Running head: ADAPTIVE INFERENTIAL FEEDBACK

No Man is a Failure Who Has Friends:

The Role of Adaptive Inferential Feedback in Hopelessness Depression

Lize R. Jalbert

Lakehead University, Thunder Bay, Ontario

Dissertation submitted in partial fulfillment of degree of Doctor of Philosophy, Clinical Psychology

© Lize Rachelle Jalbert, 2004

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

National Library of Canada

Bibliothèque nationale du Canada

Acquisitions and Bibliographic Services

Acquisisitons et services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence
ISBN: 0-612-92285-5
Our file Notre référence
ISBN: 0-612-92285-5

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou aturement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this dissertation.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de ce manuscrit.

While these forms may be included in the document page count, their removal does not represent any loss of content from the dissertation.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Acknowledgments

My sincere thanks to Dr. Josephine Tan for her guidance in the completion of this work. Her commitment to her students is remarkable. I would also like to thank my husband, Christopher Polowski for his support and encouragement throughout this process. His belief in me helped carry me through the sometimes stormy waters of graduate school.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table of Contents

List of Tables	iv
List of Figures	vi
List of Appendices	vii
Abstract	viii
Chapter 1: Introduction	1
Theoretical Antecedents of the Hopelessness Depression Subtype	1
Learned Helplessness	1
Explanatory Style	3
Hopelessness Depression Theory	4
Research on Hopelessness Depression	8
The Diathesis-Stress Component	9
The Proximal Sufficient Cause/Causal Mediation Component	11
The Symptom Component	12
Ruminative Coping Style Component	13
Social Support Component	15
The Present Study: Purpose and Hypotheses	20
Chapter 2: Method	23
Recruitment and Screening Phase	23
Recruitment Sample	23
Recruitment Procedure	23
Recruitment and Screening Materials	23

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Main Study 25

Sample 25

Materials 26

Measures 27

Procedure 33

Chapter 3: Results 36

Study Revisited 36

Relationship Among the Variables 36

Overview of Analyses 37

Pre-Analysis Issues 38

Main Findings 40

Supplementary Analyses 42

Chapter 4: Discussion 44

Study Revisited 44

Discussion of Findings 46

Strengths and Limitations of Present Study 50

Implications for the HD Theory 53

Summary of Study Findings and Directions for Future Research 54

References 56

Tables and Figures 66

Appendices 83

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

List of Tables

1. Summary of Studies of the Hopelessness Depression Model 66

2. Description of Main Study Sample 70

3. Pooled Correlation Matrix 71

4. Within-Group and Pooled Means and Standard Deviations (SD) 72

5. Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in HD Symptom (DHDSQ) Scores 73

6. Summary of Sequential Regression Analysis for LES, GENSUP, MIF, DCSQ, and GROUP Predicting Change in HD Symptom (DHDSQ) Scores 74

7. Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in non-HD Symptom (DBDI) Scores 75

8. Summary of Sequential Regression Analysis for LES, GENSUP, MIF, DCSQ, and GROUP Predicting Change in non-HD Symptom (DBDI) Scores 76

9. Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in Hopelessness (DBHS) Scores Within Top Quartile of Hopelessness Scores 77

10. Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 through 4 Predicting Change in HD Symptom (DHDSQ) Scores 78

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

11. Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 through 4 Predicting Change in Hopelessness (DBHS) Scores 79

12. Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 through 4 Predicting Change in non-HD Symptom (DBDI) Scores 80

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

List of Figures

1. The Hopelessness Depression Model 81

2. The Social Support Component of the Hopelessness Depression Model 82

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

List of Appendices

A. Cognitive Style Questionnaire 83

B. Recruitment Letter 98

C. Informed Consent: Screening Phase 99

D. Informed Consent: Main Study 100

E. Debriefing Information 101

F. Learned Optimism Summary 102

G. Negative Events Log 103

H. Potential Negative Events List 105

I. Social Feedback Questionnaire 106

J. Beck Depression Inventory-II 109

K. Hopelessness Depression Symptom Questionnaire-Revised 111

L. Beck Hopelessness Scale 115

M. Social Support Inventory 116

N. Life Events Questionnaire 120

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Abstract

The theory of hopelessness depression (Abramson, Metalsky, & Alloy, 1989) states that the presence of the psychological state of hopelessness is a sufficient cause for the development of a specific subtype of depression called Hopelessness Depression (HD). The state of hopelessness in turn, develops through a combination of several contributory causes that include the lack of general social support and a specific type of social support called adaptive inferential feedback (AIF). AIF refers to the feedback from others to an individual that promotes optimistic, rather than pessimistic, inferences about the causes, consequences and meaning of negative events. The objective of the present study was to determine whether participants taught to give themselves AIF (i.e., given direct instruction on how to change pessimistic attributions to optimistic ones for actual negative life events) would experience larger changes in cognitive style, hopelessness, HD symptoms, but not non-HD depressive symptoms, relative to participants who did not receive this instruction. The study further sought to examine the relationship between maladaptive inferential feedback (MIF) from one's environment and changes in these variables. A group of undergraduate students with a pessimistic attributional style was randomly assigned to either a Treatment group or a no-treatment Control group. The Treatment group underwent an optimism training workshop and for 28 days thereafter, engaged in disputation techniques in response to actual negative events in their lives. Pre- and post- assessments of the cognitive style, hopelessness, and HD- and non-HD depressive symptoms of the two groups were carried out. Results

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

indicate that AIF from the workshop predicted change in HD- and non-HD depressive symptoms and that this relationship was mediated by a change in cognitive style. Supplementary analyses indicated that practicing the disputation skills for one week predicted change in hopelessness, HD- and non-HD depressive symptoms. Implications for the role of AIF in alleviating hopelessness and depression as well as implications for the validity of the HD theory overall are discussed.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

CHAPTER 1

Introduction

The theory of hopelessness depression (HD; Abramson, Metalsky, & Alloy, 1989) has been the subject of intense research during the last decade. Though the primary components of the model (i.e., the diathesis-stress, causal mediation, and symptom components) have been studied quite thoroughly with a variety of different methodologies including both experimental and survey designs, only recently have studies on the secondary model variables such as social support and adaptive inferential feedback (AIF) begun to appear in the literature. The objective of the present study was to determine whether participants taught to give themselves AIF (i.e., given direct instruction on how to change pessimistic attributions to optimistic ones for actual negative life events) would experience larger changes in cognitive style, hopelessness, HD symptoms and non-HD depressive symptoms, relative to participants who did not receive this instruction. The following sections describe the theoretical antecedents of the HD subtype (i.e., learned helplessness and explanatory style), outline the theoretical HD model, and describe the research testing the model.

Theoretical Antecedents of the Hopelessness Depression Subtype: Learned Helplessness and Explanatory Style

Learned Helplessness

The theoretical roots of hopelessness depression lie in explanatory style theory (Abramson, Seligman, & Teasdale, 1978) which in turn, stems from research on learned helplessness (Seligman & Maier, 1967). In a classic experiment, Seligman and Maier demonstrated the phenomenon of learned helplessness using three groups of dogs. One

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

group was shocked in a harness, but they could turn off the shock by pressing a panel with their noses. A second group of dogs was yoked to the first group so that they received equal amounts of shock, but had no control over shock termination. A third group, the control group, received no shock. Subsequently, all groups of dogs were tested in a two-way shuttle box. Although jumping the partition in the shuttle box would have quickly terminated shock for all groups of dogs, the dogs that had been unable to control shock termination tended not to jump the partition, but instead passively tolerated the shock. Seligman and Maier hypothesized that this group of dogs had *learned* that their responses did not control the outcome, and had come to *expect* that the same thing would happen in the future. When their initial responses were ineffective in controlling shock, the dogs became passive and helpless, failing to learn new ways of escaping. Seligman and Maier named this phenomenon "learned helplessness".

Following a series of experiments with animals, Seligman (1975) proposed the phenomenon of learned helplessness as a model for human depression, noting that the helpless dogs appeared to demonstrate many of the same cognitive, motivational, and affective symptoms as depressed humans. For instance, helpless dogs behaved as though they expected outcomes to be uncontrollable. Likewise, depressed people often report feeling hopeless about change for the better and feel unable to cope with present problems. Furthermore, Seligman hypothesized that the huddling and whimpering of the dogs in the shuttlebox was the animal equivalent of crying, pervasive sadness, and lack of pleasure reported by depressed individuals. Indeed, research in which helplessness was induced in humans (usually through the means of unsolvable

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

tasks, rather than by shock) demonstrated that, following uncontrollability, people showed a variety of deficits (Hiroto & Seligman, 1975).

It soon became clear however, that when applied to humans, the learned helplessness model failed to adequately explain depression. One-third of Seligman's human subjects never became helpless. Of the ones who did, some bounced back right away while others never recovered. Some only remained helpless in the specific situation they learned to be helpless about, while others became helpless in brand new situations. Some blamed themselves for being unable to solve the unsolvable problems, while others blamed the experimenter (Seligman, 1990). Analogously, the original theory could not explain why depressed individuals often blamed themselves for bad events, nor could it answer why some individuals experienced specific and short-lived emotional reactions to a negative event while others experienced a major depressive episode when confronted with the same type of event. In short, the learned helplessness theory of depression could not account for individual differences in the ascription of explanations among those exposed to uncontrollable events.

Explanatory Style

The reformulated learned helplessness model of depression (Abramson, Seligman, & Teasdale, 1978) suggested that individual differences in a cognitive variable--the way people characteristically explain bad events--might account for these individual differences in depressive tendencies in response to bad events. According to this model, when people experience an aversive event, they ask themselves why the event occurred. The reasons they give for bad events can

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

then be analyzed along three theoretical dimensions: internal-external (i.e., "Is it my fault or someone else's fault?"), stable-unstable (i.e., "Is it going to last forever or is it temporary?"), and global-specific (i.e., "Is it going to affect everything that happens to me or is it only going to affect me in this specific situation?"). The reformulated model predicted that individuals who characteristically produce internal, stable, and global explanations for bad events have a pessimistic or depressogenic explanatory style and are more likely to become depressed in response to a bad event than individuals who make external, unstable, and specific explanations (i.e., optimistic explanatory style) for the same event.

Since the explanatory style model was first introduced in 1978, it has generated an immense amount of research in a wide variety of areas. For example, explanatory style has been demonstrated to successfully predict depression (Seligman & Nolen-Hoeksema, 1987); illness (Peterson & Seligman, 1987); achievement in elementary school (Nolen-Hoeksema, Girgus, & Seligman, 1986), in college (Peterson & Barrett, 1987), in law school (Satterfield, Monahan, & Seligman, 1997), and at work (Seligman & Schulman, 1986); military aggression (Satterfield & Seligman, 1994); the winners of political races (Zullow, Oettingen, Peterson, & Seligman, 1988); and sporting events (Seligman, Nolen-Hoeksema, Thornton, & Thornton, 1990); and has additionally been linked to hope in fundamentalist religions (Sethi & Seligman, 1993).

Hopelessness Depression Theory

In 1989, Abramson, Metalsky, and Alloy presented a revision of the reformulated theory of learned helplessness or explanatory style in which they

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

posited the existence of a subtype of depression called hopelessness depression (hereafter referred to as "HD"). HD is hypothesized to represent a specific subtype of depression consisting of the following symptoms: sadness, retarded initiation of voluntary responses, suicidal ideation/acts, low energy, apathy, psychomotor retardation, sleep disturbance, poor concentration, mood-exacerbated negative cognitions, and in some cases, low self-esteem and dependency. This subtype is hypothesized to differ from major depression with melancholic features in that the "hypothesized core psychological process in melancholic or endogenous-type depressions is impaired capacity to experience pleasure, rather than negative cognitions" (Alloy & Abramson, 1999, p. 231). Certain commonly recognized symptoms of major depression are not hypothesized to be part of the HD subtype. These symptoms include anhedonia, irritability, guilt, appetite/weight disturbance and somatic disturbance (Alloy & Clements, 1998).

The authors stated that the rationale for their revision of the explanatory style model was that it "...did not explicitly present a clearly articulated theory of depression. Instead, it presented an attributional account of human helplessness and only briefly discussed its implications for depression" (p. 358). Further, the authors emphasized that the revision was a *hopelessness*, rather than an *attributional* theory of depression meaning that, although explanatory style was still important in the new model, it was only a part, rather than the central focus of a complex sequence of events leading to hopelessness. Today, both the explanatory style model and the HD model exist concurrently, with separate lines

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of research being conducted on each (Abela & Sarin, 2002; Martin-Krumm, Sarrazin, Peterson, & Famose, 2003)

The HD model consists of both contributory and sufficient causes that can be graphically represented according to how distal or proximal the cause is to the HD symptom constellation (see Figure 1). A contributory cause is defined as "...an etiological factor that increases the likelihood of the occurrence of the symptoms but is neither necessary nor sufficient for their occurrence" (Abramson, Metalsky, & Alloy, 1989, p. 359). A sufficient cause is defined by the authors as "...an etiological factor whose presence or occurrence guarantees the occurrence of the symptoms" (p. 359). The theory presents an etiological chain of events posited to culminate in hopelessness, which is hypothesized to be a sufficient cause for the manifestation of the symptoms of the hopelessness depression (HD). The symptoms of HD (see Part “A” of Fig. 1) forwarded by the theory are: sadness, retarded initiation of voluntary responses, suicidal ideation/acts, low energy, apathy, psychomotor retardation, sleep disturbance, poor concentration, mood exacerbated negative cognitions, and in some cases, low self-esteem, and dependency. Note that in the HD model, hopelessness (see Part “B”) is conceptually reorganized from a symptom associated with depression to a proximal sufficient cause of depression

According to the theory, negative life events (see Part “C”) set the occasion for people to become depressed. However, the relationship between negative life events and depression is not linear. Three kinds of inferences (see Part “D”) people make when confronted with negative life events help to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

determine whether or not that person will become hopeless and develop the symptoms of HD: attributions, inferred consequences, and inferred characteristics about the self. Specifically, when an individual encounters a negative life event and (a) attributes it to a stable and global cause, (b) views it as important, (c) infers that it is likely to lead to other negative consequences, and (d) interprets it as implying that s/he is unworthy or deficient, then that individual is at risk of becoming hopeless and developing the symptoms of HD. In addition, when the negative event is attributed to internal causes, individuals will experience lowered self-esteem and dependency, as well as the other symptoms of HD.

In the HD model, the causal inferences one makes about a negative event are influenced by both informational cues present in the situation (e.g., consensus, consistency, and distinctiveness information-see Part "E") and one's cognitive style (see Part "F"). Cognitive style refers to the typical way in which an individual attributes an event to a cause. For example, if an individual typically attributes negative life events to stable and global causes, infers that negative events will lead to further negative consequences, and infers that the occurrence of negative events means that they are deficient in some way, s/he would be said to have a depressogenic attributional style.

However, in the absence of negative events, people exhibiting the depressogenic inferential style should be no more likely to develop hopelessness and, in turn, depressive symptoms than people not exhibiting this style. This aspect of the HD model is a diathesis-stress component: the negative life event is the stress, and the cognitive style is the diathesis.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Abramson et al. (1989) suggested that the diathesis-stress component of the HD theory be viewed as a titration model, with some people possessing more negative cognitive styles than others and some negative events more stressful than others. Thus, the less negative a person's attributional style, the more negative a life event would have to be in order to contribute to the development of hopelessness, and vice versa.

Two additional variables have also been hypothesized to act as contributory causes of hopelessness: a ruminative coping style (see Part "G") and lack of social support (see Part "H"). An individual's style of coping (i.e., rumination or distraction) with sadness or stressful events has been found to influence the likelihood, severity, and duration of depressive episodes. People who use ruminative or self-focusing styles of coping with their depressed moods or with negative life events may be more likely to develop severe, long-lasting depressive episodes than those with distractive styles (Alloy & Abramson, 1999). Additionally, it has been hypothesized that material, emotional, and informational support from others may buffer against depression by preventing the development of hopelessness and, in particular, by providing "adaptive inferential feedback" that promotes benign inferences about the causes, consequences and meaning of negative events rather than depressogenic ones.

Research on Hopelessness Depression

Research to date on the HD model has focused mainly on three areas: (1) the diathesis stress component (i.e., interaction of negative life events and cognitive style to predict hopelessness and HD symptoms), (2) the proximal sufficient cause/causal

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

mediation component (i.e., whether or not hopelessness mediates the relationship between the contributory causes and HD symptoms), and (3) the symptom component (i.e., the prediction that particular symptoms comprise the HD subtype). The rumination and social support components of the model have only been examined in an exploratory fashion. Table 1 summarizes the research that has been conducted on the model thus far.

The Diathesis-Stress Component

With respect to the diathesis-stress component of the model, many studies have examined the relationship between attributional style, stress and depression (see Barnett & Gotlib, 1988; Brewin, 1985; Coyne & Gotlib, 1983; Peterson & Seligman, 1984; Sweeney, Anderson, & Bailey, 1986, for reviews; see also Follette & Jacobson, 1987; Metalsky, Halberstadt & Abramson, 1987 in Table 1). Overall, research generally supports the diathesis-stress component of the HD model, but findings have sometimes been inconsistent due to varying levels of quality in methodology. Abramson, Alloy, and Metalsky (1995) argue that more recent studies provide a more powerful test of these components. Indeed, many of the more recent studies demonstrate some level of support for the diathesis-stress component of the HD theory (see Metalsky & Joiner, 1997; Metalsky, Joiner, Hardin, & Abramson, 1993; Spangler, Simons, Monroe, & Thase, 1993 in Table 1).

The most impressive findings to date concerning the HD theory come from the Temple-Wisconsin Cognitive Vulnerability to Depression (CVD) Project, a collaborative 2-site study that used a prospective behavioral high-risk design with nondepressed participants to test the HD and Beck's theories of depression. In view of the fact that the participants had to pass a rigorous

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

screening process and that the methodological quality of the research was high, the results of this study are especially meaningful. As part of that study, Alloy, Just, and Panzarella (1997) used a short-term, behavioral high-risk design with a daily diary methodology for assessing daily life events and symptoms in order to examine whether attributional style interacted with life stressors to predict level of within-day, and across-days variability in the HD subtype, hopelessness depression, but not other depression symptoms. "High-risk" was defined as scoring in the highest quartile--most negative—on the Attributional Style Questionnaire (ASQ) that assesses cognitive vulnerability. "Low-risk" was defined as scoring in the lowest quartile--most positive--on this same scale. One hundred and eight participants who were deemed high-risk provided daily reports of their positive and negative life events and ratings of their highest, lowest, and average point for the day on 20 symptoms of depression for 28 days. As predicted, the across-days variability of HD symptoms, but not non-HD symptoms was predicted by the interaction of attributional style and total events, whereas within-day variability was a function of the main effects of attributional style and total events.

In a short-term longitudinal design, Alloy and Clements (1998) had participants fill out measures of life events, cognitive style and various measures of psychopathology at Time 1 and one month later at Time 2. Their findings replicated those of Alloy, Just, and Panzarella (1997) in that the diathesis-stress interaction predicted HD symptoms prospectively, but not non-HD symptoms. They further found that the relationship between the diathesis-stress interaction

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and HD symptoms (but not non-HD symptoms) was mediated by hopelessness. These findings are important because they suggest that depressogenic cognitive styles interact with daily stressors prospectively to predict HD symptoms, but not non-HD symptoms.

The Proximal Sufficient Cause/Causal Mediation Component

With respect to the causal mediation component, studies generally support the hypothesis that hopelessness at least partially mediates between the contributory causes (i.e., diathesis-stress, attributions about specific event, social support, rumination) and both general depressive symptoms and specific HD symptoms. Earlier studies (see Beck, Riskind, Brown, & Steer, 1988; Metalsky, Joiner, Hardin, & Abramson, 1993; Rholes, Riskind, & Neville, 1985 in Table 1 for examples) supported a link between hopelessness and general depressive symptoms. More recent studies have focused on the relationship between hopelessness and HD symptoms specifically (see Whisman & Pinto, 1997; Whisman, Miller, Norman, & Keitner, 1995). Though these studies were at least partially supportive of this component of the model, the findings must be considered tentative as hopelessness and depressive symptoms were measured concurrently. Thus it is not known whether hopelessness predated the symptoms of HD. More recent studies on the causal mediation component have corrected this methodological flaw by using designs that are prospective in nature (see Abramson et al., 1998; Alloy & Clements, 1998; and Johnson et al., 2001; all in Table 1). These studies have all provided support for the notion that hopelessness mediates between the contributory causes of HD and symptoms of HD.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The Symptom Component

Relevant to the symptom component, approximately eight studies have evaluated the validity of the prediction that HD is comprised of a particular set of symptoms (see Table 1). In general, the findings have been mixed, with some studies showing strong support (see Alloy & Clements, 1998; Alloy, Just, & Panzarella, 1997; Joiner, Abramson, Alloy, Metalsky, & Schmidt, 1998; Metalsky & Joiner, 1997), others only partial support (see Spangler, Simons, Monroe, & Thase, 1993; Whisman & Pinto, 1997; Whisman, Miller, Norman, & Keitner, 1995), and some little or no support (see Haslam & Beck, 1994).

