

Performance Level in Situations of Helplessness Threat and Group Affiliation: Egotistic Mechanisms in Helplessness Deficits

TOMASZ WITKOWSKI
*Instytut Psychologii
Uniwersytet Wrocławski, Poland*

ABSTRACT. In this study, the egotism hypothesis for poor performance following insoluble problems was tested. Also, the contribution of egotistic mechanisms to performance in the perceived group affiliation and helplessness threat conditions was investigated. The participants were 40 secondary school students (16 boys and 24 girls). Participants were given either solvable or unsolvable discrimination problems. In the second phase, the group affiliation variable was introduced. The level of performance, attribution, withheld effort, and manipulation checking were measured. Significant interaction ($p < .01$) showed that participants in the failure and group affiliation conditions performed better than the others. The results are contrary to the learned helplessness explanation, but they support assumptions of the attributional egotism theory.

A MAIN TENET of the model of learned helplessness is that performance deficits on a task result from exposure to uncontrollable aversive stimulation on a training problem. Both original and attributional versions maintain this assumption (Abramson, Seligman, & Teasdale, 1978; Miller & Norman, 1979; Seligman, 1975). However, many investigators have reported facilitation effects when participants who underwent helplessness training performed better than control participants on the task being tested (Hanusa & Schulz, 1977; Roth & Kubal, 1975; Tennen & Eller, 1977; Wortman, Panciera, Shusterman, & Hibscher, 1976).

Another explanation for performance deficits and facilitation effects has been proposed by Snyder, Stephen, and Rosenfield (1978). According to them, egotism is the tendency to accept good results and to deny bad ones. Success or failure is often considered a sign of individual value. Eagerness to deny responsibility for

Address correspondence to Tomasz Witkowski, Instytut Psychologii Uniwersytetu Wrocławskiego, ul. Dawida 1, 50-527 Wrocław, Poland. E-mail: tomwit@ift.uni.wroc.pl.

bad outcomes stems from an effort to protect self-esteem, and acceptance of good results is an attempt to bolster self-esteem.

Two factors are necessary for a threat to self-esteem: (a) The result must be attributable to a person, and (b) the attribution must be in agreement with that person's self-esteem. When one of these factors is absent, there is no threat to self-esteem. When both are present, the threat depends on the intensity of each factor. In response to failure, egotism negates the first factor; in response to success, self-esteem is increased by enhancing the first factor, on condition that the second is present. Frankel and Snyder (1978) proposed an alternative to the learned helplessness theory. Results of their experiment indicated an increased or a reduced level of performance after helplessness training. They assumed that learned helplessness results from a desire to protect self-esteem, rather than from decreased motivation. Experiments on learned helplessness satisfy the two conditions necessary for a threat to self-esteem. One way of guarding against such a threat is low expenditure of effort. Attributing failure to lack of effort instead of to lack of ability costs less psychologically and thus does not threaten self-esteem. This strategy is often used by research participants in experiments on learned helplessness (Frankel & Snyder, 1978).

One of the most important factors in social behavior and in motivational processes is group affiliation. This factor seems to be responsible for many effects in learned helplessness experiments. Group affiliation may cause facilitation effects in helplessness conditions and can protect self-esteem by negating the first necessary factor of a threat.

My primary aim in the present study was to investigate the contribution of the egotistic mechanism to performance in a perceived group affiliation and in helplessness threat conditions. I compared two explanations of helplessness deficits or the lack of such deficits: learned helplessness theory (Abramson et al., 1978; Seligman, 1975) and an attributional egotism point of view (Snyder et al., 1978).

Method

Overview

I used a 2×2 design. Two factors were manipulated: problem solvability and group affiliation. The discrimination problems in the first task were either solvable or unsolvable. The second tasks were performed both with and without group affiliation. Thus each variable had two levels; both were varied among participants. The primary dependent measure was average solution time.

Participants

The participants were 40 students from secondary schools in Walbrzych, Poland (16 boys and 24 girls, with a mean age of 17.2 years). They had no pre-

vious experience with psychological experiments and did not receive financial rewards or class-credit points for their participation. All respondents completed the experiment.

