 15.01$  for new fathers and  $M = 98.40$ ,  $SD = 12.30$  for new mothers) indicating that new fathers experienced greater adjustment difficulties postpartum than new mothers. New fathers had poorer relationships with friends scores ( $t(1,177) = -3.24$ ,  $p < .001$ ) ( $M = 18.88$ ,  $SD = 3.60$  for new fathers and  $M = 17.76$ ,  $SD = 3.72$  for new mothers). New fathers had poorer relationship with baby scores than new mothers ( $t(1,176) = -7.88$ ,  $p < .001$ ) ( $M = 17.11$ ,  $SD = 3.72$  for new fathers and  $M = 14.59$ ,  $SD = 2.37$  for new mothers). New fathers had lower adjustment in terms of work inside the home scores than did new mothers ( $t(1,174) = -5.53$ ,  $p < .001$ ) ( $M = 19.72$ ,  $SD = 4.12$  for new fathers and  $M = 17.47$ ,  $SD = 3.75$  for new mothers).

No gender differences were obtained for the following: depression measured at three months postpartum ( $t(1,177) = .59, p = .56$ ) ( $M = 9.12, SD = 7.99$  for new mothers and  $M = 8.27, SD = 8.09$  for new fathers); social hopelessness measured during the third trimester of pregnancy ( $t(1,209) = -1.06, p = .29$ ) ( $M = 48.73, SD = 12.32$  for new fathers and  $M = 48.09, SD = 12.78$  for new mothers); social hopelessness measured at three months postpartum ( $t(1,174) = -.11, p = .91$ ) ( $M = 44.57, SD = 13.73$  for new fathers and  $M = 44.62, SD = 14.41$  for new mothers); optimism measured during the third trimester of pregnancy ( $t(1,211) = -1.03, p = .30$ ) ( $M = 21.50, SD = 5.46$  for new fathers and  $M = 20.70, SD = 5.21$  for new mothers); work outside the home subscale ( $t(1,7) = -.41, p = .70$ ) ( $M = 7.62, SD = 1.53$  for new fathers and  $M = 8.75, SD = 2.86$  for new mothers); and relationship with spouse subscale ( $t(1,177) = .90, p = .37$ ) ( $M = 27.79, SD = 4.90$  for new fathers and  $M = 28.04, SD = 5.08$  for new mothers).

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Insert Table 10 about here

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**Table 10**

**Means and Standard Deviations for New Fathers and New Mothers  
Study 2 - Couples Pre and Postpartum**

	<u>New Fathers</u>		<u>New Mothers</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Depression-Time 1	7.51	7.12	10.18	8.01***
Depression-Time 2	8.27	8.09	9.12	7.99
Social Hopelessness-Time 1	48.73	12.32	48.09	12.78
Social Hopelessness-Time 2	44.57	13.73	44.62	14.41
Optimism	21.50	5.46	20.70	5.21
<u>PPAQ Subscales</u>				
Work In The Home	19.72	4.12	17.47	3.75***
Work Outside The Home	7.62	1.53	8.75	2.86
Relations	18.88	3.60	17.76	3.72***
Family	24.23	5.54	21.63	5.20***
Baby	17.11	3.72	14.59	2.37***
Spouse	27.79	4.90	28.04	5.08
Adjustment	114.68	15.01	98.40	12.30***

Note: \*\*Bonferroni-adjusted probability  $p < .004$ , \*\*\* $p < .001$

N ranges from 163-173 for males and 185-191 for females. Please note that N = 12 for females for "Work Outside The Home".

The following abbreviations were used: Depression-Time 1 = Depression measured during the third trimester of pregnancy; Depression-Time 2 = Depression measured at three months postpartum; Social Hopelessness-Time 1 = Social hopelessness measured during the third trimester of pregnancy; Social Hopelessness-Time 2 = Social hopelessness measuring at three months postpartum. PPAQ Subscales = Postpartum Adjustment Questionnaire subscales; Relations = relationships with friends; Family = relationships with relatives/family; Baby = relationship with baby; Spouse = relationship with spouse.

Optimism was measured during the third trimester of pregnancy. PPAQ subscales were measured at three months postpartum.

Correlations Between Depression, Social Hopelessness and  
Optimism for New Mothers Sample (N=191)

The next set of analyses examined correlations involving new mothers. Social hopelessness measured during the third trimester of pregnancy was positively correlated with depression measured during the third trimester of pregnancy ( $r = .51, p < .001$ ) and at three months postpartum ( $r = .42, p < .001$ ). Social hopelessness measured at three months postpartum was also positively correlated with depression measured during the third trimester of pregnancy ( $r = .49, p < .001$ ) and at three months postpartum ( $r = .52, p < .001$ ). Optimism was negatively correlated with depression measured during the third trimester of pregnancy ( $r = -.45, p < .001$ ) and at three months postpartum ( $r = -.28, p < .001$ ), thus indicating that lower optimism was associated with greater depression.

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Insert Table 11 about here

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Table 11

Correlations Between Depression, Social Hopelessness and Optimism for New Mothers - Study 2: Couples Pre and Postpartum (N=191)

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	Social Hopelessness Time 1	Social Hopelessness Time 2	Optimism
Depression-Time 1	.51***	.49***	-.45***
Depression-Time 2	.42***	.52***	-.28***

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The following abbreviations were used: Depression-Time 1 = Depression measured during the third trimester of pregnancy; Depression-Time 2 = Depression measured at three months postpartum; Social Hopelessness-Time 1 = Social hopelessness measured during the third trimester of pregnancy; Social Hopelessness-Time 2 = Social hopelessness measuring at three months postpartum.

Optimism was measured during the third trimester of pregnancy.

Correlations Between Postpartum Adjustment and Depression,  
Social Hopelessness and Optimism for New Mothers

To control for experiment wise inflation of alpha error, a Bonferroni-adjusted probability level was calculated on the correlations between the postpartum adjustment measure and indices of social hopelessness, depression and optimism for new mothers. The experiment wise alpha of .05 was divided by 7 (the number of postpartum adjustment subscales). After performing the above calculations, the Bonferonni-adjusted probability level was  $p < .007$ . Based on the Bonferroni-adjusted probability, only those correlations with a significance level which met or were below this value were reported and interpreted as significant.

Depression in women measured during the third trimester of pregnancy was positively correlated with overall postpartum adjustment ( $r = .18$ ,  $p < .001$ ), and work in the home ( $r = .29$ ,  $p < .001$ ), indicating that higher levels of depressive symptomatology in expectant mothers is associated with overall postpartum adjustment difficulties and difficulty completing household tasks. Although significant relationships were obtained, it must be

acknowledged that overall magnitude of correlations was small.

Depression measured at three months postpartum was positively correlated with the following postpartum adjustment subscales: overall postpartum adjustment ( $r = .31, p < .001$ ), the relationship with baby ( $r = .28, p < .001$ ), work in the home ( $r = .31, p < .001$ ), relationships with friends ( $r = .27, p < .001$ ) and relationship with spouse ( $r = .33, p < .001$ ). These results indicate that higher levels of depressive symptoms during the postpartum period in new mothers is associated with postpartum adjustment difficulties including difficulties establishing a comfortable relationship with the baby, perceptions that she cannot complete household work or maintain positive relationships with her friends or spouse. It is noteworthy that new mothers experiencing greater postpartum depressive symptoms acknowledged greater difficulties in their relationship with their spouse versus no acknowledgement of this difficulty during pregnancy.

