Title: Using multiple risk factors to assess the behavioral, cognitive, and affective effects of learned helplessness
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Abstract:
Rather than examining the effect of the pessimistic explanatory style on an outcome variable reflecting a single domain, I studied the effects of multiple learned-helplessness risk factors on behavioral, cognitive, and affective variables. Undergraduate students completed the Learned Helplessness Scale (Quinless & McDermott-Nelson, 1988) as a measure of their expectation of uncontrollability and the Explanatory Style Questionnaire (Peterson et al., 1982) to determine their explanations for both positive and negative events. Results revealed a significant effect for risk level, with students at greater risk of helplessness reporting significantly more procrastination, lower grade point averages, and more dysphoria. These results support the use of multiple risk factors representing all learned-helplessness precursors and the assessment of learned-helplessness deficits drawn simultaneously from behavioral, cognitive, and affective domains.

Full Text:
A POPULAR PRAYER asks for the serenity to accept what we cannot change or control. Too much acceptance may cause some people to bypass serenity and arrive instead at learned helplessness (LH). LH describes the maladaptive passivity that results from believing that important, often negative events are beyond a person's control. Once a person develops the expectation that many events will be uncontrollable, he or she is at risk of developing helplessness (Maier & Seligman, 1976; Seligman, 1975).

In addition to this expectation of uncontrollability, the attributional reformulation of the LH model (Abramson, Seligman, & Teasdale, 1978) adds a second risk factor for helplessness. People learn to be helpless if they explain their inability to control important events by blaming internal (“It's me!”), global (“It'll affect everything I do!”), and stable (“It'll last forever!”) causes. Although not articulated in LH theory, this pessimistic explanatory style could contribute to helplessness by confirming the expectation of uncontrollability. By attributing uncontrollable negative outcomes to internal, all encompassing, and lasting causes, people may perpetuate the belief that future events will also be uncontrollable.

Despite this possible link between the expectation of uncontrollability and the pessimistic explanatory style, the latter has eclipsed the importance of the expectation of uncontrollability as a risk factor in LH research. One reason may be methodological. Whereas the expectation of uncontrollability typically had to be assessed by determining a person's susceptibility to experimental LH induction (see, e.g., Raps, Peterson, Jonas, & Seligman, 1982), the pessimistic explanatory style can be assessed with a short paper-and-pencil inventory: the Explanatory Style Questionnaire (Peterson et al., 1982). Quinless and McDermott-Nelson (1988) developed a short paper-and-pencil inventory (the Learned Helplessness Scale), which appears to assess the expectation of uncontrollability, yet it has received little attention in the research literature (McKean, 1991).

Scant attention has also been paid to techniques designed to more fully utilize the information obtained from the Explanatory Style Questionnaire. Rather than attending only to a person's explanatory style for negative outcomes, techniques have been tested that utilize a composite explanatory style for both positive and negative events (see, e.g., Petiprin & Johnson, 1991). Helplessness may also be associated with the tendency to attribute positive outcomes to external, specific, and unstable causes. This pattern reinforces the person's belief that success is due to ephemeral factors beyond his or her control.
Taking this into account, Miller and Ross (1975) and Petiprin and Johnson (1991) suggested combining explanatory styles for positive and negative events by forming two explanatory style groups. A self-serving explanatory style helps to prevent the development of helplessness. The self-serving person takes credit for positive events by attributing them to internal, global, and stable causes and minimizes negative outcomes by shifting them onto external, specific, and unstable causes. The self-derogating style associated with learned helplessness results from blaming oneself for negative events by attributing them to internal, global, and stable causes, while minimizing successes by attributing them to external, specific, and unstable factors.

Despite the development of such techniques, sole reliance on the pessimistic explanatory style as a risk factor for helplessness abounds. The pessimistic explanatory style has been shown to be related to failure and quitting among beginning insurance salespeople (Seligman & Schulman, 1986), poor academic performance in college students (Peterson & Barrett, 1987), depression in college students told they had failed an exam (Metalsky, Abramson, Seligman, Semmel, & Peterson, 1982), and most recently, stress-induced illness in members of Harvard University's longitudinal Study of Adult Development (Peterson, Seligman, & Vaillant, 1988).

