DOCUMENT RESUME

ED 363 435 PS 021 879

Steinhauer, Annie; And Others AUTHOR

TITLE An Assessment of the Self-Protective Function of

Self-Handicapping.

PUB DATE Mar 93

NOTE 18p.; Paper presented at the Biennial Meeting of the

Society for Research in Child Development (70th, New

Orleans, LA, March 25-28, 1993).

Reports - Research/Technical (143) --PUB TYPE

Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Defense Mechanisms; Junior High Schools; *Junior

> High School Students; *Mathematics Skills; Mathematics Tests; Psychological Patterns; Self Concept Measures; *Self Efficacy; Student Attitudes;

Student Behavior

*Self Handicapping; *Self Prediction; Self IDENTIFIERS

Protection

ABSTRACT

Self-handicapping is the phenomenon of setting oneself up to fail a feared evaluation task to protect a sense of self-worth. A study examined whether individuals self-handicap to protect a general or global perception of themselves or to protect perceptions of competence in the specific domain being evaluated. Handicapping behaviors related to preparation for and completion of a mock math quiz were examined in 495 junior high school students. Students' perceptions of their math competence were assessed through four scales of self-reported competence, and actual competence was measured through two standardized arithmetic tests. Overraters were expected to self-handicap to sustain their exaggerated positive self-view. In a second test session, student's preparation and handicapping behaviors were determined through a quiz practice sheet, questionnaires regarding claimed effort and excuses, an anxiety inventory, and completion of a math quiz with optional levels of difficulty. Study findings included the following: (1) perceived math competence was generally accurate for most of the students; (2) students who did overrate their math competence did not self-handicap as expected, while underraters did, indicating that the motive was not self-protection but self-consistency or verification, allowing individuals to maintain their current self-view; and (3) students who overrated their competence claimed less anxiety and fewer excuses but tended to choose easier questions than other students, in effect setting themselves up to do well in a self-enhancing way. (BCY)



^{*} Reproductions supplied by EDRS are the best that can be made

from the original document.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONIAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

An Assessment of the Self-Protective Function of Self-Handicapping

Annie Steinhauer, Shelley Hymel, and Erik Z. Woody

Department of Psychology, University of Waterloo, Waterloo, ON, N2L 3G1

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

A. Steinhauer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

Paper presented at the Biennial Meeting of the Society for Research in Child Development,

New Orleans, LA, March 1993.



An Assessment of the Self-Protective Function of Self-Handicapping

A young woman will be completing her first university examination one week from now, and she is considerably anxious. This anxiety might be expected to motivate her to spend many hours preparing for this exam by rereading and studying her textbooks and class notes, reviewing old exams for the course, forming a study group, etc. But what if, rather than preparing to do her best, she sets herself up to fail by procrastinating rather than studying, staying up all night the night prior to the exam watching pay TV, or imbibing several stiff drinks immediately prior to the exam? This phenomenon of setting oneself up to fail a feared evaluative task was first labelled "self-handicapping" by Jones and Berglas in the late 1970's (Jones & Berglas, 1978; Berglas & Jones, 1978). By self-handicapping, individuals avoid accurate feedback on their ability. In the process, self-handcappers are thought to be protecting their self-worth by decreasing responsibility for failure while increasing responsibility for success. If the student failed her exam, for example, she could blame her procrastination, or sleep deprivation, or intoxication, rather than her own inadequacy as a student. She might tell herself, "If only I hadn't been drunk, I would have gotten the highest grade in the class." If she performed well on the exam despite the handicaps she had relied upon, she could see herself as exceptional. She might think: "Even though I hardly studied, I did well, so I must be brilliant." In the study I will be describing today, this self-protective function of self-handicapping was assessed.