Procedure

I adapted the experimental procedure from Frankel and Snyder (1978). The participants were told that the main purpose of the study was to develop intelligence scales for candidates applying to secondary schools. Next, they were told that their results would be available to the other participants at the end of the experiment. They were then informed that there would be four tasks. In the first phase, the 40 participants, divided randomly into groups, were to solve four mathematical exercises each. Twenty participants were to solve four elementary mathematical problems, and 20 were to attempt to solve four unsolvable exercises. They were tested individually. Solution time was measured but not included in the results. Communication between participants was prohibited.

In the second phase, participants from these two groups were again divided randomly, this time into four equal groups. In two groups, the affiliation variable was introduced, and their instructions were different. Affiliated participants were given the following information:

As a result of the screening tests and after some calculations, you have been placed in a group of participants of similar intelligence. You will use the same procedure for solving exercises. You will remain anonymous, but your scores will be used to calculate the group's average.

These instructions manipulated group affiliation. In the groups without affiliation, instructions were analogous to those in the first phase. All participants solved the same very difficult exercises. The participants were timed. Average solution time, determined by earlier pilot tests in similar situations, was doubled if a participant failed to solve a task. The pilot tests had also provided the level of task difficulty.

Following the tasks, participants were asked to fill out a brief questionnaire adapted from Frankel and Snyder (1978). In all, there were nine questions: 7-point scales were used for seven of them. To check the manipulation of discrimination problem solvability, I asked participants to evaluate their performance on these problems on a scale ranging from *thought I performed poorly* (1) to *thought I performed very well* (7). They were then asked to indicate the extent to which success or failure on the discrimination problems was *not at all under my control* (1) or *entirely under my control* (7). These two questions were connected with only the first phase of the experiment.

The participants were asked how well they performed on the tasks, with responses ranging from *very poorly* to *very well*. The two questions not answered on 7-point scales were *How many anagrams did you think you solved?* (0–4), and

How many do you think the average person in the test solved? (0–4). Participants were asked about their attribution. There were four 7-point questions about the effects of difficulty, luck, effort, and abilities on their results (Frieze & Weiner, 1974). Next, the participants were asked (a) whether they could have done better—*not at all* (1) to *very much* (7)—if they had tried harder, or (b) whether they had tried so hard that it had interfered with their performance—*no interference* (1) to *tried too hard* (7). After completing the experiment, participants were debriefed.

Results

To analyze results, we used a 2×2 (Solvable/Unsolvable Problems \times Group Affiliation/No Group Affiliation) analysis of variance. The main dependent measure of performance level was average solution time.

Problem Solvability: Manipulation Checks

Compared with success, failure in the training tasks caused lower ratings of performance on the discrimination problems (1.20 versus 6.40): $F(1, 36) = 643.80, p < .001$; and on ratings of control, (1.95 versus 5.90): $F(1, 36) = 211.99, p < .001$. There were no other significant effects.

Task Performance

The participants who had experienced failure in the training phase solved tasks more slowly than did those who had experienced success (8.68 versus 7.05): $F(1, 36) = 4.66, p < .03$. A comparison of the results between affiliated and unaffiliated participants showed that the participants from groups performed only slightly faster than those without affiliation (7.37 versus 8.36): $F(1, 36) = 1.73, p < .19$. This difference was not statistically significant.

However, there was the expected significant interaction between the two independent variables: $F(1, 36) = 6.21, p < .01$. Participants in the failure and group affiliation conditions achieved a higher level of performance than did the participants in the failure and no-group affiliation (7.24 versus 10.11; see Table 1). Unaffiliated participants who had succeeded in the first phase of the experiment recorded a faster performance time than unaffiliated participants who also had succeeded in the first phase (6.60 versus 7.49).

Questionnaire Results

Attribution examinations showed that the participants without affiliation more often selected abilities and effort as primary causes of their results, in contrast to those with an affiliation (5.30 versus 4.05): $F(1, 36) = 20.75, p < .01$ (abilities); and (5.50 versus 4.60): $F(1, 36) = 8.44, p < .01$ (effort). Conversely, the participants

TABLE 1
Tasks Performance

Average solution time	Solvable tasks		Unsolvable tasks	
	Affiliation	No	Affiliation	No
<i>M</i>	7.49	6.60	7.24	10.11
<i>SD</i>	1.30	2.31	3.12	2.45

Note. $n = 10$ in each condition. Average solution time is in minutes.

with an affiliation selected task difficulty as the primary cause of their results (5.75 versus 4.75) more frequently than those with no affiliation: $F(1, 36) = 12.4, p < .01$. Other statistically significant main or interaction effects on attribution were not observed.

