

THE EFFECTS OF SITUATION AND LEARNED RESOURCEFULNESS ON COPING RESPONSES

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Learned resourcefulness theory suggests that people high in resourcefulness can minimize the negative effect of stress on their performance, therefore, they can do better than less resourceful individuals under stressful conditions (Rosenbaum, 1990). This study was designed to examine whether individuals high and low in resourcefulness, differ in their perceived stress levels, self-efficacy expectancies, and coping strategies. In the study, 255 students were asked to imagine themselves in two different stressful academic situations (controllable and uncontrollable) and to complete measures of perceived stress level, self-efficacy expectancy, and coping ways (Folkman & Lazarus, 1988). Data analyses indicated that highly resourceful students have higher self-efficacy expectancies. They use more problem-focused coping, more positive reappraisal, are more likely to seek social support, and less likely to use escape-avoidance strategies during the stages of an examination situation.

When people encounter stressful life events they try to change the adverse effect of these events on their well-being by using a number of coping strategies. The transactional theory defines *coping* as *The person's cognitive and behavioral efforts to manage (reduce, minimize, master or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources* (Folkman, Lazarus, Gruen, & Delongis, 1986, p.2). Folkman and Lazarus (1985) emphasize that an individual's coping responses will change depending on the changing person-environment relationship. To examine this proposition a number of studies based on transactional theory have focused on students' ways of coping at different stages of an examination.

In their classic study, Folkman and Lazarus (1985) examined changes in emotions and coping responses during three stages of an examination. Students

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decreased their use of problem-focused coping, and were less likely to seek social support, or to emphasize the positive, and self-isolation, but increased distancing from the preparation stage to the waiting stage. Students also decreased wishful thinking and distancing from the waiting stage to the outcome stage.

Results of the studies examining students' appraisals and coping responses in different stages of an examination have supported transactional theory indicating significant changes in students' appraisals and coping strategies (Carver & Scheier, 1994; Raffety, Smith, & Ptacek, 1997). Researchers have consistently reported that students have tended to use more planful problem-solving during the preparation stage compared to the waiting stage. Similarly, seeking social support has been used more during the preparation stage. Research findings for other forms of coping are mixed rather than consistent. For example, Folkman and Lazarus (1985) found that positive reappraisal was utilized more during the preparation stage, whereas Carver and Scheier reported no significant difference in the use of positive reframing depending on the situation.

A number of studies have reported a significant relationship between personality dispositions and coping responses (Parkes, 1984; Terry, 1991). For example, Bolger (1990) examined the effects of both situation and neuroticism on coping responses. Results indicated a significant effect of neuroticism by time on coping. Specifically, subjects high in neuroticism used more wishful thinking and more self-blame compared to their low-neuroticism counterparts in the preexamination stage, but not in the postexamination stage. Bolger interpreted these findings as a contribution to "the understanding of how static personality traits reveal themselves dynamically under stress" (p. 536). The literature suggests that personality variables as well as situational factors are associated with individuals' appraisals and coping responses.

Learned resourcefulness has been defined as *an acquired repertoire of behaviors and skills (mostly cognitive) by which a person self-regulates internal responses (such as emotions and cognitions) that interfere with the smooth execution of a target behavior* (Rosenbaum & Jaffe, 1983, p. 216). Learned resourcefulness includes four aspects; the use of self-statements to control emotional responses, the application of problem-solving strategies, the tendency to delay immediate gratification, and perceived self-efficacy. Rosenbaum (1990) suggests that learned resourcefulness does not influence an individual's perceived stress level, but it does influence an individual's self-efficacy expectancy. The concept of self-efficacy expectancy refers to a person's beliefs about whether he or she can cope with a situation effectively (Bandura, 1977). Studies have found a significant positive relationship between learned resourcefulness and self-efficacy (Lewinsohn & Alexander, 1990; Rosenbaum & Ben-Ari Simira, 1986)

Learned resourcefulness theory suggests that people high in resourcefulness can minimize the negative effect of stress on their performance, therefore, they can do better than low resourceful individuals under stressful conditions (Rosenbaum, 1990). Empirical studies have supported this prediction, indicating a significant effect of learned resourcefulness on performance in the face of stressful situations (Akgun & Ciarrochi, 2003; Kennett, 1996; Rosenbaum & Ben-Ari, 1985; Rosenbaum & Jaffe, 1983).