Taken together, these studies suggest only moderate support for the existence of a discrete set of symptoms comprising HD depression. There are however, several methodological difficulties that limit the level of confidence that can be placed in these findings. For example, five of the eight studies (all but Alloy & Clements, 1998; Alloy, Just, & Panzarella, 1997, and Metalsky & Joiner, 1997) used cross-sectional designs, making it impossible to determine whether or not hopelessness temporally preceded the hypothesized symptoms of HD. In addition, only three studies (Alloy & Clements, 1998; Alloy, Just et al. 1997; Metalsky & Joiner, 1997) examined whether the diathesis-stress component predicts prospectively HD symptoms in particular, and even of these, only the Alloy and Clements study tested whether HD symptoms were mediated by hopelessness. Furthermore, all but one of the studies (Alloy & Clements) failed to examine the specificity of the theory's predictions with regard to symptoms of HD vs. non-HD symptoms. Finally, five of the eight studies (Haslam & Beck,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

1994; Joiner et al., 1997; Spangler et al., 1993; Whisman et al., 1995; Whisman & Pinto, 1997) included only a subset of the symptoms hypothesized to be part of the HD subtype.

Ruminative Coping Style

The response styles theory (Nolen-Hoeksema, 1987) was originally developed to explain sex differences in depression. It stated that more women than men are depressed because they respond to depressed mood through a ruminative style of coping that tends to amplify and prolong depressive episodes. More recent studies have focused more specifically on the ruminative response style (regardless of gender) and its relationship to depression.

Although it is fairly recent, the response styles theory has received a fair amount of research attention (Nolen-Hoeksema, 1986 cited in Nolen-Hoeksema, 1987; Butler & Nolen-Hoeksema, 1994; Nolen-Hoeksema, Grayson, & Larson, 1999; Nolen-Hoeksema, Morrow, & Fredrickson, 1993; Nolen-Hoeksema, Parker, & Larson, 1994). These studies are relevant to the HD model in that they establish a general link between a ruminative coping style and general depressive symptoms, specifically affecting the duration and severity of depressive episodes. Additionally, Just and Alloy (1997) have shown that a ruminative coping style may also be involved in the onset of a depressive episode. However, none of these studies specifically addressed the predictions made about rumination in the HD model, namely that a ruminative response set contributes to the development of hopelessness and thus hopelessness depression.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

To address this concern, Robinson and Alloy (1999) analyzed CVD project data to examine depression as a function of both cognitive vulnerability and stress-reactive rumination (i.e., rumination in response to a stressor). They found that stress-reactive rumination interacted with cognitive vulnerability to predict both lifetime history and prospective onsets of major depressive disorder and episodes of HD. Specifically, among high-risk participants (defined as having a pessimistic attributional style), the lifetime prevalence and prospective incidence of major depression and HD were significantly greater for those who were also high in stress-reactive rumination than for those who did not tend to ruminate in response to stressors.

Most recently, Nolen-Hoeksema and Davis (1999) examined the relationship between a ruminative coping style and various aspects of social support after a trauma (i.e., the death of a loved one through terminal illness). These authors hypothesized that people who engaged in a ruminative coping style would be more likely to seek out social support after a trauma, and benefit more from it, but would report receiving less social support, relative to nonruminators. These three predictions were supported, even when controlling for level of distress. The authors suggested social support was perhaps more beneficial to ruminators because it offset one of the mechanisms by which rumination influences depression (e.g., suggestions from others about instrumental ways to cope with grief-related distress). Likewise, they speculated that ruminators may seek out others for support following a loss because "...they are more actively and persistently thinking about their loss, its meanings, and their own reactions to the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

loss than nonruminators are, and they want to share these thoughts with others" (p. 810). This last speculation remains untested.

Though these studies have demonstrated a link between rumination and depression, and to HD symptoms, the available research has not yet fully addressed the relationship of rumination to HD .

Social Support

Although research on the relationship between social support and depression and/or psychopathology is plentiful (see Cohen & Wills, 1985; Robinson & Garber, 1995; Stokes & McKirnan, 1989; and Thoits, 1982 for reviews) research on the social support component of the HD model is relatively sparse. Based on the work of Cohen and Willis which suggested that social support acts as a buffer against depression in times of stress by either directly reducing the amount of stress one faces or by changing one's perception of stress, Abramson, Metalsky, and Alloy (1989) posited that social support protects against depression by reducing the likelihood of becoming hopeless. In a sample of 103 HIV+ gay men, Johnson et al. (2001) found that increased hopelessness mediated the association between low baseline social support and increases in hopelessness and depression. Further, increases in hopelessness predicted increases in depression after controlling for baseline social support, and low baseline social support did not predict increased depression when hopelessness was controlled statistically.

Panzarella and Alloy (1995) proposed a mechanism called "adaptive inferential feedback" (AIF; see Figure 2) by which social support decreases one's

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

likelihood of becoming depressed. According to the authors, AIF occurs when members of an individual's social network offer adaptive interpretations as alternatives to that individual's depressogenic inferences. Specifically, "...adaptive feedback from supporters involves attributing the cause of a negative event to unstable, specific factors rather than to stable, global ones. Further, adaptive inferences do not suggest negative consequences or negative characteristics about the person" (Panzarella & Alloy,.1995, p. 3).

Panzarella and Alloy's model indicates that there are three ways in which social support and AIF can impact on depression (see Figure 2). First, the presence of *general social support* (e.g., financial aid) may decrease the likelihood of developing hopelessness by decreasing the number of negative life events an individual is exposed to throughout the course of his or her life. Second, *adaptive inferential feedback (AIF)* may decrease vulnerability to HD by preventing the development of a pessimistic attributional style or influencing its maintenance, such that a depression-prone individual who receives high levels of AIF may actually be able to change his or her cognitive style from pessimistic to optimistic over time. Third, *AIF* may decrease the likelihood of making maladaptive inferences about particular stressful life events regardless of whether or not it affects one's general tendency to make pessimistic inferences.

Panzarella and Alloy (1995) tested these hypotheses as part of the Cognitive Vulnerability to Depression (CVD) Project. Using the Adaptive Inferential Feedback Questionnaire, which actually measures the amount of *maladaptive inferential feedback* or *MIF* (i.e., feedback given by others that is stable, global, with negative consequences and negative self-implications*)*, they

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

found evidence for the roles of social support and MIF in the HD model. First, higher levels of general social support were associated with fewer and less severe negative life events, and predicted a lower level of future stress (direct effect). Second, those with a pessimistic attributional style received more MIF than those with an optimistic attributional style. Third, those with low levels of MIF made more adaptive inferences for actual events than did those with high levels of MIF. Fourth, participants who had a depressogenic inferential style, high.stress, and high levels of MIF were more likely to develop hopelessness, depressive symptoms, and diagnosable depressive episodes (including HD) than were participants who had only 0, 1, or 2 of these vulnerability factors. Fifth, the effect of the inferential style x stress x MIF interaction was partially mediated by hopelessness.

In another study of 295 students designed to validate an improved measure of MIF (Panzarella, DeFronzo, Truesdell, Cascardi, & Alloy, 2001), it was found that a high level of MIF made a significant contribution to explaining variance in depressive symptoms over and above two comprehensive social support measures (the Social Support Inventory and the Interpersonal Support Evaluation List). This suggests that a high level of MIF is an important predictor of depressive symptoms. In addition, a high level of MIF also made significant contributions to explaining hopelessness and depressive symptoms even after the contributions of stress and negative inferential style as well as general social support were controlled. Taken together, these studies suggest that a lack of social support in

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

general and the presence of MIF in particular, play an important role in the onset of hopelessness and depressive symptoms.

Despite impressive findings, these studies are limited by several conceptual and methodological weaknesses: (1) homogenous sampling, (2) failure to suggest a mechanism by which social support exerts its effect on hopelessness, and (3) psychometrically weak measures. For instance, though the Johnson et al. (2001) study demonstrated a relationship between baseline social support and hopelessness depression symptoms that was at least partially mediated by hopelessness, his sample (HIV+ gay males) was highly selective. More importantly, no attempt was made to suggest or test a mechanism by which social support contributes to the alleviation of hopelessness or HD.

The Panzarella and Alloy (1995) study represents an improvement in that they used a larger and more heterogeneous sample (university undergraduates), and provided a mechanism, "adaptive inferential feedback" by which social support might alleviate hopelessness and HD. However, their central measure, the Adaptive Inferential Feedback Questionnaire (AIFQ) was practically weak in that the wording of the items was sometimes awkward (e.g., "What did Person 1, Person 2, and Person 3 indicate to you about whether the cause of the stressor is something that will frequently be causing problems?"). In addition, the measure was not psychometrically strong, as acknowledged by the authors themselves. Despite "...adequate reliability and validity" (p. 8), the AIFQ was cumbersome to complete, requiring the participant to give separate ratings for feedback for each of three people in their social network for each item. Perhaps most importantly,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the AIFQ consisted of only four items, one for each type of maladaptive inference featured in the hopelessness depression model, thereby limiting construct validity. Given that the AIF construct was featured in each of the five hypotheses forwarded by Panzarella and Alloy (1995), psychometrically sound measurement of this construct was crucial. Thus, the strength of their conclusions is limited by the weakness of their measures.

Most recently, Alloy et al. (2001) examined the role of parental feedback, cognitive style and inferential feedback styles of parents in the development of cognitive vulnerability, in their university-aged children. In addition, they investigated whether any of these variables related to the parents were associated with the onset of hopelessness depression or hopelessness in their children during a 2.5 year follow-up.

The results were congruent with the predictions of the AIF hypothesis. Based on the students' reports of their parents behavior, as well as the parents' self-reports of their behavior, it was found that mothers and fathers of cognitively vulnerable students communicated more stable, global attributional feedback to them and more negative consequence feedback when they experienced negative events as children than the parents of cognitively invulnerable students. As well, mothers' stable, global attributional feedback and negative consequence feedback significantly predicted a greater likelihood of onset of hopelessness depression and average hopelessness level in their child across the 2.5-year follow-up. Student reports of their fathers' attributional and consequence feedback did not

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

predict any of the student outcomes. Similar results have been reported in other studies (Garber & Flynn, 2001; Turk & Bry, 1992).

The Present Study: Purpose and Hypotheses

Panzarella and Alloy (1995) define AIF as "... feedback from supporters... attributing the cause of a negative event to unstable, specific factors rather than to stable, global ones" as well as not suggesting "negative consequences or negative characteristics about the person" (p. 3). They suggest that one of the ways in which AIF may exert its influence is by helping to alter an individual's cognitive style over time (from pessimistic to optimistic). Their research supports a relationship between AIF and cognitive style such that individuals receiving higher levels of *maladaptive inferential feedback* (i.e., stable, global attributions with negative consequences and negative characteristics about the self) show a more pessimistic attributional style, where as individuals receiving low levels of *MIF* show a more optimistic attributional style.

There is a substantial body of research demonstrating the efficacy of cognitive restructuring on dysfunctional thinking (Beck and Weishaar,1989; DeRubeis, Evans, Hhollon, & Garey, 1990; Hollon, DeRubeis, & Evans, 1996). Seligman (1990) has suggested that it is possible to change one's attributional or cognitive style from pessimistic to optimistic by being taught to specifically challenge the stability, globality, and internality of one's explanations for negative life events through the use of cognitive disputation strategies. In essence, one can be taught to give oneself adaptive inferential feedback (AIF) when making initially pessimistic attributions for negative life events. Receiving direct

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

instruction on how to change pessimistic attributions for negative life events to optimistic ones may provide a more direct test of the hypothesis that the presence of *adaptive* inferential feedback is related to changes in cognitive style (from pessimistic to optimistic) than would an examination of levels of *maladaptive inferential feedback* (MIF). Though Panzarella & Alloy (1995) did study AIF originally, their measure was psychometrically weak as previously discussed, and more recent work has focused on MIF.

The objective of the present study was to determine whether participants given direct instruction on how to change pessimistic attributions to optimistic ones for actual negative life events would experience larger changes in cognitive style, hopelessness, HD symptoms and non-HD depressive symptoms, relative to participants who did not receive this instruction. The study further sought to examine the relationship between maladaptive inferential feedback (MIF) from one's environment and changes in these variables.

Individuals with a cognitively vulnerable (pessimistic) attributional style were randomly classified into either a Treatment group or a Control group. Both groups completed measures of MIF, negative life events, and general social support, as well as initial measures of hopelessness, HD symptoms, and non-HD depressive symptoms. Those in the Treatment group attended an "optimism workshop" designed to teach them to utilize cognitive disputation strategies developed by Seligman (1990) to ameliorate their pessimistic attributional style (i.e., give themselves AIF). As well, over the next 28 days they kept a log of negative events that occurred in their lives and of their daily practice in the disputation strategies. The Control group did not attend the optimism

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

workshop and was not given any tasks. At the end of 28 days, both groups were assessed for their attributional style, hopelessness, HD symptoms, and non-HD depressive symptoms.

It was hypothesized that compared to the Control group, the Treatment group would show a greater improvement in cognitive style (more to less pessimistic), hopelessness (more to less severe), and HD symptoms (more to less severe), but not in non-HD depressive symptoms, from pre- to post-intervention. In other words, those who received AIF through the optimism workshop and practiced giving themselves AIF on a daily basis would show greater change than those who were not taught to give themselves AIF in response to their pessimistic attributions for negative events. This finding was expected to occur even when number of negative life events was controlled for. It was further hypothesized that the observed changes in the clinical variables (i.e., hopelessness and HD symptoms), would be mediated by changes in cognitive style as a result of the intervention. Finally, it was hypothesized that low levels of maladaptive feedback from others in participants' lives (MIF) would also predict change in the clinical variables and in cognitive style.

The present study also addressed shortcomings in previous research by utilizing recent and psychometrically improved versions of two measures, the Hopelessness Depression Symptom Questionnaire – Revised (HDSQ-R; Hankin, Abramson, & Siler, 2000) and the Social Feedback Questionnaire (Panzarella et al., 2001) to measure, respectively, HD symptoms and maladaptive inferential feedback.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

CHAPTER 2

Methodology

Recruitment and Screening Phase

Recruitment Sample

A total of 778 undergraduate university students were recruited and screened for cognitive vulnerability style using the Cognitive Style Questionnaire (CSQ; Appendix A). Of these, 259 individuals who were within the top third of the distribution were classified as having a pessimistic attributional style and were eligible for participating in the main study. The mean CSQ composite score for the recruitment sample was 3.65 (*SD* = .86). The cutoff score that delineated the upper third of the sample from the rest of the distribution was 4.00.

Recruitment Procedure

The experimenter verbally introduced the topic of the study in class. A letter of recruitment (see Appendix B), a consent form (see Appendix C) and the CSQ were passed to interested students to complete. The section below describes in detail the CSQ and materials used in the recruitment and screening.

Recruitment and Screening Materials

Cognitive Style Questionnaire (CSQ - Appendix A). The CSQ (Abramson, Metalsky, & Alloy, 1990) is an expanded version of the Attributional Style Questionnaire (ASQ; Peterson et al., 1982) that assesses the degree to which individuals make internal, stable, and global attributions for 12 hypothetical events, 6 positive and 6 negative achievement and interpersonal events. In addition to measuring the three dimensions of internality, stability, and globality, the CSQ allows the assessment of three other

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

attributional dimensions that are relevant to the HD model (Abramson et al., 1989): inferences about the consequences, self-worth implications, and importance of the events. Therefore, the CSQ has a total of 12 events to which respondents can rate on 7-point scales on dimensions of Internality, Stability, Globality, Consequences, Self-implication and Importance. Scores for each dimension are obtained by adding the item scores relevant to that particular dimension. Higher scores on each dimension (possible range 12 to 84) reflect a more pessimistic attributional style.

To identify individuals with pessimistic attributional style, a CSQ composite score for negative events was calculated consisting of the sum of the Stability, Globality, Consequences, and Self-implication Dimensions (Alloy et al., 2001). The internal consistency for the CSQ composite score in the present study is .82, while the internal consistencies for CSQ subscales are as follows: Internality (.63), Stability (.76), Globality (.63), Consequences (.73), Self-implications (.76), and Importance (.71). CSQ scores have been shown to predict hopelessness and the presence of hopelessness depression (Alloy, Abramson, Murray, Whitehouse, & Hogan, 1997).

Recruitment letter (Appendix B). The recruitment letter presented the purpose of the study to the participants as looking at the relationship among mood, social support and daily coping. It indicated that certain participants would be asked to take part in a 2-hour seminar and a telephone check-in one week later, to keep a daily log of negative events for 28 days following the workshop, and to complete various questionnaires, while other participants would only be asked to complete the questionnaires before and after the 28-day period. The rest of the letter emphasized the voluntary nature of students' participation, the anonymity and confidentiality of their responses, the time commitment

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

required by participation, and the opportunity to obtain a summary of the results of the study.

Consent form for the screening phase (Appendix C). The consent form stated the title of the research study, described the purpose of the recruitment, outlined the requirements for participation, assured the participant that no risk was involved, noted that participation was on a voluntary basis and that responses would be kept anonymous and confidential, and provided the opportunity for participants to receive a summary of the results of the study. This form was signed before participation in the screening began.

Main Study

Sample

Out of the 259 individuals who were eligible for participating in the main study, 114 (mean age = 21.00 years, *SD* = 4.6, age range = 18-45 years) consented to be involved in the project. Of these, 82 (18 males, 64 females) were randomly assigned to the Treatment group and 32 (8 males, 24 females) to the Control group. As can be seen from Table 2 that displays demographic data for both groups, a majority of the participants were Caucasian and in the first year of university. The socioeconomic status of the participants, as defined by their annual family income, was evenly distributed across the range of income assessed. An ANOVA showed no significant difference between the groups on age. As well, Chi-square analyses showed no significant association between group membership and any of the demographic variables of sex, ethnicity, year of university, and income. A *t*-test on the CSQ scores obtained during

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

recruitment revealed no significant difference between the Treatment (M = 4.67, SD = .51) and Control (M = 4.52, SD = .43) groups.

Materials

Consent form for main study (Appendix D). The consent form stated the title of the research study, described its purpose, outlined the participation requirements for both the Treatment and Control groups, assured the participant that no risk was involved, noted that participation was on a voluntary basis and that responses would be kept anonymous and confidential, and provided the opportunity for participants to receive a summary of the results of the study. This form was signed before participation in the main study began.

Debriefing (Appendix E). The debriefing reiterated the purpose of the study, explained the rationale for it, and discussed the major hypotheses of the study.

Learned Optimism Summary (Appendix F). This 2-page document, based on information from the book “Learned Optimism” (Seligman, 1990), was given to participants in the Treatment group, and summarized the “Event – Thought – Feeling” model as well as the various disputation strategies (i.e., evidence, alternatives, usefulness, implications) that were taught during the optimism training workshop. An example of a disputation strategy was also provided in the summary.

Negative Events Log (Appendix G). This 2-page log was used by the Treatment group after the optimism workshop to document actual negative events that occurred in their lives over the next 28 days and the disputation strategies they practiced in response to the negative events. The following elements were recorded: (1) the negative event, (2) the belief the participant holds about the cause of the negative event, (3) the feeling

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that occurs as a result of holding that belief, (4) the technique used to change the negative belief, (5) the new belief held as a result of using the disputation techniques, and (6) the feeling that occurs as a result of holding the new belief. Participants also rated the Internality, Stability, and Globality of both the original and revised belief on a scale of 1 to 7, and rated their feelings on a scale of 0 to 100%. Changes in the mean weekly scores of these dimensions were explored.

Potential Negative Events List (Appendix H). A list of sample negative life events and daily hassles relevant to university-aged individuals adapted from the Life Events Questionnaire (Saxe & Abramson, 1987) were provided to Treatment group participants after the workshop. The purpose of providing this list was to allow the participants to select one negative life event out of the list to practice their disputation strategies in case no actual negative event happened to them on any day during their practice period.

Measures

Social Feedback Questionnaire (SFQ; Appendix I). The SFQ (Panzarella, DeFronzo, Truesdell, Cascardi, & Alloy, 2001) is a 12-item scale that assesses levels of maladaptive inferential feedback (MIF) given to an individual from others. It is based on the 4-item Adaptive Inferential Feedback Questionnaire (Panzarella & Alloy, 1995), and was developed to improve on the weak psychometric properties and awkward wording of the latter. Participants are instructed to think about some of the stressors and difficulties they have been dealing with in the past month and to list the three people they most often talk to about these problems. Next, they are asked to respond to the 12 items by indicating on a 5-point scale whether the people they selected have given them the message in the item "never", "rarely", "sometimes", "often"or "always". Scores range

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

from 12 to 60 with higher scores indicating a greater amount of maladaptive inferential feedback. In the present study, the internal consistency of this scale is .89.

Beck Depression Inventory –II (BDI-II; Appendix J). The BDI-II (Beck, Steer & Brown, 1996) is a 21-item measure commonly used to assess the presence and severity of cognitive, affective and somatic symptoms of depression. Participants are asked to rate the severity of these items on a scale of 0 to 3. A total score, ranging from 0 to 63, is created by summing all items. The BDI-II has been shown to correlate strongly with depressed mood symptoms (as measured by the SCID-I) in university students attending a counseling center (Sprinkle et al., 2002), providing evidence of criterion validity. In this same study, a BDI-II cutoff score of 16 yielded a sensitivity rate of 84% and a false-positive rate of 18% demonstrating discriminant validity. Test-retest reliability was shown to be .96 (Sprinkle et al., 2002). Construct validity for the BDI-II was demonstrated in a study by Steer, Ball, Ranieri, & Beck (1997) which showed that psychiatric outpatient scores on the BDI-II correlated more positively with scores on the Depression subscale than with scores on the Anxiety subscale of the Symptom Checklist-90-Revised. For the purpose of the present study, a composite score based on the following items *not* hypothesized to be part of Hopelessness Depression (i.e., non-HD depressive symptoms) was used: anhedonia (items 4 and 12), Irritability (item 17), guilt (items 5 and 6), appetite/weight disturbance (item 18), and somatic disturbance (item 21) (Alloy & Clements, 1998). Thus, the range of possible scores was 0 to 21. The internal consistency of the composite score in the present study was .76.