If self-handicapping protects its users from failure, self-handicappers should be high in self-worth. In past research, this relationship between self-handicapping and self-worth has not been found consistently, however (Harris & Snyder, 1986; Harris, Snyder, Higgins, & Schrag, 1986; Strube, 1986; Strube & Roemmele, 1985). Perhaps this expected relationship has not been found because individuals self-handicap not to protect a general or global self-feeling, but to protect a perception of competence in the domain under evaluation. For



example, the girl who self-handicaps prior to an athletic event may be trying to protect her perception of athletic competence rather than her global self-worth. Furthermore, these domain-specific self-perceptions may relate to self-handicapping, but only as a function of actual competence in the same domain. Specifically, individuals are expected to self-handicap as a function of the degree of distortion of their self-perceptions, where distortion is defined as a difference between their actual competence and their perceptions of competence. (See Figure 1.) According to this definition, accurate raters have actual and perceived competencies which are closely matched. An example might be an excellent violinist who sees himself as such. This individual would be considered a "high accurate rater". Most individuals would be expected to be accurate judges of their own competence (i.e., accurate raters) in most domains.

Insert Figure 1 about here.

According to the model presented in Figure 1, there are two types of individuals who distort their perceptions of competence. The first group of distorters are <u>underraters</u>, individuals who underrate their actual competence. These individuals are high in actual competence but low in perceived competence. They see themselves as less competent than others would rate them, and/or than one would infer from their scores on objective measures. An example might be a boy who views himself as a poor math student despite straight A's and a score above 90% of his peers on a standardized math achievement test. The second type of distorters are individuals who overrate their actual competence, or <u>overraters</u>. These individuals are low in actual competence but high in perceived competence; they have inflated perceptions of their abilities. For example, a girl might believe that she is an excellent tennis player while her teacher disagrees because the girl cannot make contact with the ball.



How is this degree of distortion expected to relate to self-handicapping? By self-handicapping, individuals avoid feedback on their actual ability. As a result, self-handicappers should have distorted rather than accurate self-perceptions. If self-handicapping is self-protective, overraters, who see themselves as more competent than they are, are expected to be prone to self-handicapping in order to maintain this overly positive self-view. If overraters fail after handicapping, they can blame the failure on the handicap rather than inability, and thereby sustain the false belief that they are highly competent. Success despite the handicap also confirms that overraters are highly competent.

To summarize thus far, if the primary influence of self-handicapping is on self-conceptions in the domain of the particular task rather than on global self-worth, the self-handicapper's self-conceptions in this domain must be assessed. The only way to determine whether self-handicapping is effectively protecting handicappers from failure is to consider handicappers' self-worth in light of their actual competence. If self-handicapping is self-protective, self-handicappers are expected to overrate competence in the domain of the task. Thus, the major hypothesis of this study is that overraters will be more likely to self-handicap than underraters.

<u>Method</u>

The relationship between accuracy of domain specific self-perceptions and self-handicapping was assessed in the context of junior high school students' preparation for and completion of a mock mathematics quiz. The degree of distortion of math perceptions was assessed by comparing perceptions of math competence as measured by a domain-specific self-concept scale with actual competence as measured by standardized math test scores and teacher ratings of math ability.



Four-hundred and ninety-five students from 25 classes in 4 schools participated in this study. The sample included approximately an equal number of boys and girls and Grade 7's and 8's, and the mean age of participants was 13.0 years.

All testing took place in two 40-minute group sessions held one week apart in students' regular classes. The main goal of the first session was to assess actual and perceived math competence. Only the measures relevant to this goal, i.e., measures of actual and perceived mathematics competencies, will be reviewed here. (These measures are listed in Table 1.)

Insert Table 1 about here.

Four scales of the self-report measure of perceptions of competence, the Self-Description Questionnaire-II (SDQ-II, Marsh, 1990), were administered, including scales of perceptions of math competence, verbal competence, academic competence and global self-worth. The Math Perceptions scale was used as the measure of perceptions of math competence. Two measures were used to assess actual math competence. First, participating students completed a grade-appropriate subset of questions from the Arithmetic subtest of the Woodcock-Johnson Tests of Achievement-Revised (Woodcock & Mather, 1989). Second, teachers were asked to rate on a 5-point Likert scale the math competence of all participating children in comparison to the other children they teach. These two measures of actual math competence were moderately correlated (r = .52, p <.001), and thus scores on these measures were standardized and summed to compute one overall measure of actual math competence.

