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DEPRESSION AND  
COPING STYLES

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science  
in  
Psychology

---

By  
Charles John Sudbeck  
June 1992

DEPRESSION AND  
COPING STYLES

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By  
Charles John Sudbeck  
June 1992

Approved by:

[Redacted Signature]

Lynnda Warren, Chair, Psychology

[Redacted Signature]

Gloria Cowan

[Redacted Signature]

Matt Riggs

May 29, 1992  
Date

### ABSTRACT

The focus of this study is to test several hypotheses derived from Nolen-Hoeksema's response style model to account for gender differences in depression. This model posits two basic response styles to cope with depression which are rumination and distraction. These response styles, along with two others, were assessed by a questionnaire which also included four indices of depression. A Pearson product-moment correlation was performed as were four multiple regressions. The findings provided little support for Nolen-Hoeksema's model, because no gender differences were found on any of the depression indices. Women were found to use rumination significantly more than men, whereas men used significantly more drug use in response to depression. Only four of the sixteen intercorrelations between the indices of depression and coping style were significant. Increased distraction and rumination were associated with decreased current depression. Also found was a positive correlation between the ruminative and distractive coping styles.

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## INTRODUCTION

Unipolar depression is a condition which afflicts millions of people each year and which has been the focus of hundreds of research studies in the past twenty years. Depression is classified in the DSM III-R (1987) as a mood disorder, but the symptoms that define the syndrome of major depression include affective, cognitive, and behavioral disturbances. These are characterized by sad mood, anhedonia, psychomotor agitation or retardation, decreased energy, and thought content revolving around guilt and worthlessness.

One consistent finding in research on unipolar depression is what has come to be referred to as the 2:1 sex ratio in depression. This ratio refers to the fact that women typically have been found to have twice the rate of depression relative to men. Gender differences in depression have been assessed in a number of different ways, including level of intensity of depression, chronicity, number of occurrences, symptomatology, and methods of coping with depression.

The majority of past studies have found the 2:1 ratio in level of depression with the exception of college students, who have been found repeatedly not to show sex differences in current level of depression. In the review that follows, whether sex differences are found and how sizable the

differences are dependent on the nature of the sample used and the measures used.

One of the first studies on sex differences was done by Radloff and Rae (1979). They studied susceptibility and precipitating factors in relation to observed sex differences in depression. They found that women were exposed to the precipitating factors at a higher rate than men. When these factors were controlled, however, there was still a significant sex difference, with women demonstrating a significantly higher rate of depression than men.

Amenson and Lewinson (1980) used a large adult community sample (n=998) to determine the differences in length, onset, and duration of depression between men and women. They found significant sex differences in the initial episode of depression and subsequent episodes as well. Women had higher rates in both categories, yet there were no differences in the duration of the depressive episodes.

Vrendenburg, Krames, and Flett (1986) found no differences in the first episode of depression as measured on the Beck Depression Inventory but a significant sex difference in subsequent episodes, with women at a higher rate, this finding suggests a greater sex difference not in initial episodes but in lifetime occurrences.

Sex differences in expression or manifestation of depression were studied by Funabiki, Bologna, Pepping, and Fitzgerald (1980) in a sample of college students. They



found that sex differences in both the cognitive and behavioral manifestations of depression. Depressed women reported eating more, expressing themselves in writing more often, and engaging in more verbal hostility than depressed men. Depressed men reported more self-preoccupation and use of instrumental responses than depressed women.

Chino and Funabiki (1984) cross-validated the previous research in a study with college students that examined behavioral factors in depression, they also found significant differences in depression symptomatology between depressed men and women. Depressed men endorsed behaviors such as being with other depressed people, obtaining joy in making others depressed, and an increase in smoking behavior. Depressed women reported eating more, seeking personal support, and writing to express their feelings.

In a study to assess gender differences in the experience of depression, Chevron, Quinlan, and Blatt (1978) found no sex differences in a sample of college students on self-rated depression. They did find an experiential difference, however, with women's depression more focused on dependency and men's depression on self-criticism.

Within a homogeneous community of 12,500 Amish adults, Egeland and Hostetter (1983) found no sex difference in the prevalence of depression, although this finding can not be generalized to the general population, it is important because it suggests that sex differences in unipolar

depression may disappear when conditions such as alcoholism and acting-out disorders, more prevalent in men than women, are not present as confounding variables within the sample.

In a study done with a clinical population, Frank, Carpenter, and Kupfer (1988) found no difference in the occurrence of depression between males and females on the Hamilton depression scale, the Raskin depression scale, and the Beck Depression Inventory. Interestingly, they did find that men had a significantly faster recovery rate, which they attributed to possible sex differences in reporting and in symptom denial. They also found sex differences in the expression of the symptoms consistent with previous findings.

