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Explanatory Style and Goal Setting

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ABSTRACT (100-200 words):

I conducted a longitudinal study to investigate whether the diathesis-stress model of learned helplessness could account for differences in goal setting and performance. One week before a midterm exam, 136 college students completed questionnaires measuring explanatory style, threat appraisals, situational constraints, academic ability, level of depression, goal priorities, and academic goals. One week after the midterm exam, course grade goals were measured again and midterm exam scores were obtained. Results suggested modest support for the diathesis-stress model of learned helplessness: (1) Pessimists set lower goals with respect to the exam but not with respect to course grade, (2) situational constraints and threat appraisals were predictive of goal setting but not exam performance, (3) the interaction between explanatory style and situational constraints was not significant in predicting threat appraisals or goal difficulty, (4) goal priority was not significantly predictive of exam performance. Further discussion of the validity of this model must await more conclusive data.

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Explanatory Style and Goal Setting

The reformulated learned helplessness model of Abramson, Seligman, & Teasdale (1978) hypothesizes that when people face bad events they ask why. People who attribute the occurrence of bad events happening to them to internal, stable, and global causes are more prone to depression, rather than people who explain the occurrence of bad events as being due to external, unstable, and specific causes (Peterson & Seligman, 1984; Peterson, Villanova, & Raps, 1985). Examples of internal factors are lack of ability, lack of effort, and unattractiveness of the outcome; external factors are lack of luck, the task being too hard, etc. Stable causes can reoccur whereas unstable ones should not; global causes occur across a wide variety of situations whereas specific causes occur only in one situation. Peterson and Seligman (1984) use the term explanatory style to describe the habitual ways people explain the causes of events. Individuals who possess a pessimistic explanatory style (uses internal, stable and global attributions to explain bad events which befall them) tend to react in a passive way when faced with failure or a difficult situation. Pessimists will see failure not only in the near future, but also across time and across a variety of situations. Individuals with an optimistic explanatory style (explain bad events that befall them as due to external, unstable, and specific causes) tend to persist longer when faced with failure or difficult circumstances (Peterson & Seligman, 1984).
Much attention has been focused recently on attributional correlates of successful adjustment to living (cf. Anderson, Jennings, & Arnoult, 1988). For example, attributional style has been applied to the prediction of salesperson success (Seligman & Schulman, 1986), college student exam performance (Peterson & Barrett, 1987), and the occurrence of physical illness among college students (Peterson, 1988). Since explanatory style is construed as a precursor to helplessness, "any and all phenomena in which helplessness plays a role should therefore be related to explanatory style" (Peterson & Barrett, 1987, p. 603).

This study applies the concept of explanatory style to yet another domain, the setting of academic goals by university students. However, rather than examining only correlational relationships between explanatory style, goal setting, and academic performance, this study goes a step further by including situational factors that may interact with explanatory style in the prediction of process (viz., goals) and outcome measures (viz., academic performance) of academic achievement.

The notion that explanatory style might interact with various situational factors in the prediction of motivation and performance is not new. Metalsky, Abramson, Seligman, Semmel, & Peterson (1982) were the first researchers in the learned helplessness literature to investigate the interactive effects of explanatory style and a situational variable. These researchers cast their predictions within a diathesis-stress model of learned helplessness. According to Metalsky et al., the reformulated model of learned helplessness implies that
certain attributional styles are vulnerability factors for depressive reactions. Accordingly, the diathesis-stress model of learned helplessness posits that a pessimistic explanatory style is a "diathesis" for depressive reactions and that negative life events are a "stress" for depressive reactions (viz., negative affect, low motivation, subsequent poor performance). Specifically, this framework posits that when pessimists encounter bad events, they demonstrate a wide range of debilitation in their wake. Whereas, when optimists encounter bad events, their affect, motivation, and subsequent performance are less affected.

In their study, Metalsky et al. measured students' explanatory style and depression prior to a midterm exam. Failure on the midterm exam served as the situational variable hypothesized to interact with explanatory style in the prediction of mood subsequent to the receipt of exam feedback. Analysis of the standardized residual gain scores on the Multiple Affect Adjective Check List (MAACL; Zuckerman & Lubin, 1965) supported the diathesis-stress hypothesis with respect to the internality and globality subscales of the Attributional Style Questionnaire (ASQ; Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982), but failed to support their prediction with respect to the stability subscale of the ASQ.

The present study focuses more exclusively on academic goals and performance. Furthermore, unlike Metalsky et al. (1982), the present study employs a situational variable that is less specific with reference to a particular event. Rather, the "stress" component of the
diathesis-stress model in the present study takes the form of individual accounts of the demands an environmental transaction places upon individuals. Below, I describe the study more completely and review the current literature on goal setting and how personal goals are influenced by explanatory style and situational factors.

**Goal setting and explanatory style**

A goal is defined as what an individual is trying to accomplish; it is the object of an action (Locke, Shaw, Saari, & Latham, 1981). The three main dimensions of goals that have been studied are specificity, temporality, and difficulty. Results of goal setting studies have shown that specific and difficult goals provide more direction and motivation, and result in higher performance than vague goals such as just "doing your best" (Locke, et al., 1981; Tubbs, 1986; Steers & Porter, 1974). As noted by Campion & Lord (1982), specific goals provide the most precise interpretation of performance feedback, resulting in better learning and regulation of performance; difficult goals result in better performance because they provide a higher standard around which performance is regulated. Moreover, more proximal goals (ones that require action in the present) are more motivating than more distal goals, ones that require no immediate action (Bandura, 1977).

Goals are important predictors of both behavior and emotions (Ahrens, 1987). In an early experiment on depression and goal setting (Loeb, et al., 1971) depressed and nondepressed outpatients did a card sorting task. They were asked to estimate the number of cards they would like to be able to sort and their estimated probability of
success. Depressed patients set the same goals as did nondepressed patients but estimated their probability of success to be lower, and depressed patients set higher goals for themselves after success than after failure. Nondepressed patients' goals did not differ after success and failure. The responsiveness of depressed people to feedback may make them prone to have low, unmotivating goals following failure and high, unattainable goals following success. The first would lead to low levels of effort, the second to failure. Laxer (1964) found that depressed people had larger discrepancies between what they wanted to be and what they were. Goals that are either too high or too low are related to depression; low goals lead to low motivation, and goals that are too high lead to failure.

