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**If At First You Don't Succeed.....
What Makes You Try Again?**

by

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Honors Project

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If At First You Don't Succeed.....What Makes You Try Again?

Optimists have better outcomes than pessimists across a variety of situations (Andersson, 1996; Scheier and Carver, 1992). The underlying assumption for these differences is that because optimists have positive expectancies for future events, they persist longer. Greater persistence, in turn, leads to the more frequent experience of desired outcomes. In the present study, we hypothesized that situational factors will also play a role in persistence. Specifically, when individuals believe that it is important to perform well on a given task, they will persist longer than if they believe the task is unimportant. To investigate the role of these variables, both optimists and pessimists were given an unsolvable task for which we manipulated the perceived importance of the task. We predicted a main effect for optimism, such that optimists would persist longer than pessimists. In addition, we predicted a main effect for level of task importance, such that persistence would be longer for those in the high importance of task condition. Lastly, we examined the possibility of an interaction between the two variables. Results and implications will be discussed.

Introduction

When faced with adversity, why do some people give up while others persevere? Research has found that when an individual expects to perform well on a task, he or she works longer on the task. However, when an individual expects failure, he disengages from the task (Carver, Blaney, and Scheier, 1979).

More importantly, expectancies exist at varying degrees of specificity. That is, they can be either specific or general. Specific expectancies apply to particular events or situations. In contrast, generalized expectancies are more global and stable. They apply in situations which are new to us, and therefore the outcomes are unknown. For example, consider a person whose car has broken down while on the way to an important meeting.

One specific positive expectancy is that she believes she can fix the car. A more general expectancy would be she believes she can fix most things. An even more general expectancy would be that she usually attains her desired goals.

To measure generalized expectations, Scheier and Carver (1985) developed the Life Orientation Test, or the LOT. Scheier and Carver label these expectancies “dispositional optimism.” Individuals who possess high amounts of dispositional optimism are optimists, while those low in dispositional optimism are pessimists. Optimists tend to have more positive outcomes than do pessimists across a variety of situations (Andersson, 1996; Scheier and Carver, 1992). The underlying assumption as to why this occurs is that optimists have better expectations than pessimists. As a result of these expectations, they persist longer than pessimists to reach their goal. This increased persistence in turn leads to high goal attainment.

General expectancies and specific expectancies are not independent of one another. If an individual is optimistic in general, he is more likely to be optimistic about the outcomes of specific events. Moreover, if an individual is pessimistic in general, he is more likely to believe that success on a particular task is improbable. However, general expectancies do not entirely account for our specific expectations. Aspects of each individual situation, such as prior experience in that particular domain, also might influence expectancies. If a pessimistic individual possessed skill in a certain area, he may expect to perform well in that area despite his general pessimism. Perhaps his confidence in his abilities would override his general pessimism.

This theory was supported in an early study by Bridges. (Bridges and Scheier, 1998) Optimists were found to persist longer than pessimists. However, this was only true when participants had little prior experience on the task. Moreover, these findings have never been replicated. The goal of this study is to replicate these findings and, in addition, investigate the role of task importance.

Based on past research, we hypothesized that optimists would persist longer than pessimists on a given task in which they had little prior experience. We also hypothesized that when individuals believed their performance on the task to be important, they would persist longer than if they believed that their performance was unimportant. We also hypothesized that general expectancies and specific expectancies would be similar, although not identical.

Methods

Subjects

Participants were forty-nine undergraduate students enrolled in Introductory Psychology courses at Carnegie Mellon University. Thirty-three participants were male, and sixteen were female. All participants volunteered for the study and received one credit toward partial fulfillment of a class requirement for participation in experimental research.

Overview of Procedures

At the beginning of the semester, all participants completed a measure of dispositional optimism as part of a departmental pretesting session required for introductory psychology students. Subjects volunteered for a study which they believed investigated the processes of puzzle solving. Before arrival on the day of the experiment, subjects were randomized into one of two conditions – Important or Unimportant.

After arrival for the experimental session, subjects first signed a consent form and were then seated alone at a computer. Next, all participants read the task instructions on the computer screen. The instructions informed them that the task would consist of four computerized geometric line puzzles. Participants were then instructed that the goal was to trace over all the line segments in each puzzle in one continuous line. This was to be done without using any segment more than once. Additional information instructed each subject that his or her score would be the total number of puzzles solved correctly. All subjects

understood that they could quit a puzzle without having finished it and move on to the next puzzle, but after moving on they could not return to previous puzzles. Throughout the experiment, they would also complete several questionnaires assessing mood and other variables. Subjects were given a solvable example puzzle to ensure that they understood the directions and the goal of the task. The experimenter then reiterated the instructions and answered any questions about the task.