Within a college student population, Gjerde, Block, and Block (1988) found no sex differences in the occurrence of self-reported depression as measured by the Center of Epidemiological Studies-Depression (CES-D) scale. They did find a gender difference in the expression of depression, consistent with previous findings.

Hammen and Padesky (1977), using a college student population, found no sex differences in the degree of self-reported depression as measured by the Beck Depression Inventory. They found that the expression of depression was significantly different, however, with men having an inability to cry, sense of failure, and loss of social

interest whereas women expressed depression with indecisiveness and self-dislike.

A follow-up study by Padesky and Hammen (1981) also using college students found no sex difference in the level of depression as assessed by the D30 subscale of the Minnesota Multiphasic Personality Inventory, but there was a sex difference in the patterns of response to the depression, the patterns were expressed by men as social withdrawal, cognitive and motivational deficits, and somatic concerns. Depression in women was expressed more by lack of confidence, lack of concern to what happens to them, and being hurt by criticism.

Oliver and Toner (1990), in another study using college students, supported the findings of Padesky and Hammen (1981), they found no sex difference in the level of depression as measured by the Beck Depression Inventory, but there was a significant difference in the depressive symptomatology with women reporting more emotional symptoms and men reporting more withdrawal and somatic symptoms.

The previous studies illustrate the sex differences which can occur during the course of unipolar depression. Within certain groups, such as college students and the Amish, certain measures of level or intensity of depression were found to show no sex difference. Within the college student samples, consistent gender differences were found in the symptoms and experiences of depression, these were

characterized by women eating more, expressing their feelings, focusing on dependency, seeking social support, self-dislike, and lack of confidence, whereas men had an increase in smoking, self-criticism, an inability to cry, sense of failure, loss of social interest, and somatic symptoms.

The studies just reviewed mainly examined gender differences in depression without any comprehensive formulation or theory addressing the causes of the sex differences or the lack of them, the following section will focus on a theoretical formulation.

#### Nolen-Hoeksema's Model

The most extensive work to date on how to account for observed sex differences in depression has been reported by Nolen-Hoeksema. She initially reviewed (1987) a large number of studies relevant to sex differences in depression. She then identified and discussed five possible explanations for sex differences found in unipolar depression which were biological, social, sex role, personality development, and personality differences. Based on her review of the literature, she argued that none of the five explanations has received strong research support. She then proposed her own explanation for sex differences in unipolar depression, an explanation based on gender differences in response to depression. According to Nolen-Hoeksema, the way a person responds to the experience of being depressed will affect

the duration, severity, and recurrence of depressive episodes (Nolen-Hoeksema, 1987, 1990).

Responses to depression can be understood in terms of two different coping styles according to Nolen-Hoeksema. The first style she calls ruminative because the person's responses are cognitions and behaviors which repetitively focus the depressed person's attention on the symptoms, causes, and consequences of the depression. The second type of coping response she refers to as distractive because here the responses are cognitions and behaviors designed to draw the person's attention away from the symptoms of the depression.

Nolen-Hoeksema (1990) has found sex differences in how men and women respond to depression. Women tend to use the ruminative style significantly more than men. A series of studies reported by Nolen-Hoeksema (1990) examined these sex differences in response styles. One study (Nolen-Hoeksema, Morrow, & Fredrickson, 1989) used a list of distractive and ruminative behaviors to assess which would be used by males and females. The women in this sample of college students significantly rated themselves as more likely to engage in ruminative responses whereas the men reported using the distractive behaviors significantly more when depressed. In a study which used heterosexual couples as subjects, Carstensen, Morrow, and Roberts (1988) found evidence for sex differences in response to negative emotions surrounding

conflict in the relationship. Women reported using the ruminative style and having a higher rate of depressive symptomatology. The men in the sample, in contrast, reported using the distractive style more often. According to Nolen-Hoeksema and colleagues, the ruminative style interferes with instrumental behaviors which would decrease the depression, while simultaneously having the effect of amplifying the depression. Men tend to use the distractive style significantly more than women with the result that they are distracted away from their depressed mood. One consequence of the way men and women responded to depression is that women should have longer and more frequent depression than men due to the fact that the ruminative style used more by women is ineffective in ameliorating depression.

In a study by Morrow and Nolen-Hoeksema (1990), the response styles of distraction and rumination were evaluated for effectiveness in alleviating depressed mood. A depressed mood was induced in the subjects and they were then assigned to one of four types of response tasks. These tasks were active distraction, passive distraction, active rumination, or passive rumination. The greatest remediation of depression was seen within the active distraction task, followed by the passive distraction task. The passive rumination task had the least remediation effect. A key point in this study was that the tasks were randomly

assigned and did not reflect the subjects' actual response style. While this study found no sex differences, it did find that the effects of both response styles were equally beneficial or detrimental to both men and women assigned to the tasks; that is, women who engaged in active distraction received as much benefit from this response as men did and vice-versa.