Most LH studies share another feature. In addition to their reliance on the pessimistic explanatory style as the sole helplessness risk factor, most have also sought helplessness effects in only a single domain. A key point of the original LH model is that helplessness is manifested in behavioral, cognitive, and affective domains simultaneously (Maier & Seligman, 1976; Seligman, 1975). Behavioral effects can include passivity, giving up, and (a recent addition to the list) procrastination (McKean, 1991). Cognitive effects include decreased problem-solving ability, frustration, and lowered self-esteem. Affective deficits usually feature dysphoria or depressed mood following negative outcomes.

Thus, when viewed from this perspective, most LH studies have not (a) addressed the expectation of uncontrollability as a risk factor for helplessness, (b) addressed the role of explanatory style for both positive and negative outcomes as risk factors for helplessness, or (c) included measures of behavioral, cognitive, and affective deficits to simultaneously test for helplessness effects in all three domains. The purpose of this study was to address these trends and examine a more complete LH model by including (a) measures of both risk factors, and (b) all three helplessness deficit domains. It was hypothesized that greater expectation of uncontrollability and a more self-derogating explanatory style would affect college students' academic performance by placing them at risk of LH. Therefore, high-risk students were expected to report significantly (a) more procrastination on academic tasks (behavioral deficit), (b) lower college grade point averages (GPAs; cognitive deficit), and (c) more dysphoria in response to negative outcomes (affective deficit).

Method

Participants and Materials

One hundred twenty-two female and 56 male undergraduates at two rural southeastern Ohio colleges volunteered to participate in return for extra credit in introductory psychology courses. The average age of the students was 20.01 years; 38% were freshmen, 27% were sophomores, 17% were juniors, and 18% were seniors. Students were predominantly White (less than 5% were minorities) and from middle- or working-class homes.

Learned Helplessness Scale (LHS). Quinless and McDermott-Nelson (1988) designed this 20-item scale to assess respondents' expectations of uncontrollability. Respondents indicate their level of agreement on 4-point Likert scales. Possible scores range from 20 to 80, with higher scores suggesting greater helplessness due to the perception that events are beyond the respondent's control. Scores above 41 are attained by respondents who at least "somewhat agree" with most statements. This scale remains the only published measure of helplessness-related expectations and so was included despite its limited use and relatively meager evidence of reliability and validity. Face and content validity are more easily defended, as helplessness researchers Seligman and Peterson assisted the creators of the scale in item development and selection.
Explanatory Style Questionnaire (ESQ). Peterson et al. (1982) developed this questionnaire to determine people's characteristic manner of explaining positive and negative outcomes. Respondents generate causes for six positive and six negative events. These causes are then rated on the following attributional dimensions using 7-point scales: (a) internal-external, (b) global-specific, and (c) stable-unstable. For each event, scores for the three attributional dimensions are summed and can range from 3 to 21. Higher scores indicate a more pessimistic explanatory style. A composite score for the six positive and six negative events is obtained, and the total negative score is subtracted from the total positive score. A median split is then used to divide respondents into self-serving (above the median) and self-derogating (below the median) explanatory style groups (Miller & Ross, 1975; Petiprin & Johnson, 1991). Original test-retest reliabilities for the ESQ range from .57 to .70. Extensive evidence of concurrent and criterion validity has been established (for reviews of this literature, see Peterson & Seligman, 1984 and 1987).

Procrastination Assessment Scale for Students (PASS). Solomon and Rothblum (1984) developed this scale to assess students' tendency to procrastinate on several major academic tasks: studying for tests, writing papers, and completing assigned readings. Students indicate (a) the degree to which they procrastinate and (b) their level of anxiety as a result of their procrastination on these tasks via 5-point Likert scales. Ratings for these two items are summed across the three tasks. Possible scores range from 6 to 30, with higher scores indicating a greater tendency to procrastinate and experience anxiety as a result of that procrastination. Scores of 18 and above are attained by students who report at least moderate levels of procrastination and anxiety on the three tasks. As with the LHS, evidence of reliability and validity is limited, yet this remains the only published index of academic procrastination. Test-retest reliabilities average .6, and PASS scores were modestly but significantly related to the number of quizzes postponed to the final five weeks of the semester in a self-paced course (Solomon & Rothblum).

Grade point average. To protect students' anonymity during data collection, it was decided not to obtain GPAs from the registrars of the two colleges, as this would require matching completed questionnaires with a student's name or identification number. All subjects were instead asked to report their cumulative college GPA as of the preceding semester.