Hopelessness Depression Symptom Questionnaire Revised (HDSQ-R; Appendix K). The HDSQ-R (Hankin, Abramson, & Siler, in press) is a 40-item self-report measure

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that allows investigators to examine individual and combined symptoms of hopelessness depression. It is an extension of the HDSQ (Metalsky & Joiner, 1997), and remains exactly the same except for eight additional items to measure the HD symptoms of sad affect and negative cognitions. The format is similar to the BDI-II (Beck, Steer, & Brown, 1996). Each symptom is measured by a cluster of four items that increase progressively in severity. There are a total of 10 subscales, each comprised of four items, and each measuring a different symptom of hopelessness depression. Scores on each item range from 0 to 3 and, for a given subscale, from 0 to 12, with higher scores reflecting greater severity of a given symptom. The HDSQ is designed to measure the following symptoms (subscales):

(a) motivational deficit (items 1-4)

(b) interpersonal dependency (items 5-8)

(c) psychomotor retardation (items 9-12)

(d) anergia (items 13-16)

(e) apathy/anhedonia (items 17-20)

(f) insomnia (items 21-24)

(g) difficulty in concentration (items 25-28)

(h) suicidality (items 29-32)

(i) sad affect (items 33-36), and

(j) mood-exacerbated negative cognitions (items 37-40).

For the purposes of the present study, a composite score to measure hopelessness depression was calculated by summing subscale scores. The composite score ranges

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

from 0 to 120, with higher scores indicating greater severity of hopelessness depression symptoms.

Internal consistencies (as measured by alpha coefficients) for the original HDSQ are as follows: motivational deficit (.70), dependency (.72), psychomotor retardation (.74), anergia (.86), apathy/anhedonia (.75), insomnia (.81), difficulty in concentration (.80), suicidal ideation (.86). The alpha coefficient for the full HDSQ was .93. Overall coefficient alpha for the HDSQ-R is .94. With respect to construct validity, a factor analysis of the original HDSQ revealed eight factors possessing eigenvalues greater than one. These eight factors were interpretable, nonredundant, and non-trivial, and corresponded to the eight HDSQ subscales. Further, LISREL analyses of subscale intercorrelations revealed one higher-order latent construct—Hopelessness Depression Symptoms (Metalsky & Joiner, 1997). In a study of 270 adolescents, Hankin et al. (2000) demonstrated evidence of discriminant validity. The vulnerability-stress interaction measured in their study significantly predicted changes in 9 out of 10 HD symptoms on the HDSQ-R, and significantly predicted HD symptoms on the BDI, but not non-HD symptoms.

In the present study, the internal consistency of overall HDSQ-R was .94. The internal consistency for the individual symptoms were as follows: motivational deficit (.73), interpersonal dependency (.63), psychomotor retardation (.70), anergia (.86), apathy/anhedonia (.75), insomnia (.88), difficulties in concentration (.78), suicidality (.94), sad affect (.87), mood-exacerbated negative cognitions (.84).

Beck Hopelessness Scale (Appendix L). The Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974), which is a measure of the psychological state of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

hopelessness, has 20 true-false statements that assess the extent of negative expectancies about the immediate and long-range future. Of the 20 statements, 9 are keyed FALSE, and 11 are keyed TRUE to indicate endorsement of pessimism about the future. The item scores are summed to yield a total score that can range from 0 to 20 with higher scores indicating greater hopelessness.

The BHS has been tested in suicide ideators and attempters, alcoholics, heroin addicts, single- and recurrent-major depressives, and those with dysthymic disorder. Among these populations, internal consistency was high with KR-20 reliabilities of .92, .93, .91, .82, .92, .92, and .87, respectively. Test-retest reliabilities of .66 and .69 have been reported. The BHS has been shown to correlate with clinical ratings of hopelessness (r =.74 in a general practice sample, and .62 in a sample of suicide attempters), as well as significantly related to BDI scores in all of the seven clinical samples that were previously mentioned, demonstrating concurrent validity. Relating to discriminant validity, the BHS has been shown to differentiate the DSM-III Major Affective Disorders from those with Generalized Anxiety Disorder. Relating to construct validity, the relationship between BHS scores and suicidal intent has been shown to be higher than that between BDI scores and suicidal intent. The internal consistency of the BHS in the present study is .85.

Social Support Inventory (Appendix M). The Social Support Inventory was developed by Brown, Brady, Lent, Wolfert, and Hall (1987). It consists of 39 items, measuring five factors: (1) Acceptance and Belonging, (2) Appraisal and Coping Assistance, (3) Behavioral and Cognitive Guidance, and (4) Tangible Assistance and Material Aid, (5) Modelling. Each factor can be scored for social support needs (N),

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

social support supply (S), satisfaction with social support (SS), and perceived fit of social support (PF). Respondents use 7-point rating scales (1 = "none" to 7 = "very much") to indicate how much they needed and how much they received each type of support in the past week. Split-half reliability was .94 for the Satisfaction with Support subscale. Internal consistency as assessed with coefficient alpha yielded correlations of .95 for the Perceived Fit subscale and .96 for the Satisfaction with Support subscale. In support of the predictive validity of the SSI, Brown et al. (1987) found that the scores on the Perceived Fit subscale correlated significantly with anxiety ($r = .54$), depression ($r = .57$), psychosomatic symptoms ($r = .31$), and health risk behaviors ($r = .20$). The SSI was also shown to be independent of mood state and experimental demand.

For the purposes of the present study, the satisfaction scores for the "Acceptance and Belonging" and "Tangible Assistance and Material Aid" subscales were used to create a composite score measuring general social support (GENSUP) that was judged to be conceptually different from adaptive inferential feedback. The internal consistency of the "Acceptance and Belonging" and "Tangible Assistance and Material Aid" as well as the composite (GENSUP) were .92, .89, and .91 respectively.

The Life Events Questionnaire (LEQ - Appendix N). The LEQ (Saxe & Abramson, 1987) is a 134-item questionnaire that is designed to be a comprehensive list of potential negative life events and stressful situations in the lives of university students. The measure contains both major and minor episodic events as well as chronic situations in a wide variety of content domains relevant for college students (e.g., school, family, finances). It has been found to have a 3-week test-retest reliability of .92, and its validity is supported by the finding that LEQ scores were positively correlated with scores on the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

BDI ($r = .55, p < .01$; Saxe & Abramson, 1987). Also the interaction of scores on the LEQ and a measure of negative cognitive schema was shown to predict concurrent and future depression (McClain & Abramson, 1995). Due to the length of the questionnaire and the large number of questionnaires being used in the present study, a random sample of 66, rather than the full 134 items, was administered. A total LEQ score was obtained by summing up the number of negative events recorded by each participant. A higher LEQ score indicates greater life stresses. For the present study, the internal consistency of this scale was .43.

Procedure

All testing sessions were conducted in groups. Testing took place on two occasions: Time 1 (T1), and Time 2 (T2).

Time 1. The experimenter greeted the group of participants prior to the beginning of the workshop and explained the purpose of the study in general terms. Members of both the Treatment and Control groups were present. Members of the Control group were informed that they would be filling out a package of questionnaires that would take approximately one hour and then would be returning in 28 days to complete the same package. Members of the Treatment group were told that they would also complete the initial package of questionnaires, but that they would be required to stay for an extra hour to participate in a "workshop", and also that they would be required to practice some of the workshop components over the next 28 days before completing the questionnaires again. The optimism workshop did not begin until all members of the Control group had completed their questionnaires and left.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Participants then filled out the consent form (see Appendix D) and the following series of questionnaires: Social Feedback Questionnaire, Hopelessness Depression Symptom Questionnaire-Revised (HDSQ-R), the Beck Hopelessness Scale (BHS), the Beck Depression Inventory-II (BDI-II), the Social Support Inventory (SSI), and the Life Events Questionnaire (LEQ) (see Appendices I to N, respectively).

Following completion of these measures, the Treatment group listened to the optimism workshop and had the opportunity to participate in a practice disputation exercise at the end of the workshop. They were then given a summary of the workshop information, and asked to practice the cognitive disputation techniques they had learned over the next 28 days. Participants were also given the Potential Negative Events List, and 28 separate Negative Events Logs on which they were expected to record one negative event daily as well as the specific disputation method they used in response to this negative event. On days when no negative event happened to them, they were requested to choose one negative event from the Potential Negative Events List and respond to it on the Negative Events Log as if it were an actual event that had happened to them. This strategy ensured that the participants practiced their disputation strategies every day even when no negative event had taken place in their lives. A telephone call was made to each Treatment group participant one week after the workshop as a "check-in" to ensure that s/he had properly learned how to dispute pessimistic beliefs. Members of the Control group were not called.

Time 2. After the 28-day period, members of both the Treatment and Control groups were contacted and scheduled to complete the same measures they filled out at the screening and at T1 (CSQ, HDSQ-R, BHS, and BDI-II). Members of the Treatment

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

group were also asked to turn in their Negative Event Logs. Participants were fully debriefed at the end of the experimental session (see Appendix E).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

CHAPTER 3

Results

Study Revisited

The objective of the present study was to determine whether participants given direct feedback on how to change pessimistic attributions to optimistic ones for actual negative life events (Treatment group) would experience larger changes in hopelessness and HD symptoms, but not in non-HD depressive symptoms, relative to participants who did not receive this feedback (Control group). The study further sought to determine whether the observed changes would be mediated by changes in cognitive style. Finally, the relationship between general social support, level of maladaptive inferential feedback (MIF) and change in clinical symptoms was examined. Life stress was statistically controlled to reduce confounds.

Relationship Among the Variables

In order to ascertain the relationships among the variables in the study, a bivariate correlational analysis (see Table 3) on the entire sample was conducted on the following:

(a) LES = Life Event Stress (a measure of life stresses)

(b) MIF = Social Feedback Questionnaire (a measure of maladaptive inferential feedback from others)

(c) GENSUP = Social Support Inventory (a measure of social support)

(d) DBDI = Beck Depression Inventory difference scores (Time 1 - Time 2) (measure of severity of non-HD depressive symptoms)

(e) DBHS = Beck Hopelessness Scale difference scores (Time 1 - Time 2) (measure of severity of the state of hopelessness)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

(f) DHDSQ = Hopelessness Depression Symptom Questionnaire difference scores (Time 1 - Time 2) (measure of severity of hopelessness depression)

(g) DCSQ = Cognitive Style Questionnaire difference scores (Time 1 - Time 2) (measure of cognitive vulnerability or pessimistic attributional style)

As none of the variable pairs showed a correlation higher than .90, there was no need to delete any of the variables from the study due to potential problems associated with multicollinearity (Tabachnick & Fidell, 2001, p. 84). Table 4 shows the pooled and within-group means and standard deviations for all study variables.

Overview of Analyses

The main analytic strategy used was multiple regression. The first task was to determine whether the two groups differed significantly from each other on the clinical variables from Time 1 to Time 2. Hence, separate sequential regressions were conducted using change in hopelessness (DBHS), change in HD symptoms (DHDSQ), and change in non-HD depressive symptoms (DBDI) as criterion variables, and GROUP as the predictor variable. For each regression, life stress (LES), general social support (GENSUP) and level of maladaptive inferential feedback from others (MIF) were entered at Step 1. Then GROUP was entered at step 2 to determine if GROUP contributed to change in the criterion variables above and beyond contributions made by life stress, level of general social support, and level of MIF from others. For those regressions in which GROUP significantly predicted change in the criterion variable, a second regression was conducted using LES, GENSUP, and MIF at Step 1, change in cognitive style (DCSQ) at Step 2 and Group at Step 3. This allowed the assessment of whether the effect of GROUP on the criterion variable was mediated by changes in cognitive style. If

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the effect of GROUP disappeared once change in cognitive style was statistically controlled for, cognitive style was judged to mediate the relationship between GROUP and the criterion variables. Supplementary analyses consisted of: (1) a sequential multiple regression on each of the top and bottom quartiles of DBHS to explore the relationship of the predictor variables to changes in hopelessness among the most and least hopeless of the participants, and (2) three standard multiple regressions on DHDSQ, DBHS, and DBDI to see if the weekly changes in disputational abilities were related to these clinical variables. Pre-analysis issues and investigations into the regression assumptions are discussed below.

Pre-Analysis Issues

Missing Data

Missing values on any questionnaire item were handled by substituting the group mean value for that item (Tabachnick & Fidell, 2001, p. 60). Group mean values were generated by the DESCRIPTIVES procedure of the Statistical Package for the Social Sciences (SPSS).

Univariate Outliers

Univariate outliers were detected through SPSS DESCRIPTIVES by requesting standardized scores for all dependent variables in each group. Standard score values greater than $\pm$ 3.29 were considered to be outliers (Tabachnick & Fidell, 2001, p. 67). In order to reduce the influence of univariate outliers on the rest of the data, the score on the variable for the outlying cases was changed to a value that was one unit higher than the next most extreme score until the standard score value for that variable fell below $\pm$ 3.29, as recommended in Tabachnick & Fidell (p. 71).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Multivariate Outliers

Multivariate outliers within each group were examined using SPSS REGRESSION and identified using the Mahalanobis distance, which tends to yield very conservative estimates (Tabachnick & Fidell, 2001, p. 68). A second indicator, Cook's D, was used in addition to the Mahalanobis distance to identify influential multivariate outliers (Tabachnick & Fidell, 2001, p. 69). An influential multivariate outlier is defined as a case whose inclusion or exclusion from the database results in significant changes in one or more of the regression coefficients (Stevens, 2002, p. 126), and shows up with a Cook's D of 1.0 or greater. For the purpose of the present study, a multivariate outlier was defined as a case with a significant Mahalanobis distance and a Cook's D >1. No multivariate outliers were found for any of the dependent variables in a MANOVA or for any of the predictors in the regression analyses as no case yielded a significant Mahalanobis distance or a Cook's D > 1.

Assumptions for Multiple Regression

Multiple regression assumes: (i) normality, (ii) linearity, and (iii) homoscedasticity of residuals. These assumptions were assessed by examining residuals scatterplots through SPSS REGRESSION. Based on the residuals scatterplots for the two regression analyses, the assumptions of normality, linearity and homoscedasticity were judged to have been met. As there are five predictors in the present study (LES, GENSUP, MIF, GROUP, DCSQ), 90 participants are required to test the overall model (50 + 8m, where "m" is the number of predictors) and 109 participants are required to test individual predictors (104 + m; Tabachnick & Fidell, 2001, p. 117). Therefore the ratio of cases to IVs is acceptable as there were 114 participants. Multicollinearity and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

singularity were assessed using the tolerance statistic. Multicollinearity and singularity can be identified through very low tolerances of between .01 and .0001 (Tabachnick & Fidell, p. 84). As the tolerances for all regression analyses were above 0.8, multicollinearity and singularity among the IVs were judged to be absent.

Main Findings

Sequential Multiple Regressions on Change in HD Symptoms (DHDSQ)

A multiple regression was conducted on DHDSQ as the criterion variable with the predictor variables entered in the following order: LES, GENSUP and MIF at Step 1, and GROUP at Step 2. Results showed that at Step 2 with all variables entered, there was a significant omnibus main effect [$\Delta R^2 = .10$, $\Delta F(1, 109) = 6.34$, $p<.05$] with GROUP as the significant predictor ($r = .24$, $\beta = .23$, $t = 2.52$, $p<.05$), over and above the contributions of LES, GENSUP, and MIF (see Table 5). The Treatment group showed a greater decrease in HD symptoms than the Control group. A second multiple regression was conducted on DHDSQ, this time using LES, GENSUP and MIF at Step 1, DCSQ at Step 2, and Group at Step 3, in order to determine whether change in cognitive style mediated the effect of GROUP on change in HD symptoms (DHDSQ). Results at Step 2 showed a significant omnibus main effect [$\Delta R^2 = .07$, $\Delta F(1, 109) = 8.48$, $p<.01$], with DCSQ ($r = .23$, $\beta = .27$, $t = 2.91$, $p<.01$) and LES ($r = .22$, $\beta = .22$, $t = 2.21$, $p<.05$) as significant predictors. Greater changes in cognitive style (from pessimistic to optimistic) and greater number of life events were associated with greater decreases in HD symptoms. At Step 3, adding GROUP did not significantly improve prediction of DHDSQ, demonstrating that life stress and change in cognitive style mediated the relationship between GROUP and change in HD symptoms (see Table 6).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Sequential Multiple Regressions on Change in Hopelessness (DBHS)

A multiple regression was conducted on DBHS as the criterion variable with the predictor variables entered in the following order: LES, GENSUP and MIF at Step 1, and GROUP at Step 2. Results showed that none of the variables contributed significantly to the prediction of DBHS. As the hopelessness scores for this sample were rather low to begin with (a mean of 5.3, out of a possible 20), the same analysis was repeated using only those participants whose scores fell into the top and bottom quartiles on hopelessness (BHS scores ≤ 2 and ≥ 8, respectively) to determine if the lack of findings could potentially be attributed to a restricted range of sampling (see Supplementary Analyses section below).

Sequential Multiple Regressions on Change in non-HD Symptoms (DBDI).

A multiple regression was conducted on DBDI as the criterion variable with the predictor variables entered in the following order: LES, GENSUP and MIF at Step 1, and GROUP at Step 2. Results showed that at Step 2, there was a significant omnibus main effect [$\Delta R^2 = .06$, $\Delta F(1, 104) = 7.39$, $p < .01$], with GROUP as a significant predictor ($r = .27$, $\beta = .25$, $t = 2.72$, $p < .01$). Relative to the Control group, participants in the Treatment group showed greater changes in non-HD depressive symptoms (see Table 7). A second multiple regression was conducted on DBDI, this time using LES, GENSUP and MIF at Step 1, DCSQ at Step 2, and Group at Step 3. This would determine whether change in cognitive style mediated the effect of GROUP on change in non-HD depressive symptoms (DBDI). Results at Step 2 showed a significant omnibus

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

main effect [$\Delta \underline{R}^2 = .10$, $\Delta \underline{F}(1, 104) = 12.74$, $\underline{p} \leq .001$] DCSQ being the only significant predictor ($\underline{r} = .31$, $\beta = .33$, $\underline{t} = 3.57$, $\underline{p} \leq .001$). Greater changes in cognitive style (from pessimistic to optimistic) were associated with greater decreases in non-HD depressive symptoms. At Step 3, with LES, GENSUP, MIF, and DCSQ in the equation, adding GROUP did not significantly improve prediction of DBDI, demonstrating that change in cognitive style mediated the relationship between GROUP and change in non-HD depressives symptoms as well (see Table 8).

Supplementary Analyses

Sequential multiple regressions were conducted on the top and bottom quartiles of hopelessness scores with DBHS as the criterion variable and with the predictor variables entered in the following order: LES, GENSUP and MIF at Step 1, and GROUP at Step 2. Results showed that, using only those scores in the bottom quartile (BHS ≤ 2), none of the variables contributed significantly to the prediction of DBHS. However, when scores in the top quartile (BHS ≥ 8) were used, results showed that at Step 2, there was a significant omnibus main effect [$\Delta \underline{R}^2 = .17$, $\Delta \underline{F}(1, 25) = 5.00$, $\underline{p} < .04$], with GROUP as a significant predictor ($\underline{r} = .36$, $\beta = .43$, $\underline{t} = 2.23$, $\underline{p} < .05$). Relative to the Control group, participants in the Treatment group showed greater changes in hopelessness symptoms (see Table 9).

In order to examine the relationship between daily practice of the disputation techniques and change in the clinical variables, attributional ratings from the Negative Events Logs were examined. Only the Treatment group was examined because the Control group did not fill out the Negative Events Logs. A daily score was created by summing across the internality, stability and globality rating before disputation of an

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

actual negative event for the day, and a second score was created by summing across these ratings after disputation. By subtracting this second score from the first, a daily difference score was obtained. Mean difference scores for each week were calculated (WEEK1, WEEK2, WEEK3, and WEEK4).

Three sequential multiple regressions were conducted, using each of the clinical variables (DHDSQ, DBHS, and DBDI) as criterion variables and pre/post-disputation difference means (WEEK1, WEEK2, WEEK3, and WEEK4) as predictors. As can be seen in Table 10, results indicate a significant omnibus main effect [$\Delta R^2 = .13$, $\Delta F(1, 80) = 11.49$, $p \leq .001$], with only WEEK1 as a significant predictor ($r = .35$, $\beta = .35$, $t = 3.39$, $p \leq .001$) of change in change in HD symptoms (DHDSQ). Greater pre/post-disputation differences in Week 1 were associated with greater decreases in HD symptoms. The same patterns are repeated for change in hopelessness (DBHS) and change in non-HD depressive symptoms. Table 11 illustrates that for DBHS, there was a significant omnibus main effect [$\Delta R^2 = .07$, $\Delta F(1, 80) = 5.92$, $p < .05$], with WEEK1 as a significant predictor ($r = .26$, $\beta = .26$, $t = 2.43$, $p < .05$). Greater pre/post-disputation differences in Week 1 were associated with greater decreases in hopelessness. Finally, Table 12 illustrates that for DBDI, there was a significant omnibus main effect [$\Delta R^2 = .08$, $\Delta F(1, 80) = 7.12$, $p < .01$], with WEEK1 as a significant predictor ($r = .29$, $\beta = .29$, $t = 2.68$, $p < .01$). Greater pre/post-disputation differences in Week 1 were associated with greater decreases in non-HD depressive symptoms.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

CHAPTER 4

Discussion

Study Revisited

Panzarella and Alloy (1995) suggested that both general social support and adaptive inferential feedback (AIF) may influence hopelessness and HD symptoms. First, the presence of general social support (e.g., financial aid) may decrease the level of stress an individual is exposed to throughout the course of his or her life. Second, AIF may decrease vulnerability to HD by preventing the development of a pessimistic attributional style or influencing its maintenance, such that persons vulnerable to depression who receive high levels of AIF from their environment may actually be able to change their cognitive style from pessimistic to optimistic over time. Third, AIF may decrease the likelihood of making maladaptive inferences about particular stressful life events *regardless* of whether or not it affects one's general tendency to make pessimistic inferences. Thus far, studies have tended to focus on the influence of maladaptive inferential feedback (MIF) on hopelessness and depressive symptoms.