Social hopelessness measured during the third trimester of pregnancy was not positively correlated with any of the postpartum adjustment subscales.



Social hopelessness measured at three months postpartum was positively correlated with overall postpartum adjustment ( $r = .24, p < .001$ ), relationship with baby ( $r = .22, p < .007$ ), and work in the home ( $r = .26, p < .001$ ). These results indicate that greater levels of postpartum social hopelessness in new mothers is associated with overall postpartum adjustment difficulties, difficulties forming a relationship with the baby, and accomplishing tasks in the home.

Optimism measured during the third trimester of pregnancy was not correlated with any of the postpartum adjustment subscales.

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Insert Table 12 about here

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**Table 12**

**Correlations Between Postpartum Adjustment and Depression, Social Hopelessness and Optimism for New Mothers - Study 2: Couples Pre and Postpartum**

	Depression Time 1	Depression Time 2	Social Hope Time 1	Social Hope Time 2	Optimism
Adj	.18***	.31***	.14	.24***	-.12
Baby	.17	.28***	.18	.22**	-.17
Family	.09	.06	.09	.11	-.16
Homework	.29***	.31***	.19	.26***	-.11
Outwork	.08	.03	-.35	-.27	-.38
Relate	.19	.27***	.17	.15	-.03
Spouse	.12	.33***	.02	.19	.01

Note: \*\*Bonferroni-adjusted probability  $p < .007$ , \*\*\* $p < .001$

N ranges from 185 - 191 with the exception of N=12 for "Outwork - work outside the home".

The following abbreviations were used: Depression Time 1 = depression measured during the third month of pregnancy; Depression Time 2 = depression measured at three months postpartum; Social Hope Time 1 = social hopelessness measured during the third month of pregnancy; Social Hope Time 2 = social hopelessness measured at three months postpartum; Adj = adjustment; Baby = relationship with baby; Homework = work in the home; Outwork = work outside the home; Relate = relationships with friends; Family = relationships with relatives/family; Spouse = relationship with spouse.

OPTIMISM was measured during the third trimester of pregnancy.

Intercorrelations Among Depression, Social Hopelessness and Optimism for New Mothers

Social hopelessness measured during the third trimester of pregnancy was positively correlated with depression measured during the third trimester ( $r = .51$ ,  $p < .001$ ).

Social hopelessness measured at three months postpartum was positively correlated with depression measured during the third trimester of pregnancy ( $r = .49$ ,  $p < .001$ ), social hopelessness measured during the third trimester of pregnancy ( $r = .75$ ,  $p < .001$ ) and depression measured at three months postpartum ( $r = .52$ ,  $p < .001$ ).

Depression measured at three months postpartum was positively correlated with depression measured during the third trimester of pregnancy ( $r = .55$ ,  $p < .001$ ) and social hopelessness measured during the third trimester of pregnancy ( $r = .42$ ,  $p < .001$ ).

Optimism was negatively correlated with depression measured during the third trimester of pregnancy ( $r = -.45$ ,  $p < .001$ ), and social hopelessness measured during the third trimester of pregnancy ( $r = -.49$ ,  $p < .001$ ). Also, optimism was correlated negatively with depression measured at three months postpartum ( $r = -.28$ ,  $p < .001$ ) and social

hopelessness measured at three months postpartum ( $\underline{r} = -$   
.39,  $\underline{p} < .001$ ).

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Insert Table 13 about here

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Table 13

Intercorrelations Among Depression, Social Hopelessness and Optimism for New Mothers - Study 2: Couples Pre and Postpartum

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	1	2	3	4	5
Dep-Time 1	1.00				
Sochope-Time 1	.51***	1.00			
Dep-Time 2	.55***	.42***	1.00		
Sochope-Time 2	.49***	.75***	.52***	1.00	
Optimism	-.45***	-.49***	-.28***	-.39***	1.00

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

N ranges from 185 - 191.

The following abbreviations were used: Dep-Time 1 = depression measured during the third trimester of pregnancy; Dep-Time 2 = depression measured at three months postpartum; Sochope-Time 1 = social hopelessness measured during the third trimester of pregnancy; Sochope-Time 2 = social hopelessness measured at three months postpartum.

### Intercorrelations Among Adjustment Subscales for New Mothers

To control for experiment wise inflation of alpha error, a Bonferroni-adjusted probability level was calculated on the intercorrelations between the postpartum adjustment subscales for new mothers. After performing the calculation, the Bonferroni-adjusted probability level was  $p < .007$ . Based on the Bonferroni-adjusted probability, only those correlations with a significance level which met or were below this value were reported and interpreted as significant.

For new mothers, the relationship with baby subscale was positively correlated with relationships with friends ( $r = .21, p < .007$ ). The relationship with spouse subscale was positively correlated with work in the home ( $r = .27, p < .001$ ) and relationships with friends ( $r = .22, p < .007$ ). The adjustment subscale was positively correlated with work in the home ( $r = .53, p < .001$ ), relationships with friends ( $r = .42, p < .001$ ), relationships with relatives/family subscale ( $r = .53, p < .001$ ), relationship with baby subscale ( $r = .41, p < .001$ ) and relationship with spouse subscale ( $r = .65, p < .001$ ).

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Insert Table 14 about here

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It is important to note that the PPAQ subscales appear to have relatively little correlation with one other, suggesting that it is important to look at each subscale separately.

**Table 14**

**Intercorrelations Among Adjustment Subscales for New Mothers  
-Study 2: Couples Pre and Postpartum**

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	1	2	3	4	5	6	7
Homework	1.00						
Outwork	.06	1.00					
Relations	.18	.08	1.00				
Family	.08	-.55	-.02	1.00			
Baby	.18	.18	.21**	.10	1.00		
Spouse	.27***	-.10	.22**	.14	.02	1.00	
Adjustment	.53***	-.15	.42***	.53***	.41***	.65***	1.00

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Note: \*\*Bonferroni-adjustment probability  $p < .007$ , \*\*\* $p < .001$

N ranges from 185 - 191.

The following abbreviations were used: Homework = work in the home; Outwork = work outside the home; Relations = relationships with friends; Family = relationships with relatives/family; Baby = relationship with baby; Spouse = relationship with spouse; Adjustment = overall postpartum adjustment.



Correlations Between Depression, Social Hopelessness and  
Optimism for New Fathers (N=173)

The same analyses were conducted for new fathers. Social hopelessness measured during the third trimester of the wife's pregnancy was positively correlated with depression measured prior to the child's birth ( $r = .46$ ,  $p < .001$ ) and at three months postpartum ( $r = .45$ ,  $p < .001$ ). Social hopelessness measured at three months postpartum was also positively correlated with depression measured prior to the child's birth ( $r = .36$ ,  $p < .001$ ) and at three months postpartum ( $r = .56$ ,  $p < .001$ ). Optimism in new fathers was negatively correlated with depression measured prior to the child's birth ( $r = -.53$ ,  $p < .001$ ) and at three months postpartum ( $r = -.38$ ,  $p < .001$ ).

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Insert Table 15 about here

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Table 15

Correlations Between Depression, Social Hopelessness and Optimism for New Fathers (N=173) - Study 2: Couples Pre and Postpartum

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	Social Hopelessness Time 1	Social Hopelessness Time 2	Optimism
Depression-Time 1	.46***	.36***	-.53***
Depression-Time 2	.45***	.56***	-.38***

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The following abbreviations were used: Depression-Time 1 = Depression measured during the third trimester of pregnancy; Depression-Time 2 = Depression measured at three months postpartum; Social Hopelessness-Time 1 = Social hopelessness measured during the third trimester of pregnancy; Social Hopelessness-Time 2 = Social hopelessness measuring at three months postpartum.