Nolen-Hoeksema (1991) subsequently studied the response styles and the effect that they have on duration of depressive symptoms. She found that subjects who utilized ruminative styles tended to have longer durations of depression, even when the initial severity was taken into account. She also replicated the sex difference in response styles with women using significantly more the ruminative style and men using significantly more the distractive style. Within the distractive response style, Nolen-Hoeksema found that men were more likely than women to use alcohol as a distractor. She views this as a coping style used to keep from ruminating. Although use of alcohol is not considered a beneficial coping response, it is still viewed as a distractive mechanism.

Nolen-Hoeksema proposed that stereotypical sex-role behaviors are related to response styles in that being active and controlling one's mood are part of the masculine sex role and being inactive and emotional are part of the feminine sex role. These behaviors are reinforced during

childhood, and any cross-sex behaviors tend to be directly addressed as inappropriate. The following study tested this hypothesis.

Conway, Giannopoulos, and Stiefenhofer (1990) studied college students high in masculinity and femininity as assessed by the Bem Sex Role Inventory. They found that men and women high in femininity used the ruminative style more than the distractive style. They also found that men and women who were high in masculinity used the distractive style more than the ruminative style. The sex difference in response style was present as well as a sex role difference, with both findings consistent with Nolen-Hoeksema's model.

Wood, Saltzberg, Neale, Stone, and Rachmiel (1990) also examined coping response styles as they relate to negative mood. Their findings were consistent with Nolen-Hoeksema's response style hypothesis. They found that subjects who used distraction were less depressed than those who used rumination, which was associated with negative mood. Another finding was that men who engaged in coping strategies that are characteristic of women were more unhappy than men who did not.

Kleinke, Staneski, and Mason (1982) used the findings presented by Hammen and Padesky's (1977) study on sex difference in expression of depression as a basis for their study. They examined differential coping behaviors as a function of gender. They found that female college students



cope with depression by crying, blaming themselves, self-labeling themselves as depressed, and seeking help from other people. Male college students, in contrast, cope with depression by escaping by drug use, spending time alone, and finding humor in the situation. These findings, reported before Nolen-Hoeksema presented her model, are consistent with her definitions of ruminative and distractive coping styles.

Billings and Moos (1984) examined chronic strains instead of acute life events in the context of coping and depression. They found that problem solving, defined as information seeking and taking specific action to deal with the situation and affective regulation, defined as responses that control stressor related emotions, were associated with less dysfunction. Emotional discharge responses, defined as verbal and behavioral expressions of unpleasant emotions and indirect efforts to relieve tension, such as letting feelings out somehow and taking it out on other people when depressed, were more frequently used by women. These responses were linked to greater dysfunction as assessed by the Research Diagnostic Criteria for depression. These findings are also consistent with Nolen-Hoeksema's model.

Kolenc, Hartley, and Murdock (1990) found that emotion-focused coping styles were significantly and positively related to depression. Emotion-focused behaviors include crying, eating, smoking cigarettes, becoming irritable, and

confronting one's feelings when depressed. Problem-focused coping was found to be inversely related to depression. Problem-focused behaviors include ignoring the problem and finding humor in the situation. Depressed individuals tended to use this style less than non-depressed individuals. These findings were generally consistent with Nolen-Hoeksema's hypothesis to the extent that problem-focused coping falls under the distraction coping style and emotion-focused under the ruminative style. This seems reasonable in that emotion-focused behaviors are those that confront the depressed affect whereas problem-focused behaviors function to ignore the depression.

#### Present Study

The present study is an attempt to test hypotheses derived from Nolen-Hoeksema's model. Nolen-Hoeksema's previous studies have examined response styles using either non-depressed subjects or subjects who have had depression induced.

This study examined what response styles are used by college students in coping with depression and the efficacy of such styles in ameliorating depression. The particular focus of this study was to determine whether the response styles are significantly linked to frequency of occurrence of depression and the chronicity of depressed episodes. If Nolen-Hoeksema's model is accurate, then both men and women who use the ruminative style would be expected to have

longer episodes of depression than men and women who use the distractive style. The two styles should also be significantly associated with recurrence of episodes according to Nolen-Hoeksema's model. She argues that recurrence of episodes is due to the fact that the ruminative style is passive. With this style, the individual should experience amplification and prolongation of depressed mood and the ineffectiveness of this style should lead to multiple episodes due to an inability to control the depressed mood when it occurs.