Seligman (1990) has suggested that it is possible to change one's cognitive style from pessimistic to optimistic through the use of specific cognitive disputation strategies designed to change internal, stable, global attributions for negative events into external, temporary and specific ones. In essence, one can be taught to give oneself adaptive inferential feedback. The present study suggested that receiving direct instruction on how to change pessimistic attributions for negative life events to optimistic ones may provide a more direct test of the hypothesis that the presence of *adaptive* inferential feedback is related to *changes*

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

in cognitive style (from pessimistic to optimistic), hopelessness and HD symptoms than would an examination of levels of *maladaptive* inferential feedback (MIF). In other words, the presence of AIF may predict decreases in hopelessness and HD symptoms better than the absence of MIF. Therefore, the objective of the present study was to determine whether participants given direct instruction on how to change pessimistic attributions for actual negative life events, using those specific disputation strategies suggested by Seligman, would experience larger changes in cognitive style, hopelessness, and HD symptoms, but not in non-HD depressive symptoms, relative to participants who did not receive this instruction. The study further sought to examine the relationship between MIF from one's environment and changes in these variables among individuals.

It was hypothesized that compared to the Control group, the Treatment group would show a greater improvement in cognitive style (more to less pessimistic), hopelessness (more to less severe), and HD symptoms (more to less severe), but not in non-HD depressive symptoms, from pre- to post-intervention. In other words, those who were taught how to give themselves AIF through a workshop and practiced giving themselves AIF on a daily basis would show greater change than those who did not attend the workshop and were not taught to give themselves AIF. This finding was expected to occur even when the number of negative life events, level of general social support, and level of MIF was controlled for. It was further hypothesized that the observed changes in the clinical variables (i.e., hopelessness and HD symptoms) would be mediated by changes in cognitive style. Supplementary analyses explored the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

relationship of daily practice of the disputation techniques to changes in the clinical variables.

Discussion of Findings

Regarding the first and second hypotheses, results showed that, in comparison to the Control group, participants who attended the optimism workshop (where they were taught how to give themselves AIF) and practiced the disputation skills over the next month, did in fact experience larger decreases in HD symptoms and non-HD depressive symptoms, but not in hopelessness. Further, as predicted, the effect of attending the workshop and practicing the skills on change in the depressive symptoms was mediated by changes in cognitive style. These relationships continued to be significant even when number of negative life events, general social support and MIF were controlled for. Thus, those who experienced change in depressive symptoms, appear to have done so because their explanations for negative events became less pessimistic over the course of the month. These findings provide partial support for Panzarella and Alloy's (1995) hypothesis about the relationship between AIF and change in HD symptoms, and the findings of Alloy et al. (2001) who found that parental inferential feedback predicted the likelihood of developing an episode of HD 2.5 years later, and that this relationship was mediated by children's cognitive risk status. Results from the supplementary analyses in the present study that showed pre/post differences in attributions for actual negative life events for Week 1 to predict changes in HD symptoms also provides support for the idea that symptom change was related to change in attributions (from more to less pessimistic).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Contrary to our predictions, participation in the optimism workshop failed to predict changes in hopelessness. This finding may mean that the skills taught in the workshop were not powerful enough to produce a significant change in hopelessness, even though they did produce a change in HD and non-HD symptoms. This explanation would be contrary to the HD model, which posits that hopelessness is a proximal sufficient cause of hopelessness depression. As such, changes in hopelessness would be necessary in order for changes in HD symptoms to occur. A more likely explanation is that changes in hopelessness were small because of a limited range of sampling. Examination of the data indicates that the average score on the Beck Hopelessness Scale at Time 1 was 5.3 (out of a possible 20). In other words, though participants were screened for cognitive vulnerability, they were not all that hopeless to begin with, and optimism training may not produce any significant or meaningful change in very mild degrees of hopelessness. If the participants had demonstrated higher levels of hopelessness at Time 1, it is possible that the optimism workshop would have produced a larger decrease in hopelessness, in accordance with the model. A comparison can be made to the use of antidepressant medication in depressed individuals. Taking antidepressants when one is not depressed does not produce a "happiness effect", but taking them when one is depressed might produce *decreases* in depression. This explanation is supported by the fact that when we looked at only those who scored in the top quartile in hopelessness at Time 1, Group did significantly predict changes in hopelessness scores.

Also contrary to our predictions, the optimism workshop appeared to be effective in reducing non-HD depressive symptoms as well as HD symptoms. This is congruent

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

with previous works (Panzarella & Alloy, 1995; Panzarella, DeFronzo, Cascardi, Truesdell, & Alloy, 2001) which measured the provision of AIF/MIF from others (but which did not use cognitive disputation strategies) and found a relationship between AIF/MIF and both HD and non-HD symptoms (i.e., those with higher AIF/lower MIF showed lower levels of HD and non-HD symptoms). Our results also converge with those of Alloy et al. (2001) who observed that parental inferential feedback predicted children's likelihood of developing not only HD, but also Major Depression 2.5 years later. Finally, Truesdell, Panzarella and Marciano (1999) found a relationship between MIF and anxiety (i.e., those with lower MIF showed lower levels of anxiety) in undergraduate students. Taken together, these findings suggest that challenging oneself in ways specifically designed to change stable, global, and internal attributions into unstable, temporary, specific ones or receiving this type of feedback from others (parents or friends) may confer a broader benefit than simply the alleviation of HD symptoms. Once again, a comparison may be made to the treatment of both depression and anxiety with certain types of antidepressant medication. Depression and anxiety are alike in some ways and different in others, but both conditions may be successfully treated with certain types of antidepressants. The findings do not however, provide support for the specificity of the HD subtype.

Previous research (Panzarella, DeFronzo, Cascardi, Truesdell & Alloy, 2001), reported a relationship among MIF and hopelessness and depression, such that higher levels of MIF were associated with higher levels of hopelessness and depression. Therefore, it was expected in the present study that lower levels of MIF would also be associated with decreases in hopelessness and HD symptoms, but not in non-HD

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

symptoms. Contrary to our predictions, MIF did not predict change in the clinical variables. The fact that MIF did not predict change in hopelessness or depressive symptoms, though unexpected, is perhaps not so surprising. Panzarella et al. hypothesized about what the role of AIF may be in the prevention or maintenance of hopelessness and depression. However, what they measured in the 2001 study was the presence or absence of maladaptive inferential feedback and its relation to depression. As asserted earlier, the *absence* of MIF does not automatically imply the *presence* of AIF. Likewise, though MIF has been shown to be a powerful predictor of levels of hopelessness and depression (Alloy et al, 2001; Panzarella et al.), it is not necessarily a powerful predictor of *decreases* in hopelessness and depression. The fact that the *presence* of self-directed AIF, but not the *absence* of MIF predicted change in the clinical variables supports this explanation.

Supplementary analyses explored the relationship between daily practice of giving oneself AIF through the use of the negative event logs and changes in the clinical variables within the Treatment group. Results showed that the average difference in internality, stability, and globality ratings before and after disputation of actual negative life events during the first week after the optimism workshop contributed significantly to the prediction of change in hopelessness, HD symptoms and non-HD symptoms. Therefore, the daily practice of giving oneself AIF may help to decrease one's level of hopelessness and depression. However, practicing disputation skills during Weeks 2 through 4 did not contribute to the prediction of change scores above and beyond scores for Week 1. At first glance, this finding seems counterintuitive, in that one would expect more practice to result in greater decreases in symptom levels. Previous research has

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

shown that, among depressed outpatients undergoing cognitive-behavioral therapy, those who did the most homework improved much more than those who did little or no homework (Burns & Spangler, 2000). However, participants in the Burns and Spangler study were outpatients in therapy for depression. It is possible that, in individuals demonstrating only very mild levels of depression such as those in the present study, the point of diminishing returns with respect to the benefits of added practice with disputation skills may be reached fairly quickly. Returning to the example of medical management of depression, giving a large dose of antidepressant medication to an individual who is only very mildly depressed is not likely to yield a better effect than giving him or her the minimal dose. In individuals exhibiting signs of more severe hopelessness and depression, longer "doses" of practice with disputation skills may very well lead to larger decreases in depression.

Strengths and Limitations of the Present Study

One of the strengths of the current study is that it looks at changes in hopelessness and depression using a short-term longitudinal design rather than examining symptoms cross-sectionally. Using a short-term longitudinal design allows for measurement of change in individuals across time as opposed to simply providing a snapshot of variable levels at one point in time. As such, we can have greater confidence in saying that AIF is related to changes in depression as opposed to simply saying that those with lower levels of depression have higher levels of AIF compared to those with higher levels of depression. A second strength of the present study is that the direct impact of the presence of AIF (rather than the absence of MIF) on changes in hopelessness and depression was assessed. This is important in that Panzarella and Alloy (1995)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

hypothesized about the positive effects of AIF, but Panzarella et al. (2001) measured the negative effects of MIF. As such, the current study allowed for a more direct test of their hypotheses about the role of AIF in changing depressive symptoms and cognitive style.

A limiting factor in the current study was that the initial screening sample was not particularly pessimistic or depressed. The average CSQ score was 3.65 on a scale of 1 to 7, (with higher scores measuring more a more pessimistic attributional style). As such, even though only the most pessimistic of over 750 students were used (those scoring in the top third on the CSQ), the cutoff score was still only 4.0 (measuring a relatively neutral attributional style). Using the top quartile (which would have reduced the available pool of participants), would have resulted in a cutoff score of only 4.2. The Cognitive Vulnerability to Depression (CVD) project, from which most of the data on HD stems, classified individuals as "high risk" and "low risk" based on scores in the top and bottom quartiles of the 5, 378 students they screened. Their cutoff scores on the CSQ were 5.05 (out of 7) at the Temple University site, and 5.15 (out of 7) at the Wisconsin Site resulting in an initial sample size of 549 students (10.2% of their initial screening sample) (Alloy & Abramson, 1999). Only 43 students (5.7%) in our initial screening sample obtained a CSQ score of 5.05 or above. It would appear that even though our screening sample was smaller than that of the CVD project, our students were also less pessimistic. Our participants were also less depressed. Though the CVD sample was specifically chosen to be cognitively vulnerable but nondepressed at Time 1, 39% of high-risk participants in the CVD project showed a lifetime prevalence of Major Depression, while 40% showed a lifetime prevalence of the HD subtype. Two and a half years later, 17% of "high risk" participants met DSM-III-R and RDC criteria for Major

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Depression and 41% for the HD subtype. Among the subgroup that showed a retrospective history of depression, 27% experienced a recurrence of Major Depression and 52% a recurrence of HD (Alloy et al., 1999). As such, participants in the CVD project sample were significantly more depressed than our cognitively vulnerable participants. This unintended difference in sample may account for some of the differences between our findings and those of the CVD project. Had our participants shown more pessimism, hopelessness and depression at the outset, it is possible that self-directed AIF would have predicted changes in hopelessness, and MIF would have predicted changes in hopelessness and HD symptoms within the treatment group.

A second limitation in the present study is that instruction in how to give oneself AIF is a bit different than receiving AIF from others on a more informal basis, such as might occur in participants' environment. However, our approach allowed us greater control with respect to the provision of AIF through the use of specific examples in the workshop, and by teaching clients to use disputation strategies for the specific purpose of modifying their pessimistic explanations for negative events, or finding alternatives that were less internal, stable, and global. Therefore, it allowed us to test the effects of AIF as provided in an "ideal" fashion. Because AIF was provided in a very direct fashion with specific intent, we are able to say with greater confidence that the simple absence of MIF from a depressed person's environment is not likely to be as powerful in decreasing existing symptoms of hopelessness and depression, as AIF provided on a more intensive level, such as might be encountered in therapy.

The third limitation in the present study is that the size of the Control group (N=32) was smaller that that of the Treatment group (N=82). This presents a problem

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

when there is a lack of significant findings because one cannot be sure whether no finding existed or whether the analysis lacked the statistical power to detect an existing difference. However, the fact that initial (time 1) levels of hopelessness, HD symptoms, and non-HD symptoms were predicted by the independent variables suggests that, though small, the number of participants in the Control group was sufficient to have adequate statistical power.

Implications for the HD Theory

With respect to the overall validity of the theory of hopelessness depression, our findings on social support raise an important question about the usefulness of the HD theory. The presence of self-directed AIF predicted not only those symptoms of HD, but also those of non-HD depression. As previously discussed, this finding converges with the findings of others (Panzarella & Alloy, 1995; Panzarella, DeFronzo, Cascardi, Truesdell, & Alloy; Truesdell, Panzarella & Marciano, 1999), demonstrating that MIF is related to non-HD symptoms of depression, Major Depression, and anxiety. These findings do not provide support for the specificity of the HD subtype. Of the studies specifically designed to examine the symptom component of the model, half (4 of 8) fail to find full support for the notion that the other model components (diathesis-stress and hopelessness) specifically predict HD symptoms (Haslam & Beck, 1994; Spangler, Simons, Monroe, & Thase, 1993; Whisman & Pinto, 1997; Whisman, Miller, Norman & keitner, 1995). Alloy and Abramson (1999) suggest that perhaps it is more accurate to speak of a “negative cognition cause” rather than a “negative cognition subtype” such as HD (231). In other words, perhaps the HD model is one of several etiological pathways to a common depression. However, a substantial body of research already exists

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

demonstrating a relationship between the various model components such as diathesis-stress (Olinger, Kuiper, & Shaw, 1987), hopelessness (Beck, Riskind, Brown, & Steer, 1988), rumination (Nolen-Hoeksema, 1987), and social support (Cohen & Wills, 1985) and depression. The uniqueness of the HD theory is that it proposed that these components together predicted a heretofore unnamed subtype of depression. If research does not uphold the notion that HD symptoms *specifically* are predicted by a combination of the above variables, then what does the HD theory offer that is clearly distinguishable from previous research? Though this study alone is insufficient to call the HD model into question and the above-mentioned limitations certainly need to be addressed, the fact that previous studies also failed to support the specificity of the symptom component of the model suggests that researchers in this area need to turn their full attention to definitively answering the question of whether or not the HD model represents a subtype of depression. If the specificity of the symptom component of the model cannot be upheld, then researchers need to consider whether it is worthwhile to continue researching it.

Summary of Study Findings and Directions for Future Research

The results of the present study provides support for the hypothesis that the presence of adaptive inferential feedback predicts decreases in symptoms of both Hopelessness Depression and non-HD depressives symptoms and that this relationship appears to be mediated by a change in cognitive style. Finally, though the findings are small, they are encouraging in that one session of direct instruction on how to give oneself AIF through the use of disputation combined with a relatively short duration of practice (1 week), effected a significant change in symptoms of hopelessness and depression symptoms.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

One of the study's limitations is that the participants were not particularly pessimistic or depressed. As such, it was not possible to determine whether the small proportion of variance in change symptoms explained by AIF was due to the fact that other unmeasured factors were more salient than AIF or to a restricted range of sampling. Future research would benefit from examining the relationship between presence of AIF and changes in depressive symptoms among individuals who are more depressed, such as might be seen in outpatient or inpatient psychotherapy. A second important avenue of research would be a comparison of naturally-occurring AIF with more intensive forms of AIF such as that seen in psychotherapy. Exploration of which form of AIF is more powerful in producing change in depressive symptoms or how the two may combine to produce change would further clarify the role of AIF in depression and may additionally provide useful information about how to best make use of an individual's support system while they are in therapy. A third potential suggestion for future research stems from the fact that AIF as measured in this study, predicted change in both HD and non-HD symptoms. Studies investigating whether certain components of cognitive-behavioral therapy produce changes in HD vs. non-HD symptoms would help to clarify whether HD is a distinct subtype.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

References

Abela, J. R. A., & Sarin, S. (2002). Cognitive vulnerability to hopelessness depression: A chain is only as strong as its weakest link. *Cognitive Therapy and Research, 26*(6), 811-829.

Abramson, L. Y., Alloy, L. B., & Metalsky, G. I. (1995). Hopelessness depression. In G. M. Buchanan and M. E. P. Seligman (Eds.), *Explanatory style* (pp. 113-134). Hillsdale, NJ: Lawrence Erlbaum.

Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Cornette, M., Akhavan, S., & Chiara, A. (1998). Suicidality and cognitive vulnerability to depression among college students: A prospective study. *Journal of Adolescence, 21*, 473-487.

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review, 96*, 358-372.

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1990). *The Cognitive Style Questionnaire: A measure of the diatheses featured in the hopelessness theory of depression*. (unpublished manuscript). Madison: University of Wisconsin.

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49-74.

Alloy, L. B., & Abramson, L. Y. (1999). The Temple-Wisconsin cognitive vulnerability to depression (CVD) project: Conceptual background, design, and methods. *Journal of Cognitive Psychotherapy: An International Quarterly*.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Alloy, L. B., & Clements, C. M. (1998). Hopelessness theory of depression: Tests of the symptom component. *Cognitive Therapy and Research, 22*(4), 303-335.

Alloy, L. B., Abramson, L. Y., Murray, L. A., Whitehouse, W. G., & Hogan, M. E. (1997). Self-referent information processing in individuals at high and low cognitive risk for depression. *Cognition and Emotion, 11*, 539-568.

Alloy, L. B., Abramson, L. Y., Tashman, N. A., Berrebbi, D. S., Hogan, M. E., Whitehouse, W. G., Crossfield, A. G., & Morocco, A. (2001). Developmental origins of cognitive vulnerability to depression: Parenting, cognitive, and inferential feedback styles of the parents of individuals at high and low cognitive risk for depression. *Cognitive Therapy and Research, 25*(4), 397-423.

Alloy, L. B., Abramson, L. Y., Whitehouse, W. G., Hogan, M. E., Tashman, N. A., Steinberg, D. L., Rose, D. T., & Donovan, P. (1999). Depressogenic cognitive styles: Predictive validity, information processing and personality characteristics, and developmental origins. *Behaviour Research and Therapy, 37*, 503-531.

Alloy, L. B., Just, N., & Panzarella, C. (1997). Attributional style, daily life events, and hopelessness depression: Subtype validation by prospective variability and specificity of symptoms. *Cognitive Therapy and Research, 21*(3), 321-344.

Alloy, L. B., Lipman, A. J., & Abramson, L. Y. (1992). Attributional style as a vulnerability factor for depression: Validation by past history of mood disorders. *Cognitive Therapy and Research, 16*, 391-407.

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

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Beck, A. T., & Steer, R. A. (1988). *Beck Hopelessness Scale Manual.* San Antonio, CA: Harcourt Brace & Company.

Beck, A. T., & Weishaar, M. E. (19890. Cognitive therapy. In R. J. Corsini and D. Wedding (Eds), *Current psychotherapies* (4th ed.) (pp. 285-320). Itasca, IL: F. E. Peacock Publishers, Inc.

Beck, A. T., Riskind, J. H., Brown, G., & Steer, R. A. (1988). Levels of hopelessness in DSM-III disorders: A partial test of content-specificity in depression. *Cognitive Therapy and Research, 12*, 459-469.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *BDI-II Manual* (2nd ed.). San Antonia, CA: Harcourt Brace & Company.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42*, 861-865.

Brewin, C. R. (1985). Depression and causal attributions: What is their relation? *Psychological Bulletin, 98*, 297-309.

Brown, S.D., Brady, T., Lent, R.W., Wolfert, J., & Hall, S. (1987). Perceived social support among college students. Three studies of the psychometric characteristics and counseling uses of the social support inventory. *Journal of Counseling Psychology, 34*(3), 337-354.

Burns, D. D., & Spangler, D. L. (2000). Does psychotherapy homework lead to improvements in cognitive-behavioral therapy or does improvement lead to increased homework compliance? *Journal of Consulting and Clinical Psychology, 68*(1), 46-56.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Butler, L. D., & Nolen-Hoeksema, S. (1994). Gender differences in responses to depressed mood in a college sample. *Sex Roles, 30*(5/6), 331-346.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357.

Coyne, J. C., & Gotlib, I. H. (1983). The role of cognition in depression: A critical appraisal. *Psychological Bulletin, 94*, 472-505.

DeRubeis, R. J., Evans, M. D., Hollon, S. D., & Garvey, M. J. (1990). How does cognitive therapy work? Cognitive change and symptom change in cognitive therapy and pharmacotherapy for depression. *Journal of Consulting & Clinical Psychology, 58*(6), 862-869.

Follette, V. M., & Jacobson, N. S. (1987). Importance of attributions as a predictor of how people cope with failure. *Journal of Personality and Social Psychology, 52,* 1205-1211.