The attributional reformulation of the learned helplessness model claims that individuals who possess a pessimistic explanatory style for bad events are more predisposed to depression when bad events occur (Peterson & Seligman, 1984). When confronted with a similar negative life event, people who tend to use internal, stable, or global attributions should be more likely to experience a depressive reaction than people who tend to use external, unstable, or specific attributions (Metalsky, 1982). However, Abramson et al. (1978) state that it is important to realize that explanations and explanatory style are not sufficient to produce depression but rather are risk factors for depressive deficits. Explanations affect depression to a greater degree than depression affects explanations.
Recently, Peterson and Barrett (1987) reported that explanatory style predicted academic performance among university freshmen. This relationship was found even when academic ability and depression were held constant. Also, their results suggested that explanatory style may affect subsequent performance through an influence on academic goals. In their study, Peterson & Barrett found that individuals with a pessimistic explanatory style (viz., use internal, stable, and global causes to explain the occurrence of bad academic events) set less specific academic goals (e.g., "I hope to do my best"). And, as noted above, research in the goal setting tradition has shown that specific and difficult goals result in performance that exceeds that of individuals who set less specific goals (Locke et al., 1981). These data suggest that students who attribute failure to internal causes are not going to work as hard or as long as students who attribute failure to external causes (Peterson & Barrett, 1987).

Situational characteristics may interact with explanatory style in the prediction of goal characteristics, such as specificity or difficulty. Dachler and Mobley (1973), Schneider (1978), and Terborg (1977) have all proposed that situational performance constraints directly affect work outcomes; in many work situations, people who are willing and able to accomplish a task may be either inhibited or prevented from doing so due to situational characteristics that are beyond their control. Peters & O'Connor (1980) define situational constraints as factors which get in the way of ability translating into performance. Thus, situational constraints may qualify as stressors.
that make individuals' transactions with the environment more difficult. Examples of academic-related situational constraints are not having enough time to study, not having a quiet place to study, losing lecture notes, and having an instructor who is not willing to help a student. Situational constraints are hypothesized to directly affect performance. To the extent that situational constraints hinder the use of ability, performance should be reduced (Peters & O'Connor, 1980). Peters, O'Connor, & Rudolph (1980) found evidence that situational constraints affected the levels of both performance and affect. In their study, subjects with high situational constraints performed at a lower level and reported more negative affect than did subjects facing lower levels of situational constraints.

**Threat appraisals**

Lazarus & Launier (1978) define cognitive appraisal as "the mental process of placing any event in one of a series of evaluative categories related to either its significance for the person’s well-being or the available coping resources and options." They propose that when people are faced with a stressful situation they experience certain emotions such as resentment, anger, fear, etc. that indicate their appraisal of the situation. When these stressful situations are perceived as causing future harm or loss they are called threat appraisals. Threat appraisals are a negative state of mind in that the person emphasizes the potential harm that can result from a situation (Lazarus & Launier, 1978; Folkman, Schaeffer, & Lazarus, 1979).
Primary threat appraisals, or judgements about an outcome, are influenced by many personal and situational factors: The extent to which individuals believe they have control over the outcome; their commitment, or what is important and what has meaning to them; and how clear or ambiguous the expected outcome is (Folkman, 1984). Threat appraisals are relevant to the study of achievement-related behaviors because anxiety and fear, which can be associated with threat appraisals, may affect the strategies people use to overcome achievement-related obstacles.

Research indicates that individuals tend to employ two primary strategies when they encounter a stressor: (a) emotion-focused coping, whereby individuals attempt to manage their emotional response to a situation, and (b) problem-focused coping, which entails directly dealing with the problem by engaging in proactive behaviors designed to remove and/or reduce the effect or presence of stressors. An example of problem-focused coping is following a plan of action, whereas trying to forget about the problem is an example of emotion-focused coping. Individuals who experience strong negative emotions when evaluating a transaction may be unable to devote the necessary time or effort to problem-focused activities (Lazarus, Averill, & Opton, 1974).

In the present study, threat appraisals serve as an indicator of affective debilitation. Threat appraisals are hypothesized to be a function of the combined effects of explanatory style and situational constraints. It is anticipated that the threat appraisals of optimists will not significantly differ as a function of constraints, whereas the
threat appraisals of pessimists under high situational constraints will be elevated relative to individuals who possess a similar explanatory style but who report facing less severe constraints.

Goal conflict

Goal conflict is defined as interference among multiple goals (Locke, et al., 1981). Drucker (1974) stated that conflicts among goals are common and can have negative effects on performance. This conflict is managed by assigning different priority levels to the goals (Austin & Bobko, 1985). Those goals with a high priority attached to them are likely to result in higher motivation and better performance than those goals with a low priority. These priorities can change, however, which can affect performance. For example, if a university student joins a social club, then his/her social life may then have a higher priority than school. The student will spend less time studying and therefore receive lower grades. Changing the priority of goals can be adaptive, however; if a student starts the semester with the goal of getting an A in a certain class and this has high priority, if the student fails the first few exams it is unrealistic to still maintain the goal for an A. Realizing that even if the student gets an A on all remaining exams he/she can only get perhaps a B in the class, a student with an optimistic explanatory style might change the goal to a B and place higher priority on another class where it may still be possible to get an A. Goals are best when they are difficult but attainable.

Most previous research has dealt with outcomes of goal setting rather than the goal setting process. However, Villanova, Peterson, &
Kyger (1988) investigated whether differences in the levels of academic goals could be explained by the diathesis-stress model of learned helplessness. Subjects responded to questionnaires that measured explanatory style, situational constraints, threat appraisals, and personal goals for an impending introductory psychology exam and goals for the course grade. Situational constraints and threat appraisals were related to both exam and course grade goals. They found that those with a pessimistic explanatory style tended to set lower goals when faced with a difficult situation than those with a pessimistic explanatory style faced with an unstressful situation. These findings suggest that explanatory style may play an important role in the regulation of aspiration level. When this is coupled with information about how individuals perceive their situation, the diathesis-stress model of learned helplessness may be useful in predicting how individuals will appraise their situation and the difficulty of the standards they try to meet (Villanova, Peterson, & Kyger, 1988). In a second study, the effects of explanatory style on actual performance were investigated. Results suggested that individuals who set lower exam grade goals tended to get lower exam grades than those individuals who set higher goals (Villanova, Peterson, & Kyger, 1988).