No direct test of Nolen-Hoeksema's hypothesis has yet been made. Included in the present study are questions to assess the actual efficacy of the response styles as related to the number of previous episodes of depression and the chronicity of these episodes. This will give a greater understanding of which styles are used by males and females as well as how well each works to remediate the depressive symptoms.

The five hypotheses for this study were:

- 1) Females should score higher than males on the depression indices of frequency and chronicity, but there will be no sex difference for current level of depression.
- 2) Females should report greater use of the ruminative coping style than males.
- 3) Males should report greater use of the distraction, avoidance, and drug use coping styles than females.

- 4) The ruminative coping style should be positively correlated with longer duration and greater frequency of depression and the distractive coping style should be negatively correlated with longer duration and greater frequency.
- 5) Frequency and duration of depression should be significantly associated with response style. That is, subject's response style scores were expected to be significantly correlated with their depression scores with high depression associated with high rumination and lower depression associated with distraction, avoidance, and drug use regardless of gender.

The first hypothesis excludes the current level of depression as a sex difference due to previous studies with college students that have found no difference between men and women on current level of depression. The second and third hypotheses are based on findings reported by Nolen-Hoeksema. The fourth hypothesis is also directly derived from Nolen-Hoeksema's model and provided a test of the effectiveness of the response styles as they operate in a person's life over a twelve month period. Nolen-Hoeksema reported in one study that response styles were related to duration of depression but no test has yet been made regarding whether the styles are associated with frequency of depression in a given time period.

Four different coping styles were studied. These styles are based on research done by Conway, Giannopoulos, and Stiefenhofer (1990). These particular measures of coping style were selected because they include Nolen-Hoeksema's ruminative and distractive styles as well as drug use and avoidance. The drug use and avoidance styles were included to determine whether these styles, considered unhealthy by most clinicians, will nonetheless be associated with lower depression. If drug use is associated with lower self-reported depression, this also will provide indirect support for substance abuse as a confounding variable in research on depression incidence and prevalence. The four different coping styles are defined as follows:

Avoidance- ignoring the problem, thinking of other things, and avoiding thoughts about the depression.

Rumination- cognitions and behaviors which focus on the causes and reasons for the depression.

Distraction- cognitions and behaviors which are designed to shift attention off the depression.

Drug use- drinking alcohol and using drugs as a form of self-medication against the depression.

## METHOD

College students from California State University, San Bernardino were used as subjects. The sample size was 285 with 81 men and 204 women. Subjects participated on a voluntary basis and with informed consent. Subjects also had the chance for debriefing. All subjects were treated in accordance with APA Guidelines for Research with Human Subjects.

The subjects were administered the questionnaire in four classes or given the opportunity to acquire the questionnaire from the psychology office. They were instructed to read and sign the informed consent form on the front, fill out the questionnaire, and were then given a debriefing form. Some of the students received extra credit in their classes for participation.

## Measures

1) Current level of depression. This was assessed by means of the short-form Beck Depression Inventory (BDI). The BDI was chosen for ease of administration and for the fact that it has been the most frequently used instrument in previous studies reviewed in this area. The BDI has an internal consistency of .86 and a test-retest reliability from .48 to .86. Due to limitations imposed by computer scoring, BDI item #7 was reduced from six to five responses, with the upper limit of the question (I would kill myself if I could) removed.

2) Frequency of depression. A single item developed for this study was used to assess frequency of depression in the past year. Participants were asked if during the past year, they were depressed 0-1 times, 2-3 times, 4-5 times, 6-7 times, or 8 or more times.

3) Duration of depression. A single item developed for this study was used to assess duration of depression in the past year. Participants were asked if during the past year when depressed, the depression usually lasted no more than a few hours, 1-2 days, 3-7 days, 2-4 weeks, or a month or more.

4) Depression coping styles. The four coping styles of rumination, distraction, avoidance, and drug use were assessed by the Coping Style Questionnaire (Conway, Giannopoulos, & Stiefenhofer, 1990). This is a twelve item instrument developed by means of a factor analysis of a larger set of items to test Nolen-Hoeksema's hypothesis. They chose her response styles as well as two others from other studies. A sample item and number of items for each coping style follows:

- 1) Distraction: I do something physical. (three items)
- 2) Rumination: I talk to others about my feelings. (three items)
- 3) Drug Use: I take drugs. (two items)
- 4) Avoidance: I ignore the problem and think of other things. (three items)

A fifth item, "I write to express my feelings", was not used in the statistical analyses.