Optimism was measured during the third trimester of pregnancy.

Correlations Between Postpartum Adjustment and Depression,  
Social Hopelessness and Optimism for New Fathers

To control for experiment wise inflation of alpha error, a Bonferroni-adjusted probability level was calculated on the correlations between the postpartum adjustment measure and indices of social hopelessness, depression and optimism for new fathers. The experiment wise alpha of .05 was divided by 7 (the number of postpartum adjustment subscales). After performing the above calculations, the Bonferonni-adjusted probability level was  $p < .007$ . Based on the Bonferroni-adjusted probability, only those correlations with a significance level which met or were below this value were reported and interpreted as significant.

Depression measured for new fathers during the third trimester of the wife's pregnancy was positively correlated with adjustment ( $r = .21$ ,  $p < .007$ ) and relationships with friends ( $r = .23$ ,  $p < .007$ ). These results indicate that new fathers experiencing higher levels of depressive symptoms during their wife's pregnancy experienced greater overall postpartum adjustment and difficulties maintaining relationships with their friends.

Depression measured at three months postpartum was positively correlated with all of the adjustment subscales:

adjustment ( $\underline{r} = .45, p < .001$ ), relationship with baby ( $\underline{r} = .26, p < .001$ ), relationships with relatives/family ( $\underline{r} = .31, p < .001$ ), work in the home ( $\underline{r} = .24, p < .001$ ), work outside the home ( $\underline{r} = .26, p < .001$ ), relationships with friends ( $\underline{r} = .32, p < .001$ ) and spouse ( $\underline{r} = .30, p < .001$ ). These results indicate the new fathers experiencing higher levels of postpartum depressive symptoms experienced difficulties in all areas of postpartum adjustment.

Social hopelessness measured during the third trimester of the wife's pregnancy was also positively correlated with the following postpartum adjustment subscales: overall postpartum adjustment ( $\underline{r} = .32, p < .001$ ); relationship with baby ( $\underline{r} = .26, p < .001$ ), work outside the home ( $\underline{r} = .21, p < .007$ ) and relationships with friends ( $\underline{r} = .21, p < .007$ ). These results indicate that expectant fathers experiencing higher levels of social hopelessness experienced greater difficulties with overall postpartum adjustment, their relationship with the new baby, their ability to complete work outside the home and relationships with friends.

Social hopelessness measured at three months postpartum was positively correlated with adjustment ( $\underline{r} = .39, p < .001$ ), relationship with baby ( $\underline{r} = .26, p < .001$ ), relationships with relatives/family ( $\underline{r} = .25, p < .001$ ),

work outside the home ( $r = .33$ ,  $p < .001$ ), relationships with friends ( $r = .33$ ,  $p < .001$ ) and relationship with spouse ( $r = .24$ ,  $p < .007$ ), indicating that new fathers experiencing higher levels of social hopelessness experienced greater difficulties with overall postpartum adjustment including their relationship with the new baby, relatives/family, friends, wife and their ability to accomplish work outside the home effectively.

Optimism measured for new fathers during the third trimester of the wife's pregnancy was not significantly correlated with any postpartum subscales.

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Insert Table 16 about here

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**Table 16**

**Correlations Between Postpartum Adjustment and Depression, Social Hopelessness and Optimism for New Fathers - Study 2: Couples Pre and Postpartum**

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	Depression Time 1	Depression Time 2	Social Hope Time 1	Social Hope Time 2	Optimism
Adj	.21**	.45***	.32***	.39***	-.19
Baby	.11	.26***	.26***	.26***	-.18
Family	.14	.31***	.18	.25***	-.04
Homework	.06	.24***	.17	.12	-.14
Outwork	.17	.26***	.21**	.33***	-.14
Relate	.23**	.32***	.21**	.33***	-.19
Spouse	.11	.30***	.16	.24**	.08

---

Note: \*\*Bonferroni-adjusted probability  $p < .007$ , \*\*\* $p < .001$

N ranges from 163-173.

The following abbreviations were used: Depression Time-1 = depression measured during the third month of pregnancy; Depression-Time 2 = depression measured at three months postpartum; Social Hope Time 1 = social hopelessness measured during the third month of pregnancy; Social Hope Time 2 = social hopelessness measured at three months postpartum; Adj = overall postpartum adjustment; Baby = relationship with baby; Family = relationships with relatives/family; Homework = work in the home; Outwork = work outside the home; Relate = relationships with friends; Spouse = relationship with spouse.

Optimism was measured during the third trimester of pregnancy.

Intercorrelations Among Depression, Social Hopelessness and Optimism for New Fathers

Social hopelessness in husbands measured during the third trimester of the wife's pregnancy was positively correlated with the husband's depression measured during the third trimester ( $r = .46, p < .001$ ).

Depression measured at three months postpartum was positively correlated with depression measured during the third trimester of pregnancy ( $r = .52, p < .001$ ) and social hopelessness measured during the third trimester of pregnancy ( $r = .45, p < .001$ ).

Social hopelessness measured at three months postpartum was positively correlated with depression measured during the third trimester of pregnancy ( $r = .36, p < .001$ ), social hopelessness measured during the third trimester of pregnancy ( $r = .71, p < .001$ ) and depression measured at three months postpartum ( $r = .56, p < .001$ ).

Optimism was negatively correlated with depression measured during the third trimester of pregnancy ( $r = -.53, p < .001$ ), social hopelessness measured during the third trimester of pregnancy ( $r = -.53, p < .001$ ), depression measured at three months postpartum ( $r = -.38, p$

<.001) and social hopelessness measured at three months postpartum ( $r = -.39$ ,  $p < .001$ ).

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Insert Table 17 about here

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Table 17

Intercorrelations Among Depression, Social Hopelessness and Optimism for New Fathers - Study 2: Couples Pre and Postpartum

---

	1	2	3	4	5
Dep-Time 1	1.00				
Sochope-Time 1	.46***	1.00			
Dep-Time 2	.52***	.45***	1.00		
Sochope-Time 2	.36***	.71***	.56***	1.00	
Optimism	-.53***	-.53***	-.38***	-.39***	1.00

---

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

N ranges from 163-173.

The following abbreviations were used: Dep-Time 1 = depression measured during the third trimester of pregnancy; Dep-Time 2 = depression measured at three months postpartum; Sochope-Time 1 = social hopelessness measured during the third trimester of pregnancy; Sochope-Time 2 = social hopelessness measured at three months postpartum.

### Intercorrelations Among Adjustment Subscales for New Fathers

To control for experiment wise inflation of alpha error, a Bonferroni-adjusted probability level was calculated on the intercorrelations between the postpartum adjustment subscales for new fathers. After performing the calculation, the Bonferroni-adjusted probability level was  $p < .007$ . Based on the Bonferroni-adjusted probability, only those correlations with a significance level which met or were below this value were reported and interpreted as significant.