Garber, J., & Flynn, C. (2001). Predictors of depressive cognitions in young adolescents. *Cognitive Therapy and Research, 25*(4), 353-376.

Hankin, B. L., Abramson, L. Y., & Siler, M. (2000). A prospective test of the hopelessness theory of depression in adolescence. *Cognitive Therapy and Research.*

Haslam, N., & Beck, A. T. (1994). Subtyping major depression: A taxometric analysis. *Journal of Abnormal Psychology, 103*(4), 686-692.

Hiroto, D. S., & Seligman, M. E. P. (1975). Generality of learned helplessness in man. *Journal of Personality and Social Psychology, 31*, 311-327.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Holon, S.D., DeRubeis, R. J., & Evans, M. D. (1996). Cognitive therapy in the treatment and prevention of depression. In P. M. Salkovskis (Ed), *Frontiers of cognitive therapy* (pp.293-317). New York, NY: Guilford Press.

Johnson, J. G., Alloy, L. B., Panzarella, C., Metalsky, G. I., Rabkin, J. G., Williams, J. B. W., & Abramson, L. Y. (2001). Hopelessness as a mediator of the association between social support and depressive symptoms: Findings of a study of men with HIV. *Journal of Consulting & Clinical Psychology, 69*(6), 1056-1060.

Joiner, T. E., Jr., Abramson, L. Y., Alloy, L. B., Metalsky, G. I., & Schmidt, N. (1998). *Taxometric evidence for a hopelessness depression subtype.* Manuscript submitted for publication.

Just, N., & Alloy, L. B. (1997). The response styles theory of depression: Tests and an extension of the theory. *Journal of Abnormal Psychology, 106*, 221-229.

Martin-Krumm, C. P., Sarrazin, P. B., Peterson, C., & Famose, J. P. (2003). Explanatory style and resilience after sports failure. *Personality & Individual Differences, 35*(7), 1685-1695.

McClain, S. B., & Abramson, L. Y. (1995). Self-schemas, stress and depressed mood in college students. *Cognitive Therapy and Research, 19*, 419-432.

Metalsky, G. I., & Joiner, T. E., Jr. (1997). The Hopelessness Depression Symptom Questionnaire. *Cognitive Therapy and Research, 21*(3), 359-384.

Metalsky, G. I., Halberstadt, L. J., & Abramson, L. Y. (1987). Vulnerability to depressive mood reactions: Toward a more powerful test of the diathesis-stress and causal mediation components of the reformulated theory of depression. *Journal of Personality and Social Psychology, 52*, 386-393.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Metalsky, G. I., Joiner, T. E., Jr., Hardin, T. S., & Abramson, L. Y. (1993). Depressive reactions to failure in a naturalistic setting: A test of the hopelessness and self-esteem theories of depression. *Journal of Abnormal Psychology, 102*, 101-109.

Nolen-Hoeksema, S. (1987). Sex differences in unipolar depression: Evidence and theory. *Psychological Bulletin, 101*(2), 259-282.

Nolen-Hoeksema, S., & Davis, C. (1999). "Thanks for sharing that": Ruminators and their social support networks. *Journal of Personality and Social Psychology, 77*(4), 801-814.

Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*(1), 115-121.

Nolen-Hoeksema, S., Girgus, J., & Seligman, M. E. P. (1986). Learned helplessness in children: A longitudinal study of depression, achievement, and explanatory style. *Journal of Personality and Social Psychology, 51*, 435-442.

Nolen-Hoeksema, S., Grayson, C., & Larson, J. (1999). Explaining the gender difference in depressive symptoms. *Journal of Personality and Social Psychology, 77*(5), 1061-1072.

Nolen-Hoeksema, S., Morrow, J., & Fredrickson, B. I. (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology, 102*(1), 20-28.

Nolen-Hoeksema, S., Parker, L. E., & Larson, J. (1994). Ruminative coping with depressed mood following loss. *Journal of Personality and Social Psychology, 67*(1), 92-104.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Olinger, L. J., Kuiper, N. A., & Shaw, B. F. (1987). Dysfunctional attitudes and stressful life events: An interactive model of depression. *Cognitive Therapy & Research, 11*(1), 25-40.

Panzarella, C., & Alloy, L. B. (1995, November). *Social support, hopelessness, and depression: An expanded hopelessness model.* Paper presented at the Association for the Advancement of Behavior Therapy Meeting.

Panzarella, C., DeFronzo, R., Truesdell, K., Cascardi, M., & Alloy, L. B. (2001). *Introducing a measure of adaptive feedback: Instrument development and psychometric properties of the Social Feedback Questionnaire.* Manuscript submitted for publication.

Peterson, C., & Barrett, L. (1987). Explanatory style and academic performance among university freshmen. *Journal of Personality and Social Psychology, 53*, 603-607.

Peterson, C., & Seligman, M. E. P. (1984). Causal explanations as a risk factor for depression: Theory and evidence. *Psychological Review, 91*, 347-374.

Peterson, C., & Seligman, M. E. P. (1987). Explanatory style and illness. *Journal of Personality, 55*(2), 237-265.

Peterson, C., Semmel, A., von Baeyer, C., Abramson, L. Y., Metalsky, G. I., & Seligman, ME. P. (1982). The Attributional Style Questionnaire. *Cognitive Therapy and Research, 6*, 287-300.

Rholes, W. S., Riskind, J. H., & Neville, B. (1985). The relationship of cognitions and hopelessness to depression and anxiety. *Social Cognition, 3*, 36-50.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Robinson, M. S., & Alloy, L. B. (1999). *Negative inferential style, stress-reactive rumination, and life stress as interactive risk factors in the onset of depression.* Manuscript submitted for publication. Cornell University Medical School.

Robinson, N. S., & Garber, J. (1995). Social support and psychopathology across the life span. In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology, Vol. 2: Risk, disorder, and adaptation.* Wiley series on personality processes (pp. 162-209). New York, NY: John Wiley & Sons.

Satterfield, J. M., & Seligman, M. E. P. (1994). Military aggression and risk predicted by explanatory style. *Psychological Science, 5*(2), 77-82.

Satterfield, J. M., Monahan, J., & Seligman, M. E. P. (1997). Law school performance predicted by explanatory style. *Behavioral Sciences and the Law, 15*, 95-105.

Saxe, L. L., & Abramson, L. Y. (1987). *The Life Events Questionnaire: Reliability and validity*. Unpublished manuscript.

Seligman, M. E. P. (1975). *Helplessness: On depression, development, and death.* San Francisco, CA: Freeman.

Seligman, M. E. P. (1990). *Learned optimism: How to change your mind and your life.* New York, NY: Pocket Books Press.

Seligman, M. E. P., & Maier, S. F. (1967). Failure to escape traumatic shock. *Journal of Experimental Psychology, 74*, 1-9.

Seligman, M. E. P., & Nolen-Hoeksema, S. (1987). Explanatory style and depression. In D. Magnusson & A. Ohman (Eds.), *Psychopathology: An interactional perspective* (pp. 125-139). Orlando, FD: Academic Press, Inc.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Seligman, M. E. P., & Schulman, P. (1986). Explanatory style as a predictor of performance as a life insurance agent. *Journal of Personality and Social Psychology, 50*, 832-838.

Seligman, M. E. P., Nolen-Hoeksema, S., Thornton, N., & Thornton, K. M. (1990). Explanatory style as a mechanism of disappointing athletic performance. *Psychological Science, 1*, 143-146.

Sethi, S., & Seligman, M. E. P. (1993). Optimism and fundamentalism. *Psychological Science, 4*(4), 256-259.

Spangler, D. L., Simons, A. D., Monroe, S. M., & Thase, M. E. (1993). Evaluating the hopelessness model of depression: Diathesis-stress and symptom components. *Journal of Abnormal Psychology, 102*(4), 592-600.

Sprinkle, S. D., Lurie, D., Insko, S. L., Atkinson, G., Jones, G. L., Logan, A. R., & Bissada, N. N. (2002). Criterion validity, severity cut scores, and test-retest reliability of the Beck Depression Inventory-II in a university counseling center sample. *Journal of Counseling Psychology, 49*(3), 381-385.

Steer, R. A., Ball, R., Ranieri, W. F., & Beck, A. T. (1997). Further evidence for the construct validity of the Beck Depression Inventory-II with psychiatric outpatients. *Psychological Reports, 80*(2), 443-446.

Stevens, J. (2002). *Applied multivariate statistics for the social sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Stokes, J. P., & McKirnan, D. J. (1989). Affect and the social environment: The role of social support in depression and anxiety. In P. C. Kendall & D. Watson (Eds.),

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Anxiety and depression: Distinctive and overlapping features (pp. 253-283). New York, NY: Academic Press, Inc.

Sweeney, P. D., Anderson, K., & Bailey, S. (1986). Attributional style in depression: A meta-analytic review. *Journal of Personality and Social Psychology, 50*, 974-991.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York, NY: HarperCollins College Publishers.

Thoits, P. A. (1982). Life stress, social support, and psychological vulnerability: Epidemiological considerations. *Journal of Community Psychology, 10*, 341-362.

Truesdell, K. C., Panzarella, C., & Marciano, P. L. (1999). *The role of adaptive inferential feedback in reducing anxiety*. Paper presented at the Association for the Advancement of Behavioral Therapy (AABT).

Turk, E., & Bry, B. (1992). Adolescents' and parents' explanatory styles and parents' causal explanations about their adolescents. *Cognitive Therapy and Research, 16*, 349-357.

Whisman, M. A., & Pinto, A. (1997). Hopelessness depression in depressed inpatient adolescents. *Cognitive Therapy and Research, 21*(3), 345-358.

Whisman, M. A., Miller, I. W., Norman, W. H., & Keitner, G. I. (1995). Hopelessness depression in depressed inpatients: Symptomatology, patient characteristics, and outcome. *Cognitive Therapy and Research, 19*(4), 377-398.

Zullow, H. M., Oettingen, G., Peterson, C., & Seligman, M. E. P. (1988). Pessimistic explanatory style in the historical record: CAVE-ing LBJ, presidential candidates and East versus West Berlin. *American Psychologist, 43*, 673-682.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1

Summary of Studies of the Hopelessness Depression Model

Study	Sample	N	Model Component	Findings
Metalsky, Halberstadt & Abramson, (1987)	US	94	Diathesis-stress	Ss with a stable, global attributional style (diathesis) for low midterm grade (stress) > depressive mood than Ss with an unstable, specific style.
Follette & Jacobson, (1987)	US	108	Diathesis-stress	No relationship between attributional style (diathesis) for low midter grade (stress) and depressive mood.
Metalsky, Joiner, Hardin & Abramson, (1993)	US	114	Diathesis-stress	Enduring depressive reactions (up to 4 days later) to a low midterm grade (stress) predicted by stable, global attributional style (diathesis).
			Causal mediation	Effect of attributional style on depressive reactions was mediated by hopelessness.
Alloy, Lipman & Abramson, (1992)	US	84	Diathesis	Ss with depressogenic attributional style more likely to exhibit past MDD and HD and more episodes of these disorders than Ss with a nondepressogenic attributional style.
Metalsky & Joiner, (1997)	US	174	Diathesis-stress	Diathesis-stress interaction predicted onset of HD symptoms but not non-HD symptoms.
			Symptom	Causal modeling techniques showed that the eight hypothesized HD symptoms reflect one underlying latent construct of HD.
Alloy et al., (1999)	US	349	Diathesis	Attributionally high-risk Ss showed higher lifetime rate of depression (twice the rate of MDD and four times the rate of HD) than low-risk participants. High-risk Ss also showed a higher prospective incidence of first onsets and recurrences of depression than low-risk Ss.

N.B. US = Undergraduate Students; OP = Outpatients; IP = Inpatients; CS = Community Sample; MDD = Major Depressive Disorder; HD = Hopelessness Depression; GAD = Generalized Anxiety Disorder

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1 (con't)

Study	Sample	N	Model Component	Findings
Beck, Riskind, Brown & Steer, (1988)	OP	199 MDD 48 GAD 76 control	Proximal sufficient cause	MDD Ss > mean HS scores than GAD or control Ss. HS scores more highly correlated with clinician- and self-rated depression than with anxiety. Positive relationship between HS and anxiety became nonsignificant after depression was controlled for, while HS remained correlated with depression after anxiety was controlled for.
Rholes, Riskind & Neville, (1985)	US	195	Proximal sufficient cause	Hopelessness was a significant predictor of future depression.
Whisman, Miller, Norman, & Keitner, (1995)	IP	80	Proximal sufficient cause	Depressed inpatients high in hopelessness experienced more HD symptoms than those low in hopelessness.
			Symptom	High- and low-hopelessness Ss did not differ on 21 out of 24 non-HD symptoms
Whisman & Pinto, (1997)	IP	160	Proximal sufficient cause	Hopelessness predicted HD symptoms to a greater extent than non-HD symptoms.
			Symptom	Use of a taxometric analytic procedure, using hopelessness and the symptoms of HD as taxonic indicators, did not support the existence of a hopelessness depression latent taxon.
Abramson et al., (1998)	US	349	Causal mediation	High risk participants were more likely than low risk ones to exhibit suicidality and that hopelessness mediated the relationship between cognitive vulnerability and suicidality.
Johnson et al., (2001)`	HIV+ males	103	Causal mediation	Increases in hopelessness mediated between low baseline levels of social support and HD symptoms.

N.B. US = Undergraduate Students; OP = Outpatients; IP = Inpatients; CS = Community Sample; MDD = Major Depressive Disorder; HD = Hopelessness Depression; GAD = Generalized Anxiety Disorder

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1 (con't)

Study	Sample	N	Model Component	Findings
Spangler, Simons, Monroe, & Thase, (1993)	OP	57	Symptom	Ss with a depressive attributional style who experienced a negative live event in a matching content domain exhibited higher levels of hopelessness and HD symptoms than Ss without a style/stressor match.
Alloy & Clements (1998)	US	100	Diathesis stress	The attributional diathesis-stress interaction predicted HD symptoms prospectively and specifically.
			Causal mediation	Relationship between the diathesis-stress interaction and symptoms of HD was mediated by hopelessness.
			Symptom	Hopelessness uniquely associated both concurrently and prospectively with symptoms of depression but not anxiety. HD symptoms correlated with one another more highly than with non-HD depressive symptoms or symptoms or other psychopathology. Hopelessness predicted prospectively 4 of 8 HD symptoms, but did non predict any non-HD depressive symptoms.
Alloy, Just, & Panzarella (1997)	US	108	Symptom	Attributionally high-risk Ss exhibited higher levels and greater variability of HD symptoms, but not other depression symptoms. HD symptoms intercorrelated with each other on a daily basis more highly than they correlated with other non-HD symptoms.
Joiner, Abramson, Alloy, Metalsky, & Schmidt (1998) (cited in Alloy & Clements, 1998)	OP (mixed diagnoses)	large (size not specified)	Symptom	Strong evidence for a HD taxon.
Haslam & Beck, (1994)	OP	531	Symptom	Lack of clear evidence for a discrete HD subtype.

N.B. US = Undergraduate Students; OP = Outpatients; IP = Inpatients; CS = Community Sample; MDD = Major Depressive Disorder; HD = Hopelessness Depression; GAD = Generalized Anxiety Disorder

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 1 (con't)

Study	Sample	N	Model Component	Findings
Nolen-Hoeksema & Morrow (1991)	US	137	Rumination	Students who, before an earthquake already had elevated levels of depression and stress symptoms and a ruminative coping style had more depression and stress symptoms at 10-days and 7-weeks follow-up than nonruminative Ss, even when initial stress and depression were controlled for.
Nolen-Hoeksema, Morrow, & Fredrickson (1993)	US	79	Rumination	Among Ss who tracked their mood for 30 days, those who ruminated remained depressed longer than those who did not. Even when initial depression was controlled, rumination still predicted duration of depressive episode.
Nolen-Hoeksema, Parker, & Larson (1994)	OP	253	Rumination	People with a ruminative style at 1 month post-loss were more likely to have a pessimistic outlook at 1 month, which was associated with higher depression at 6 months. People with a ruminative coping style were more depressed at 6 months, even after controlling for initial depression levels, social support concurrent stressors, gender, and pessimism.
Just & Alloy (1997)	US	189	Rumination	Nondepressed Ss reporting rumination in response to their depressive symptoms were more likely to experience a depressive episode over 18 months than distractors. Both a ruminative response style in a nondepressed state as well as the use of rumination during the first depressive episode predicted the severity of that episode.
Robinson & Alloy (1998)	US	not specified	Rumination	Stress-reactive rumination interacted with cognitive risk to predict both lifetime history and prospective onsets of MDD and HD.
Nolen-Hoeksema & Davis (1999)	CS	455	Rumination	Ruminative Ss were more likely to seek out social support after the loss of a loved one, benefited more from it, but received less of it, relative to nonruminators.

N.B. US = Undergraduate Students; OP = Outpatients; IP = Inpatients; CS = Community Sample; MDD = Major Depressive Disorder; HD = Hopelessness Depression; GAD = Generalized Anxiety Disorder

Table 2

Description of Main Study Sample

Variable	Treatment Group (*n* = 82)	Control Group (*n* = 32)
Sex		
Male	18	8
Female	64	24
Age	$M = 21.24$ ($SD = 4.9$)	$M = 20.6$ ($SD = 3.5$)
Ethnicity		
Caucasian	67 (88.2 %)	24 (82.8%)
Native Canadian	1 (1.3%)	0
African Canadian	2 (1.3%)	2 (6.9%)
Asian Canadian	1 (1.3%)	0
Other	5 (6.6%)	3 (10.3%)
Program Year		
Year 1	61 (77.2%)	25 (83.3%)
Year 2	12 (15.2%)	1 (3.3%)
Year 3	4 (5.1%)	2 (6.7%)
Year 4	1 (1.2%)	2 (6.7%)
Year 5	1 (1.3%)	0
Income Level		
Under $25,000	13 (21%)	8 (30.8%)
$25,000 - $50,000	13 (21%)	10 (38.5%)
$50,001 - $75,000	13 (21%)	4 (15.4%)
$75,001 - $100,000	16 (25.8%)	3 (11.5%)
Over $100,000	7 (11.3%)	1 (3.8%)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 3

Pooled Correlation Matrix

	LESTOT	SFQOTOT	GENSUP	DBDI	DBHS	DHDSQ
LESTOT						
SFQOTOT	.36**					
GENSUP	-.35**	-.31**				
DBDI	.21*	.12	-.11			
DBHS	.02	.10	-.12	.38**		
DHDSQ	.22*	.09	-.11	.68**	.41**	
DCSQ	-.09	.02	.16	.31**	.30**	.23*

Note. The acronyms for the variables in the table are reported in the text.

* $p < 0.05$ level (2-tailed).

** $p < 0.01$ level (2-tailed).

Table 4

Within-Group and Pooled Means and Standard Deviations (SD)

	Control Group			Treatment Group			Pooled Data		
Variable	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
MIF	18.78	4.62	32	21.08	7.42	82	20.44	6.8	114
GENSUP	72.41	21.40	32	67.71	19.88	82	59.03	20.3	114
LES	67.44	46.47	32	72.63	65.73	81	71.16	60.64	114
DBDI	.75	2.85	32	2.60	3.19	77	2.06	3.20	109
DBHS	.44	2.46	32	1.46	3.12	81	1.17	2.96	114
DHDSQ	1.77	8.88	32	8.43	13.42	82	6.56	12.63	114
DCSQ	.63	.82	32	1.19	1.09	82	1.04	1.05	114

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 5

Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in HD Symptom (DHDSQ) Scores

Variable	B	SE B	β
Step 1			
LES	.04	.02	.20
GENSUP	-.03	.06	-.04
MIF	.01	.19	.01
Step 2			
LES	.04	.02	.21
GENSUP	-.01	.06	-.02
MIF	-.05	.19	-.03
GROUP	6.5	2.6	.23*

Note. $R^2 = .05$ for Step 1; $\Delta R^2 = .05$ for Step 2.

*$p<.05$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 6

Summary of Sequential Regression Analysis for LES, GENSUP, MIF, DCSQ, and GROUP Predicting Change in HD Symptom (DHDSQ) Scores

Variable	B	SE B	β
Step 1			
LES	.04	.02	.20
GENSUP	-.03	.06	-.04
MIF	.01	.19	.01
Step 2			
LES	.05	.02	.22*
GENSUP	-.05	.06	-.08
MIF	-.04	.18	-.02
DCSQ	.07	.02	.27**
Step 3			
LES	.05	.02	.27*
GENSUP	-.04	.06	-.06
MIF	-.07	.18	-.04
DCSQ	.06	.02	.22*
GROUP	4.90	2.61	.18

Note. $R^2 = .05$ for Step 1; $\Delta R^2 = .07$ for Step 2; $\Delta R^2 = .03$ for Step 3.

*$p<.05$

**$p<.01$

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 7

Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in non-HD Symptom (DBDI) Scores

Variable	B	SE B	β
Step 1			
LES	.01	.01	.17
GENSUP	.00	.02	.01
MIF	.06	.05	.13
Step 2			
LES	.01	.01	.18
GENSUP	.00	.02	-.03
MIF	-.05	.05	-.10
GROUP	1.77	.65	.25**

Note. $R^2 = .06$ for Step 1; $\Delta R^2 = .06$ for Step 2.