The second testing session was structured around the preparation for and completion of the mathematics quiz. Procedure for this session is outlined in Table 2. Students were given a practice problem packet. The first white page of this packet consisted of practice problems,



and was followed by three pink pages. Students were given time to prepare for the upcoming quiz using the practice problems. They were told that they could spend as much or as little time preparing as they wanted, but that they would not have enough time to complete all practice problems. They were asked to work independently on the remaining pink pages once they had spent enough time preparing. The few students who had not started on the first pink page at 9 minutes, 15 seconds were asked to start on this page then.

Insert Table 2 about here.

At the top of the first pink page were two ratings of effort expenditure. First, students were asked to estimate, without the help of time cues, how long they had spent working on the practice problems in minutes and seconds. (Prior to the practice problem session, students had been asked to remove their watches and the clocks in the classroom had been covered.) Second, students were asked to rate on a 5-point Likert scale how hard they had tried during the practice period. The remainder of this page was the Excuses Questionnaire, a variety of potential excuses for poor performance on the upcoming math quiz that students were to rate on a 4-point scale. Some of these items were directly relevant to the preparation session, e.g., "The practice roblems were too hard for me," while others were not, e.g., "I am hungry or thirsty right now." The second pink page was the State form of the State-Trait Anxiety Inventory for Children (Spielberger, Edwards, Lushene, Montuori, & Platzek, 1973). on which children were asked to rate their current emotional state. The last pink page consisted of a puzzle and space for drawing, and was included solely to occupy the early finishers. Finally, once all students were working on the puzzle page, problem sets were collected and quizzes were distributed. Participants were asked to choose 10 questions total from 10 each of easy, intermediate, and difficult questions. They were not allowed to see the



actual questions until they had made their choices. In order to provide them with some incentive for challenging themselves, students were informed that the more difficult questions were worth more points. Once they had chosen the 10 questions they wanted to work on, they could begin working on them. Following approximately 10 minutes, the quizzes were collected.

Therefore, the 5 handicaps made available to participants prior to the quiz were: actual effort, claimed effort, general excuse-making, state anxiety, and question-difficulty choice. Actual effort was based on in-class raters' recording of students' actual time spent on the practice problems according to when students turned from the white practice problem page to the pink page, and on the total number of practice problems attempted. Claimed effort expenditure was based on the self-report Likert rating completed following practice problem completion. Overall score on the Excuses Questionnaire was used as the measure of general excuse-r. aking and total score on the State form of the State-Trait Anxiety Inventory was used as a measure of overall anxiety. Finally, question-difficulty choice, because of its potential for interference with accurate feedback on ability, was also considered a handicap. In this study, the choice of easy questions was associated with a tendency to self-handicap and was therefore considered the handicapping option. Of these handicaps, two (actual effort expenditure, question-difficulty choice) are actual behavioural manipulations, while the remaining three handicaps are merely claims of interfering circumstances.

Results

The main interest in this study was the relationship between distorted self-perceptions and self-handicapping. Prior to examining this issue, the degree to which students distorted their self-perceptions was considered. The obtained correlation of .59 (p < .0001) between actual and perceived competencies suggested that most children were relatively accurate raters of their math competence, and, conversely, that there were likely few extreme



distorters. In light of this relationship between actual and perceived competencies, it was wondered whether knowing perceived competence would provide any additional information once actual competence was known. Hierarchical multiple regression was used to answer this question because with regression, the unique variance due to a factor can be considered above and beyond the variance it shares with other factors. The steps in these regression analyses that are relevant to the central research hypothesis are outlined in Table 3.

Insert Table 3 about here.

Thus, actual competence was entered into the regression equation first (Step 1), followed by perceived competence (Step 2), and finally, the interaction between actual and perceived competencies (Step 3). Step 2 in this analysis is highlighted. This step is the measure of the effect of distortion in self-perception, where distortion is defined as the increase in proportion of variance accounted for by perceived competence once variance due to actual competence is taken into account. In this step, actual competence is being held constant, and the interest is in any additional variation in perceived competence.

