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## THE PROTECTIVE STYLE QUESTIONNAIRE: SELF- PROTECTIVE MECHANISMS AMONG STIGMATIZED ADOLESCENTS

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STEPHEN B. HILLMAN, PAULA C. WOOD AND SHLOMO S. SAWILOWSKY

Crocker and Major (1989) hypothesized three mechanisms by which members of stigmatized groups may protect self-esteem. The mechanisms are: a) ingroup social comparisons, b) valuing/devaluing performance selectively, and c) racial prejudice. We provide a test of Crocker and Major's hypothesized mechanisms with the development of the *Protective Style Questionnaire* which was administered to a sample of 78 African-American adolescents. Evidence of high internal consistency reliability (about .86) and factor loadings support the orthogonality of the three mechanisms. Results showed varying levels of endorsement of each mechanism.

A review of social stigma and self-esteem by Crocker and Major (1989) pointed out that "although several psychological theories predict that members of stigmatized groups should have low global self-esteem, empirical research typically does not support this prediction" (p. 608). They argued that this discrepancy could be explained by a number of ways individuals in such groups use self-protective mechanisms to protect self-esteem. Individuals who are stigmatized (due to race, gender, physical disability, etc.) are people for whom others hold negative beliefs or stereotypes. These individuals have likely been negatively impacted in terms of interpersonal and financial outcomes relative to people who are not stigmatized.

There is empirical support for Crocker and Major's (1989) theoretical position on the self-protective properties of stigma. For example, some recent studies on

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African-American adolescents indicated that a) their global self-concept was significantly higher than reported norms (Wood, Hillman, & Sawilowsky, 1992), b) they were more external in their attribution of events which control their lives than reported norms (Hillman, Wood, & Sawilowsky, 1992), and c) they viewed themselves as having more influence over positive life events than negative life events (Hillman, Wood, & Sawilowsky, 1994).

Crocker and Major (1989) proposed three mechanisms by which people protect self-esteem. They are a) "the tendency to make ingroup social comparisons" (p. 614) - ingroup common fate, b) "selectively devaluing, or regarding as less important for their self-definition, those performance dimensions on which they or their group fare(s) poorly, and selectively valuing those dimensions on which they or their group excel(s)" (p. 616) - devaluing/valuing performance selectively, and c) "attributing negative feedback or relatively poor outcomes to the prejudice attitudes of others toward their group" (p. 612) - racial prejudice.

Because there is no measure of Crocker and Major's (1989) hypothesized three mechanisms, the purpose of this study is to report on the development of the *Protective Style Questionnaire (PSQ)*. This instrument is designed to detect and further understand the use of the three mechanisms by which stigmatized individuals protect self-esteem (Wood et al., 1992) through the use of externalizing attributions when confronted with negative feedback (Hillman et al., 1992; 1994).

## METHODOLOGY

### SAMPLE

The adolescents from whom the data were collected were participants in the Summer Training and Education Program (STEP) at Wayne State University from 1990 - 1994. The purpose of STEP was to provide a fifteen month intervention (two six-week summer sessions and special support during the intervening academic year) for middle school students who were at-risk for not completing high school. In order to be included in this program, students had to meet the following criteria:

- their families were documented to be below the federally defined poverty level
- they were one to four years behind grade level expectation in academic achievement
- school counselors determined that they were at-risk for dropping out of school (indicators being truancy, low grades, behavior problems, family problems, multiple grade retentions)
- they were 13, 14, or 15 years of age
- enrolled in an urban middle school

Data were collected on the 78 African-American urban middle school students who participated in the STEP program in the summer of 1994. This constitutes a stigmatized group of youngsters according to Crocker and Major's (1989) definition. The average age of the sample was 14.0 years; 37.7% of the students were female and 62.3% of the students were male.

In order to participate in the STEP program, informed consent was obtained from the participant's parent(s) or legal guardian(s). The data were collected in the early part of the summer program, i.e., in the second month of a 15 month program. Because the data were collected early in the program, concern for unintended influences of the academic enrichment program was diminished. The students were administered the *PSQ* by their STEP instructors in a group setting. The instructors received prior training from the researchers regarding the standardized procedures which they were to follow. Neither the instructors nor the participants were aware of the specific hypotheses of the research.