** $p < .01$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 8

Summary of Sequential Regression Analysis for LES, GENSUP, MIF, DCSQ, and GROUP Predicting Change in non-HD Symptom (DBDI) Scores

Variable	B	SE B	β
Step 1			
LES	.01	.01	.17
GENSUP	.00	.02	.01
MIF	.06	.05	.13
Step 2			
LES	.01	.01	.18
GENSUP	-.01	.02	-.05
MIF	.05	.05	.10
DCSQ	.02	.01	.33**
Step 3			
LES	.01	.01	.19
GENSUP	-.00	.02	-.03
MIF	.04	.05	-.08
DCSQ	.02	.01	.28**
GROUP	1.24	.65	.18

Note. $R^2 = .06$ for Step 1; $\Delta R^2 = .103$ for Step 2; $\Delta R^2 = .029$ for Step 3.

** $p<.01$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 9

Summary of Sequential Regression Analysis for LES, GENSUP, MIF, and GROUP Predicting Change in Hopelessness (DBHS) Scores Within Top Quartile of Hopelessness Scores

Variable	B	SE B	β
Step 1			
LES	.00	.01	.02
GENSUP	-.01	.03	-.05
MIF	-.03	.09	-.08
Step 2			
LES	.00	.01	.02
GENSUP	-.01	.03	-.06
MIF	-.08	.09	-.23
GROUP	2.90	1.30	.43*

Note. R^2 = .01 for Step 1; ΔR^2 = .17 for Step 2

*$p<.05$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 10

Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 though 4 Predicting Change in HD Symptom (DHDSQ) Scores

Variable	B	SE B	ß
Step 1			
WEEK1	.26	.08	.35**
Step 2			
WEEK1	.13	.11	.18
WEEK2	.18	.12	.24
Step 3			
WEEK1	.15	.11	.21
WEEK2	.29	.15	.39
WEEK3	-.19	.14	-.22
Step 4			
WEEK1	.16	.12	.22
WEEK2	.31	.15	.41
WEEK3	-.17	.15	-.20
WEEK4	-.05	.14	-.06

Note. $R^2 = .13$ for Step 1.

** $p < .01$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 11

Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 though 4 Predicting Change in Hopelessness (DBHS) Scores

Variable	B	SE B	ß
Step 1			
WEEK1	:05	.02	.26*
Step 2			
WEEK1	.05	.03	.29
WEEK2	-.01	.03	-.04
Step 3			
WEEK1	.05	.03	.30
WEEK2	0.0	.04	-.02
WEEK3	-.01	.04	-.02
Step 4			
WEEK1	.05	.03	.27
WEEK2	-.01	.04	-.06
WEEK3	-.02	.04	-.08
WEEK4	.03	.03	.14

Note. R^2 = .07 for Step 1.

*p<.05.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table 12

Summary of Standard Regression Analysis for Daily Practice of Disputation from Weeks 1 though 4 Predicting Change in non-HD Symptom (DBDI) Scores

Variable	B	SE B	ß
Step 1			
WEEK1	.12	.05	.29**
Step 2			
WEEK1	.09	.07	.23
WEEK2	.04	.07	.08
Step 3			
WEEK1	.09	.07	.22
WEEK2	.02	.09	.05
WEEK3	.02	.09	.05
Step 4			
WEEK1	.10	.07	.23
WEEK2	.03	.09	.06
WEEK3	.03	.09	.06
WEEK4	-.02	.08	-.04

Note. $R^2 = .08$ for Step 1.

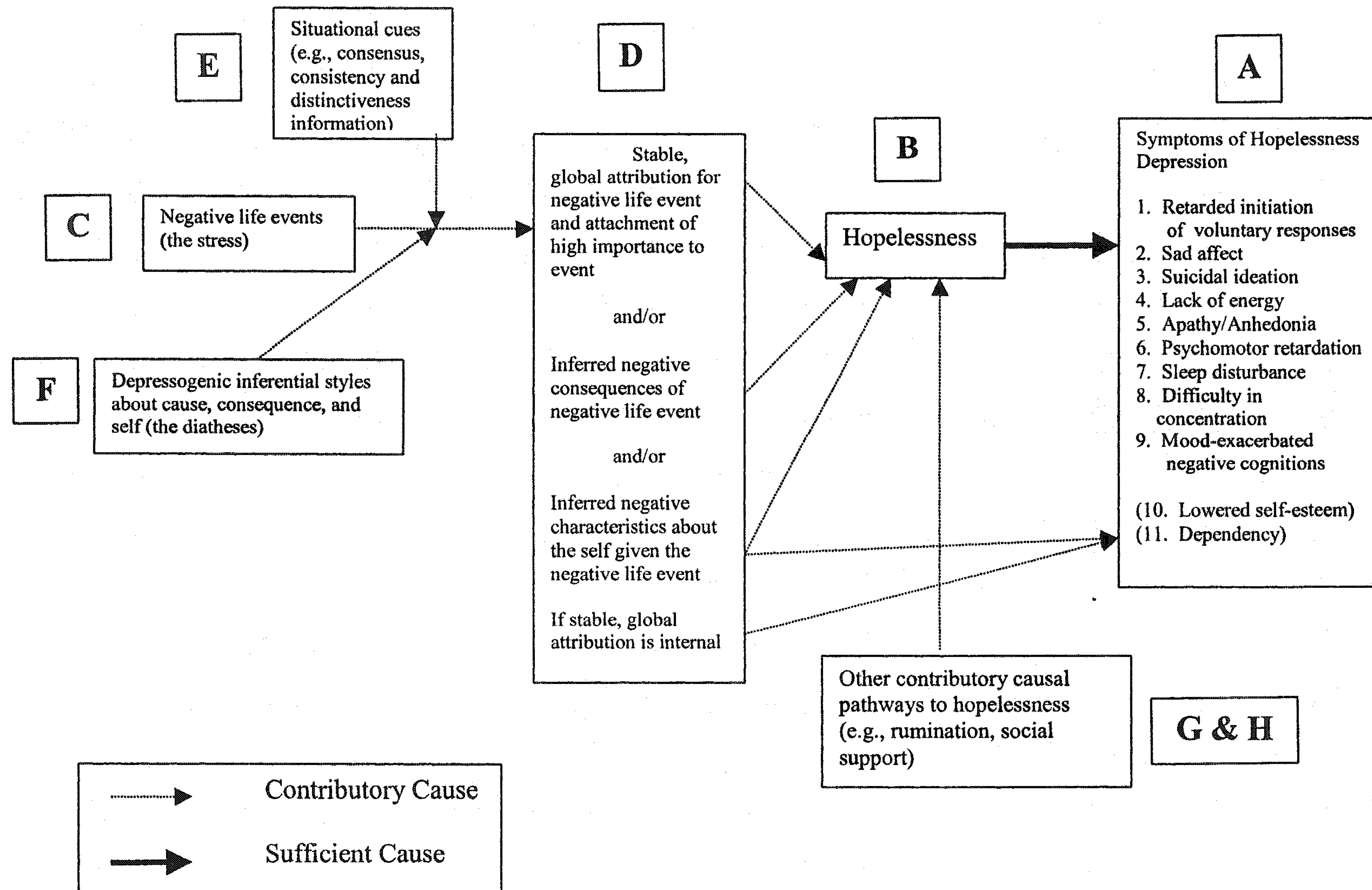
**$p<.01$.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Figure 1

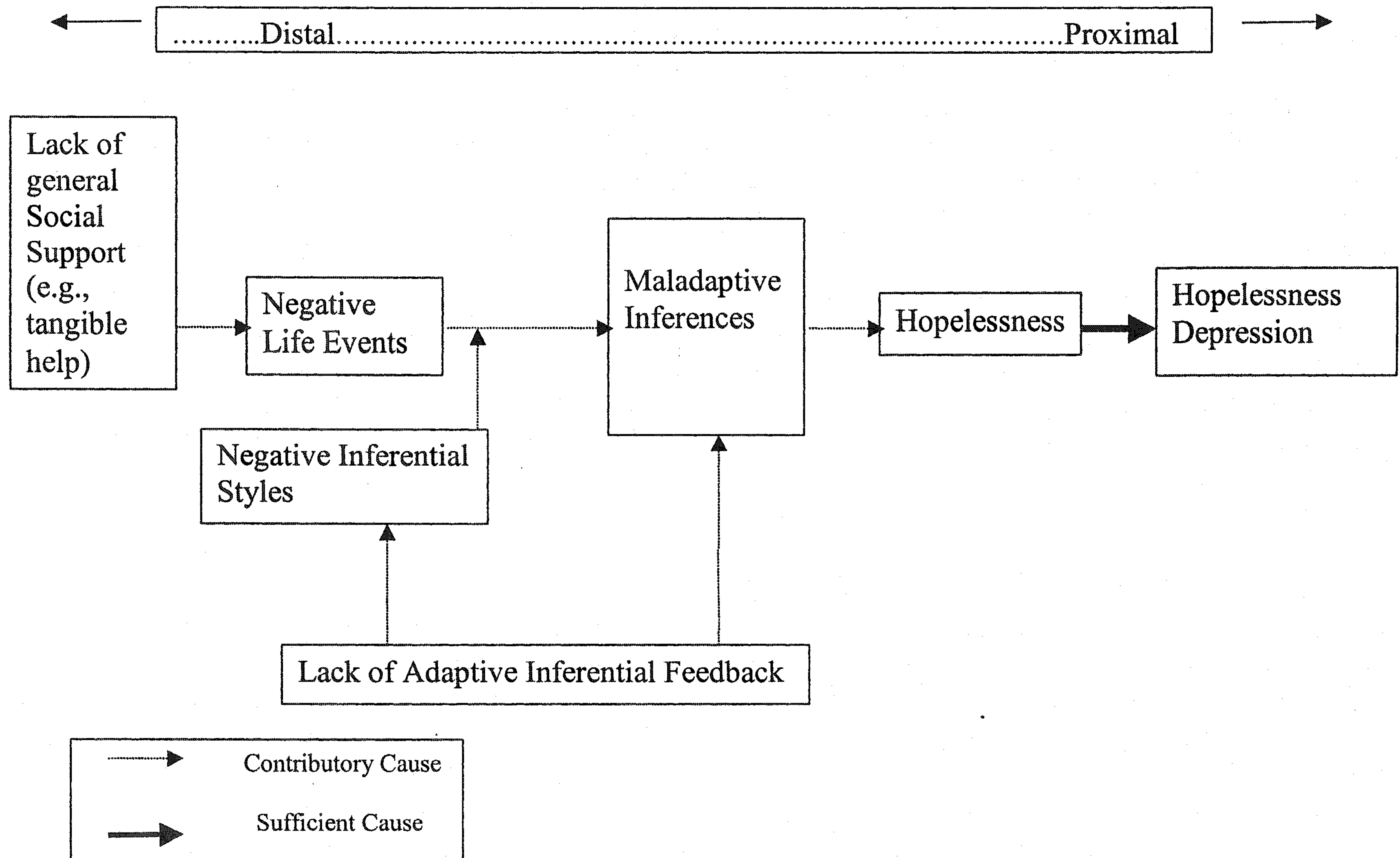
The Hopelessness Depression Model



Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Figure 2

The Social Support Component of the Hopelessness Depression Model



Appendix A

Cognitive Style Questionnaire

Date: ____________________

Directions

Please try to vividly imagine yourself in each of the situations or sequences of events that follow. Picture each situation as clearly as you can and as if the events were happening to you right now. Place yourself in each situation and decide what you feel would have caused it if it actually happened to you. Although events may have many causes, we want you to choose only one—the major cause if the event actually happened to you. For each situation, you will write down this cause in the blank provided. Then we will ask you some questions about the cause. After you have answered the questions about the cause of the event, think about how you'd react if the situation actually occurred in your life and what the occurrence of the situation would mean to you. Then we will ask you some questions about your views of and reactions to the situation.

It is important to remember that there are no right or wrong answers to the questions. The important thing is to answer the questions in a way that corresponds to what you would think and feel if the situations actually were occurring in your life.

1. Imagine that the following sequence of events actually happens to you:

You take an exam and receive a low grade on it.

Questions 1 a-d ask about the cause of your low grade on the exam.

a. Write down the one major cause of your low grade on the exam.

____

b. Is it something about you or something about other people or circumstances that caused your low grade on the exam: [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when taking exams, will the cause of the low grade on this exam also cause other exam grades of yours to be low? [Circle one number.]

Will never again cause my exam grades to be low	1	2	3	4	5	6	7	Will always cause my exam grades to be low

d. Is the cause of your low grade on the exam something that just causes problems in your exam grades, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my exam grades	1	2	3	4	5	6	7	Causes problems in all areas of my life

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Questions 1e-g ask for your views of and reactions to your low grade on the exam and not about the cause of your low grade on the exam.

e. How likely is it that your receiving a low grade on the exam will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your low grade on the exam mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that your grade on the exam is low? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

2. **Imagine that the following sequence of events actually happens to you:**

You don't have a boy/girlfriend (or spouse) although you want one.

Questions 2a-d ask about the cause of your not having a boy/girlfriend (or spouse) although you want one.

a. Write down the one major cause of your not having a boy/girlfriend (or spouse) although you want one.

____

b. Is it something about you or something about other people or circumstances that caused your not having a boy/girlfriend (or spouse) although you wanted one? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when you want a boy/girlfriend (or spouse), will the cause of your not having a boy/girlfriend (or spouse) now also cause you to not have a boy/girlfriend (or spouse) then? [Circle one number.]

Will never again cause me to not have a boy/girl-friend (or spouse)	1	2	3	4	5	6	7	Will always cause me to not have a boy/girl-friend (or spouse)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

d. Is the cause of your not having a boy/girlfriend (or spouse) something that just causes problems in whether or not you have a boy/girlfriend (or spouse), or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in whether or not I have a boy/girlfriend (or spouse)	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 2e-g ask for your views of and reactions to your not having a boy/girlfriend (or spouse) and <u>not</u> about the cause of your not having a boy/girlfriend (or spouse).

e. How likely is it that your not having a boy/girlfriend (or spouse) will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your not having a boy/girlfriend (or spouse) mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that you don't have a boy/girlfriend (or spouse)? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

3. **Imagine that the following sequence of events <u>actually</u> happens to you:**

A friend comes to you with a problem, and you are not as helpful as you would like to be.

Questions 3a-d ask about the <u>cause</u> of your not being as helpful as you would like to be to your friend.

a. Write down the <u>one</u> major cause of your not being as helpful as you would like to be to your friend.

____

b. Is it something about you or something about other people or circumstances that caused your not being as helpful as you would like to be to your friend? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

c. In the future when a friend comes to you with a problem, will the cause of your not being as helpful as you would like to be to your friend now also cause you to not be as helpful as you would like to be to your friend then? [Circle one number.]

Will never again cause me to not be as helpful as I would like to be	1	2	3	4	5	6	7	Will always cause me to not be as helpful as I would like to be

d. Is the cause of your not being as helpful as you would like to be to your friend something that just causes problems in your helping friends, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my helping friends	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 3e-g ask for your views of and reactions to your not being as helpful as you would like to be to your friend and <u>not</u> about the cause of your not being as helpful as you would like to be to your friend.

e. How likely is it that your not being as helpful as you would like to be to your friend will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your not being as helpful as you would like to be to your friend mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that you are not being as helpful as you would like to be to your friend? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

4. Imagine that the following sequence of events actually happens to you:

As an assignment, you give an important talk in class, and the class reacts negatively.

Questions 4a-d ask about the cause of the class reacting negatively to your talk.

a. Write down the one major cause of the class reacting negatively to your talk.

____

b. Is it something about you or something about other people or circumstances that caused the class to react negatively to your talk? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when you give important talks in class, will the cause of the class reacting negatively to your talk now also cause the class to react negatively to your talk then? [Circle one number.]

Will never again cause the class to react negatively to my talks	1	2	3	4	5	6	7	Will always cause the class to react negatively to my talks

d. Is the cause of the class reacting negatively to your talk something that just causes problems when you give talks, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just when I give talks	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 4e-g ask for your views of and reactions to the class reacting negatively to your talk and not about the cause of the class reacting negatively to your talk.

e. How likely is it that the class reacting negatively to your talk will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does the class reacting negatively to your talk mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that the class reacted negatively to your talk? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

5. Imagine that the following sequence of events actually happens to you:

Your parents have been treating you in a negative way.

Questions 5a-d ask about the cause of your parents treating you in a negative way.

a. Write down the one major cause of your parents treating you in a negative way

____

b. Is it something about you or something about other people or circumstances that caused your parents to treat you in a negative way? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when interacting with your parents, will the cause of your parents treating you in a negative way now also cause your parents to treat you in a negative way then? [Circle one number.]

Will never again cause my parents to treat me in a negative way	1	2	3	4	5	6	7	Will always cause my parents to treat me in a negative way

d. Is the cause of your parents treating you in a negative way something that just causes problems when you interact with them, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just when I interact with my parents	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 5e-g ask for your views of and reactions to your parents treating you in a negative way and not about the cause of your parents treating you in a negative way.

e. How likely is it that your parents treating you in a negative way will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your parents treating you in a negative way mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

g. How important is it to you that your parents treat you in a negative way? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

6. Imagine that the following sequence of events actually happens to you:

Your gradepoint average (GPA) for the semester is low.

Questions 6a-d ask about the cause of your low gradepoint average (GPA) for the semester.

a. Write down the <u>one</u> major cause of your low gradepoint average (GPA) for the semester.

____

b. Is it something about you or something about other people or circumstances that caused your low gradepoint average (GPA) for the semester? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when you receive your grades for a semester will the cause of this semester's low gradepoint average (GPA) also cause other semesters' gradepoint averages (GPA's) of yours to be low? [Circle one number.]

Will never again cause my semester gradepoint averages (GPA's) to be low	1	2	3	4	5	6	7	Will always cause my semester gradepoint averages (GPA's) to be low

d. Is the cause of your low gradepoint average (GPA) for the semester something that just causes problems in your grades, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my grades	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 6e-g ask for your views of and reactions to your low gradepoint average (GPA) for the semester and <u>not</u> about the cause of your low gradepoint average (GPA) for the semester.

e. How likely is it that your low gradepoint average (GPA) for the semester will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

f. To what degree does your low gradepoint average (GPA) for the semester mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that your gradepoint average (GPA) for the semester is low? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

7. Imagine that the following sequence of events <u>actually</u> happens to you:

At a party, people don't act interested in you.

Questions 7a-d ask about the <u>cause</u> of people not acting interested in you at the party.

a. Write down the <u>one</u> major cause of people not acting interested in you at the party.

____

b. Is it something about you or something about other people or circumstances that caused people to not act interested in you at the party? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when at parties, will the cause of people not acting interested in you at this party also cause people to not act interested in you at other parties? [Circle one number.]

Will never again cause people to not act interested in me at parties	1	2	3	4	5	6	7	Will always cause people to not act interested in me at parties

d. Is the cause of people not acting interested in you at the party something that just causes problems at parties, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my interactions at parties	1	2	3	4	5	6	7	Causes problems in all areas of my life

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Questions 7e-g ask for your views of and reactions to people not acting interested in you at the party and not about the cause of people not acting interested in you at the party.

e. How likely is it that people not acting interested in you at the party will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does people not acting interested in you at the party mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

h. How important is it to you that at a party, people don't act interested in you? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

8. Imagine that the following sequence of events actually happens to you:

You can't get all the work done that others expect of you.

Questions 8a-d ask about the cause of your not getting all the work done that others expect of you.

a. Write down the one major cause of your not getting all the work done that others expect of you.

____

b. Is it something about you or something about other people or circumstances that caused your not getting all the work done that others expect of you? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when doing the work that others expect, will the cause your not getting all the work done that others expect of you now also cause you to not get all the work done then? [Circle one number.]

Will never again cause me to not get all the work done	1	2	3	4	5	6	7	Will always cause me to not get all the work done

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

d. Is the cause of your not getting all the work done that others expect of you something that just causes problems in your getting the work done that others expect, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in getting the work done that others expect	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 8e-g ask for your views of and reactions to your not getting all the work done that others expect of you and <u>not</u> about the cause of your not getting all the work done that others expect of you.

e. How likely is it that your not getting all the work done that others expect of you will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your not getting all the work done that others expect of you mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that you can't get all the work done that others expect of you? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

9. Imagine that the following sequence of events <u>actually</u> happens to you:

You apply for admission into graduate or professional schools but don't get accepted at any you want to attend?

Questions 9a-d ask you about the <u>cause</u> of your not getting accepted at any of the graduate or professional schools you want to attend.

a. Write down the <u>one</u> major cause of your not getting accepted at any of the graduate or professional schools you want to attend.

____

b. Is it something about you or something about other people or circumstances that caused your not getting accepted at any of the graduate or professional schools you want to attend? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

c. In the future when applying for admission into graduate or professional schools, will the cause of your not getting accepted at any of the graduate or professional schools you want to attend now also cause you to not get accepted at any of the graduate or professional schools you want to attend then? [Circle one number.]

Will never again cause me to not get accepted at the graduate or professional schools I want to attend	1	2	3	4	5	6	7	Will always cause me to not get accepted at the graduate or professional schools I want to attend

d. Is the cause of your not getting accepted at any of the graduate or professional schools you want to attend something that just causes problems in your getting accepted at graduate or professional schools you want to attend, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in getting accepted at graduate or professional schools I want to attend	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 9e-g ask for your views of and reactions to your not getting accepted at any of the graduate or professional schools you want to attend and <u>not</u> about the cause of your not being accepted.

e. How likely is it that your not getting accepted at any of the graduate or professional schools you want to attend will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your not getting accepted at any of the graduate or professional schools you want to attend mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that you don't get accepted at any of the graduate or professional schools you want to attend? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

10. Imagine that the following sequence of events actually happens to you:

During the first year of working in the career of your choice, you receive a negative evaluation of your job performance from your employer.