The question at Step 2 is whether distorted perceptions of competence predict self-handicapping. Specifically, it was predicted that, if self-handicapping is self-protective, overraters would tend to self-handicap more than underraters. In fact, the inverse was found: Underraters self-handicapped more than overraters. (See Table 4.)

Insert Table 4 about here.

The interest at Step 3 of the regression analysis was in self-handicapping and the interaction between actual and perceived competencies. No specific predictions were made. In two cases, for question-difficulty choice and the Excuses Questionnaire, this interaction



was significant. In both cases, there was more variation among highly competent students across levels of perceived competence, with the greatest differences in the behaviour of high-actual-competence underraters and high accurate raters.

For question-difficulty choice, for example, as illustrated in Figure 2, all students low in actual competence irrespective of perceived competence tended to choose easy questions. This finding contrasts with that for highly competent students: High-actual-competence underraters chose easier questions than accurate raters high in competence. Thus, low-ability students' question choices seemed to reflect their actual competence, whereas the question choices of highly competent students seemed to reflect variations in perceived competence. Comparing underraters to overraters, underraters' choice of easy questions suggests that they genuinely believed that they were low in competence as they had reported. In contrast, overraters' choice of easy questions suggested that they did not believe that they were highly competent as they had reported.

Insert Figure 2 about here.

Discussion

The goal of the present investigation was to assess the role of self-handicapping in the maintenance of a distorted perception of competence. Overraters were expected to self-handicap in order to sustain their exaggeratedly positive self-view, but they did not. Instead they set themselves up to do as well as they could in a "self-enhancing" way. Overraters persisted during the practice session even though there may have been few questions some of them could solve. They claimed less anxiety and fewer excuses prior to the quiz. Considering their diligent quiz preparation, overraters may have felt little need to deflect responsibility for the outcome. Their choice of easy quiz questions, however,



suggests that they were aware that they were less able than they had reported. Thus, overraters did not set themselves up to fail; they set themselves up to succeed, but to succeed at a task within their capability.

Contrary to prediction, underraters were more prone to self-handicapping than overraters. Underraters may have self-handicapped for the self-protective reasons originally hypothesized by Jones and Berglas (1978), to stop their already low perceptions of competence from sinking any 'ower. This self-protective motive is questionable, however, given that the self-handicappers in this study had low perceptions of competence despite their supposedly self-protective efforts.

Rather than self-protection, self-handicapping may have been serving the function of self-consistency or self-verification (Fitch, 1970; Shrauger, 1975), allowing individuals to continue to see themselves as they do presently. Thus, underraters, by self-handicapping, are perpetuating a view of themselves as low in competence, while overraters, by setting themselves up to do well, may continue to see themselves as more competent than they are.

Misraters' behaviour may therefore make more sense in light of self-efficacy (Bandura, 1977) than self-handicapping theory. Self-efficacy theorists believe that individuals' behaviour is guided by their beliefs about their ability to succeed at a task. Thus, people who believe they can do well set themselves up to do well, whereas people who believe that they will fail set themselves up to fail.

To conclude, the findings of this study suggest that self-handicapping may not be serving its hypothesized self-protective function. In fact, when self-handicapping was evaluated as a function of accuracy of self-perceptions, these adolescent self-handicappers seemed to have overly negative rather than overly positive self-perceptions. Further studies of self-handicapping conducted in naturalistic settings using genuine evaluative tasks are needed to better understand the relationship between distorted self-perceptions and self-handicapping.



References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

 Psychological Review, 65, 259-273.
- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. <u>Journal of Personality and Social Psychology</u>, <u>36</u>, 405-417.
- Fitch, G. (1970). Effects of self-esteem, perceived performance, and choice on causal attributions. <u>Journal of Personality and Social Psychology</u>, 16, 311-315.
- Harris, R. N., & Snyder, C. R. (1986). The role of uncertain self-esteem in self-handicapping.