#### **INSTRUMENT DEVELOPMENT AND ADMINISTRATION**

The *PSQ* was developed to test the use of the three hypothesized mechanisms advanced by Crocker and Major (1989). These hypotheses purport to explain the frequent failure of research studies to find low self-esteem among stigmatized youngsters. The *PSQ* was modeled after the *Attribution Style Questionnaire* by Peterson, et al. (1982) and the *Expanded Attribution Style Questionnaire* by Peterson and Villanova (1988).

The *PSQ* consists of six vignettes. Each vignette describes a negative event which might happen to an adolescent. The text for each vignette was shown to adult African-American individuals to validate the plausibility and likelihood of these events occurring in the lives of African-American adolescents. Moreover, the vignettes were purposefully chosen to reflect daily life experiences of the adolescents in the sample. The contexts represented in the stimuli include school, job, and interpersonal relationships.

There are three types of responses possible for each vignette. The "A" responses to each vignette refer to Crocker and Major's (1989) ingroup comparisons or shared common fate hypothesis. The "B" responses are derived from their hypothesis of devaluing poor performance or valuing successful performance selectively, and the "C" responses are based on the hypothesis of negative events occurring due to stigmatized group membership, such as race.

Three items (one for each of the three mechanisms) are linked to each vignette, for a total of 18 items on the initial version of the *PSQ*. The response set is a four point ordinal scale. The degree to which a person agrees with the use of the mechanism in response to the negative experience communicated in the vignette is obtained by endorsement of "NO", "no", "yes", or "YES". (The ordered levels of endorsement are distinguished by use of capitalization.)

## RESULTS

An exploratory factor analysis was conducted on the data set obtained from the African-American adolescents in the sample. The data analysis was performed using an unrotated factor analysis routine provided in SPSS 7.0 for Windows 95, Professional Statistics module. (Rummel, 1970, noted "If we only wish to describe the given data through a multifactor solution, no rotation of these results need be contemplated" (p. 351). Similarly, see Tatsuoka & Lohnes, 1988, p. 199.) Evidence for a three factor solution, matching the hypothesized three mechanisms, is depicted in Table 1. Factor loadings for the three subscales indicate 14 of 18 items loaded on the appropriate subscale with factor loadings  $\geq .4$ . Seven items presented eigenvalues  $\geq 1.0$ , with the cumulative percent of explained variance at 65.7%. The results of a multidimensional scaling, using a Euclidean distance model, are presented in Figure 1. These results support the spatial clustering of items in the three factor model. The *PSQ* is presented in the Appendix, including the four items dropped from the analysis due to low factor loadings.

The "rule of thumb" in the statistical literature regarding the minimum ratio of sample size per variable is from "two subjects per variable to 20 subjects per variable" (Stevens, 1992, p. 384). In the current study there are 4.3 subjects per variable (i.e., 78 subjects and 18 items on the instrument). Moreover, Guadagnoli and Velicer (1988) concluded, based on Monte Carlo evidence, that more important factors than this ratio include the absolute magnitude of the factor matrix (or loadings), number of components (i.e., subscales), and the number of variables per component that have moderate or high factor loadings. According to Stevens (1992, p.384), a component with three "factor pattern coefficients" (Thompson & Daniel, 1996) or loadings of at least .80 will be reliable regardless of sample size, and in further discussion, noted that if there are at least "two loadings above .60", then the component is reliable. All three subscales on the *PSQ* had at least two items with factor loadings above .60.