## RESULTS

A Pearson correlation analysis and four multiple regressions were performed on the data. A Cronbach's alpha was computed for each of the coping measures with the results as follows: avoidance ( $\alpha = .42$ ), distraction ( $\alpha = .51$ ), rumination ( $\alpha = .56$ ), and drug use ( $\alpha = .60$ ).

### The relationship between gender, indices of depression, and the four depression coping styles

Only partial support was found for the first hypothesis which predicted no gender differences in the level of depression. Gender differences were expected, however, in the frequency and chronicity measures. As can be seen in Table 1, gender was not significantly associated with any of the depression measures, thereby providing support only for the prediction of no gender differences in current depression.

There was a significant association between gender and two of the four coping styles. The second hypothesis was supported. As predicted, women reported greater use of the ruminative style ( $r = .40, p < .001$ ) than men. Only partial support was found for the third hypothesis. As expected, men reported greater use of drugs as a way to cope with depression ( $r = -.19, p < .001$ ) than women. Avoidance and distraction, however, were not associated with gender as predicted from Nolen-Hoeksema's model.

Table 1

Means, standard deviations, and correlations  
between gender, indices of depression,  
and depression coping styles

---

	Gender	<u>Male</u>		<u>Female</u>	
		Mean	SD	Mean	SD
BDI	-.00	5.52	6.29	5.57	5.30
Frequency	-.01	1.99	1.37	1.97	1.28
Intensity	-.01	1.83	.97	1.82	.85
Duration	-.03	1.31	1.11	1.25	1.01
Avoidance	-.05	4.51	2.33	3.73	2.21
Distraction	-.02	5.43	2.33	5.28	2.44
Rumination	.40**	5.03	2.38	7.27	2.38
Drug Use	-.19**	1.86	1.89	1.15	1.56

One-tailed significance: \*\*  $p < .001$

Note.

Negative correlations denote masculine direction and  
positive correlations denote feminine direction

---

The relationship between indices of depression and coping styles: A test of Nolen-Hoeksema's model

Table 2 shows the Pearson  $r$ 's obtained between each of the depression indices and the four coping styles. No support was found for the fourth hypothesis which predicted significant associations between frequency and duration of depression and the ruminative and distractive coping styles. The frequency and duration measures were not significantly associated with any of the coping styles. Hypothesis five was only partially supported. As predicted, greater use of the distractive coping style was associated with less current depression ( $r = -.27, p < .001$ ). Contrary to prediction, however, greater use of the ruminative style was also significantly associated with less current depression ( $r = -.15, p < .001$ ). This finding is not consistent with Nolen-Hoeksema's model. No support was found for the prediction that drug use and avoidance would be associated with current depression. Since both drug use and avoidance can be viewed as methods of distraction, these findings are also inconsistent with expectations derived from Nolen-Hoeksema's model. Finally, although no hypothesis was made regarding the intensity measure of depression, intensity of depression in the past year was significantly associated with distraction ( $r = -.18, p < .001$ ) and drug use ( $r = .16, p < .001$ ). Interestingly, greater drug use as a coping method was associated with greater intensity of depression

in the past year although it was not associated with current level of depression. Intensity was not associated with avoidance or rumination as would be expected given Nolen-Hoeksema's model.

#### Additional findings

There was an unexpected relationship between the distraction and ruminative coping styles ( $r = .22$ ,  $p < .001$ ). The remainder of the associations between the coping styles are shown in Table 3.

The results of four multiple regressions were performed to determine how well coping styles and gender, when taken together, predict the four indices of depression. Table 4 presents the multiple regressions analyses.

Table 2

Pearson product-moment correlation between  
indices of depression and coping styles

---

	Avoid	Distract	Ruminat	Drug Use
BDI	.06	-.27**	-.15**	.11
Frequency	.05	-.06	.07	.12
Intensity	-.02	-.18**	.04	.16**
Duration	-.05	-.05	.02	.07

One-tailed significance: \*\*  $p < .001$

Note.

Negative correlations denote reduction  
of depression

---

Table 3

Pearson product-moment correlation  
among depression coping styles

---

	Avoid	Distra	Ruminat	Drug Use
Avoid	---	.14*	.05	.04
Distra		---	.22**	-.01
Ruminat			---	-.15*
Drug Use				---

One-tailed significance \*  $p < .01$  \*\*  $p < .001$

---

The regressions were stepwise and, as can be seen, the addition of variables did not improve on the univariate  $r$ 's for the BDI, frequency, and duration measures. For three of the four regression analyses, the multiple  $R$  was unchanged by the addition of variables. Only for the intensity measure did more than one variable contribute to the variance accounted for. Here the addition of drug use to distraction improved the multiple  $R$  significantly from .17 to .24 ( $F = 8.42$ ,  $p < .001$ ).