To examine whether high resourceful individuals change their coping strategies according to situational demands, Gintner, West, and Zarski (1989) studied the relationship between learned resourcefulness and coping strategies in two stages of an examination situation. It was found that high resourceful subjects tended to use significantly more problem-focused coping strategies during the examination preparation week than did low resourceful subjects. Conversely, low resourceful subjects reported using significantly more wishful thinking and distancing during the preparation week than did high resourceful subjects.

Studies on coping responses suggest that personality variables as well as situational factors are related to coping. In his literature review, Lazarus (1993) emphasized that much more research examining the influence of personality variables on different coping responses is needed. Following his advice, the influence of learned resourcefulness as well as situation on coping responses has been examined in the present study.

METHOD

PARTICIPANTS

Four hundred and twenty-two questionnaires were distributed to undergraduate students from the University of Wollongong, New South Wales, Australia. Of these, 274 were returned (65%), and 19 questionnaires were not used in the study due to missing data, resulting in a sample of 255 participants (aged 18 to 45 years, $M = 20.53$, $SD = 3.84$). Ninety-seven male and 158 female students volunteered for the study.

MATERIALS

To manipulate the examination situation, two different scenarios, each describing a stressful situation, were used. One of these presented a controllable outcome, having an examination, and the other contained an uncontrollable outcome, having an unsatisfactory examination result. Students who had volunteered were assigned at random to one of these two situations.

Depending on their assigned conditions, students were asked to imagine themselves in one of these stressful academic situations. The stressfulness of the academic event was measured by two questions (e.g., "I perceive this situation as

stressful”). Responses consisted of a Likert Scale ranging from 1 (*not at all*) to 5 (*extremely*). Students’ confidence in their ability to cope with these stressful academic events (self-efficacy) was assessed by another two questions (e.g., “I can overcome this stressful situation”).

The revised Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1988) was used to determine the students’ ways of coping under these specific conditions of having an examination or having an unsatisfactory examination result. In the light of the literature (e.g., Compas, Malcarne, & Fondacaro, 1988; Patterson et al., 1990) it has been assumed that coping is stable over time in the same, or similar, stressful situations. Therefore, students were asked to report their tendencies to use eight coping strategies when they are faced with described examination situations, rather than their coping strategies for a single examination. The WCQ contains 50 items describing cognitive and behavioral strategies that are used to deal with stressful situations. Participants are required to rate the extent to which they use each coping item in the face of a particular stressful event on a 4-point Likert scale (0 = *not used*, 3 = *used a great deal*). Reliabilities of the eight coping ways for the present study sample ranged from .44 to .77.

The learned resourcefulness of the subjects was assessed by Rosenbaum’s Self-Control Schedule (SCS; Rosenbaum, 1980). This 36-item self-report questionnaire assesses individuals’ general repertoire of self-control behavior and their tendencies to use these behaviors when faced with everyday problems. The reliability of the Self-Control Schedule for the present study was also quite reasonable (Cronbach’s Alpha, $r = .84$).

PROCEDURE

The undergraduate students completed the Self-Control Schedule and then measures of stress and confidence, and Ways of Coping Questionnaire for one of these stressful situations; having an examination or having an unsatisfactory examination result.

RESULTS

To examine whether situation and learned resourcefulness have a significant effect on students’ perceived stress levels, and their confidence in their ability to cope with these events, a multiple regression analysis was performed. Learned resourcefulness situation and gender acted as independent variables in predicting stress and confidence. In order to reduce the problem of collinearity (Aiken & West, 1991) learned resourcefulness scores were transformed to z scores, and situation was coded as -1 (for situation 1) and 1 (for situation 2). Gender was also coded as -1 (for males) and 1 (for females).