All participants were told that the task measured an ability called Apperceptual Insight (AI). Participants in the Unimportant condition were told that AI was “the ability to breakdown visually complex images.” Participants in the Important condition were told that AI “reflects a creative and insightful approach to problem solving. It encompasses the dimensions of rationality, perceptual differentiation, emotional acuity, and global perspective.” They were also told that lower scores on the task reflected a lack of AI. This lack of AI was linked to poor interpersonal relationships, poor marital satisfaction, poor job performance, and some mild forms of psychopathology.

Before beginning the first puzzle, each participant completed the first questionnaire. This questionnaire assessed familiarity with puzzles, specific expectations, general mood, and specific aspects of mood. As a manipulation check, the questionnaire also included two items assessing perceived importance of the task and of AI.

The first puzzle for all participants was unsolvable. The time spent on the puzzle and the total number of attempts made at solving the puzzle were recorded. These comprised the dependent variables for the study.

After participants disengaged from attempting to solve the first puzzle, they completed the second questionnaire. This questionnaire contained a number of items, including measures of overall mood and expectations for the next line puzzle. At this point, the subject was informed that the experiment was over. The subject was then probed for suspicion and debriefed.

Measures

Dispositional Optimism. Dispositional Optimism was measured with the LOT-R (Scheier, Carver, Bridges, 1994). The LOT-R is a 10-item measure (4 filler items). Participants were given statements (such as “In uncertain times I usually expect the best”) and asked to think about themselves and indicate the extent of their agreement with the sentences on a 5-point scale, with 1 being “strongly agree” and 5 being “strongly disagree.” The mean LOT-R score was 15.52 (s.d. = 3.94).

Persistence. Persistence was measured in two ways. The first way was the number of *attempts* the participant made at the puzzle before giving up. The second was the total amount of *time* spent on the puzzle.

Mood. During the pre-task questionnaire, subjects were asked to rate their current levels of frustration, anger, irritation, anxiety, and annoyance. In each case, a 1 to 5 scale was used, with 1 being “a lot” and 5 being “not at all.” In addition, overall mood was assessed both before the task and after the task. Subjects used a 5-point scale, with 1 being “very good” and 5 being “very bad.”

Manipulation check. Two questions were used in the initial questionnaire as a manipulation check. All participants were asked to rate the importance level of the task. In addition, they were asked to rate how important they believed it was to possess Apperceptual Insight. Both questions were answered on a 5-point scale, with 1 being “very important” and 5 being “very unimportant.”

Specific expectations. Specific expectations for the task were measured both before and after the unsolvable puzzle. The initial questionnaire assessed specific expectations for the first puzzle, and the second questionnaire assessed specific expectations for the second puzzle. All participants were asked to rate on a 7-point scale how well they expected to perform on the subsequent puzzle. A rating of 1 denoted that the subject expected to do very well, and a rating of 7 meant that the subject expected to perform very poorly.

Results

Effects of Optimism on Persistence

Recall that we hypothesized that optimists would persist longer than pessimists. To test this hypothesis, we examined the correlation coefficients between LOT-R scores and the two measures of persistence. Neither the association between LOT-R scores and time nor the association between LOT-R scores and number of attempts was significant ($r = -.22, p = .198$; $r = -.17, p = .340$, respectively). Although the correlations between the LOT-R scores and our measures of persistence were not significant, there was actually a trend in the opposite direction. Pessimists, across both conditions, tended to persist for a longer amount of time than did optimists.

Effects of Task Importance on Persistence

We had hypothesized that those subjects who believed that it was important to perform well on the task would persist longer than would those who believed it was Unimportant to do well on the task. We first checked the manipulation, to see if those in the Important condition believed their performance to be more important than those in the Unimportant condition. To test this, we examined the correlation coefficient between condition and task importance and between condition and AI importance. Unfortunately, our manipulation failed to create a difference in the perception of importance. The correlation with task importance was $.01, p = .969$. The correlation with AI importance was $-.01, p = .966$.

Because our manipulation check revealed that our experimental manipulation had failed to influence perceived importance, we examined subjects' scores on task importance and used those scores to divide subjects into two groups – those who perceived the task as relatively unimportant and those who perceived the task as relatively important. All future analyses were conducted using these two groups.

To test the relationship between perceived importance and persistence, we examined the correlation coefficient between task importance and time. This result was not significant ($r = .04, p = .805$).