Table 4

Multiple Regressions of coping styles and gender  
in prediction of depression indices

---

Multiple Regression for BDI

<u>Step</u>	<u>Variable</u>	<u>r</u>	<u>Change in r</u>	<u>Beta</u>	<u>F</u>	<u>(1, 282)</u>
1	Distra	.27	-----	-.27	21.94	
2	no other variables entered					

---

Multiple Regression for Frequency

<u>Step</u>	<u>Variable</u>	<u>r</u>	<u>Change in r</u>	<u>Beta</u>	<u>F</u>	<u>(1, 282)</u>
1	Drug	.12	-----	.12	4.26	
2	no other variables entered					

---

Multiple Regression for Duration

No variables entered

---

Multiple Regression for Intensity

<u>Step</u>	<u>Variable</u>	<u>r</u>	<u>Change in r</u>	<u>Beta</u>	<u>F</u>	<u>(1, 282)</u>
1	Distra	.17	-----	-2.99	8.96	
2	Drug	.24	.026	2.77	8.42	
3	no other variables entered					

---



## DISCUSSION

The results of this study provide virtually no support for the model of Nolen-Hoeksema. Her model attempts to account for gender differences in depression. Since this study found no gender differences in any of the depression indices, there are no gender differences to account for. Still, if her model is correct, one would have expected to see gender differences in coping styles and, further, differences in depression as a function of coping style. Only partial support was found here.

The lack of gender differences on the Beck Depression Inventory is consistent with previously published studies using college students as subjects. Why college students show no gender differences in depression while community adult samples do is a finding for which no one has yet provided an other than speculative explanation. One reason may be that the Beck Depression Inventory may not be as sensitive to lower levels of depression as some other measure of depression such as the CES-D. Another explanation for these inconsistencies across student and community adult samples lies in the different environments in which students and community adults live in. College students perform similar social roles and are subject

to similar levels of stress in the academic environment which is also structured similarly for each gender. Non-student women and men, in contrast, can not be assumed to live and work in similar environments or to perform similar roles. In fact, adults are exposed to differential life stressors as a function of gender and also subject to more differentiated gender roles than are students (Radloff & Rae, 1979).

Why the remaining measures of depression did not show a gender difference can be interpreted similarly. Also, the frequency, duration, and intensity measures were retrospective, asking subjects to recall depressive episodes for the past twelve months. These measures thus can be expected to be less reliable than current reports and perhaps therefore provided a poor test of the hypotheses.

Although no gender differences were found for any of the depression measures, gender was significantly associated, as predicted and consistent with Nolen-Hoeksema's model, with drug use and rumination. Unfortunately, gender showed no relationship with either avoidance or distraction, therefore providing no support here for Nolen-Hoeksema's model. The reported greater use of drugs by men in coping with depression is consistent with a large body of research that indicates men use more alcohol and other substances

than women do. The fact that in this sample women reported greater use of rumination than men seems best interpreted not in terms of women's greater focus on emotionality, but rather in terms of the content of the rumination scale. The scale consists of the following three items: "I get together with one very close person or friend", "I talk to others about my feelings", and "I cry". Although Giannopoulos, Conway, and Stiefenhofer labelled these as "rumination", first two items would seem to be better viewed as seeking social support. If the rumination measure is actually best construed as a measure of seeking social support, then the fact that college women scored higher on it than college men can be interpreted as consistent with a repeatedly found gender difference in college samples - i.e., that women cope with depression by talking with friends whereas men do not. This interpretation of the rumination measure also would help explain the finding that rumination was negatively associated with the BDI scores, a finding directly opposite from what would be predicted by Nolen-Hoeksema's model. Seeking social support might help to alleviate depression in contrast to obsessive rumination. This can also account for the significance of the sex difference in the use of the ruminative coping style. In Warren's (1983) literature, male intolerance of depression included the reluctance

of a male to label himself as depressed, when experiencing depression. If this is the case, men would then not seek social support or use the word "depression" when discussing their situation with others. Other gender beliefs that Nolen-Hoeksema discusses are the belief that the experience and symptoms of depression are seen as passive, dependent, and nonassertive, qualities which a male will conclude are not a part of his own experience and therefore dismiss any depression because it wasn't caused by any of those factors.

There was a significant relationship between the distractive coping style and the Beck's Depression Inventory and also the intensity of previous depressive episodes. Distraction was associated with less depression in both, yet there were no significant sex differences in the use of this style, which is inconsistent with Nolen-Hoeksema's model. This style apparently does work to alleviate the intensity of depression one experiences, regardless of gender. Why there was no gender difference in use of this style is not entirely clear but may depend on specific item content. The three items assessing distraction as a coping style are as follows: "I go out to meet people at a party or a club", "I get away and do something I enjoy", and "I do something physical". Since college

students live in a social environment, social activities such as a party or club activity are readily available to both men and women students.