A significant interaction regarding the question about low effort was observed: $F(1, 36) = 5.76, p < .05$. After helplessness training, participants without affiliation ceased trying. In contrast, successful participants without affiliation maintained their effort (4.70 versus 2.80). Other statistically significant main or interaction effects were not observed.

Discussion

My purpose in the study was to investigate the contribution of egotistic mechanisms to performance in group affiliation and helplessness threat conditions and to compare two explanations of helplessness deficits: the learned helplessness theory (Abramson et al., 1978; Seligman, 1975) and the attributional egotism point of view (Snyder et al., 1978). The findings of the present study are compatible with and confirm the egotism explanation.

After their experience with unsolvable problems, only those participants without an affiliation performed poorly. Those with an affiliation were able to attribute their results to external factors. This caused them to reattempt to solve exercises, with unexpectedly good results. In addition, these participants did not withhold effort. According to the attributional egotism explanation, the first necessary factor of threat to self-esteem was absent, which eliminated the threat to these participants. The results of the participants after classical helplessness training indicate, not deficits, but rather mechanisms for protecting self-esteem by withholding effort. Thus, there were two factors necessary to threaten self-esteem. In the solvable condition, the participants performed well because there was no threat to their self-esteem; therefore, they were not forced to resort to protective tactics.

The results indicate that group affiliation, by generating circumstances in which an egotistic mechanism can develop, modulates the level of performance and

protects self-esteem, even in the failure condition. Occurrences of helplessness deficits definitely rely on self-esteem as a social construct. Depending on social conditions, self-esteem can cause both increases and decreases in performance. Because its impact on such processes as poor performance or helplessness deficits is very important, self-esteem must be considered in learned helplessness experiments. A large body of literature confirms this point of view (Frankel & Snyder; 1978, Sigall & Gould 1977; Silver et al., 1982; Snyder et al., 1981; Tennen et al., 1982). The results of this experiment support assumptions of the attributional egotism theory and shed critical light on the learned helplessness theory.

REFERENCES

- Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49-74.
- Frankel, A., & Snyder, M. L. (1978). Poor performance following unsolvable problems: Learned helplessness or egotism? *Journal of Personality and Social Psychology, 36*, 1415-1423.
- Hanusa, B. H., & Schulz, R. (1977). Attributional mediators of learned helplessness. *Journal of Personality and Social Psychology, 35*, 602-611.
- Miller, I. W., & Norman, W. A. (1979). Learned helplessness in humans: A review and attribution theory model. *Psychological Bulletin, 86*, 93-118.
- Roth, S., & Kubal, L. (1975). Effects of noncontingent reinforcement on tasks of differing importance: Facilitation and learned helplessness. *Journal of Personality and Social Psychology, 32*, 680-691.
- Seligman, M. E. P. (1975). *Helplessness*. San Francisco: W. H. Freeman.
- Sigall, H., & Gould, R. (1977). The effects of self-esteem and evaluator demandingness on effort expenditure. *Journal of Personality and Social Psychology, 35*, 12-20.
- Silver, R. L., Wortman, C. B., & Klos, D. S. (1982). Cognitions, affect, and behavior following uncontrollable outcomes: A response to current human helplessness research. *Journal of Personality, 50*, 480-514.
- Snyder, M. L., Smoller, B., Strenta, A., & Frankel, A. (1981). A comparison of egotism, negativity, and learned helplessness as explanations for poor performance after unsolvable problems. *Journal of Personality and Social Psychology, 40*, 24-30.
- Snyder, M. L., Stephan, W. G., & Rosenfield, D. (1978). Attributional egotism. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 2, pp. 91-117). Hillsdale, NJ: Erlbaum.
- Tennen, H., Drum, P. E., Gillen, R., & Stanton, A. (1982). Learned helplessness and the detection of contingency: A direct test. *Journal of Personality, 50*, 426-442.
- Tennen, H., & Eller, S. (1977). Attributional components of learned helplessness and facilitation. *Journal of Personality and Social Psychology, 35*, 242-247.
- Wortman, C. B., Panciera, L., Shusterman, L., & Hibscher, J. (1976). Attributions of causality and reactions to uncontrollable outcomes. *Journal of Experimental Social Psychology, 12*, 301-316.

Received April 24, 1996