Interaction between optimism and task importance

Because we did not find any main effects for optimism or task importance on persistence, we next tested to see if there was an interaction between the two variables to predict persistence. To test this, we performed a 2 (optimism, pessimism) X 2 (Important, Unimportant) Analysis of Variance (ANOVA). The dependent measure was time spent on task. Results demonstrated a significant interaction between LOT-R scores and task importance ($F(1, 38) = 4.89, p = .033$). This interaction was such that optimists persisted longer when they believed the task was important than when they believed it was unimportant. In contrast, pessimists persisted longer when they believed that the task was unimportant than when they believed it was important. (See Table 1)

Table 1

	Pessimists	Optimists
Important	11.69	17.74
Unimportant	17.61	9.84

Persistence in Minutes

Relation between optimism and specific expectancies

We also hypothesized that there would be a strong positive correlation between dispositional optimism and specific expectancies for both the first puzzle and the second puzzle. To explore this relationship, we first examined the correlation coefficients between LOT-R scores and specific expectancies. This correlation was significant. ($r = -.43, p = .005$, inasmuch as lower expectancy scores represented more positive expectancies). As expected those who had higher levels of dispositional optimism also had more positive expectancies for their performance on the first puzzle. In addition we examined the correlation coefficient between LOT-R scores and expectancies for the second puzzle. Again, results were as expected. Optimists had more positive expectancies than pessimists ($r = -.54, p = .000$).

Lastly, we investigated whether optimism predicted specific expectancies for the second puzzle independent of subjects' expectations for the first puzzle. To do this, we examined ^gat the partial correlation coefficient between LOT-R and expectancies for the second puzzle, controlling for expectancies for the first puzzle. This correlation was significant ($r = -.42, p = .008$).

Discussion

Although the association between optimism and persistence was not significant, across both conditions pessimists tended to persist longer than did optimists. We also found that subjects who believed the task to be important did not persist longer than those who believed the task to be unimportant. However, we did find that optimism interacted with self-rated task importance to predict persistence. As anticipated, optimists persisted longer when they believed the task to be important. In contrast, pessimists persisted longer when they believed the task to be unimportant.

We also found that general expectancies influenced specific expectancies. Individuals who were more optimistic tended to have more positive specific outcome

expectancies than did those who were more pessimistic. This result held true for both the first puzzle and the second.

We had hypothesized that optimists would persist longer than would pessimists and that those individuals who believed the task to be important would persist longer than those who believed it to be unimportant. This was not supported. Actually, persistence depended on not one, but both, of the variables. Thus, for optimists, believing the task was important was associated with *more* time spent on the puzzle. In contrast, for pessimists, believing the task was important was associated with *less* time spent on the puzzle.

Our second finding was that general expectancies and specific expectancies were related. Thus, if one were optimistic in general, he or she would expect more positive outcomes on specific tasks than if he or she were pessimistic. This relationship was strong, but generalized expectancies did not fully account for variance in specific expectancies. The remaining variance in specific expectancies might be accounted for by other situational variables.

This research has implications on our daily lives. This shows the adaptability of optimists. They work longer at tasks which they perceive them to be more important. Thus, they are more likely to achieve the desired outcome from these tasks. Pessimists, on the other hand, are less likely to achieve the desired outcomes on important tasks because they disengage sooner than optimists. When confronted with unimportant tasks, pessimists persist significantly longer than do optimists. Thus, a pessimist is more likely to waste his time and energy over trivial tasks, while an optimist conserves his time and energy for the more important tasks. Consequently, optimists will fare better on more important tasks. These important tasks may be what affect life course and quality of life.

Although we provided those participants in the Important condition with precise information about the importance of the task and of Apperceptual Insight, we left those in the Unimportant condition with very little information. The individuals in the latter

condition could have filled in this gap with information from their own beliefs of task importance and consequently believed the task to be as important as those in the former condition. Hence, both conditions would have seen the task as equally important. This could explain the lack of significant differences in persistence found between the two conditions.

There are limitations to this study. As just stated, our experimental manipulation failed to influence perceived task importance. Therefore, we used subjects' scores on the question regarding task importance for all analyses. Since this variable was not experimentally manipulated, we cannot assume causality between the two variables. Specifically, we do not know what made some participants believe that the task was important, while others believed it to be unimportant.

Future research might examine other situational factors, such as perceived level of control. We hypothesize that when individuals feel that they are in control of a situation, they will persist longer than when they believe they are not in control of the situation. Furthermore, controllability might interact with optimism, such that optimists would persist longer when they have control of a situation than when they are not in control.

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