Work outside the home was positively correlated with work inside the home ( $r = .25$ ,  $p < .001$ ). The relationships with friends subscale was positively correlated with work in the home ( $r = .22$ ,  $p < .007$ ) and work outside the home ( $r = .27$ ,  $p < .001$ ). Relationships with relatives/family was also positively correlated with work in the home ( $r = .22$ ,  $p < .007$ ). Relationship with baby was positively correlated with work in the home ( $r = .22$ ,  $p < .007$ ), relationships with friends ( $r = .28$ ,  $p < .001$ ) and relationships with relatives/family ( $r = .24$ ,  $p < .007$ ). Relationship with spouse was positively correlated with work in the home ( $r = .32$ ,  $p < .001$ ), work outside the home ( $r = .25$ ,  $p < .001$ ),

relationships with friends ( $r = .28, p < .001$ ) and relationship with baby ( $r = .21, p < .007$ ).

The overall postpartum adjustment subscale was positively with all other postpartum adjustment subscales: work outside the home ( $r = .44, p < .001$ ), relationships with friends ( $r = .57, p < .001$ ), relationships with family/relatives ( $r = .64, p < .001$ ), relationship with the baby ( $r = .58, p < .001$ ) and relationship with spouse ( $r = .63, p < .001$ ).

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Insert Table 18 about here

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**Table 18**

**Intercorrelations Among Adjustment Subscales for New Fathers  
-Study 2: Couples Pre and Postpartum**

---

	1	2	3	4	5	6	7
Homework	1.00						
Outwork	.25***	1.00					
Relations	.22**	.27***	1.00				
Family	.22**	.18	.18	1.00			
Baby	.22**	.17	.28***	.24**	1.00		
Spouse	.32***	.25***	.28***	.19	.21**	1.00	
Adjustment	.63***	.44***	.57***	.64***	.58***	.63***	1.00

---

Note: \*\*Bonferroni-adjusted probability  $p < .007$ , \*\*\* $p < .001$

N ranges from 163-173.

The following abbreviations were used: Homework = work in the home; Outwork = work outside the home; Relations = relationships with friends; Family = relationships with family; Baby = relationship with baby; Spouse = relationship with spouse; Adjustment = overall postpartum adjustment.

### Multiple Regression

The final hierarchical regression analyses predicted depression in the pregnancy and postpartum periods. The purpose of these analyses was to determine whether the personality factors (optimism and social hopelessness) could predict increases in levels of depression over time after removing variance associated with levels of depression during the pregnancy period. Separate analyses were conducted for new mothers and new fathers.

#### Regression Equation Predicting Depression During the Third Trimester of Pregnancy - New Mothers

The analysis for new mothers showed that optimism measured during the third trimester of pregnancy predicted 21% of the variance in pregnancy depression levels,  $F$  Change = 61.99,  $p < .001$ . Subsequent entry of social hopelessness measured during the third trimester of pregnancy in the second predictor block found that it was a significant predictor accounting for 10% of the remaining variance,  $F$  Change = 33.84,  $p < .001$ . This result signifies that an expectant mother's level of social hopelessness

prior to the birth of the child predicts which mothers are higher in depression, over and above trait optimism.

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Insert Table 19 about here

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Table 19

Regression Equation Predicting Depression During the Third Trimester of Pregnancy for New Mothers - Study 2: Couples Pre and Postpartum

---

Variable	$R^2$	$R^2$ Change	F Change	Beta
Optimism	.21	.21	61.99***	-.460
Sochope-Time 1	.31	.10	33.84***	.360

---

Note: \*\*\* $p < .001$

The following abbreviations were used: Sochope-Time 1 = social hopelessness measured during the third trimester of pregnancy. Optimism was also measured during the third trimester of pregnancy.

Regression Equation Predicting Depression During the Third  
Trimester of Pregnancy - New Fathers

The analysis for new fathers showed that optimism measured during the third trimester of the wife's pregnancy predicted 26% of the variance in husband's depression prior to the child's birth,  $F$  Change = 71.76,  $p < .001$ . Subsequent entry of social hopelessness measured during the third trimester of pregnancy in the second predictor block found that it was a significant predictor accounting for 4% of the remaining variance,  $F$  Change = 12.82,  $p < .001$ . This result signifies that an expectant father's level of social hopelessness prior to the birth of the child predicts depression, over and above trait optimism.

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Insert Table 20 about here

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Table 20

Regression Equation Predicting Depression During the Third Trimester of Pregnancy for New Fathers - Study 2: Couples Pre and Postpartum

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Beta
Optimism	.26	.26	71.76***	-.506
Sochope-Time 1	.30	.04	12.82***	.241

Note: \*\*\*p<.001

The following abbreviations were used: Sochope-Time 1 = social hopelessness measured during the third trimester of pregnancy. Optimism was also measured during the third trimester of pregnancy.

Regression Equation Predicting Depression at Three Months  
Postpartum - New Mothers

The analysis for new mothers showed that optimism measured during the third trimester of pregnancy predicted 8% of the variance in postpartum depression,  $F$  Change = 15.93,  $p < .001$ . Subsequent entry of social hopelessness measured at three months postpartum in the second predictor block found that it was a significant predictor accounting for 20% of the remaining variance,  $F$  Change = 51.24,  $p < .001$ . This result signifies that an expectant mother's level of social hopelessness after the birth of the child predicts postpartum depression, over and above trait optimism.

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Insert Table 21 about here

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Table 21

Regression Equation Predicting Depression At Three Months Postpartum for New Mothers - Study 2: Couples Pre and Postpartum

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Beta
Optimism	.08	.08	15.93***	-.279
Sochope-Time 2	.28	.20	51.24***	.483

Note: \*\*\*p<.001

The following abbreviations were used: Sochope-Time 2 = social hopelessness measured at three months postpartum. Optimism was measured during the third trimester of pregnancy.

Regression Equation Predicting Depression at Three Months  
Postpartum - New Fathers

The analysis for new fathers showed that optimism measured during the third trimester of pregnancy predicted 17% of the variance in father's postpartum depression,  $F$  Change = 36.37,  $p < .001$ . Subsequent entry of social hopelessness measured at three months postpartum in the second predictor block found that it was a significant predictor accounting for 19% of the remaining variance,  $F$  Change = 51.09,  $p < .001$ .

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Insert Table 22 about here

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Table 22

Regression Equation Predicting Depression At Three Months Postpartum for New Fathers - Study 2: Couples Pre and Postpartum

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Beta
Optimism	.17	.17	36.37***	-.417
Sochope-Time 2	.36	.19	51.09***	.478

Note: \*\*\*p<.001

The following abbreviations were used: Sochope-Time 2 = social hopelessness measured at three months postpartum. Optimism was measured during the third trimester of pregnancy.

Regression Equation Predicting Depression At Three Months  
Postpartum - New Mothers

Perhaps the most critical statistical analysis involves the issue of whether personality factors measured prior to the child's birth could predict which parents are susceptible to increased levels of depression during the postpartum period. This analysis recognizes that pregnancy levels of depression are robust predictors of postpartum depression levels. Given this fact, are personality measures able to predict increases in depression (from pregnancy and postpartum)?

The analysis for new mothers showed that Time 1 depression (e.g., pregnancy) predicted 31% of the variance in postpartum depression scores,  $F$  Change = 82.96,  $p < .001$ . Subsequent entry of trait optimism in the second predictor block found that it did not predict a significant amount of unique variance,  $F$  Change = 0.29, ns. Finally, entry of social hopelessness at three months postpartum in the third block found that it accounted for an additional 8% of the variance,  $F$  Change = 24.94,  $p < .001$ . This result signifies that an expectant mother's level of social hopelessness prior to the birth of the child predicts which mothers are

vulnerable to increased depressive symptoms as a result of making the transition to parenthood.