The results revealed that the main effect of learned resourcefulness on students' confidence level was significant $F(1, 247) = 27.53, p < .01$. An inspection of parameter estimates indicated that there was a significant positive relationship between learned resourcefulness and confidence level ($B = .58, p < .01$). Specifically, high resourcefulness was associated with a high level of confidence. Multiple regression revealed that male and female students differed in their perceived stress level $F(1, 247) = 8.84, p < .01$. Females ($M = 6.13$) perceived these situations as more stressful than did males ($M = 6.89$).

To examine the effect of situation and learned resourcefulness on students' coping strategies, a second multiple regression analysis with eight ways of coping as the dependent variables was carried out. The results of the regression analysis indicated that the main effect of situation on confrontive coping $F(1, 247) = 6.94, p < .01$ and escape-avoidance was significant $F(1, 247) = 11.67, p < .01$. In situation 1, having an examination, the students tended to use both confrontive coping ($M = 6.39$) and escape-avoidance ($M = 9.97$) more than in situation 2, the means respectively being $M = 5.35$ and $M = 8.15$. Situation also had a significant effect on seeking social support $F(1, 247) = 4.69, p < .05$. Students reported more seeking social support in situation 1, having an examination ($M = 8.41$), compared to situation 2, having an unsatisfactory examination result ($M = 7.47$). Situation did not have any significant effect on planful problem solving, positive reappraisal, self-controlling, distancing, and accepting responsibility.

The main effect of learned resourcefulness on escape-avoidance $F(1, 247) = 22.51, p < .01$ and planful problem solving $F(1, 247) = 62.34, p < .01$ was significant. Parameter estimates indicated that learned resourcefulness was negatively related to escape-avoidance ($\beta = -1.35, p < .01$), and positively related to planful problem solving ($\beta = 1.46, p < .01$). Learned resourcefulness had a significant effect on positive reappraisal $F(1, 247) = 18.89, p < .01$. Parameter estimates suggested a positive relationship between high resourcefulness and positive reappraisal ($\beta = 1.26, p < .01$). The effect of learned resourcefulness on self-controlling was also significant $F(1, 247) = 7.08, p < .01$. The positive beta coefficient revealed that high resourcefulness was positively related to self-controlling ($\beta = .54, p < .01$).

DISCUSSION

The present study examined the effects of personal and situational determinants on the perceived stress, confidence, and coping responses of students. On the basis of learned resourcefulness theory, it was expected that highly resourceful subjects would perceive themselves to be more capable of coping with stressful academic situations. Results provided support for this

hypothesis, revealing a significant positive relationship between learned resourcefulness and confidence. These results are in line with the findings of Rosenbaum and Ben-Ari Simira (1986) that high resourcefulness was positively correlated with self-efficacy expectancy. There was no significant effect of situation on either perceived stress or self-efficacy. As suggested by Rosenbaum (1990), learned resourcefulness did not affect perceived stress level. High resourceful students perceived the situations as stressful as did their low resourceful counterparts.

It was also anticipated that students would vary their coping strategies across two different examination situations. Consistent with this prediction, students preferred to use more confrontive coping, more escape-avoidance and were more likely to seek social support in the situation of having an examination, than in the situation of having an unsatisfactory examination result. In general, these results supported transactional theory (Lazarus & Folkman, 1984), which indicated significant changes in students' coping responses across two stages (anticipatory and negative outcome) of an examination.

Another purpose of the present study was to examine whether learned resourcefulness influences students' situation-specific coping responses. The results of the analysis indicated that high resourceful students utilized more planful problem solving, more positive reappraisal, and less escape-avoidance than did low resourceful students. These results are partly consistent with the results of the study of Gintner et al. (1989), in which low resourceful students reported more wishful thinking, more distancing and more keeping to self than did highly resourceful students. Considerable research has suggested that the use of escapist or avoidance coping strategies may be a risk factor for maladjustment (e.g., Conway & Terry, 1992; Masel, Terry, & Grible, 1996). On the other hand, active coping strategies, such as planful problem solving and seeking social support are associated with good adjustment to stressful situations (e.g., DeGrauw & Norcross, 1989; Holahan & Moos, 1987; Terry & Hynes, 1998). In the light of the literature on coping effectiveness it is possible to suggest that high resourceful students use more effective strategies compared with low resourceful students.

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