Interestingly, on this measure, there is social activity but without the added implication that one is talking to one's friends about one's depression.

The low Cronbach alphas for avoidance and distraction also have contributed to the lack of significant relationships between the coping styles and gender. Since low alphas have the effect of attenuating correlations, it is possible that the unreliability of the distractive and avoidance measures made the detection of what may actually be a significant relationship impossible. Also, the significant associations found on the other measures may also be stronger if scale reliability were improved. The significant relationship of drug use with intensity can be seen as evidence for the negative effect that drugs, particularly alcohol, have on depressive episodes. If an individual is already depressed and chooses alcohol use as a coping style, the depressant effect of the alcohol could intensify the experience of the depression.

The results of the multiple regressions are consistent with the correlational analyses. Since so few of the bivariate relationships were significant, it

is not surprising that using the measures as multiple predictors produced virtually no increase in the variance accounted for on the four depression measures.

From the findings of this study, Nolen-Hoeksema's model to account for gender differences in response to depression was not strongly supported. Unfortunately, this study can not be taken as definitive because the coping measures employed were at less than acceptable levels of internal consistency, reliability, and because their item content does not appear to be consistent with scale labels assigned by Giannopoulos, Conway, and Stiefenhofer. Another reason may be that the subjects were taken from a college population. Nolen-Hoeksema's model may be better applied to samples taken from the general population where gender differences for depression are found.

One possible future direction for research in this area concerns ascertaining the effect on level of depression and related measures of the number of coping strategies a person employs rather than on a simple strategy. Nolen-Hoeksema's model does not account for multiple use of coping strategies, despite the likelihood that multiple, and even apparently opposing strategies, may be employed by both men and women. For example, it is not inconceivable that someone might respond to depression with both ruminative and

distractive strategies in a given time period. It would be interesting to compare the effects of depression amelioration with the use of only rumination, only distraction, only physical exercise, and use of multiple strategies. If a person were to use both rumination and distraction as strategies, this would provide another possible explanation for the positive correlation between these two response styles in the present study.

## APPENDIX A

### CONSENT FORM

This research is being conducted to obtain information on the various ways that people of different ages, gender, and backgrounds deal with depression and sadness. The questionnaire that follows is part of a research project in progress at California State University, San Bernardino under the supervision of the following Psychology Department faculty: Dr. Lynda Warren, Dr. Gloria Cowan, and Dr. Matt Riggs. The questions you are going to answer address if you have been depressed or sad during the past year and how you may have dealt with this sadness or depression.

There are no right or wrong answers to the questions. It is important to answer the questions as honestly as possible. Your answers will be confidential and anonymous. To insure this, please do not write your name on any part of this questionnaire except for this first page, which will be detached and given to you when you hand in the questionnaire. Please answer all questions. This questionnaire will take approximately 10 minutes to complete. Please fill in the bubble corresponding to the number of the response.



Appendix A (cont'd)

At any point during completion of this questionnaire that you feel uncomfortable and wish to stop, please feel free to do so.

A brief written summary of the results of this study will be made available during June, 1992 and will be available in the Psychology Department office. Any interested participant can pick them up at that time.

If there are any questions or concerns about this questionnaire, please call Dr. Lynda Warren at (714) 788-6006. Thank you for your time and contribution to this research.

Name\_\_\_\_\_ (signature) Date\_\_\_\_\_

Name\_\_\_\_\_ (print)

## APPENDIX B

### Short Form Beck Depression Inventory

- 1) 1 I do not feel sad.
  - 2 I feel blue or sad
  - 3 I am blue or sad all the time and I can't snap out of it
  - 4 I am so sad or unhappy that it is quite painful
  - 5 I am so sad or unhappy that I can't stand it
- 2) 1 I am not particularly pessimistic or discouraged about the future
  - 2 I feel discouraged about the future
  - 3 I feel I have nothing to look forward to
  - 4 I feel that I won't ever get over my problems
  - 5 I feel that the future is hopeless and that things can't improve
- 3) 1 I do not feel like a failure
  - 2 I feel I have failed more than the average person
  - 3 I feel I have accomplished very little that is worthwhile or that means anything
  - 4 As I look back on my life all I can see is alot of failures
  - 5 I feel I am a complete failure as a person  
(parent, husband, wife)
- 4) 1 I am not particularly dissatisfied
  - 2 I feel bored most of the time
  - 3 I don't enjoy things the way I used to

Appendix B (cont'd)