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Insert Table 23 about here

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Table 23

Regression Equation Predicting Depression At Three Months Postpartum for New Mothers - Study 2: Couples Pre and Postpartum

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Beta
Dep-Time 1	.31	.31	82.96***	.552
Optimism	.31	.00	0.29	-.047
Sochope-Time 2	.39	.08	24.94***	.335

Note: \*\*\*p<.001

The following abbreviations were used: Dep-Time 1 = depression measured during the third trimester of pregnancy; Sochope-Time 2 = social hopelessness measured at three months postpartum. Optimism was measured during the third trimester of pregnancy.



Regression Equation Predicting Depression at Three Months  
Postpartum - New Fathers

The analysis for new fathers showed that Time 1 depression (e.g., pregnancy) predicted 27% of the variance in postpartum depression scores,  $F$  Change = 65.49,  $p < .001$ . Subsequent entry of trait optimism in the second predictor block found a significant 3% increase in the amount of variance explained,  $F$  Change = 6.35,  $p < .01$ , indicating that the pessimistic new fathers were susceptible to increased depression over time. Finally, entry of social hopelessness at three months postpartum in the third block found that it accounted for an additional 14% of the variance,  $F$  Change = 42.29,  $p < .001$ . This result signifies that an expectant father's level of social hopelessness prior to the birth of the child also predicts which fathers are vulnerable to increased depressive symptoms as a result of making the transition to parenthood, even after taking levels of trait optimism into account.

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Insert Table 24 about here

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**Table 24**

**Regression Equation Predicting Depression At Three Months Postpartum for New Fathers - Study 2: Couples Pre and Postpartum**

Variable	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Beta
Dep-Time 1	.27	.27	65.49***	.524
Optimism	.30	.03	6.35**	-.190
Sochope-Time 2	.44	.14	42.29***	.415

Note: \*\*  $p < .01$ , \*\*\* $p < .001$

The following abbreviations were used: Dep-Time 1 = depression measured during the third trimester of pregnancy; Sochope-Time 2 = social hopelessness measured at three months postpartum. Optimism was measured during the third trimester of pregnancy.

### SUMMARY OF RESULTS FOR STUDY 2

Results of Study 2 revealed that reliabilities and internal consistency were adequate for all scales used in this investigation. It is noteworthy that the work outside the home subscale of the Postpartum Adjustment Questionnaire had relatively low alphas although this subscale has only 4 items, and subscales with fewer items tend to yield lower internal consistency values due to the manner in which the statistical value is calculated. Therefore, the alphas were acceptable, but results involving work outside the home were interpreted with caution for both new fathers and new mothers, due to the relatively low alphas obtained for all measures at both timepoints.

Repeated measures  $t$ -tests were conducted to compare new fathers and new mothers. Results revealed that there was a significant gender difference whereby new mothers had higher mean depression scores during the third trimester of pregnancy than new fathers. On the Postpartum Adjustment Questionnaire subscales, new fathers had higher relationship problems with family/relatives than did new mothers; new fathers had higher total postpartum adjustment scores than new mothers indicating that new fathers

experienced greater adjustment difficulties postpartum than new mothers. Additional gender differences consisted of new fathers indicating poorer relationships with friends, the baby and with work outside the home than new mothers at three months postpartum.

Correlational results showed the link between social hopelessness and depression at both timepoints for both new fathers and new mothers. Results also showed the relationship between social hopelessness and trait pessimism. Overall, lower levels of optimism were significantly correlated with depressive symptoms at both timepoints for both new fathers and new mothers. Additionally, social hopelessness was able to predict self-reported postpartum depression over and above general pessimism, and level of depression measured during the third trimester of pregnancy. Study 2 ultimately showed that social hopelessness can predict depressive symptoms over time.

Results of Study 2 showed that social hopelessness was significantly correlated with indices of postpartum adjustment in both new fathers and new mothers. For new fathers, social hopelessness measured during the third trimester of pregnancy and at three months postpartum was associated with greater postpartum adjustment difficulties.

For new mothers, social hopelessness measured during the third trimester of pregnancy was not significant although when measured at three months postpartum it was associated with postpartum adjustment difficulties such as forming a relationship with the new baby and completing household tasks. Self-reported depression measured at both timepoints was also significantly associated with greater postpartum adjustment difficulties for both new mothers and fathers.

Lastly, multiple regression analyses were conducted separately for mothers and fathers. Results for new mothers and new fathers revealed that social hopelessness prior to the birth of the child predicts which mothers or fathers are higher in self-reported depression, over and above trait optimism. Moreover, social hopelessness after the birth of the child also predicts postpartum depressive symptoms, over and above trait optimism. Most importantly, results further indicated that social hopelessness prior to the birth of the child is related to which new mothers or new fathers are vulnerable to depressive symptoms as a result of making the transition to parenthood.

## DISCUSSION FOR STUDY 2

The initial goal of Study 2 was to examine the link between social hopelessness and self-reported depression in couples during the third trimester of pregnancy and three months postpartum. Overall, the results supported the hypothesis that there is a significant relationship between social hopelessness and depression in this sample. Furthermore, social hopelessness was significantly correlated with depression at both timepoints for new fathers and new mothers. To our knowledge, the link obtained between social hopelessness and symptoms of postpartum depression is a novel finding. However this finding, albeit novel, is in keeping with past research on psychosocial variables, which has found that postpartum depression is related to an absence of supportive social network (Cutrona, 1984; Cutrona & Troutman, 1986) and a perceived sense of being rejected by one's parents (Gotlib, Whiffen, Wallace, & Mount, 1991). It may be the case that social hopelessness is a personality factor that contributes to the association between postpartum depression and negative appraisals of social support and relationship with one's family of origin.

A related goal of Study 2 was to explore the relationship among social hopelessness, personality traits (e.g., optimism-pessimism) and depression. As expected, results showed that lower levels of optimism were significantly correlated with depression and social hopelessness at both timepoints for both new fathers and new mothers. The correlations between optimism at Time 1 and depression at both timepoints ( $r$ 's ranging from  $-.28$  to  $-.53$ ) are quite consistent with the results of Andersson's meta-analysis which found an average correlation of  $r = -.45$  in research involving the Life Orientation Test and indices of depression.

Additionally, the present dissertation research showed that the Life Orientation Test was not significantly associated with depression measured during the third trimester of pregnancy for mothers (see Table 11). This finding is consistent with Fontaine and Jones (1997) but inconsistent with the findings of Carver and Gaines (1987) who did find that optimism predicted susceptibility to depression but in a much smaller sample compared to the sample in the current study.

A third goal of Study 2 was to investigate the unique ability of social hopelessness to predict depression, over and above general pessimism. Results showed that social

hopelessness does predict over and above general pessimism for both new fathers and new mothers during the third trimester of pregnancy and at three months postpartum, and social hopelessness is related to increases in levels of depression over time, after controlling for pregnancy levels of depression. This is a potentially important finding not only because social hopelessness was a significant predictor over optimism, but also because research with general samples has found few personality factors that predict vulnerability to depression (for reviews, see Flett, Hewitt, Endler, & Bagby, 1995; Enns & Cox, 1997). Clearly, the current findings need to be replicated, but trait hopelessness may be an important vulnerability factor in depression.