Questions 10a-d ask about the cause of the negative evaluation of your job performance from your employer.

a. Write down the one major cause of the negative evaluation of your job performance from your employer.

____

b. Is it something about you or something about other people or circumstances that caused the negative evaluation of your job performance from your employer? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when your job performance in the career of your choice is evaluated, will the cause of this negative job evaluation also cause other job evaluations to be negative? [Circle one number.]

Will never again cause my job evaluations to be negative	1	2	3	4	5	6	7	Will always cause my job evaluations to be negative

d. Is the cause of the negative evaluation of your job performance from your employer something that just causes problems in your job evaluations in the career of your choice, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my job performance in the career of my choice	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 10e-g ask for your views of and reactions to the negative evaluation of your job performance from your employer and not about the cause of the negative evaluation of your job performance from your employer.

e. How likely is it that the negative evaluation of your job performance from your employer will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

f. To what degree does the negative evaluation of your job performance from your employer mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that during the first year of working in the career of your choice, you receive a negative evaluation of your job performance from your employer? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

11. Imagine that the following sequence of events <u>actually</u> happens to you:

Your relationship with your boy/girlfriend (or spouse) ends even though you would like it to continue.

Questions 11a-d ask about the <u>cause</u> of your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue.

a. Write down the <u>one</u> major cause of your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue

____

b. Is it something about you or something about other people or circumstances that caused your relationship with your boy/girlfriend (or spouse) to end even though you would like it to continue? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when you are involved in a relationship, will the cause your relationship with your boy/girlfriend (or spouse) ending now also cause other relationships with boy/girlfriends (or spouses) to end even though you would like them to continue? [Circle one number.]

Will never again cause my relationships with boy/girl-friends (or spouses) to end	1	2	3	4	5	6	7	Will always cause my relationships with boy/girl-friends (or spouses) to end

d. Is the cause of your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue something that just causes problems in your relationships, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my relationships	1	2	3	4	5	6	7	Causes problems in all areas of my life

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Questions 11e-g ask for your views of and reactions to your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue and not about the cause of your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue.

e. How likely is it that the ending of your relationship with your boy/girlfriend (or spouse) will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does your relationship with your boy/girlfriend (or spouse) ending even though you would like it to continue mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that your relationship with your boy/girlfriend (or spouse) ends even though you would like it to continue? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

12. Imagine that the following sequence of events actually happens to you:

A person with whom you really want to be friends does not want to be friends with you.

Questions 12a-d ask about the cause of the person not wanting to be friends with you.

a. Write down the one major cause of the person not wanting to be friends with you

____

b. Is it something about you or something about other people or circumstances that caused the person to not want to be friends with you? [Circle one number.]

Totally caused by other people or circumstances	1	2	3	4	5	6	7	Totally caused by me

c. In the future when you want to be friends with someone, will the cause of this person not wanting to be friends with you also cause other people to not want to be friends with you? [Circle one number.]

Will never again cause other people to not want to be friends with me	1	2	3	4	5	6	7	Will always cause other people to not want to be friends with me

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

d. Is the cause of the person not wanting to be friends with you something that just causes problems in your making friends, or does it also cause problems in other areas of your life? [Circle one number.]

Causes problems just in my making friends	1	2	3	4	5	6	7	Causes problems in all areas of my life

Questions 12e-g ask for your views of and reactions to the person not wanting to be friends with you and not about the cause of the person not wanting to be friends with you.

e. How likely is it that the person not wanting to be friends with you will lead to other negative things happening to you? [Circle one number.]

Not at all likely to lead to other negative things happening to me	1	2	3	4	5	6	7	Extremely likely to lead to other negative things happening to me.

f. To what degree does the person not wanting to be friends with you mean to you that you are flawed in some way? [Circle one number.]

Definitely does not mean I am flawed in some some way	1	2	3	4	5	6	7	Definitely does mean I am flawed in some way

g. How important is it to you that person with whom you really want to be friends does not want to be friends with you? [Circle one number].

Not at all important	1	2	3	4	5	6	7	Extremely important

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix B

Recruitment Letter

Dear Prospective Participant,

I am a Ph.D. student in Clinical Psychology at Lakehead University. I am currently conducting a study that will examine changes in mood, and the way in which an individual views and/or copes with negative daily events. I am also interested in how certain background variables (e.g., social support) might affect this relationship.

Involvement in the screening phase of this study involves completing the enclosed questionnaire. In return, you will earn 1 point towards your final grade. Some individuals will be contacted for participation in the main phase of this study. Participation in the main phase involves attending two sessions during which those contacted will be asked to fill out some questionnaires. Some of these individuals will also be asked to stay to participate in a workshop and to practice of the things they have learned in the workshop for 28 days.

All responses will be anonymous and confidential, and you are free to withdraw at any time. There are no foreseeable risks or benefits to participation in this study. The data obtained in this research will be kept with the principal researcher, Lize Jalbert, and a copy of the data will be kept by the project supervisor, Dr. Josephine Tan at her Psychology research lab for a period of 7 years. A summary of the results of this study will be distributed to any participant who requests a copy of the results.

If you are interested in participating in this research project, please fill out the enclosed questionnaire. You will be contacted if you qualify for further participation. You will receive 1 point for completing this questionnaire, regardless of whether you qualify for further participation or not.

Sincerely,

Lize Jalbert

*PLEASE GIVE YOUR NAME AND PHONE NUMBER IF YOU ARE INTERESTED IN FURTHER PARTICIPATION IF YOU QUALIFY:

NAME:__________________________________

PHONE NUMBER:__________________________

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix C

Informed Consent: Screening Phase

1. The title of this research is: Mood and Coping with Negative Events.

2. I, ______________________________, consent to take part in the screening phase of a study that will examine the relationship between mood and coping with negative events. This screening phase is designed to identify individuals who may be appropriate for the main study.

3. I will be asked to fill out one questionnaire. In total, participation in the screening phase of this study will require approximately 1/2 hour of my time.

4. I understand that my responses will be anonymous and confidential.

5. I understand that the researcher, Ms. Lize Jalbert, and the project supervisor, Dr. Josephine Tan will have access to my responses. There will be no way to trace anything back to me.

6. I understand that the data obtained in this research will be kept with Lize Jalbert, and a copy of the data will be kept by Dr. Josephine Tan in her Psychology research lab for a period of 7 years.

7. I understand that there are no foreseeable risks or benefits to participation in the screening phase of this study.

8. I understand that I am free to discontinue my participation in this study at any time and for any reason, without explanation or penalty.

9. I understand that I will receive 1 bonus point towards my final grade for participating in the screening phase of this study. If I am selected for the main study and I complete it in its entirety, I can earn up to 2 more bonus points.

I have read the above description of the study and wish to participate in the screening phase. I understand that I am free to withdraw at any time without penalty or explanation, even after signing this form.

______________________ ______________________

(signature) (date)

____

(witness)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix D

Informed Consent: Main Study

1. The title of this research is: Mood, and Coping with Negative Events.

2. I, ______________________________, consent to take part in a study that will examine changes in mood, and the way in which an individual views and/or copes with negative daily events.

3. I will be asked to attend two sessions during which I will fill out some questionnaires. I may also be phoned for a 10-minute telephone check-in one week after the first session and keep a 2-sheet Negative Event Log for 28 days. In total, participation in the main phase of this study will require either 2 or 5 hours of my time, depending upon which group I am placed in.

4. I understand that my responses will be anonymous and confidential.

5. I understand that the researcher, Ms. Lize Jalbert, and the project supervisor, Dr. Josephine Tan will have access to my responses. There will be no way to trace anything back to me.

6. I understand that the data obtained in this research will be kept with Lize Jalbert, and a copy of the data will be kept by Dr. Josephine Tan in her Psychology research lab for a period of 7 years.

7. I understand that there are no foreseeable risks or benefits to participation in this study.

8. I understand that I am free to discontinue my participation in this study at any time and for any reason, without explanation or penalty.

9. I understand that I will receive 2 bonus points towards my final grade for participating in this study (one for attending each of the two sessions).

I have read the above description of the study and wish to participate in this study. I understand that I am free to withdraw at any time without penalty or explanation, even after signing this form.

______________________________ (signature)

______________________________ (date)

______________________________ (witness)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix E

Debriefing Information

The purpose of this research project was to investigate the role of a particular type of social support called "adaptive inferential feedback" in decreasing symptoms of depression, and hopelessness.

It has been demonstrated that when people fail at something (e.g., they don't get a job they were interviewed for), they sometimes blame themselves for the failure (e.g., they weren't good enough), think they will continue to fail in the future (e.g., they will never succeed at a job interview) and that many negative things will happen to them as a result of their failure (e.g., they will never get a job). When people make these kinds of attributions about their failures, they often feel worse, sometimes to the point of depression and hopelessness. More recently, it has been suggested that a certain type of social support from others called, "adaptive inferential feedback", can help to alleviate feelings of hopelessness and depression following a failure. This type of feedback from people in your environment helps you to focus on external, temporary, and specific causes for your failure. For example, if your friend spoke to you after the job interview and told you that the reason you didn't get the job was because the interviewer was having a really bad day and hated doing job interviews (external, temporary, and specific), you might feel better about not having gotten the job than you would if no one told you anything after your interview.

This study hypothesized that learning to give oneself AIF and practicing it would predict changes in hopelessness and depressive symptoms. We hope to use the results of this study to help determine the best kind of support to give to those people who are feeling depressed and hopeless.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix F

Learned Optimism Summary

EVENT	➔ ***BELIEF***	➔ ***FEELING***

Event: The negative event that occurred. Can be anything from an earthquake to a bad hair day (see "Potential Negative Events List" for examples)

Belief: Your thought or belief about why the negative event happened.

Feeling: How you feel as a result of the belief that you hold about why the negative event happened. Usually stated in one word (e.g., happy, sad, angry).

Methods of Disputation

1. ***Looking for Evidence-*** Ask yourself, "What is the evidence for and against this belief?" Stick to facts, not judgments.
2. ***Looking for Alternatives*** – Ask yourself, "What are all the possible reasons for this negative event? Is there any less destructive way to look at this?"
3. ***Implications of Belief*** – Ask yourself, "Even if my belief is accurate, so what? What are the implications? Are they likely to be as disastrous as I think they will be? And how likely are those implications?"
4. ***Usefulness of Holding Belief*** – Ask yourself, "Even if this belief is true, is it helpful for me to hold on to this belief? What good will it do me to dwell on it?"

Example

Event: I borrowed a really expensive pair of earrings from my friend, and I lost one of them while I was out dancing.
Belief: I am so irresponsible. They were Kay's favorite earrings, and of course I go and lose one. She is going to be so absolutely furious at me. Not that she doesn't have every reason. If I were her, I'd hate me too. I just can't believe how much of a klutz I am. I wouldn't be surprised if she told me she didn't want to have anything to do with me anymore.
Feeling: I felt totally sick (80%). I was ashamed (80%) and embarrassed (75%) and didn't want to call and tell her what happened. Basically, I just sat around feeling stupid (75%) for awhile, trying to muster up the guts to call her.
Disputation: They were Kay's favorite earrings (***evidence***) and she will probably be very disappointed (***implication***). However, she will realize it was an accident (***alternative***), and I seriously doubt she will hate me because of this (***implication***). I don't think it's accurate to label myself as totally irresponsible just because I lost an earring (***implication***).
New Belief: Although it is unfortunate that I lost the earring, I'm sure she'll understand and I'm not worried that she'll end the friendship over it.
New Feeling: Sick (0%), stupid (5%), ashamed (0%), embarrassed (50%).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix G

Negative Events Log

Date: ______________________

1) What happened? (Negative Event):____
____
____
____
____

2a) Why do you think it happened? (Cause):____________________________________
____
____
____
____

2b) Is the cause of the event (2a) due to you or to about someone or something else? (Circle number)

1	2	3	4	5	6	7
Totally about other people or circumstances						Totally about me

2c) Would the cause of the event (2a) cause similar negative events to occur in the future? (Circle number)

1	2	3	4	5	6	7
Will never again cause similar events to occur						Will always cause similar events to occur

2d) Would the cause of the event (2a) cause other/different negative things to happen to you in the future?

1	2	3	4	5	6	7
Will never cause other/different negative events to occur						Will always cause other/different negative events to occur.

3) How does your belief or thought about why it happened make you feel? Please state feeling and rate from scale of 0 to 100 % (e.g., happy – 80%): ________________________________
____
____

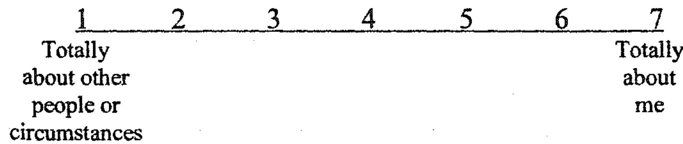
(please turn over and continue)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

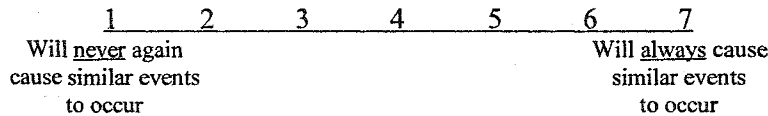
4) Which method did you use to dispute/argue against this belief? (Please circle and give example)
(a) evidence, (b) alternatives, (c) implications, (d) usefulness:________________________________

5a) What is your current belief (after disputation) about why this happened? (Current cause): ________

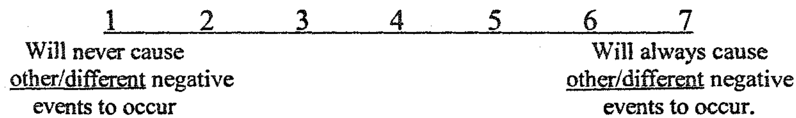
5b) Is the current cause of the event (5a) something about you or something about someone else? (Circle number)



5c) Is the current cause of the event (5a) something that would cause similar negative events to occur in the future? (Circle number)



5d) Will the current cause of the event (5a) cause other/different negative things to happen to you in the future?



6) How does your new belief about why it happened make you feel? Please state feeling and rate from 0 to 100% (e.g., happy – 80%): ________________________________

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix H

Potential Negative Events List

1. Received negative reaction from family or friends about not doing well in school (e.g., yelled at; called “dumb”; silent treatment; parents refused to pay tuition because of poor grades, etc.)
2. Failed to achieve an important school-related goal that does not involve grade point average (e.g., did not get into orchestra, athletic team, etc.)
3. Not accepted into major or college of choice because grades were too low.
4. Put down by one or more teachers or T.A.s (e.g., called names in front of others; ridiculed; etc.)
5. Got caught cheating on an exam and there were severe negative consequences (e.g., flunked course; expelled from school for a term, etc.
6. Failed a course.
7. Put on or continuing on academic probation or earned an overall semester or quarter grade point average less than or equal to a ‘C’.
8. Negative consequences from studying for long periods of time (e.g., exhaustion, ill health; loss of friends; etc.)
9. Do not have enough time to do well in school, personal life, and job (if have job) (e.g., have to work long hours at job and have no time to study; study so much that have not time to see boy/girlfriend, etc.)
10. Have one or more classes with extremely undesirable features (e.g., professor speaks English very poorly; T.A.s or professor not available to answer questions, etc.)
11. Dislike major or school in general, but have to stay (e.g., forced by parents to stay; have no skills to get a job, etc.)
12. Death of pet to whom you were close or attached
13. Close friend moved away
14. Unwanted break-up of relationship with close friend
15. Significant fight or argument with friend other than roommate that led to a serious consequence such as self or friend crying, name calling, physical fight, etc.
16. Live alone and see other people less often than would like
17. Live in poor conditions such as apartment, house, dorm, etc. That is overcrowded or is very dirty, rundown or has many bugs or rodents.
18. Frequently put down or made fun of by roommate.
19. Frequently cannot complete schoolwork or other important tasks because roommate is so noisy.
20. Significant fight with roommate.
21. Often put down by parents.
22. Parents infringe on privacy.
23. Parental absence lasting at least one month.
24. Significant fight or argument with close family member.
25. Significant negative change in financial circumstances.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix I

Social Feedback Questionnaire

Please think about some of the stressors and difficulties you have been dealing with in the past month. Please list the people you talk with most often about stress and difficulties in the left column and their relationship to you in the right column.

	NAME	RELATIONSHIP TO ME (parent, sister, friend brother, spouse, partner)
Example.	***Mom***	***Parent***
1.		
2.		
3.		

The following questions are about the kinds of feedback people might give to someone when talking about difficulties. As you answer this next set of questions, please think about the conversations that you have had with the people that you just named in the box above about stressors or difficulties that you were experiencing in the past month. Please indicate how frequently you received each kind of message from the people named above by circling the number that is most accurate.

1. The difficulties you are facing now will lead to other negative things happening to you.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

2. You are NOT a good person.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

3. The cause of your difficulties will NOT got away or get resolved.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

4. If you weren't so weak, things like this might not happen.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

5. You should be really disappointed in yourself.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

6. There must be something wrong with you.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

7. You never seem to get things together.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

8. You are so helpless.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

9. The cause of the difficulties you are now facing is going to lead to problems in other areas of your life as well.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

10. The cause of the difficulties you are facing now will keeping happening again and again.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

11. Problems and difficulties are a reflection of your inadequacy.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

12. If you do poorly at one thing, it is likely that you will do poorly at other things too.

People I talk to have given me this message:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix J

Beck Depression Inventory

Age:_________ Gender: ______

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the **past two weeks, including today**. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
0 I do not feel sad.
1 I feel sad much of the time.
2 I am sad all the time.
3 I am so sad or unhappy that I can't stand it.

2. Pessimism
0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will only get worse.

3. Past Failure
0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back, I see a lot of failures.
3 I feel I am a total failure as a person.

4. Loss of Pleasure
0 I get as much pleasure as I ever did from the things I enjoy.
1 I don't enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. Punishment Feelings
0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. Self-Dislike
0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. Self-Criticalness
0 I don't criticize or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticize myself for all of my faults.
3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

10. Crying
- 0 I don't cry anymore than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

11. Agitation
- 0 I am no more restless or wound up than usual.
- 1 I feel more restless or wound up than usual.
- 2 I am so restless or agitated that it's hard to stay still.
- 3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest
- 0 I have not lost interest in other people or activities.
- 1 I am less interested in other people or things than before.
- 2 I have lost most of my interest in other people or things.
- 3 It's hard to get interested in anything.

13. Indecisiveness
- 0 I make decisions about as well as ever.
- 1 I find it more difficult to make decisions than usual.
- 2 I have much greater difficulty in making decisions than I used to.
- 3 I have trouble making any decisions.

14. Worthlessness
- 0 I do not feel I am worthless.
- 1 I don't consider myself as worthwhile and useful as I used to.
- 2 I feel more worthless as compared to other people.
- 3 I feel utterly worthless.

15. Loss of Energy
- 0 I have as much energy as ever.
- 1 I have less energy than I used to have.
- 2 I don't have enough energy to do very much.
- 3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
- 0 I have not experienced any change in my sleeping pattern.
- 1a I sleep somewhat more than usual.
- 1b I sleep somewhat less than usual.
- 2a I sleep a lot more than usual.
- 2b I sleep a lot less than usual.
- 3a I sleep most of the day
- 3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability
- 0 I am no more irritable than usual.
- 1 I am more irritable than usual.
- 2 I am much more irritable than usual.
- 3 I am irritable all the time.

18. Changes in Appetite
- 0 I have not experienced any change in my appetite.
- 1a My appetite is somewhat less than usual.
- 1b My appetite is somewhat greater than usual.
- 2a My appetite is much less than before.
- 2b My appetite is much greater than before.
- 3a I have not appetite at all.
- 3b I crave food all the time.

19. Concentration Difficulty
- 0 I can concentrate as well as ever.
- 1 I can't concentrate as well as usual.
- 2 It's hard to keep my mind on anything for very long.
- 3 I find I can't concentrate on anything.

20. Tiredness or Fatigue
- 0 I am no more tired or fatigued than usual.
- 1 I get more tired or fatigued more easily than usual.
- 2 I am too tired or fatigued to do a lot of the things I used to do.
- 3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex
- 0 I have not noticed any recent change in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix K

Hopelessness Depression Symptom Questionnaire – Revised

Date:________
____

Instructions: On this questionnaire are groups of statements. Please read all of the statements in a given group. Then pick out the one statement in each group which describes you best during the past week. If several statements in the group seem to apply equally well, choose the higher number. Do not choose more than one number for a given group of statements. BE SURE TO READ ALL OF THE STATEMENTS IN EACH GROUP BEFORE MAKING YOUR CHOICE.

#1.
0=I have not stopped trying to get what I want.
1=I have stopped trying to get what I want in some situations.
2=I have stopped trying to get what I want in most situations
3=I have stopped trying to get what I want in all situations.

#2
0=I am not passive when it comes to getting what I want these days.
1=In some situations, I'm passive when it comes to getting what I want these days.
2=In most situations I'm passive when it comes to getting what I want these days.
3=In all situations I'm passive when it comes to getting what I want these days.

#3
0=I have not given up trying to accomplish what's important to me.
1=I have given up trying to accomplish some things that are important to me.
2=I have given up trying to accomplish most things that are important to me.
3=I have given up trying to accomplish all things that are important to me.

#4
0=My motivation to get things done is as good as usual.
1=In some situations, my motivation to get things done is lower than usual.
2=In most situations, my motivation to get things done is lower than usual.
3=In all situations, my motivation to get things done is lower than usual.