TABLE 1  
FACTOR LOADINGS ( $\geq .40$ ) FOR PROTECTIVE STYLE QUESTIONNAIRE SUBSCALES A (INGROUP COMMON FATE), B (DEVALUING/VALUING PERFORMANCE SELECTIVELY), & C (RACIAL PREJUDICE)

Item	PSQ	Subscale	Factor 1 Subscale A	Factor 2 Subscale B	Factor 3 Subscale C
Q1	1a	A	.557	*	*
Q4	2a	A	.677	*	*
Q7	3a	A	.403	*	*
Q10	4a	A	.660	*	*
Q13	5a	A	.414	*	*
Q16	6a	A	.705	*	*
Q2	1b	B	*	.551	*
Q5	2b	B	*	*	*
Q8	3b	B	*	.410	*
Q11	4b	B	*	*	*

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Q14	5b	B	*	.746	*
Q17	6b	B	*	.772	*
Q3	1c	C	*	*	.723
Q6	2c	C	*	*	.495
Q9	3c	C	*	*	.677
Q12	4c	C	*	*	*
Q15	5c	C	*	*	*
Q18	6c	C	*	*	.682

Note: \* = factor loading < |.4| .

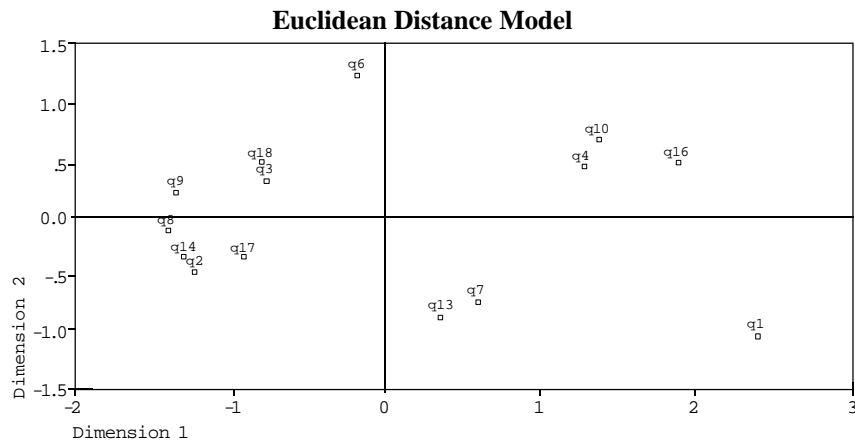


FIGURE 1: Derived Stimulus Configuration

Subscale descriptive statistics and estimates of internal consistency reliability are compiled in Table 2. The reliability estimates were also obtained using the Professional Statistics module of SPSS for Windows 95, version 7.0. On the basis of the sample of adolescents in this study, scores obtained from the Protective Style Questionnaire were shown to have internal consistency reliability estimates of .66, .58, and .57, and Spearman-Brown corrections of .85, .86, and .88, for the three subscales of ingroup comparison (A), devaluing/valuing performance selectively (B), and racial prejudice (C), respectively. (Note that Spearman-Brown corrections for attenuation are more interpretable than Cronbach Alpha which is artificially deflated for subscales with a small number of items. The Spearman-Brown correction is used to project the internal consistency reliability of the subscale if it was increased to a full length test.)

The distributions of scores obtained for the three subscales are depicted in Figures 2 - 4. An inspection of Figure 2 indicates a relatively normal (symmetric with light tails) response set for Subscale A (in-group common fate). However,

Subscales B and C (Figures 3 and 4) indicate a “floor” effect. Despite the depression of scores for the latter two subscales, there was a mild endorsement for C (racial prejudice) and pattern of rejection of B (devaluing/valuing performance selectively) as explanations for the occurrence of the negative event.

TABLE 2  
SUBSCALE DESCRIPTIVE DATA AND RELIABILITY ESTIMATES, N=78.

Subscale	# Items	m	s	CA	SB
A (Ingroup - Common Fate)	6	14.24	4.1	.66	.85
A'	6	14.24	4.1	.66	.85
B (Devaluing/Valuing Performance Selectively)	6	9.97	2.7	.36	.63
B'	4	5.51	1.9	.58	.86
C (Racial Prejudice)	6	9.58	2.8	.57	.80
C'	4	7.08	2.5	.61	.88

Note: SB for subscales based on 18 or 14 items (total test length). A', B', and C' are based on 3-factor solution. CA = Cronbach Alpha, SB = Spearman-Brown.