- 4 I don't get satisfaction out of anything anymore
- 5 I am dissatisfied with everything
- 5) 1 I don't feel particularly guilty
- 2 I feel bad or unworthy a good part of the time
- 3 I feel quite guilty
- 4 I feel bad or unworthy practically all the time  
now
- 5 I feel as though I am very bad or worthless
- 6) 1 I don't feel disappointed in myself
- 2 I am disappointed in myself
- 3 I don't like myself
- 4 I am disgusted with myself
- 5 I hate myself
- 7) 1 I don't have any thoughts of harming myself
- 2 I have thoughts of harming myself but I would  
not carry them out
- 3 I feel I would be better off dead
- 4 I feel my family would be better off if I were  
dead
- 5 I have definite plans about committing suicide
- 8) 1 I have not loss interest in other people
- 2 I am less interested in other people now than I  
used to
- 3 I have lost most of my interest in other people  
and have little feeling for them

Appendix B (cont'd)

- 4 I have lost all my interest in other people and  
don't care about them at all
- 9) 1 I make decisions about as well as ever  
2 I try to put off making decisions  
3 I have great difficulty in making decisions  
4 I can't make decisions at all any more
- 10) 1 I don't feel that I look any worse than I used to  
2 I am worried that I am looking old or  
unattractive  
3 I feel that there are permanent changes in my  
appearance and they make me look unattractive  
4 I feel that I am ugly or repulsive looking
- 11) 1 I can work about as well as before  
2 It takes extra effort to get started at doing  
something  
3 I don't work as well as I used to  
4 I have to push myself very hard to do anything  
5 I can't do any work at all
- 12) 1 I don't get any more tired than usual  
2 I get tired more easily than I used to  
3 I get tired from doing anything  
4 I get too tired to do anything
- 13) 1 My appetite is no worse than usual  
2 My appetite is not as good as it used to be

Appendix B (cont'd)

3 My appetite is much worse now

4 I have no appetite at all anymore

## APPENDIX C

### Part B Coping Styles Items

Answer the following questions AS IF YOU WERE SAD OR DEPRESSED. These answers should be how you would cope with that sadness or depression.

14) I ignore the problem and think of other things

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always

15) I write to express my feelings

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always

16) I avoid thinking of reasons why I'm depressed

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always

17) I take drugs

1 almost never

2 rarely

Appendix C (cont'd)

- 3 sometimes
  - 4 frequently
  - 5 almost always
- 18) I try to determine why I'm depressed
- 1 almost never
  - 2 rarely
  - 3 sometimes
  - 4 frequently
  - 5 almost always
- 19) I take alcoholic beverages (e.g., beer or wine)
- 1 almost never
  - 2 rarely
  - 3 sometimes
  - 4 frequently
  - 5 almost always
- 20) I get together with one very close person or friend
- 1 almost never
  - 2 rarely
  - 3 sometimes
  - 4 frequently
  - 5 almost always
- 21) I go out to meet people at a party or a club
- 1 almost never
  - 2 rarely
  - 3 sometimes

Appendix C (cont'd)

4 frequently

5 almost always

22) I talk to others about my feelings

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always

23) I get away and do something I enjoy

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always

24) I cry

1 almost never

2 rarely

3 sometimes

4 frequently 5 almost always

25) I do something physical

1 almost never

2 rarely

3 sometimes

4 frequently

5 almost always



## APPENDIX D

### Part C Depression Indices for past year

26) During the past year, I was depressed:

- 1 0-1 times
- 2 2-3 times
- 3 4-5 times
- 4 6-7 times
- 5 8 or more times

27) During the past year when I was depressed, my depression was usually:

- 1 extreme, I was unable to function in my usual daily activities
- 2 strong, definitely interfered with my functioning
- 3 moderate, some interference with my functioning
- 4 mild, not particularly bothersome
- 5 not bothersome at all

28) During the past year when I was depressed, my depression usually lasted no more than:

- 1 a few hours
- 2 1-2 days
- 3 3-7 days
- 4 2-4 weeks
- 5 a month or more

29) GENDER

- 1 male
- 2 female

## APPENDIX E

### Explanation of Study

You have just participated in a study which was designed to investigate how people react to depression and sadness. We are also looking for a sex difference in the ways females and males respond to depression and sadness.

The questionnaire you have just completed was designed to assess your current level of depression, past episodes of depression together with their frequency and length, also assessed were different methods that people use to cope with depression.

Only group results will be given for this study and they will be made available to interested participants in June, 1992 in the Psychology Department office.

If you feel that this questionnaire has caused any distress to you, feel free to contact the University Counseling Center at 880-5040.

We greatly appreciate your time and contribution to this study. If you would like further information concerning this study, please contact Dr. Lynda Warren at (714) 788-6006 after June 15, 1992.

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