The fourth goal of Study 2 was to examine the association between symptoms of depression and domains of postpartum adjustment. For new mothers, there were several significant associations between depression and aspects of postpartum adjustment. First, new mothers reporting depression during the third trimester of pregnancy noted difficulties with overall postpartum adjustment and an inability to complete work in the home. Social hopelessness during the third trimester was not significantly related to postpartum adjustment



difficulties. At three months postpartum, new mothers who reported depressive symptomatology noted postpartum adjustment difficulties with their relationship with the baby, work in the home, relationships with friends, their spouse and overall maladjustment. Social hopelessness measured at three months postpartum was related to adjustment difficulties which included their relationship with the baby, work in the home and overall adjustment. As for optimism, this personality trait did not play a significant role in adjustment for new mothers. These results are similar to those obtained in the O'Hara et al. (1992) study which found that the PPAQ was significantly correlated with a measure of depression, social adjustment, marital adjustment and infant characteristics. Furthermore, in O'Hara et al.'s (1992) study, the relationship with spouse subscale of the PPAQ was highly correlated with marital adjustment and the relationship with baby subscale of the PPAQ was significantly correlated with infant characteristics.

Analyses with the data for fathers further illustrated the link between depression and postpartum adjustment. For example, depression measured during the third trimester of pregnancy was associated with postpartum adjustment difficulties including relationships with friends and

overall adjustment. Social hopelessness measured during the third trimester was also related to postpartum adjustment difficulties including relationship with the baby, work outside the home and relationships with friends. At three months postpartum, men experiencing depressive symptomatology reported greater difficulties with all areas of adjustment (e.g., relationship with the baby, relationships with family/relatives, work in the home, work outside the home, relationships with friends, their spouses and overall adjustment). Social hopelessness measured at three months postpartum was related to postpartum adjustment difficulties including the relationship with the baby, relationships with family/relatives, work outside the home, relationships with friends, relationship with their spouse and overall adjustment. As for optimism, this personality trait did not play a significant role in postpartum adjustment for new fathers.

Overall, Study 2 is the first research to show that social hopelessness predicts depression over time. It is also the first study to administer the Postpartum Adjustment Questionnaire to fathers. Psychometric tests showed that the reliability and validity of the PPAQ was not adversely affected by administering the PPAQ to fathers. Therefore, the present dissertation research

extends and goes beyond the previous study conducted by O'Hara et al. (1992) which focused on The Postpartum Adjustment Questionnaire and its development. In this research, the psychometric characteristics of the measure were evaluated in two studies. In Study 1, a large sample of women completed the measure and several related measures 1 month postpartum and took the PPAQ again 2 months postpartum. Their spouses completed the PPAQ 1 and 2 months postpartum although the husband's version concentrated on spousal ratings, not direct answers to the PPAQ about how the husbands were coping. These two studies provided evidence for the reliability and validity of the PPAQ although it did not address how husbands directly feel about the impending birth of their child and how they feel after the birth.

### Clinical Implications, Assessment and Treatment

The primary outcome of Study 2 indicates that social hopelessness is significantly associated with postpartum depression in first time parents (see Table 11, 12, 15 and 16). Based on this finding, it would seem important to highlight the benefits of identifying social hopelessness as early into the pregnancy as possible to prevent expectant mothers and fathers from experiencing increased anxiety and depression pre and postpartum. Therefore, it is suggested that the Social Hopelessness Questionnaire be used as a psychometric test during the pregnancy phase to identify levels of social hopelessness. This would enable caregivers to identify and intervene with those individuals experiencing a moderate to severe level of social hopelessness. Expectant mothers and fathers could then receive appropriate interventions to teach them adaptive coping strategies to deal with their anxiety and depression about becoming parents.

Additionally, new parents would benefit from childbirth preparation classes with a specific focus on the feelings of expectant mothers and fathers. Specifically, programs designed to explore the feelings of new fathers would be beneficial. It appears that available education concentrates on the pragmatics involved in childbirth and leaves the more personal and interpersonal issues aside. Research conducted by Chalmers and Meyer (1996) indicate that fathers experience a myriad of contradictory feelings prepartum and postpartum. Overall, fathers reported that they perceive their marriage, in the first few months after the baby's birth, as less satisfactory than prior to the baby's arrival. Chalmers and Meyer (1996) speculate that this dissatisfaction is due to inadequacies in preparation for birth and parenthood. Furthermore, many new fathers feel rejected by their spouse after the birth of a child as most of their wife's attention becomes focused on the new baby. Preparatory classes for new parents could help highlight relationship problems that may occur postpartum and provide new couples with the necessary communication skills to deal with one another effectively.

With respect to treatment, the identification of social hopelessness at the beginning of the pregnancy phase process would enable psychotherapists to target this area

with couples. Expectant mothers and/or fathers who are experiencing increased levels of depression during pregnancy are more likely to view their worlds negatively, only enhancing their sense of isolation and despair. Therefore, therapy could be conducted from a cognitive standpoint whereby the psychotherapist helps the expectant parents to integrate a more adaptive cognitive schema comprised of positive thoughts about their health, well-being and ability to take care of and raise a child.

It would also be beneficial to identify social hopelessness in expectant parents during pregnancy as this information would then provide the caregivers with important information regarding the personality style of each parent. As noted earlier, social hopelessness is viewed as a stable and enduring personality trait which can predispose expectant parents to a vulnerability to postpartum depressive symptomatology and this is supported by current test-retest data. Therefore, identification of a new parent's personality style would also provide caregivers and/or psychotherapists with valuable information about how to target the area and teach the expectant parent adaptive coping skills to deal with their fears about becoming a parent.

As was indicated in Study 1, Beck et al.'s (1979) Cognitive Therapy of Depression would also be a beneficial treatment approach with new parents. As Beck's theory notes, the development of depression begins with an experience connoting loss to the client. In the case of Study 2, the loss to expectant parents can be viewed as the transition to parenthood coupled with changes in relationships with friend, family and most importantly, spouse. As the new parent begins to negatively view themselves due to their perceived incompetency or failure to adjust to pregnancy and the baby, a pessimistic outlook begins to pervade the client's outlook on life and eventually hopelessness results. By identifying social hopelessness during the pregnancy, the therapist can aim to show the new parents that there are other interpretations of his/her present and future and other choices than the current maladaptive behaviours that are contributing to their distress. Identification of negative thought patterns can then lead to the formation of adaptive coping strategies which will enhance the transition from pre to postpartum for new parents.

It is often the case that new parents will become more depressed as they begin to feel isolated from their old lifestyles which may include family and friends. This

ultimately leads to withdrawal and isolation as a way of coping which increases their overall sense of social hopelessness. Therefore, it would also be beneficial to encourage couples to engage in interpersonal therapy whereby they can learn to reach out and ask others for help. Often new parents feel alone and isolated with their experiences which further exacerbates their transition to parenthood.

#### Limitations and Directions For Future Research for Study 2

A limitation with Study 2 was the fact that parents and children were not followed over a longer time frame. The ability to track the adjustment of parents and children over a longer time frame would provide better insight into the long-term effects of social hopelessness. Also, it would likely help identify which children are at a greater risk for adjustment problems due to the emotional lability of their parents following the birth of the child. This study would be exploratory in nature as the above hypothesis is based primarily on speculation.

Another limitation with Study 2 is the need for replication due a lack of generalizability to other socioeconomic groups. Study 2 was comprised primarily of middle class families with adequate levels of education and



good jobs. Research by Hobfoll and associates on inner-city women indicates that these women are at substantially higher risk for postpartum depression and different predictor variables may be involved (see Hobfoll, Ritter, Lavin, Hulsizer, & Cameron, 1995).