Beck Depression Inventory (BDI). The short form of the BDI (Beck & Beamesderfer, 1974) requires subjects to report the extent to which they experience 13 common symptoms of depression on 4-point Likert scales. Possible scores range from 0 to 39 and are evaluated according to the following ranges: 0-3, none or minimal; 4-7, mild; 8-15, moderate; and 16+, severe. Beck and Beamesderfer reported that BDI scores correlate well with clinical ratings of depression (r = .616). The BDI was selected to assess the emotional components of helplessness because of its use by Seligman and other researchers in many LH studies.

Procedure

All students attended small group assessment sessions in which they independently completed a packet of paper-and-pencil inventories, which assessed the two LH risk factors (LHS and ESQ) and the three helplessness deficits (PASS, GPA, and BDI). Students were assigned to the high-risk group if they met both of the following criteria: (a) LHS scores above the median (40) and (b) ESQ composite scores for positive and negative events below the median (3.5). Students scoring below the LHS median and above the ESQ composite median were assigned to the low-risk group. These criteria reduced the original pool of participants to a final sample of 96, composed of 48 high-risk and 48 low-risk students. The final sample was predominantly female (71%).

Results

Bivariate correlations revealed that measures of the two risk factors (LHS and ESQ) were significantly related but in no danger of redundancy (r = -.27, p is less than~ .001). It can therefore be assumed that the two measures assess related but nonetheless distinct elements of learned helplessness. The three measures of helplessness deficits (PASS, GPA, and BDI) were not significantly intercorrelated (all correlation coefficients
were .14 or below). This supports the contention that independent behavioral, cognitive, and affective deficits are measured by these instruments.

Results of a 2 x 2 (Risk Level x Gender) multiple analysis of variance revealed a significant multivariate main effect for risk level, F(1, 92) = 10.17, p < .001, on the linear combination of the behavioral, cognitive, and affective deficits. Examination of the univariate Fs for each deficit showed that risk level significantly affected all three LH deficits in the hypothesized direction. High-risk students obtained significantly higher PASS scores, F(1, 92) = 16.46, p < .001. PASS scores for high-risk students average 20.81, compared with 17.06 for low-risk students. High-risk students also reported significantly lower GPAs, F(1, 92) = 5.6, p < .01. GPAs for high-risk students averaged 2.82, whereas low-risk students' GPAs averaged 3.11. Finally, high-risk students obtained significantly higher BDI scores, F(1, 92) = 14.65, p < .001. BDI scores for high-risk students averaged 6.04, compared with 2.5 for low-risk students. There was no significant effect for gender.

Discussion

After some 25 years, LH research has seemingly entered a comfortable but crystallized state. Most studies seek relationships between the pessimistic explanatory style and some outcome measure often selected from a single domain, be it behavioral, cognitive, or affective. Although programmatic, consistent inquiry is important in furthering understanding of the applications of LH, a more pioneering approach should not be forsaken. Alternate methods for conceptualizing LH variables have been advanced yet tend to languish at the fringes of the professional literature.

One purpose of this study was to examine a more complete formulation of the LH model by examining the effects of multiple LH risk factors. For this reason, a measure was sought that would assess expectations of uncontrollability, and a technique was sought that would quantify explanatory styles for both positive and negative outcomes in a single conceptual unit. Thus, this study represents a beginning attempt to utilize alternate measures and techniques in assessing LH. Both the LHS and the self-serving versus self-derogating explanatory styles were successful in accounting for the type of behavioral, cognitive, and affective deficits that helplessness produces. Measures and techniques such as these deserve further research attention. Research that addresses the interaction between these risk factors would also be valuable in elucidating the process through which people learn helplessness.

Another purpose of this study was to simultaneously examine the effects of helplessness in multiple domains. As both the original and reformulated LH models stipulate, helplessness deficits are observable in behavioral, cognitive, and affective domains. Few studies have explicitly sought deficits from all three domains. The results of this study help to confirm that helplessness is associated with real-world deficits in all three domains. High-risk students were found to procrastinate more on academic tasks (behavioral domain), perform more poorly in their studies (cognitive domain), and suffer more dysphoria when faced with negative outcomes (affective domain). Future research can contribute much to understanding the interconnections between these deficits by choosing to assess outcome variables selected from all three domains. Future attempts to ameliorate the effects of helplessness, or to psychologically inoculate people to prevent the development of helplessness, will require a thorough understanding of the connections between helplessness in the behavioral, cognitive, and affective domains.

REFERENCES


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