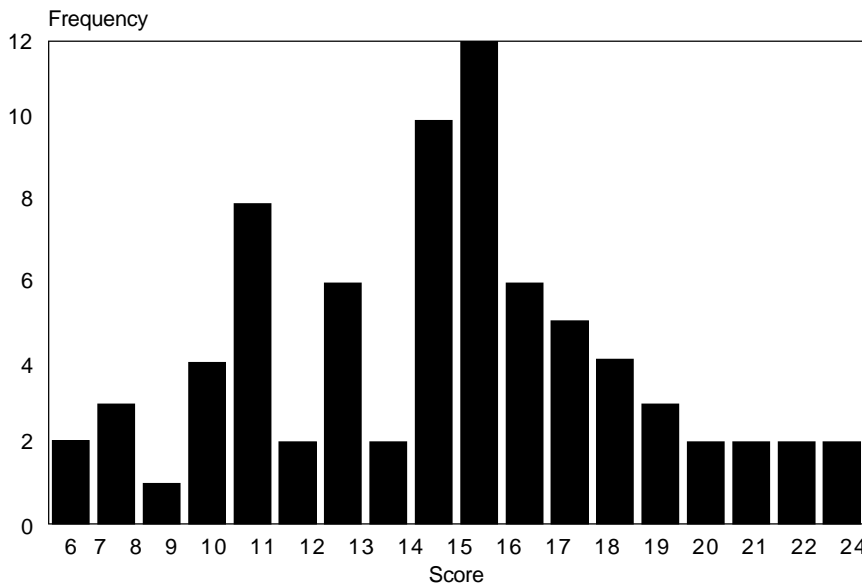
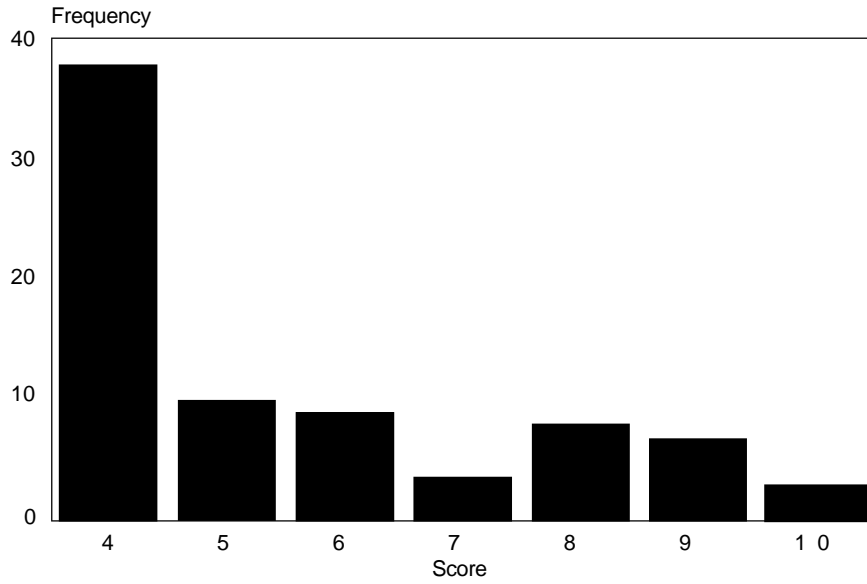
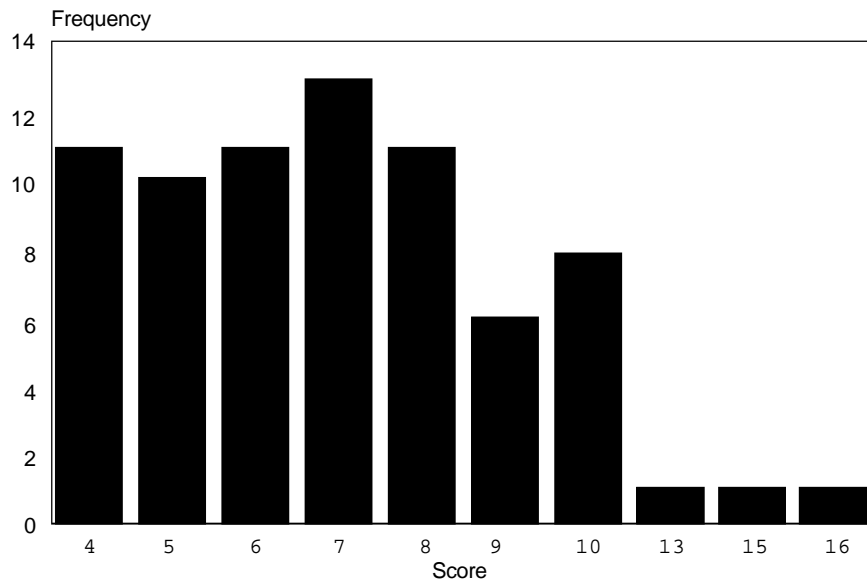