A final limitation pertains to the use of self-report measures in Study 2. Whiffen (1992) has observed that a self-report measure cannot be equated with clinical depression in a postpartum sample and the results are not specific to depression, in that they may also apply to anxiety, hostility, etc. Therefore, it would be beneficial to conduct clinical interviews with expectant parents that would focus on their thoughts and feelings about themselves, the new baby and their lives before and after the birth of the baby. The interview data could then be combined with self-report measures in order to obtain a more comprehensive look at the psychological issues that face new parents.

Finally, it must be acknowledged that even though the variables included in the current study were significant correlates of self-reported depression and PPAQ scores, much of the variance in these outcome measures remains to be accounted for, even after allowing for the role of measurement error. Future research needs to examine the

role of hopelessness in conjunction with other sources of variation, including individual differences in biological status, infant temperament, infant health status, other stressful events, and so on. Longitudinal studies that examine the role of coping strategies as moderators or mediators between social hopelessness and stressful life events would also be valuable to the future growth of the social hopelessness concept.

### GENERAL DISCUSSION

The main goal of both Study 1 and Study 2 was to examine individual differences in personal beliefs about outcome expectancies in the social domain. The results of both studies suggest that social hopelessness is an important factor to consider when examining the adjustment of individuals who have undergone a stressful life event (e.g., traumatic physical and/or emotional injury or the birth of a child).

The similarities across both Study 1 and Study 2 were that social hopelessness was significantly correlated with depression in both studies; and social hopelessness was significantly correlated with other outcome measures in both studies (e.g., The Beck Hopelessness Scale, The Life Orientation Test and the Postpartum Adjustment Questionnaire). Furthermore, social hopelessness was able to predict over and above other outcome expectancy measures concurrently (Study 1) and over time (Study 2). Lastly, the Social Hopelessness Questionnaire demonstrated adequate psychometric properties in both Study 1 and Study 2.

The outcome of Study 1 highlights the concurrent validity of social hopelessness at one timepoint whereas Study 2 highlights the predictive utility of social

hopelessness in predicting depression over time. Further, the psychometric characteristics of the Social Hopelessness Scale are reliable and valid.

The present research also established that personality factors measured at one timepoint and over time can predict levels of psychological distress. In Study 1, results indicated that anxious, apprehensive individuals will most likely experience greater degrees of social hopelessness and depression. In Study 2, results showed that individuals with lower levels of optimism tend to view their worlds more negatively, increasing their vulnerability to depression. Study 2 highlighted these findings not only at one timepoint but over two timepoints.

The predictive utility of social hopelessness in the current research indicates that an explicit focus on social hopelessness may be an important addition to interpersonal treatments of depression. Interpersonal psychotherapy, as outlined by Klerman, Weissman, Rounsaville and Chevron (1984), addresses a variety of interpersonal concerns, including role disputes, acquiring and adjusting to new relationships and identifying and correcting deficits in social skills. Existing research indicates that this is a relatively effective form of treatment. For instance, it was used effectively to alleviate the depression of six

women suffering from postpartum depression (Stuart & O'Hara, 1995). Given the role of psychosocial factors in postpartum distress these data are not surprising, but perhaps an explicit focus on social hopelessness as a supplement to interpersonal psychotherapy would lead to further enhancements of the quality of life and would help defend against relapses and recurrences of depression.

Overall, social hopelessness appears to be a key vulnerability factor in individuals who are susceptible to depression although it is important to note that despite the importance of social hopelessness in the development of depression there are other factors which may contribute to the depressive experience (e.g., biological factors).

### Limitations of Existing Therapeutic Approaches

It is important to discuss the limitations of the existing therapeutic approaches (e.g., cognitive-behaviour and social learning) in the treatment of social hopelessness as these approaches do not address longstanding personality issues. It is noteworthy that due to the hypothesis that developmental antecedents such as a history of childhood abuse or parental criticism and social hopelessness are likely related, other therapeutic approaches must not be discounted when approaching the

treatment of social hopelessness. It would appear that longer-term therapies such as those based on a psychodynamic foundation would also be useful in treating a person with high levels of social hopelessness. Since social hopelessness is viewed as a stable and enduring personality trait with a state component, the likelihood of longer-term therapy is high due to the entrenched personality patterns that develop from childhood through to adulthood. This is not to say that a therapist cannot adapt an eclectic approach to therapy, integrating the various cognitive-behavioural, social learning and/or psychodynamic approaches, but the therapist must always remain aware that due to the trait-component in social hopelessness, the therapist may not be able to completely change the feeling of social hopelessness for the client but should aim to help socially hopeless individuals to develop adaptive coping strategies to deal with their feelings and life situations.

Other important issues that must be addressed in any therapeutic approach with a socially hopeless individual are related to the therapeutic alliance, disclosure and trust. It would appear that socially hopeless individuals perceive the world and those around them as unsupportive, uncaring and critical. Based on these perceptions, the

therapist must initially work on developing a positive therapeutic alliance whereby the socially hopeless individual can feel safe and trusting of the therapist. A fundamental issue in the development of social hopelessness is a lack of trust in one's interpersonal relationships and the therapeutic alliance will become a forum in which the client can experience unconditional support, acceptance and trust from the therapist. Bearing this in mind, it is vital that the therapist be aware of their own feelings in therapy as socially hopeless individuals would likely be challenging clients at the outset of therapy (e.g., testing the therapist to see if they will eventually be rejected for undesirable thoughts or behaviour).

#### General Directions For Future Research

Although the current results indicate that social hopelessness is a potentially important predictor of depressive symptoms, it is evident that numerous issues involving social hopelessness remain to be tested.

An initial direction for future research will be to focus on further investigations of the nomological network and developmental antecedents of social hopelessness. One potentially important focus will be research on social hopelessness and abuse. The key conceptualization of

social hopelessness incorporates the notion that a key element of social hopelessness is a protracted sense of powerlessness that results from prolonged exposure to sexual or physical abuse (Briere & Runtz, 1986; Kazdin, Moser, Colbus, & Bell, 1985; Sedney & Brooks, 1984). At present, there have been no direct tests of long-term exposure to abuse and social forms of hopelessness.

Another direction for future research will be to examine the possible role of social hopelessness as a contributing factor in relationship problems. Research on interpersonal expectancies has confirmed that negative beliefs about another person are associated with dissatisfaction and family stress. Comparisons of distressed and nondistressed couples have shown that they differ in their expectancies and these differences are especially apparent in high conflict situations (Beavers, 1982; Carnelley & Janoff-Bulman, 1992; Vanzetti, Notarius & NeeSmith, 1992). Life experiences may shape interpersonal expectancies and beliefs, which, in turn, may influence the types of outcomes that are experienced (Carnelley & Janoff-Bulman, 1992).