 <u>Journal of Personality and Social Psychology</u>, 51, 451-458.
- Harris, R. N., Snyder, C. R., Higgins, R. L., & Schrag, J. (1986). Enhancing the prediction of self-handicapping. <u>Journal of Personality and Social Psychology</u>, 51, 1191-1199.
- Jones, E. E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement.

 Personality and Social Psychology Bulletin, 4, 200-206.
- Marsh, H. W. (1990). <u>Self-Description Questionnaire-II</u>: <u>Manual and Research Monograph</u>. San Antonio: Harcourt, Brace, Jovanovich.
- Shrauger, J. (1975). Responses to evaluation as a function of initial self-perceptions. Psychological Bulletin, 82, 581-596.
- Spielberger, C. D., Edwards, C. D., Lushene, R. E., Montuori, J., & Platzek, D. (1973).

 STAIC Preliminary Manual for the State-Trait Anxiety Inventory for Children. Palo Alto:
 Consulting Psychologists Press.
- Woodcock, R. W., & Mather, N. (1989). <u>Administration Manual for the Woodcock-Johnson Tests of Achievement. Standardized and Supplemental Batteries</u>. Allen, TX: DLM Teaching Resources.



Figure 1.

Accuracy of perceptions of competence.

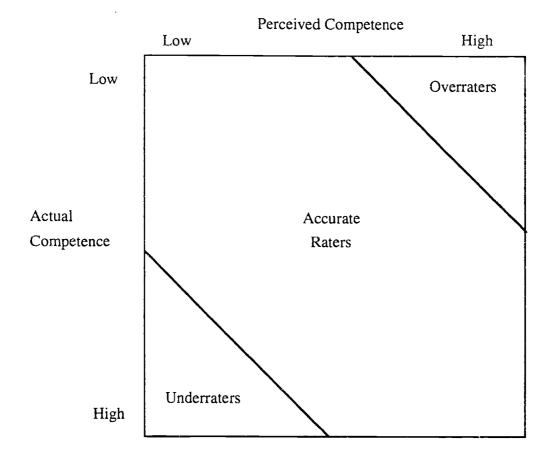




Table 1.

Relevant measures administered in Session #1.

1. Self-Description Questionnaire-II (4 scales only)

- -domain-specific measure of self-worth
- -scales of perceived math, verbal, and general academic competence, and global self-worth administered

e.g., "Mathematics is one of my best subjects."

2. Calculation subtest of the Woodcock-Johnson Tests of Achievement-Revised

-standardized measure of actual math competence

3. Teacher Ratings of Math Competence

-measure of actual math competence -ratings completed on a 5-point scale

combined measure of math competence



Table 2.

Summary of procedures in Session #2.

1. Quiz preparation using practice problems (9 minutes, 15 seconds maximum)

Investigators' tasks:

- -coding on- vs. off-task behaviour while turned to practice page
 -recording time participant finishes working on practice problems
- 2. Completion of two claimed effort questions
 -how hard tried to do their best (4-point scale)
 -estimate of time spent on practice problems
- 3. Completion of Excuses Questionnaire
- 4. Completion of state form of State-Trait Anxiety Inventory for Children
- 5. If finished early, completion of fun page

Investigators collect practice problem sets and distribute quizzes.

6. Choice of difficulty level of 10 quiz questions and completion of quiz questions selected

Table 3.

Multiple regression for predicting self-handicapping.

1. Actual Competence

2. Perceived Competence (Effect of Distortion)

3. Actual Competence x Perceived Competence

Outcome variables: 5 self-handicaps



Table 4.

Self-handicapping and distorted perception of competence

(Step 2--perceptions of competence entered).

Prediction: Overraters will self-handicap more than underraters.

Handicap	Effect	
Actual Effort Expenditure	Underraters > Overraters	
Claimed Effort Expenditure	not significant	
Excuse-Making (Excuses Questionnaire)	Underraters > Overraters	
State Anxiety	Underraters > Overraters	
Question-Difficulty Choice	Underraters > Overraters	



Figure 2.

Question-difficulty choice as a function of actual and perceived mathematics competencies.