FIGURE 2: PSQ A Scale In-Group Common Fate



**FIGURE 3: PSQ B Scale Devaluing/Valuing Performance Selectively**



**FIGURE 4: PSQ C Scale Racial Prejudice**



## DISCUSSION

Crocker and Major (1989) noted that people may be stigmatized due to their race, which is a readily apparent characteristic. Attribution of negative feedback by a person who is stigmatized due to race might result in the use of one or more of the three mechanisms they proposed in order to dismiss negative feedback and thereby maintain self-esteem. Indeed, Goffman (1963) previously suggested that access to a stigmatization explanation might be used to avoid self-assessment as a response to negative feedback, thereby precluding the benefits of accurate and well-meaning feedback.

The *Protective Style Questionnaire* is the first instrument that permits a direct measurement of Crocker and Major's (1989) hypotheses. The results of this study are the only empirical evidence, to date, supporting the use of the hypothesized mechanisms they described for the protection of self-esteem by stigmatized individuals in the presence of negative events.

The study lends support to Crocker and Major's (1989) hypothesis that stigmatized people make ingroup social comparisons (A) as a way to protect self-esteem. The racial prejudice (C) hypothesis was endorsed also, but less frequently, and the devaluing/valuing performance selectively (B) hypothesis was endorsed sparingly. The sorted factor matrix ( $\geq |.4|$ ) served to identify and support the three subscales, as they relate to the three mechanisms.

Additional vignettes might be added to expand the scope of the *PSQ*, especially for older adolescents and adults. For example, contexts such as driving an automobile, career, and marriage might be useful for other applied settings. The *PSQ* might also be used by educators and psychologists as a diagnostic tool in determining the mechanisms which are used by youngsters in deflecting negative, albeit accurate, feedback.

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#### APPENDIX

##### The Protective Style Questionnaire

1. You have had trouble finding a better job for some time.
  - A. To help myself feel better, I would think about people like me who also had trouble finding better jobs.
  - B. Many people like me do not find better jobs, so it's not important to be successful in finding a job.
  - C. Is the cause of your unsuccessful job search due to something about your race?
2. You go to a store, ask for change, and the cashier says "no".
  - A. To help myself feel better, I would think about people to whom the cashier also said "no".
  - \*B. Many people like me have things like this happen so it's no big deal.
  - C. Is the cause of the cashier having said "no" due to something about your race?
3. You do a project for school which gets a low grade.
  - A. To help myself feel better, I would think about people like me who also get low grades.
  - B. Many people like me do not get good grades so it's not important for me to get good grades.
  - C. Is the cause of your low grade on your project due to something about your race?
4. You go out with your boyfriend/girlfriend and it doesn't go well.
  - A. To help myself feel better I would think about people like me who have the same thing happen.
  - \*B. Many people like me have this happen so it's no big deal.
  - \*C. Is the cause of this due to something about your race?
5. You don't complete all the homework the teacher assigned and you don't get credit.
  - A. To help myself feel better I would think about people like me who have similar experiences.
  - B. Many people like me don't complete their homework so it's not important.
  - \*C. Is the cause of not getting credit for your incomplete homework due to something about your race?
6. You are in need of help and you approach a teacher who does not help you.
  - A. To help myself feel better I would think about people like me who also were not helped by teachers.
  - B. Many people like me do not get help from teachers so it's not important.
  - C. Is the cause of your not being helped due to something about your race?

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Note: \* = items with factor loadings less than .4.