The present study extended the Villanova, Peterson, & Kyger (1988) study. In the Villanova et al. (1988) study, subjects were presented with questionnaires measuring explanatory style, situational constraints, threat appraisals, and exam and course grade goals. In addition to these, the present study also measured level of depression,
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goal priorities, and academic ability. Moreover, course grade goals were measured again after a midterm exam, and students' scores on the midterm were obtained. The longitudinal method used in this study allowed an investigation of how goal difficulty levels change over time following exam feedback. The following are hypotheses for the present study:

Hypothesis 1: Explanatory style and situational constraints should correlate positively with threat appraisals. A) Students with a pessimistic explanatory style should perceive the situation as more threatening than students with an optimistic explanatory style. B) Students reporting greater situational constraints should also perceive the situation as more threatening.

Hypothesis 2: Explanatory style, situational constraints, and threat appraisals should correlate negatively with goal difficulty and performance. A) Subjects with a pessimistic explanatory style should set lower goals than optimists; this should result in lower grades. B) Those subjects reporting high situational constraints should set lower goals and thus receive lower grades than students reporting low situational constraints. C) Subjects perceiving the situation as threatening should set lower goals and receive lower grades than those perceiving the situation as less threatening.

Hypothesis 3: When controlling for level of depression and academic ability, explanatory style should correlate negatively with goal difficulty and exam grades.
Hypothesis 4: Explanatory style and situational constraints should interact in the prediction of threat appraisals, midterm exam grades, goals, and course grade goals, even when controlling for level of depression and academic ability.

Hypothesis 5: Goal priority should interact with goal difficulty in predicting grade performance; difficult goals high in priority should result in higher grades than difficult goals low in priority.

Method

Subjects

One hundred eighty-two undergraduate students in an introductory psychology class at Northern Illinois University participated in the study at Time 1. One hundred seventy-four subjects returned for Time 2. Because of the large number of omitted responses on the various questionnaires only 136 subjects were used in the analyses.

Procedure

Questionnaires were administered to students in groups of approximately 35. The questionnaires were administered about one week before and one week following the midterm exam. The following briefly describes the questionnaires which were administered.

1) Academic ability. (See Appendix A). Academic ability was measured by using a modified version of the Wonderlic, which is a test of general learning ability (Wonderlic, 1961). The Wonderlic is probably the most widely used test in business and industry, and has been shown to predict well in a variety of situations. One study (Meyer, 1956) demonstrated that supervisors scoring average or above on the Wonderlic had more than
twice the chance of being rated High in on-the-job supervisory performance than did those who scored below average. This modified version is called the Diagnostic Achievement Test and consists of items that were written to represent the domain of items the Wonderlic covers. The estimated coefficient alpha of this measure was .64.

2) Academic Attributional Style Questionnaire, or AASQ. (See Appendix B). The AASQ (Peterson & Barrett, 1987) is a questionnaire patterned after the Attributional Style Questionnaire (Peterson, et al., 1982) except that subjects are presented with twelve academic events; the original ASQ presented subjects with questions about a wide variety of events. For the AASQ, the subject is given a hypothetical event and is then asked to rate each of the causes given on a five-point scale according to its internality (vs. externality), its stability (vs. instability), and globality (vs. specificity). The scores across the dimensions were averaged, providing a composite explanatory style score between 1 and 5. Scores closer to 5 are indicative of a more pessimistic explanatory style, and scores closer to 1 suggest a more optimistic explanatory style. The estimated coefficient alpha of the AASQ composite was computed to be .82.

3) Situational constraints. (See Appendix C). Previous research with college students provided the questions used in this measure (Villanova, et al., 1988). This questionnaire asks subjects to indicate the quality and availability of certain resource variables necessary for academic performance. The resource variables presented were student role-related information, required services and help from others, time availability,
and work environment. Students were asked to indicate to what extent each of the resources are of sufficient quality and availability for performing well in the introductory psychology course. These ratings were made on a five-point scale, with 1 being equal to high availability and high quality, and 5 being equal to unavailability and poor quality. Scores were added together and divided by four to obtain a composite score; scores closer to 1 reflect low situational constraints and scores closer to 5 reflect high situational constraints. The estimated coefficient alpha for the unit-weighted composite of 8 items was .73.

4) Threat appraisals. (See Appendix C). Subjects were asked to rate the extent to which they felt fearful, anxious, and worried about the problems each resource variable poses for them. Again, a five-point scale was used, with 1 being "not at all" and 5 being "a great deal." Subjects with scores closer to 10 were considered to perceive a situation as more threatening than subjects with scores closer to 1. The estimated coefficient alpha for this 12 item measure was computed to be .83.

5) Depression. (See Appendix D). Depression was measured with the short form of the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, and Erbaugh, 1961). This version consists of 13 of the original 21 items of the BDI and assesses the severity of common depressive symptoms (Peterson & Seligman, 1984). Examples of these items are sadness, pessimism, sense of failure, suicidal thoughts, dissatisfaction, self-dislike, etc. The BDI's validity in samples of university students has been found to be .78 (Bumberry, Oliver, &
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McClure, 1978). Each item and response has a value between 0 and 3; a composite score consists of each individual item value summed together for a total. From the score, the subject falls into one of four categories: nondepressed, mildly depressed, moderately depressed, and severely depressed. The estimated coefficient alpha for the BDI composite score was .82.

6) **Priority of Introductory Psychology Class.** (See Appendix E). This variable was measured by having the subject list all classes he/she is enrolled in in order of priority. A score of 1 indicated high priority of doing well in the introductory psychology class in relation to other classes the student was currently enrolled in.

**Results**

Means, standard deviations, and intercorrelations of the major variables appear in Table 1. One-tailed tests of significance of zero-order correlations were used to test Hypothesis 1: Situational constraints correlated positively with threat appraisals ($r = .26$, $p < .001$). Explanatory style was unrelated to threat appraisals ($r = .07$, ns). Zero-order correlations were also used to test Hypothesis 2: (A) Individuals with a pessimistic explanatory style set lower exam grade goals ($r = -.16$, $p < .05$) but not lower course grade goals ($r = .00$, ns), and performed worse on the midterm exam than did optimists ($r = -.13$, $p = .07$). (B) Situational constraint scores correlated negatively with exam grade goals and course grade goals ($r = -.15$, $p = .03$, and $r = -.25$, $p = .002$, respectively), but the relationship between constraints and exam performance was not statistically significant ($r = .08$, ns). (C) Threat
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appraisals correlated negatively with exam grade goals ($r=-.16$, $p<.01$) and course grade goals ($r=-.34$, $p<.001$), but were unrelated to exam performance (ns). In sum, support was mixed for the hypothesized relationships between these variables.