#5
0=I need little or no support from other people.
1=I need some support from other people.
2=I need a lot of support from other people
3=I need total support from other people.

#6
0=I don't rely on other people to do things for me.
1=Sometimes I rely on other people to do things for me.
2=Most of the time I rely on other people to do things for me.
3=All of the time I rely on other people to do things for me.

#7
0=These days I am not overly dependent on other people.
1=Sometimes these days I am overly dependent on other people.
2=Most of the time these days I am overly dependent on other people.
3=These days I am always overly dependent on other people.

#8
0=I am not a burden to other people.
1=I am a burden to other people sometimes.
2=I am a burden to other people most of the time.
3=I am a burden to other people all of the time.

#9
0=I am not doing things in "slow motion" these days.
1=Sometimes I do things in "slow motion" these days.
2=Most of the time I do things in "slow motion" these days.
3=I always do things in "slow motion" these days.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

#10
0=I do not walk around like a zombie these days.
1=Sometimes I walk around like a zombie these days.
2=Most of the time I walk around like a zombie these days.
3=I always walk around like a zombie these days.

#11
0=My speech is not slowed down.
1=My speech is somewhat slowed down.
2=My speech is very slowed down.
3=My speech is extremely slowed down.

#12
0=My thoughts are not slowed down.
1=My thoughts are somewhat slowed down.
2=My thoughts are very slowed down.
3=My thoughts are extremely slowed down.

#13
0=My energy is not lower than usual.
1=My energy is somewhat lower than usual.
2=My energy is much lower than usual.
3=My energy is extremely lower than usual.

#14
0=I can get things done as well as usual.
1=In some situations, I can't get things done as well as usual.
2=In most situations, I can't get things done as well as usual.
3=In all situations, I can't get things done as well as usual.

#15
0=I have as much energy as usual.
1=In some situations, I have less energy than usual.
2=In most situations I have less energy than usual.
3=In all situations, I have less energy than usual.

#16
0=I do not get tired out more easily than usual.
1=In some situations, I get tired out more easily than usual.
2=In most situations, I get tired out more easily than usual.
3=In all situations, I get tired out more easily than usual.

#17
0=I enjoy things as much as usual.
1=In some situations, I don't enjoy things as much as usual.
2=In most situations, I don't enjoy things as much as usual.
3=In all situations, I don't enjoy things as much as usual.

#18
0=When doing things I normally enjoy (e.g., work; being with people) I have as much fun as usual.
1=When doing things I normally enjoy (e.g., work; being with people) I have somewhat less fun than usual.
2=When doing things I normally enjoy (e.g., work; being with people) I have much less fun than usual.
3=When doing things I normally enjoy (e.g., work; being with people) I don't have fun at all anymore.

#19
0=When it comes to the things in life that count, I am as interested as usual.
1=When it comes to the things in my life that count, I am somewhat less interested than usual.
2=When it comes to the things in my life that count, I am much less interested than usual.
3=When it comes to the things in my life that count, I don't have any interest at all anymore.

#20
0=I enjoy sex as much as usual.
1=I enjoy sex somewhat less than usual.
2=I enjoy sex much less than usual.
3=I do not enjoy sex at all anymore.

#21
0=I do not have trouble falling asleep.
1=It takes me somewhat longer to fall asleep than usual (i.e., up to one hour longer)
2=It takes me much longer to fall asleep than usual (i.e., up to two hours longer).
3=It takes me substantially longer to fall asleep than usual (i.e., more than two hours longer).

#22
0=I do not have trouble sleeping through the night.
1=Sometimes I have trouble sleeping through the night.
2=Most of the time I have trouble sleeping through the night.
3=I always have trouble sleeping through the night.

#23
0=I do not wake up early in the morning and have trouble falling back to sleep.
1=Sometimes I wake up early in the morning and have trouble falling back to sleep.
2=Most of the time I wake up early in the morning and have trouble falling back to sleep.
3=I always wake up early in the morning and have trouble falling back to sleep.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

#24
0=I can fall asleep as well as usual.
1=Sometimes I have trouble falling asleep.
2=Most of the time I have trouble falling asleep.
3=I always have trouble falling asleep.

#25
0=My concentration is as good as usual.
1=My concentration is somewhat less focused than usual.
2=My concentration is much less focused than usual.
3=I can hardly concentrate at all anymore.

#26
0=I can concentrate as well as usual.
1=In some situations I cannot concentrate as well as usual.
2=In most situations I cannot concentrate as well as usual.
3=In all situations I cannot concentrate as well as usual.

#27
0=I do not brood about unpleasant events these days.
1=Sometimes I brood about unpleasant events these days.
2=Most of the time I brood about unpleasant events these days.
3=I always brood about unpleasant events these days.

#28
0=I am not distracted by unpleasant thoughts.
1=In some situations I am distracted by unpleasant thoughts.
2=In most situations I am distracted by unpleasant thoughts.
3=In all situations I am distracted by unpleasant thoughts.

#29
0=I do not have thoughts of killing myself.
1=Sometimes I have thoughts of killing myself.
2=Most of the time I have thoughts of killing myself.
3=I always have thoughts of killing myself.

#30
0=I am not having thoughts about suicide.
1=I am having thoughts about suicide but have not formulated any plans.
2=I am having thoughts about suicide and am considering possible ways of doing it.
3=I am having thoughts about suicide and have formulated a definite plan.

#31
0=I am not having thoughts about suicide.
1=I am having thoughts about suicide but have these thoughts completely under my control.
2=I am having thoughts about suicide but have these thoughts somewhat under my control.
3=I am having thoughts about suicide and have little or no control over these thoughts.

#32
0=I am not having impulses to kill myself.
1=In some situations I have impulses to kill myself.
2=In most situations I have impulses to kill myself.
3=In all situations I have impulses to kill myself.

#33
0=I do not feel sad.
1=I feel sad.
2=I am sad all the time and I can't help it.
3=I am so sad that I can't stand it.

#34
0=I do not feel down.
1=I feel down.
2=I am down all the time and I can't help it.
3=I am so down that I can't stand it.

#35
0=I do not feel unhappy.
1=I feel unhappy.
2=I am unhappy all the time and I can't help it.
3=I am so unhappy that I can't stand it.

#36
0=I don't cry any more than usual.
1=I cry more now than I used to.
2=I cry all the time now.
3=I used to be able to cry, but now I can't cry even though I want to.

#37
0=I do not feel like a failure.
1=I feel I have failed more than the average person.
2=As I look back on my life, all I can see is a lot of failures.
3=I feel I am a complete failure as a person.

#38
0=I don't feel particularly guilty.
1=I feel guilty a good part of the time.
2=I feel quite guilty most of the time.
3=I feel guilty all of the time.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

#39
0=I don't feel disappointed in myself.
1=I am disappointed in myself.
2=I am disgusted with myself.
3=I hate myself.

#40
0=I don't feel I am any worse than anybody else.
1=I am critical of myself for my weaknesses or mistakes.
2=I blame myself all the time for my faults.
3=I blame myself for everything bad that happens

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix L

Beck Hopelessness Scale

Date: ____________________

Instructions: This questionnaire consists of 20 statements. Please read the statements carefully one by one. If the statement describes your attitude **for the past week, including today**, circle 'T' indicating TRUE in the column next to the statement. If the statement does not describe your attitude, circle 'F' indicating FALSE in the column next to the statement. **Please be sure to read each statement carefully.**

1.	I look forward to the future with hope and enthusiasm.	T	F
2.	I might as well give up because there is nothing I can do about making things better for myself.	T	F
3.	When things are going badly, I am helped by knowing that they cannot stay that way forever.	T	F
4.	I can't imagine what my life would be like in ten years.	T	F
5.	I have enough time to accomplish the things I want to do.	T	F
6.	In the future, I expect to succeed in what concerns me most.	T	F
7.	My future seems dark to me.	T	F
8.	I happen to be particularly lucky, and I expect to get more of the good things in life than the average person.	T	F
9.	I just can't get the breaks, and there's no reason I will in the future.	T	F
10.	My past experiences have prepared me well for the future.	T	F
11.	All I can see ahead of me is unpleasantness rather than pleasantness	T	F
12.	I don't expect to get what I really want.	T	F
13.	When I look ahead to the future, I expect that I will be happier than I am now.	T	F
14.	Things just don't work out the way I want them to.	T	F
15.	I have great faith in the future.	T	F
16.	I never get what I want, so it's foolish to want anything.	T	F
17.	It's very unlikely that I will get any real satisfaction in the future.	T	F
18.	The future seems vague and uncertain to me.	T	F
19.	I can look forward to more good times than bad times.	T	F
20.	There's no use in really trying to get anything I want because I probably won't get it.	T	F

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix M

Social Support Inventory

This questionnaire contains 39 items describing types of help or support we often need or want from other people. For each item, please give 3 ratings.

1. First: *How much of this type of help or support have you wanted or needed in the past month? Place your rating in the "Needed" column and use the following scales:*

1	2	3	4	5	6	7
None						Very Much

2. Second: *How much of this type of help or support have you received from others in the past month? Place your rating in the "Received" column and use the following scales:*

1	2	3	4	5	6	7
None						Very Much

3. Third: *How satisfied have you been with what you have received in terms of this type of help or support in the past month? Place your rating in the "Satisfied" column and use the following scales:*

1	2	3	4	5	6	7
None						Very Much

GIVE ALL THREE RATINGS TO EVERY ITEM

REMEMBER: You are rating what you have needed and received and your satisfaction over the PAST MONTH.

	NEEDED	RECEIVED	SATISFIED	ITEM
1.	______	______	______	Encouragement to face reality, no matter how difficult.
2.	______	______	______	Information about how others have handled situations similar to ones you may be experiencing.
3.	______	______	______	Information about how others have felt when confronted by situations similar to ones you may be experiencing.
4.	______	______	______	A model or example for you to follow.
5.	______	______	______	Knowledge that others are comfortable and willing to talk with you about the good feelings you have about yourself.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

How much need/want:

1	2	3	4	5	6	7
None						Very Much

How much received:

1	2	3	4	5	6	7
None						Very Much

How satisfied:

1	2	3	4	5	6	7
None						Very Much

NEEDED	RECEIVED	SATISFIED	ITEM
6. ______	______	______	Knowledge that others are comfortable and willing to talk with you about your hopes and plans for the future.
7. ______	______	______	Financial support to deal with emergency situations.
8. ______	______	______	Nonfinancial aid or services to reestablish or maintain an acceptable standard of living.
9. ______	______	______	Reassurance that it is quite normal to feel down at this time of your life.
10. ______	______	______	Information and guidance about how to cope with difficult situations.
11. ______	______	______	Information and guidance about how to change negative feelings about yourself.
12. ______	______	______	Reassurance that it is okay to feel good about yourself even when things are not going well.
13. ______	______	______	Nonfinancial aid or service to deal with emergency situations.
14. ______	______	______	Assurance that you belong to a group of caring people.
15. ______	______	______	Encouragement to talk about your feelings when you are feeling down and blue.
16. ______	______	______	Information and guidance about how to change self-defeating attitudes or behaviors.
17. ______	______	______	Assistance in realizing when you are thinking or acting in self-defeating ways.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

How much need/want:

1	2	3	4	5	6	7
None						Very Much

How much received:

1	2	3	4	5	6	7
None						Very Much

How satisfied:

1	2	3	4	5	6	7
None						Very Much

NEEDED	RECEIVED	SATISFIED	ITEM
18. ______	______	______	Assurance that you are loved and cared about.
19. ______	______	______	Encouragement to talk about your future hopes and plans in a positive way.
20. ______	______	______	Help to feel optimistic about your future.
21. ______	______	______	Information on sources of financial assistance.
22. ______	______	______	Reassurance that your fears and anxieties about the future are quite normal.
23. ______	______	______	Help in seeing positive things about your life no matter how bad things are going.
24. ______	______	______	Knowledge that others are comfortable and willing to talk with you about your feelings of insecurity or fear.
25. ______	______	______	Information about how someone else handled situations similar to ones you may be experiencing.
26. ______	______	______	Assurance that you are respected and valued no matter what is happening in your life.
27. ______	______	______	Reassurance that it is not unusual to feel hopeful about your future even when things are not going well.
28. ______	______	______	Information about services that might be helpful to you.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

How much need/want:

1	2	3	4	5	6	7
None						Very Much

How much received:

1	2	3	4	5	6	7
None						Very Much

How satisfied:

1	2	3	4	5	6	7
None						Very Much

NEEDED	RECEIVED	SATISFIED	ITEM
29. ______	______	______	Reassurance that it is quite normal to feel down and blue when thinking about what's going on in your life.
30. ______	______	______	Encouragement to talk about the good aspects of yourself and your life.
31. ______	______	______	Assurance that you are needed by others.
32. ______	______	______	Financial assistance to reestablish or maintain an acceptable standard of living.
33. ______	______	______	Assurance that you are accepted no matter what is happening in your life.
34. ______	______	______	Encouragement to talk about your fears and insecurities.
35.______	______	______	Knowledge that others are comfortable and willing to talk with you about the good things that are happening in your life.
36. ______	______	______	Help and assistance in setting realistic goals for yourself.
37. ______	______	______	Knowledge that others are comfortable and willing to talk about anything with you.
38. ______	______	______	Help and assistance in your efforts to change self-defeating attitudes or behaviors.
39. ______	______	______	Knowledge that others are comfortable and willing to talk with you when you are feeling down and blue.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Appendix N

Life Events Questionnaire

Age:__________ Gender:________

Instructions: Please indicate the number of times each of these events or situations has happened to you in the past 6 weeks (e.g., 0, 1, 5, etc.).

___ Received negative reaction from family or friends about not doing well in school (e.g., yelled at; called "dumb"; silent treatment; parents refused to pay tuition because of poor grades, etc.).

___ Failed to achieve an important school-related goal that does not involve grade point average (e.g., did not get into orchestra; athletic team, etc.).

___ Not accepted into major or college of choice because grades were too low.

___ Put down by one or more teachers or T.A.s (e.g., called names in front of others; ridiculed; etc.).

___ Got caught cheating on an exam and there were severe negative consequences (e.g., flunked course; expelled from school for a term, etc.).

___ Failed a course.

___ Put on or continuing on academic probation or earned an overall semester or quarter grade point average less than or equal to a 'C'.

___ Negative consequences from studying for long periods of time (e.g., exhaustion; ill health; loss of friends; etc.)

___ Do not have enough time to do well in school, personal life, and job (if have job) (e.g., have to work long hours at job and have no time to study; study so much that have no time to see boy/girlfriend, etc.).

___ Have one or more classes with extremely undesirable features (e.g., professor speaks English very poorly; T.A.s or professor not available to answer questions, etc.)

___ Dislike major or school in general, but have to stay (e.g., forced by parents to stay; have no skills to get a job; etc.)

___ Quit job because of negative aspects of job, not because of going back to school (e.g., quit after fight with boss, or because of poor working conditions; etc.).

___ Significant negative change in financial circumstances (e.g., large amount of money or valuables lost or stolen; loss of financial support; etc.).

___ Significant fight or argument with close family member (parent, sibling, etc.) that led to a serious consequence such as self or family member crying, temporary loss of privileges for self, etc.

___ Got caught doing something disapproved of by parents, or parents found evidence of something they disapproved of (e.g., parents found drugs in room; parents found birth control devices; etc.)

___ Often put down by parents or parents show dislike (e.g., called names, parents play favorites or make unfavorable comparisons between self and siblings; receive blame for family problems—parents say "We would be better off without you".

___ Parents infringe on privacy (e.g., parents pry or go through belongings; parents question excessively; parents check up on activities) or parents infringe on freedom (parents are overly strict—constantly have to follow many rules; have to follow rigid schedules that parents set up; parents are excessively protective—not allowed to engage in "risky" activities such as sports; parents give too much help with chores or homework)

___ Parental absence lasting at least 1 month (due to military, jail term, job, etc.)

___ Interactions with parents lack pleasant features because rarely receive love, respect, or interest from parents (e.g., rarely receive compliments or praise from parents; parents rarely or never say "I love you";

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

parents rarely call or write; parents do not listen or show interest; etc.) or because time with parents is rarely spent in fun activities (e.g., discussions with parents are rarely fun; don't go to fun places with parents, etc.)

___ Significant fight or argument with roommate that led to a serious consequence such as self or roommate crying, physical fight, leaving the room for the night, etc.

___ Frequently (at least once a week) cannot complete schoolwork or other important tasks because roommate is so noisy.

___ Frequently (at least once a week) put down or made fun of by roommate.

___ Live in poor conditions such as apartment, house, dorm, etc., that is overcrowded (e.g., more than two people in a bedroom) or is very dirty, rundown or has many bugs or rodents.

___ Live alone and see other people less often than would like

___ Significant fight or argument with friend other than roommate that led to a serious consequence such as self or friend crying, name calling, physical fight, etc.

___ Unwanted break-up of relationship with close friend

___ Close friend moved away

___ Death of pet to whom you were close or attached (e.g., death of your dog)

___ Friends do not get along with each other

___ Close friend has serious medical or emotional problem that has lasted at least one month, or any duration if hospitalized (e.g., asthma; serious injury; excessive use of alcohol or drugs; etc.)

___ Have no one to confide in

___ Rarely receive affection, respect, or interest from friends (e.g., rarely receive compliments or praise from friends; friends do not listen or take interest; etc.)

___ Received negative reaction (e.g., insulting comment) about boy/girlfriend/spouse from an important person (e.g., parent, close friend, etc.)

___ Boy/Girlfriend/Spouse got in serious trouble (with law; in school; etc.)

___ Boy/Girlfriend/Spouse is too domineering towards you (e.g., s/he always insists on getting his/her own way, insists on making most of the decisions; etc.)

___ Serious illness or injury from dieting (e.g., hospitalized; fainting from hunger; metabolism problems, etc)

___ Frequently teased, ridiculed, or put down for appearance

___ Receive frequent negative comments about cigarette, drug, or alcohol use

___ Receive frequent peer pressure to use drugs, alcohol, or cigarettes (e.g., do not like to take drugs but majority of friends get high often; rejected or ridiculed by friends if don't use drugs, etc.)

___ Chronic disease or pain for at least two weeks (e.g., arthritis; diabetes; allergies; pain from illness, etc.)

___ Sexual difficulties lasting at least one month while sexually active (e.g., sex is painful; cannot maintain an erection; lack of pleasure from sex, etc.)

___ Received verbal threats of violence from a stranger or nonstranger (e.g., family member, friend, etc.)

___ Apartment, house, or room broken into

___ Family member (other than self) victim of accident or violent crime.

___ Family member (other than self) physically or sexually abused by another family member

___ Frequently receive unwanted physical or sexual contact or attention from another person (e.g., boss, teacher, friend, or family member often makes unwanted physical contact or says obscene things; often receive obscene phone calls, etc.)

___ Because of risk or danger, must make special arrangements or avoid activities at night (e.g., frequently stay home and miss activities rather than risk being out at night; often ask others for a ride or to be an escort at night; sometimes leave work early to catch the last bus; etc.)

___ Must live in or travel through an area that is unsafe in the day and/or night and can do nothing to reduce the risk or danger (e.g., do not have the money to move to a safer area; must walk alone because there is no one to walk home with after work at night; do not have the money for taxi fare, etc.)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

___ Worked on something for school which did not enjoy working on or which did not care about
___ Had a project or assignment for a class overdue
___ Was bothered with administrative hassles or "red tape" in school
___ Was criticized or negatively evaluated about work on the job
___ Lied to a family member
___ Lied to by a family member
___ Asked something by a family member, friend or boy/girlfriend/spouse that could/did not want to answer.
___ Did something embarrassing in presence of family member
___ Had something break or run poorly (e.g., car, or appliance, etc.)
___ Was awakened when trying to sleep
___ Did something that did not want to do in order to please friend, roommate, or boy/girlfriend/spouse.
___ Lied to by a friend, roommate or boy/girlfriend/spouse
___ Did something embarrassing in presence of friend, roommate, or boy/girlfriend/spouse.
___ Friend, roommate or boy/girlfriend/spouse did something that am ashamed about
___ Someone borrowed money or personal belongings from you in a way that caused difficulty for you or was bothersome to you (e.g., the person borrowed the goods and did not return them; the person borrowed without your knowledge or permission, etc.)
___ Had an unpleasant medical or dental appointment.
___ Hit or slapped by another person (with hand or object) leading to no serious consequences
___ Did any other negative or stressful situation (remember, situations have durations) happen to you during the past 6 weeks? Indicate on line below.
Situation:____

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Tag	Ind 1	Ind 2	Field Data
)00			00746nam__2200217_a_4500
)01			498066
)05			20040503132449.0
)08			040503s2004____onca____rmb___000_0_eng_c
)40			‡a CaOPAL ‡b eng
)90			‡a
100	1		‡a Hamel, Suzanne Katherine
245	1	2	‡a A participatory approach to community-based curriculum development for the living with elephants outreach program in Botswana / ‡c Suzanne Katherine Hamel. --
260			‡a [S.l. : ‡b s.n.], ‡c 2004
300			‡a xv, 152 leaves : ‡b ill.
500			‡a Typescript.
500			‡a Staff advisor: Constance Russell
502			‡a Thesis (M.Ed.) -- Lakehead University, 2004.
504			‡a Bibliography: leaves ~~xx-xx.~~ 109-116
610	2	4	‡a Lakehead University. ‡b Faculty of Education ‡v Theses
650		0	‡a
650		0	‡a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.