An additional direction for future research will focus on the assessment of social hopelessness from a state-trait perspective. Young et al. (1996) conducted a study



whereby the authors hypothesized that a patient's hopelessness is comprised of (a) a baseline level of hopelessness when not depressed and (b) an increment in hopelessness to the severity of depression at the time and the person's rate of increase in hopelessness as a function of severity of depression. Baseline and sensitivity were explanatory stable traits; hopelessness and depression were observed, time-varying states. Results of this study showed that baseline predicted a future suicide attempt; sensitivity and hopelessness when depressed did not. According to Young et al (1996) it may be useful to ask "How hopeless is the person when not depressed and how much more hopeless is he or she when depressed?, rather than simply "How hopeless is this depressed person?" Therefore, to understand the role of social hopelessness in depression, it is important to recognize that social hopelessness is dynamic, not static. The intensity of social hopelessness will not only vary from person to person, but will vary within a single person across time. Although within-person variability in hopelessness rarely has been the focus of research, it has been recognized by a number of authors. For example, Blackburn, Jones, and Lewin (1986) commented that a score on the Beck Hopelessness Scale "reflects both an individual's current

cognitions and any more stable underlying assumptions regarding the future. They suggest that there is a component of hopelessness that is stable over time and a component that varies over time on the basis of varying conditions. The same can be said about social hopelessness although further studies would need to be conducted in order to explore the direct link between social hopelessness and the state-trait concept.

It would seem valuable to administer a measure of state-trait anxiety and social hopelessness to a variety of individuals undergoing different life events (e.g., marriage, post traumatic stress, physical injury) to explore the relationship between social hopelessness and anxiety. Results of the current research indicated that an individual with a more anxious, apprehensive personality type (as measured by the 16 PF) experienced significant levels of social hopelessness. Therefore, it would be helpful to explore the impact of anxiety and its relation to social hopelessness. The Endler Multidimensional Anxiety Scales (EMAS; Endler, Edwards, & Vitelli, 1991) would be ideal measures to administer with the Social Hopelessness Questionnaire (Flett, Hewitt & Gayle, 1993, 1997) as the EMAS provides measures of both state anxiety and trait anxiety, as well as separate measures of

situational perceptions. The EMAS-State scale has two subcomponents measuring the autonomic-emotional (AE) component of state anxiety (e.g., hands feel moist, breathing is irregular, have tense feeling in stomach) and the cognitive-worry (CW) component of state anxiety (e.g., unable to concentrate, self-preoccupied, feel uncertain). The EMAS-Trait Scale is a 60-item self-report inventory. It assesses stable individual differences in anxiety proneness. Subjects are provided four general situations (15 items per scale) and make five-point ratings of the intensity of anxiety associated with each situation. The four general EMAS situations are social evaluation (i.e., you are in situations where you are being evaluated by other people), physical danger (i.e., you are in situations where you are about to or may encounter physical danger, ambiguous (i.e., you are in new or strange situations), and daily routines (i.e., you are involved in your daily routines).

An examination of other mediators/moderators of the link between social hopelessness and depression such as dispositional coping styles and social support would also be useful. Previous research has shown the importance of investigating varying forms of coping in relation to postpartum adjustment (Demyttenaere, Lenaerts, Nijls, & Van

Assche, 1995; Elliott, Shewchuk, Richeson, Pickelman, & Franklin, 1996; Terry, Mayocchi, & Hynes, 1996). Coping strategies play a significant role in a person's adaptation to stressful life events. Particular coping strategies can either facilitate or impede mental and physical health (Endler & Parker, 1990a; 1990b; Endler, Parker & Summerfeldt, 1993). The coping construct has become a key component in a number of models linking personality with both physical and mental health variables. For example, the interaction model of stress, anxiety and coping processes (Endler, 1988, 1993, 1997) proposes that personal and situation factors interact to induce perceptions of threat with consequent elevations in state anxiety levels (Endler, 1983). Coping behaviours or responses are one possible reaction to the perceived threat and consequent changes in state anxiety (Endler & Parker, 1990a). This is a process-oriented model, as particular coping responses may subsequently affect both person and situation variables, as well as the perception of the threatening situation.

An existing example of coping and postpartum adjustment can be found in research conducted by Terry, Mayocchi and Hynes (1996). The aim of this study was to test the utility of a stress-coping model of postpartum

depression. Data were collected during the last trimester of pregnancy (n = 197) and twice after the birth (4 weeks, n = 180, and approximately 5 months, n = 163). Coping resources and depressive symptomatology were assessed at Time 1, stress and coping were assessed at Time 2, and depressive symptomatology and partner ratings of coping effectiveness were assessed at Times 2 and 3. After control of the effects of initial depression, there was evidence of significant effects of levels of stress and coping responses on the Time 2 and Time 3 outcome measures. There was also some evidence linking coping resources (particularly self-esteem and family support) to postpartum depressive symptomatology.

Based on the above research, it would be useful to conduct a study whereby participants are administered the Social Hopelessness Questionnaire (Flett et al., 1993; 1997) and a measure of coping. The Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1990c) would be an ideal measure as it consists of 48 self-report items that ask respondents to indicate on a 5-point scale how frequently they engage in various activities when they encounter a difficult, stressful, or upsetting situation. It assesses task-oriented (e.g., Schedule my time better), emotion-oriented (e.g., Blame myself for procrastinating),

and avoidance-oriented coping. The avoidance scale has two subscales measuring distraction (e.g., Go out for a snack or meal), and social diversion (e.g., Go out to a party). The integration of social hopelessness and coping styles would help identify the interactions between social hopelessness and coping dimensions in the prediction of depression and other maladaptive responses to stress.

A final direction for future research might include studies focussed on other possible domains of hopelessness (e.g., health or achievement). It would seem likely that other forms of hopelessness would be pertinent to certain individuals who tend to compartmentalize aspects of their lives.

### SUMMARY

In conclusion, the current dissertation examined individual differences in personal beliefs about outcome expectancies in the social domain. Two studies were conducted to investigate the nature and correlates of the social hopelessness construct. The first study consisted of a sample of rehabilitation clients who participated in a full psychological assessment in a private psychological practice due to ongoing physical or emotional trauma stemming from work-related or motor vehicle accidents. These individuals were tested at only one timepoint. The second study consisted of first-time parents who were undergoing a major life stressor and psychosocial transition due to the birth of their first child. New parents were tested at two timepoints: 1) during the third trimester of pregnancy and 2) at three months postpartum.

Psychometric tests conducted on the data from Study 1 confirmed that the Social Hopelessness Questionnaire (SHQ) has adequate internal consistency and validity in a sample of rehabilitation clients. This validity was further indicated by correlations with the Beck Hopelessness Scale (BHS). Results of Study 1 confirmed that there was a significant link between social hopelessness and depression

in a rehabilitation sample. Further, social hopelessness was able to predict depression, over and above a general measure of hopelessness when both measures of hopelessness were included as predictors in a regression analysis. Study 1 also explored personality factors as they related to social hopelessness. Results as assessed by the 16 PF showed that a more apprehensive, anxious personality type exhibited greater levels of social hopelessness.

Correlational results for Study 2 showed the link between social hopelessness and self-reported symptoms of depression at both timepoints for both new fathers and new mothers. Results also showed the relationship between social hopelessness and trait pessimism. Overall, lower levels of optimism were significantly correlated with depression at both timepoints for both new fathers and new mothers. Additionally, social hopelessness was able to predict depressive symptomatology in the postpartum period over and above general pessimism, and level of depression measured during the third trimester of pregnancy. Study 2 ultimately showed the social hopelessness is significantly related to depressive symptoms over time. Lastly, results of Study 2 showed that social hopelessness is significantly correlated with indices of postpartum adjustment in both new fathers and new mothers.



Overall, the results illustrate the importance of assessing social hopelessness when seeking to evaluate correlates of potential significance that may contribute to the depression experienced by individuals experiencing stressful life situations. The results further suggest the need for intervention strategies that focus directly on the negative social beliefs of vulnerable individuals.

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