Hypothesis three, which stated that when controlling for level of depression and academic ability, explanatory style scores would retain statistically significant negative relationships with exam grade goals, course grade goals, and midterm exam scores. Because explanatory style was not significantly related to either course grade goals and midterm exam scores, the test of hypothesis three involving these variables was not conducted. Therefore, the estimated partial correlation between explanatory style and exam grade goals while controlling for depression and academic ability was the only viable analysis relevant to a test of this hypothesis. The relationship between explanatory style and exam grade goals was not significantly changed as a function of controlling for depression and academic ability (partial $r=.14$).

To test Hypothesis four, the sample was dichotomized on both the median AASQ score (4.22) and median situational constraints score (5.25). This resulted in four groups: (1) individuals with an optimistic explanatory style reporting low situational constraints (n=30), (2) individuals with an optimistic explanatory style reporting high situational constraints (n=35), (3) individuals with a pessimistic
explanatory style reporting a low level of situational constraints (n=40), and (4) individuals with a pessimistic explanatory style who reported experiencing a high level situational constraints (n=31).

According to the diathesis-stress model of learned helplessness, pessimists perceiving high situational constraints should set lower goals which in turn should result in lower grades. This implies an ordinal interaction between situational constraints such that the mean goal difficulty levels of individuals in groups 1 through 3 should not differ from each other but should differ from the mean goal difficulty level of individuals in group 4.

To test this hypothesis, I employed an analytical procedure suggested by Bobko (1986) for testing a hypothesized contrast in an ordinal interaction. According to Bobko, this is a two-step procedure. First, the equality of the means of the first three groups is tested by using a planned comparison one-way analysis of variance. Second, the mean of the fourth group versus the average of the first three groups is tested using a planned comparison t-test.

Since the analysis departed somewhat from Bobko's (1986) original method in that it involved the use of two covariates, I conducted a series of tests to investigate whether the assumption of homogenous regression slopes was tenable. These analyses indicated that the assumption of equal regression slopes was supported for covariance analyses involving threat appraisals and course grade goals. However, this assumption was violated with respect to exam grade goals and midterm exam scores. Subsequent analyses involving the latter two
dependent measures required within-cell adjustments of observed scores which are reported in greater detail below.

The multivariate analysis of covariance procedure of the SPSS-PC+ Version 2 (Norusis, 1988) statistical program, with the appropriate specified contrasts, was used to test hypothesis four. Step one of Bobko's (1986) procedure involving threat appraisals indicated that the three groups whose scores I wished to pool did not differ from each other ($F(2,131)=1.56$, ns). Therefore, I proceeded to conduct step two of Bobko's method. The planned contrast involving the pooled scores of groups 1 through 3 versus those of group 4 indicated that the threat appraisals of individuals in group 4 did not differ statistically from those of groups 1 through 3 ($F(1,132)=1.06$, ns; see Table 2).

Identical analyses conducted on participants' course grade goals indicated that the assumption of equality among the means of the three groups' data whom I wished to pool was not supported ($F(2,131)=6.66$, $p<.01$) (See Table 2). The failure to support this statistical assumption indicates that the pattern of cell means is more complex than expected by theory. In this case, I analyzed these data through a moderated regression framework that served as an omnibus test of differences between cell means. For this analysis, individual scores on the two independent variables are standardized, and are later multiplied to form a cross-product term that "carries" the interaction (Cohen &
Cohen, 1983). First, scores on the Beck Depression Inventory and Diagnostic Achievement Test are entered simultaneously as a block. Next, the variables explanatory style and situational constraints are entered simultaneously to test for main effects, and finally the cross-product term of explanatory style and situational constraints is entered to test for an interaction between these two variables in explaining course grade goals. The main effect for situational constraints was the only statistically significant effect for any independent variable appearing in the equation ($F(5,130)=4.06$, $p<.01$, for the full equation; $F(5,130)=7.02$, $p<.01$ for situational constraints; $R^2=.22$).

The data of two dependent variables involved in tests of the diathesis-stress hypothesis required within cell adjustment scores since the violation of the homogeneity of regression slopes assumption suggested that the relationship between the covariates and the two remaining dependent variables (viz., exam grade goal and midterm exam scores) was not uniform across all cells of the design. Therefore, adjustments unique to each cell mean were conducted (Kerlinger & Pedhauzer, 1973; see Table 3). This results in a loss of statistical power as a function of the unique estimation of these parameters. The first contrast specified by Bobko's (1986) procedure yielded no statistically significant effects; the scores of the three groups we wished to pool could be assumed to have been drawn from a common population ($F(2,125)<1$). The planned contrast that serves as a test of the diathesis-stress hypothesis indicated that pessimists who reported facing a more constraining situation set lower goals for the midterm
exam, but this difference did not reach conventional levels of statistical significance ($F(1,126)=3.63, p<.10$).

A test of the diathesis-stress hypothesis employing midterm exam scores as the dependent variable again indicated that the necessary assumption of group equivalence was tenable ($F(2,125)<1$). Therefore, step two of Bobko's (1986) procedure was conducted. This analysis indicated that the difference between the groups comprising this planned comparison was not statistically significant ($F(1,126)<1$).

Moderated regression was used to test Hypothesis five. First, priority and exam grade goal were entered simultaneously as a block to test for main effects. Next, the interaction between goal priority and exam grade goal was entered. The main effect for exam grade goal was the only statistically significant effect for any variable in the equation ($F(3,133)=5.02, p<.01$ for the full equation; $F(3,133)=8.11, p<.01$ for exam grade goal; $B=.25$; see Table 4).

Discussion

In general, modest support was found for the diathesis-stress model of learned helplessness with respect to goal setting and performance. First, difficult goals were positively related to subsequent
performance. Individuals with a pessimistic explanatory style (uses internal, stable, and global attributions) set lower goals for the midterm exam score and performed worse on the exam than optimists did, but there was no significant difference between optimists and pessimists with respect to course grade goals; pessimists did not set lower goals than optimists.

Second, subjects reporting high situational constraints set lower goals for both the midterm exam and course grade, but they did not perform worse on the exam than subjects reporting low situational constraints. In addition, individuals perceiving their situation as more threatening set lower exam grade goals and course grade goals, but this did not result in lower exam performance than for those individuals perceiving their situation as less threatening.

Third, when controlling for level of depression and academic ability, the relationship between explanatory style and exam grade goal did not change when controlling for ability and depression. This suggests that the observed relationship between explanatory style and exam grade goal was not the product of a third variable.

Fourth, the interaction between explanatory style and situational constraints did not predict threat appraisals, goal difficulty, or exam performance. Finally, contrary to expectations, goal priority did not interact with goal difficulty in the prediction of midterm exam grade; difficult goals high in priority did not result in better exam performance than difficult goals low in priority.
There are several plausible explanations for the absence of significant findings. In the first place, participants were asked to fill out several questionnaires, and an individual leaving any one of the items unanswered was excluded from data analysis, thus decreasing the sample size from 182 to 136 participants. This smaller sample size decreased the power of the test. Just the same, the power of the one-tailed tests of zero-order correlations were estimated to be approximately .95. Therefore, statistical power for tests of the main effects was certainly well above the .80 probability level recommended by Cohen (1977).

A second explanation rests upon how the study was conducted. Each session involved the participation of 35-40 individuals, which could have introduced such problems as potential loss of concentration, failure to follow directions, etc. In fact, approximately 25% of the data from original participants in the study was in some way spoiled. Perhaps, the significant results observed in the Villanova, et al. (1988) study may have been due in part to the fact that participants were administered questionnaires in groups of only 20 at a time and the spoilage rate was less than 2%.

The failure to predict exam performance might partly be a function of how performance was measured. The midterm exam scores were based on multiple-choice items in which guessing plays a role, thus introducing a potentially large amount of random error in the scores. Note that Villanova et al. (1988) used a similar multiple choice exam as the
criterion and likewise failed to find differences in exam performance among their sample of respondents.

The absence of significant effects for explanatory style may also be due to the small differences in the means which distinguish optimists from pessimists. On a 7-point scale, the mean for optimists was approximately 3.7 and the mean for pessimists approximately 4.7; a score closer to 6 or 7 would have been more representative of a pessimistic explanatory style, likewise, a score closer to 1 or 2 would have been more characteristic of an optimistic explanatory style. This same line of reasoning also holds for situational constraints. The differences in mean scores characterizing low and high situational constraints were not extreme; with an upper bound of 10 the mean score characterizing low situational constraints was approximately 4.3 and for high situational constraints approximately 6.1. This suggests that situational constraints acted as more of a nuisance for the students participating in this study than actual constraints.

The lack of an observed relationship between goal priority and performance may be due to the way that priority was measured. The questionnaire measured the priority of the introductory psychology class in relation to other classes but did not take into account the priority that the class had in relation to other non-academic circumstances. It is possible that while the introductory class may have had the highest priority of all the classes the student is taking, school in general may not have been a high priority for the student.
Although these findings resulted in modest support for the hypotheses, it cannot be concluded that the theory of learned helplessness is incorrect; especially in light of the observations noted above. Perhaps future research can provide a better test of the diathesis-stress hypothesis by attending to the shortcomings of the present study. Albeit, the shortcomings were not apparent until the data had been collected and analyzed.

This study had several desirable features which facilitated answers to several questions that remained previously unanswered. For example, this study controlled for several third variables that could plausibly explain the relationship between explanatory style and goal setting. When controlling for third variables, it was found that explanatory style retained its original relationship with exam grade goals. This suggests that third variable accounts for the observed relationship between explanatory style and aspiration level are not as persuasive as they once may have appeared. Also, this study was longitudinal, which, had I found statistically significant results, would have facilitated arguments of causal relationships among the variables.

Future research may wish to address the issue of how priority changes as a result of feedback; if pessimists may not change goals in times of adversity might they also not change priorities? Also, other potentially important aspects of goal setting were not studied. For example, goal commitment (Hollenbeck & Klein, 1987) may moderate the relationship between goal difficulty and performance. Pessimists may be
less committed to attaining their goals, particularly those high in difficulty because they tend to anticipate negative feedback.

In conclusion, the results of this study do not support the diathesis-stress model of learned helplessness, but the lack of significant findings can be explained by many factors. Further discussion of the validity of this model must await more conclusive data.
References


Table 1

Correlation Matrix of Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Explanatory Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Constraints</td>
<td>-.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 BDI</td>
<td>.24* .26*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Diagnostic Achievement Test</td>
<td>.03 .00 -.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Exam Grade Goal</td>
<td>-.16 -.16 -.16 -.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Course Grade Goal</td>
<td>.00 -.25* -.19 .22* .48**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Threat Appraisal</td>
<td>.07 .26* .26* -.22 -.23* -.35**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Exam Grade</td>
<td>-.13 .08 -.17 .11 .29** .48 -.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Priority</td>
<td>.03 .15 .01 .07 .10 .06 -.17 -.12</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.21 5.19 5.29 2.74 3.40 3.18 9.24 44.30 2.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>s.d.</td>
<td>.62 1.16 4.17 5.16 .72 .67 .73 2.56 1.06</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Each coefficient above was computed with a sample size of N=136. Two-tailed tests of significance are reported in this matrix; see the text for discussion of specific one-tailed tests.

*p<.05. **p<.01.
Table 2

Mean Course Grade Goal Scores and Threat Appraisal Scores as a Function of Explanatory Style and Situational Constraints

<table>
<thead>
<tr>
<th>Situational Constraints</th>
<th>Explanatory Style</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Optimistic</td>
<td>2.53</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td>(.75)</td>
<td>(.67)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pessimistic</td>
<td>5.22</td>
<td>4.31</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.61)</td>
<td></td>
</tr>
<tr>
<td>Threat Appraisals</td>
<td>Optimistic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.75)</td>
<td>(.67)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pessimistic</td>
<td>5.22</td>
<td>4.31</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.61)</td>
<td></td>
</tr>
<tr>
<td>Course Grade Goal</td>
<td>Optimistic</td>
<td>1.83</td>
<td>2.17</td>
</tr>
<tr>
<td></td>
<td>(.65)</td>
<td>(.75)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pessimistic</td>
<td>1.60</td>
<td>2.13</td>
</tr>
<tr>
<td></td>
<td>(.67)</td>
<td>(.71)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses.
Table 3

Adjusted Mean Exam Grade Goal Scores and Midterm Exam Scores as a Function of Explanatory Style and Situational Constraints

<table>
<thead>
<tr>
<th>Situational Constraints</th>
<th>Dependent Variable</th>
<th>Style</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exam Grade Goal</td>
<td>Optimistic</td>
<td>1.40</td>
<td>1.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.52)</td>
<td>(.65)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pessimistic</td>
<td>1.50</td>
<td>1.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.59)</td>
<td>(.72)</td>
</tr>
<tr>
<td></td>
<td>Midterm Exam Score</td>
<td>Optimistic</td>
<td>44.47</td>
<td>45.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(6.18)</td>
<td>(5.36)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pessimistic</td>
<td>44.20</td>
<td>43.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7.73)</td>
<td>(6.41)</td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses.
Table 4

Mean Midterm Exam Scores as a Function of Exam Grade Goals and Goal Priority

<table>
<thead>
<tr>
<th>Exam Grade Goal Difficulty</th>
<th>Goal</th>
<th>Priority</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td>44.41</td>
<td>46.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(6.63)</td>
<td>(6.63)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td></td>
<td>41.75</td>
<td>44.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.37)</td>
<td>(6.30)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses.
DIAGNOSTIC ACHIEVEMENT TEST

Read this page carefully. Do NOT turn this page until you are instructed to do so.

- First, set other materials aside so that you have before you a RED OPSCAN, THIS TEST, and a #2 PENCIL.

- Second, read the remaining directions carefully and wait for the experimenter to signal when to begin.

Description and Directions

This is a test of problem-solving ability. It contains a variety of questions. Below are some sample questions.

EXAMPLE #1: REAP is the opposite of:
A. obtain    B. cheer    C. continue    D. sow

EXAMPLE #2: Gasoline sells for 95 cents per gallon. What will 6 gallons cost?
A. $7.50    B. $5.70    C. $4.85    D. $6.50

The correct answer to example 1 is (D) "sow". The correct answer to example 2 is (B) $5.70.

This test contains 18 questions. It is unlikely that you will finish all of them, but do your best. When the experimenter tells you to begin, you will be given exactly 4 minutes to work as many as you can. Do not go so fast that you make mistakes since you must try to get as many right as possible. Please answer the questions in the order they appear—do not skip about.

PLEASE MARK YOUR ANSWER TO EACH QUESTION ON THE RED OPSCAN.
1. USUAL is the opposite of:
   A. rare        B. habitual     C. regular     D. always

2. Look at the row of numbers below. What number should come next?
   8 4 2 1 1/2 1/4 7
   A. 1/6    B. 1/2    C. 1/8    D. 1/16

3. A train travels 300 feet in 1/2 second. At this same speed, how many feet will it travel in 10 seconds?
   A. 6000    B. 4000    C. 3000    D. 1200

4. In the following set of words, which word is different from the others?
   A. troop     B. league     C. pack     D. participate

5. Which word below is related to smell as chew is to teeth?
   A. sweet     B. stink      C. odor      D. nose

6. A boy is 5 years old and his sister is twice as old. When the boy is 8 years old, what will be the age of his sister?
   A. 12    B. 16    C. 13    D. 15

7. A watch lost 1 minute 18 seconds in 39 days. How many seconds did it lose per day?
   A. 2 seconds    B. 3 seconds    C. 1.8 seconds    D. 1.5 seconds

8. REMOTE is the opposite of:
   A. secluded    B. near     C. exact     D. far

9. CREDITABLE CREDULOUS - Do these words have:
   A. similar meaning
   B. contradictory meaning
   C. mean neither same nor opposite

10. Our baseball team lost 9 games this season. This was 3/8 of:
    A. 24    B. 30    C. 27    D. 18
11. One number in the following series does not fit in with the pattern set by the others. What should that number be?
   1/2  1/4  1/6  1/8  1/9  1/12
   A. 1/16  B. 1/10  C. 1/3  D. 1/5

12. Assume that the first two statements are true. Is the final one:
   A) TRUE,  B) FALSE,  3) NOT CERTAIN
   "Great men are ridiculed"
   "I am ridiculed"
   "I am a great man"

13. A skirt requires 2 1/4 yards of material. How many can be cut from 45 yards?
   A. 12  B. 20  C. 24  D. 50

14. A dealer bought some cars for $40000. He sold them for $50000, making $500 on each car. How many cars were involved?
   A. 20  B. 40  C. 10  D. 15

15. CAPTURE is the opposite of:
   A. place  B. release  C. venture  D. risk

16. Lemons sell at 3 for 10 cents. How much will 1 1/2 dozen cost?
   A. 60 cents  B. 48 cents  C. 36 cents  D. 72 cents

17. Which number in the following group of numbers represents the smallest amount?
   A. 6  B. .123  C. .331  D. 11

18. Assume that the first two statements are true. Is the final statement:
   A) TRUE,  B) FALSE,  C) NOT CERTAIN
   "John is the same age as Sally"
   "Sally is younger than Bill"
   "John is younger than Bill"

If you have time left over, you may check your answers.
INTERPRETATION OF ACADEMIC EVENTS

Please try to imagine yourself in the situations that follow. If such a situation were to happen to you, what would you feel would have caused it? While events have many causes, we want you to pick only one—the major cause in this event happened to you.

Please write this cause in the blank provided after each event. Then we want you to answer three questions about the cause you provided. First, is the cause of this event something about you or something about other people or circumstances? Second, is the cause of this event something that will persist across time or something that will never again be present? Third, is the cause of this event something that affects all situations in your life or something that only affects just this type of event?

To summarize, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the one major cause of the situation if it happened to you.
3. Write the cause in the blank provided.
4. Answer three questions about the cause.
1. You cannot get all the reading done that your instructor assigns.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

- totally due to others 1 2 3 4 5 6 7
- totally due to me

C. In the future, will this cause again be present? (circle one number)

- never present
- always present 1 2 3 4 5 6 7

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

- just this situation
- all situations 1 2 3 4 5 6 7

2. You fail a final examination.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

- totally due to others 1 2 3 4 5 6 7
- totally due to me

C. In the future, will this cause again be present? (circle one number)

- never present
- always present 1 2 3 4 5 6 7

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

- just this situation
- all situations 1 2 3 4 5 6 7
3. You show up for a class and find to your surprise that there is a quiz.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

<table>
<thead>
<tr>
<th>totally due to others</th>
<th>totally due to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

C. In the future, will this cause again be present? (circle one number)

<table>
<thead>
<tr>
<th>never present</th>
<th>always present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

<table>
<thead>
<tr>
<th>just this situation</th>
<th>all situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

4. You are on academic probation.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

<table>
<thead>
<tr>
<th>totally due to others</th>
<th>totally due to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

C. In the future, will this cause again be present? (circle one number)

<table>
<thead>
<tr>
<th>never present</th>
<th>always present</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

<table>
<thead>
<tr>
<th>just this situation</th>
<th>all situations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
5. You do not have high enough grades to switch to your desired major.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

<table>
<thead>
<tr>
<th>totally due to others</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>totally due to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. In the future, will this cause again be present? (circle one number)

<table>
<thead>
<tr>
<th>never present</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>always present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

<table>
<thead>
<tr>
<th>just this situation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>all situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. You cannot solve a single problem in a set of twenty assigned as homework.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

<table>
<thead>
<tr>
<th>totally due to others</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>totally due to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. In the future, will this cause again be present? (circle one number)

<table>
<thead>
<tr>
<th>never present</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>always present</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

<table>
<thead>
<tr>
<th>just this situation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>all situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
You are dropped from the university because your grades are to low.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

totally due to others 1 2 3 4 5 6 7 totally due to me

C. In the future, will this cause again be present? (circle one number)

never present 1 2 3 4 5 6 7 always present

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

just this situation 1 2 3 4 5 6 7 all situations

You cannot get started writing a paper.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

totally due to others 1 2 3 4 5 6 7 totally due to me

C. In the future, will this cause again be present? (circle one number)

never present 1 2 3 4 5 6 7 always present

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

just this situation 1 2 3 4 5 6 7 all situations
   A. Write down the one major cause:

   B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

   totally due
to others 1 2 3 4 5 6 7
totally due
to me

   C. In the future, will this cause again be present? (circle one number)

   never
present 1 2 3 4 5 6 7
always
present

   D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

   just this
situation 1 2 3 4 5 6 7
all
situations

10. The required textbook for a course is unavailable in the school bookstore.
   A. Write down the one major cause:

   B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

   totally due
to others 1 2 3 4 5 6 7
totally due
to me

   C. In the future, will this cause again be present? (circle one number)

   never
present 1 2 3 4 5 6 7
always
present

   D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

   just this
situation 1 2 3 4 5 6 7
all
situations
11. You get a D in a course required for your major.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

    totally due
to others 1 2 3 4 5 6 7
totally due
to me

C. In the future, will this cause again be present? (circle one number)

    never
    present 1 2 3 4 5 6 7
    always
    present

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

    just this
    situation 1 2 3 4 5 6 7
    all
    situations

12. You cannot understand the points a lecturer makes.

A. Write down the one major cause:

B. Is the cause of this due to something about you or something about other people or circumstances? (circle one number)

    totally due
to others 1 2 3 4 5 6 7
totally due
to me

C. In the future, will this cause again be present? (circle one number)

    never
    present 1 2 3 4 5 6 7
    always
    present

D. Is this cause something that affects just this type of situation, or does it also influence other areas of your life? (circle one number)

    just this
    situation 1 2 3 4 5 6 7
    all
    situations
INSTRUCTIONS: This questionnaire asks you to describe your circumstances with respect to introductory psychology. Specifically, it asks you to report to what extent certain "resource variables" pose a problem for you at this time. Resource variables are aspects of your situation that can help or hinder your performance in introductory psychology.

As you work through the questionnaire, please respond as accurately as possible to each item. There are no right or wrong answers. Please make DARK MARKS when indicating your responses on the OPSCAN so that scoring errors can be kept to a minimum.
STUDENT ROLE-RELATED INFORMATION: Refers to the information (from instructors, peers, others, course and university policies and procedures, and so forth) needed for you to perform well in introductory psychology (PSYC 102).

A. To do well in PSYC 102, STUDENT ROLE-RELATED INFORMATION is:
1. UNIMPORTANT (A) (B) (C) (D) (E) IMPORTANT

B. Availability: STUDENT ROLE-RELATED INFORMATION need to perform as a student in PSYC 102 is:
2. AVAILABLE (A) (B) (C) (D) (E) UNAVAILABLE

C. Quality: The quality of the STUDENT ROLE-RELATED INFORMATION I receive about PSYC 102 is:
3. GOOD QUALITY (A) (B) (C) (D) (E) POOR QUALITY

To what extent do you feel each of the following emotions with respect to your STUDENT ROLE-RELATED INFORMATION circumstances and the upcoming exam in PSYC 102? Please base your response on the scale below:

(A) (B) (C) (D) (E)
not at all a great deal

4. WORRIED
5. EAGER
6. ANXIOUS
7. FEARFUL
8. CONFIDENT
9. HOPEFUL

10. To what extent do you believe that you can do something to improve your circumstances with respect to STUDENT ROLE-RELATED INFORMATION BEFORE the next intro psych exam?
(A) (B) (C) (D) (E)
I doubt I can do anything about it I am sure I can do something about it

11. With respect to STUDENT ROLE-RELATED INFORMATION, I would say that compared to my PSYC 102 peers, I am:
(A) (B) (C) (D) (E)
far better off about the same far worse off
REQUIRED SERVICES AND HELP FROM OTHERS: Refers to the services and help from others (fellow students, graduate teaching assistants, instructors) needed for you to perform well in introductory psychology (PSYC 102).

A. To do well in PSYC 102, REQUIRED SERVICES AND HELP FROM OTHERS is:

12. UNIMPORTANT (A) (B) (C) (D) (E) IMPORTANT

B. Availability: REQUIRED SERVICES AND HELP FROM OTHERS needed to perform as a student in PSYC 102 is:

13. AVAILABLE (A) (B) (C) (D) (E) UNAVAILABLE

C. Quality: The quality of the REQUIRED SERVICES AND HELP FROM OTHERS I receive with respect to PSYC 102 is:

14. GOOD QUALITY (A) (B) (C) (D) (E) POOR QUALITY

To what extent do you feel each of the following emotions with respect to your REQUIRED SERVICES AND HELP FROM OTHERS circumstance and the upcoming exam in PSYC 102? Please base your response on the scale below:

<table>
<thead>
<tr>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td>a great deal</td>
</tr>
</tbody>
</table>

15. WORRIED
16. EAGER
17. ANXIOUS
18. FEARFUL
19. CONFIDENT
20. HOPEFUL

21. To what extent do you believe that you can do something to improve your circumstance with respect to REQUIRED SERVICES AND HELP FROM OTHERS before the next intro psych exam?

<table>
<thead>
<tr>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I doubt I can do</td>
<td>I am sure I can do something about it</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. With respect to REQUIRED SERVICES AND HELP FROM OTHERS, I would say that compared to my PSYC 102 peers, I am:

<table>
<thead>
<tr>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>far better off</td>
<td>about the same</td>
<td>far worse off</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TIME AVAILABILITY:** Refers to the availability of time needed to perform student functions of PSYC 102, taking into consideration time limits, interruptions, unnecessary meetings, and distractions.

A. To do well in PSYC 102, **TIME AVAILABILITY** is:

23. **UNIMPORTANT** (1) (2) (3) (4) (5) (6) (7) **IMPORTANT**

B. Availability: **TIME AVAILABILITY** needed to perform as a student in PSYC 102 is:

24. **AVAILABLE** (1) (2) (3) (4) (5) (6) (7) **UNAVAILABLE**

C. Quality: The quality of the **TIME AVAILABILITY** I receive with respect to PSYC 102 is:

25. **GOOD QUALITY** (1) (2) (3) (4) (5) (6) (7) **POOR QUALITY**

To what extent do you feel each of the following emotions with respect to your **TIME AVAILABILITY** circumstance and the upcoming exam in PSYC 102? Please base your response on the scale below:

(1) (2) (3) (4) (5) (6) (7)
not at all a great deal

26. WORRIED
27. EAGER
28. ANXIOUS
29. FEARFUL
30. CONFIDENT
31. HOPEFUL

32. To what extent do you believe that you can do something to improve your circumstance with respect to **TIME AVAILABILITY** before the next intro psych exam?

(1) (2) (3) (4) (5) (6) (7)
I doubt I can do anything about it I am sure I can do something about it

33. With respect to **TIME AVAILABILITY,** I would say that compared to my PSYC 102, I am:

(1) (2) (3) (4) (5) (6) (7)
far better off about the same far worse off
**WORK ENVIRONMENT**: Refers to the physical aspects (inappropriate workspace, lighting, noise, temperature) that affect your ability to perform student functions in PSYC 102.

A. To do well in PSYC 102, WORK ENVIRONMENT is:

34. UNIMPORTANT (A) (B) (C) (D) (E) IMPORTANT

B. availability: WORK ENVIRONMENT needed to perform as a student in PSYC 102 is:

35. AVAILABLE (A) (B) (C) (D) (E) UNAVAILABLE

C. Quality: The quality of the WORK ENVIRONMENT I receive with respect to PSYC is:

36. GOOD QUALITY (A) (B) (C) (D) (E) POOR QUALITY

To what extent do you feel each of the following emotions with respect to your WORK ENVIRONMENT circumstance and the upcoming exam in PSYC 102? Please base your response on the scale below:

(A) (B) (C) (D) (E)
not at all a great deal

37. WORRIED
38. EAGER
39. ANXIOUS
40. CONFIDENT
41. CONFIDENT
42. HOPEFUL

43. To what extent do you believe that you can do something to improve your circumstance with respect to WORK ENVIRONMENT before the next intro psych exam?

(A) (B) (C) (D) (E)
I doubt I can do anything about it I am sure I can do something about it

44. With respect to WORK ENVIRONMENT, I would say that compared to my PSYC 102 peers, I am:

(A) (B) (C) (D) (E)
far better off about the same far worse off
PSYC 102 GOALS

45. Using the scale below, what is your COURSE GRADE GOAL for PSYC 102?

A) A  B) B  C) C  D) D

46. Using the same scale above, please indicate what your goal with respect to your grade on the NEXT PSYC 102 EXAM is.

EXAM IMPORTANCE

Each of the questions below ask you your perceptions of how important it is to do well on the next PSYC 102 exam. Refer to the following scale to indicate whether each statement accurately reflects how you feel about the next exam.

A  B  C  D  E
this statement ACCURATELY reflects my feelings about the next exam
this statement INACCURATELY reflects feelings about the next exam

47. My grade on the next exam will likely determine how well I do in the PSYC 102 course this quarter.

48. My grade on the next exam will affect how positively I see myself as a responsible and able student.

49. My grade on the next exam will affect how positively others will see me as a responsible and able student.

50. My grade on the next exam will determine how much effort I put into PSYC 102 the rest of this quarter.
SELF-PERCEPTIONS

Please answer the questions which follow on the scale provided below:

1
STRONGLY
AGREE

2
AGREE

3
DISAGREE

4
STRONGLY
DISAGREE

51. Trying to do well in PSYC 102 is very frustrating.
52. Most everything I do to prepare for PSYC 102 exams seem to result in wasted effort.
53. I know that if I apply myself, I can do well on the next PSYC 102 exam.
Thoughts and Feelings

Instructions: This is a questionnaire. On the questionnaire are groups of statements. Please read the entire group of statements in each category. Then pick out the one statement in that group which best describes the way you feel today, that is, right now!! Circle the letter beside the statement you have chosen. If several statements in the group seem to apply equally well, circle each one.

BE SURE TO READ ALL THE STATEMENTS IN EACH GROUP BEFORE MAKING YOUR CHOICE.

1.
A I am so sad or unhappy that I cannot stand it.
B I am blue or sad all the time and I can't snap out of it.
C I feel sad or blue.
D I do not feel sad.

2.
A I feel that the future is hopeless and that things cannot improve.
B I feel I have nothing to look forward to.
C I feel discouraged about the future.
D I am not particularly pessimistic or discouraged about the future.

3.
A I feel I am a complete failure as a person.
B As I look back on my life, all I can see is a lot of failures.
C I feel I have failed more than the average person.
D I do not feel like a failure.

4.
A I am dissatisfied with everything.
B I don't get satisfaction out of anything anymore.
C I don't enjoy things the way I used to.
D I am not particularly dissatisfied.

5.
A I feel as though I am very bad or worthless.
B I feel quite guilty.
C I feel bad or unworthy a good part of the time.
D I don't feel particularly guilty.

6.
A I hate myself.
B I am disgusted with myself.
C I am disappointed in myself.
D I don't feel disappointed in myself.
7.  
A I would kill myself if I had the chance.
B I have definite plans about committing suicide.
C I feel I would be better off dead.
D I don't have any thoughts of harming myself.

8.  
A I have lost all of my interest in other people and don't care about them at all.
B I have lost most of my interest in other people and have little feeling for them.
C I am less interested in other people than I used to be.
D I have not lost interest in other people.

9.  
A I can't make any decisions at all anymore.
B I have great difficulty in making decisions.
C I try to put off making decisions.
D I make decisions as well as ever.

10.  
A I feel that I am ugly or repulsive-looking.
B I feel that there are permanent changes in my appearance and they make me look unattractive.
C I am worried that I am looking old or unattractive.
D I don't feel that I look any worse that I used to.

11.  
A I can't do any work at all.
B I have to push myself very hard to do anything.
C It takes extra effort to get started at doing something.
D I can work about as well as before.

12.  
A I get too tired to do anything.
B I get tired from doing anything.
C I get tired more easily than I used to.
D I don't get any more tired than usual.

13.  
A I have no appetite at all anymore.
B My appetite is much worse now.
C My appetite is not as good as it used to be.
D My appetite is no worse than usual.