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The present study examines the contribution of Black students' perceived personal competencies to both a four-year academic persistence and freshman GPA. Results indicate that students who obtain higher first year GPAs and who perceive themselves as being more competent in areas of adapting, planning, exercising self-control, coping with failures, managing anxiety, and differentiating feelings persist more often than those who do not.

# Academic Performance vs. Academic Persistence: A Study of Black Students' Perceived Personal Competency

Robbie J. Steward and James D. Jackson

### Introduction

Typically, studies which have attempted to differentiate achievers from underachievers by examining global self-concept have found conflicting results. Some researchers have found that underachievers have more immature or lower self-concept than do achievers (Bailey 1971; Kanoy, Johnson, and Kanoy, 1980; Paschel, 1968). Using self-report measures, Matsunaga (1972) found that the achievers had a higher self-concept of ability, a concern with good relationships, more self-confidence and responsibility, and a greater awareness of the needs of others.

Dr. Robbie Steward is an Assistant Professor at the University of Kansas, Lawrence.

James Jackson is a graduate student in experimental psychology at the University of Kansas. On the other hand, some studies have not found a strong relationship between self-concept and underachievement. Such have found that achievers and underachievers could not be differentiated by any particular personality characteristics (Johnson, 1967; Peters, 1968; Reisel, 1971). The conclusions have questioned the legitimacy of the underachievement concept.

This conflict in the literature exists also for the study of Black student achievement and self-concept. For Black students, Jordan (1981) found a significant relationship between the two variables and attributed these conflicting findings in the literature to the fact that early researchers usually limited sampling to only students from low-income backgrounds. With this sample, other variables (such as unmet economic needs, insufficient intellectual stimulation in class, insufficient academic stimulation, relationship with family members) which were not examined may have a much stronger impact on academic achievement than self-concept.

Banks (1984) suggested that future researchers addressing Black student achievement and self-concept should carefully control for variables reflecting withingroup diversity existing among Black students. It would seem at least critical to note the demographical information of the sample examined. Few studies actually noted the existing within-group diversity in the sample, and presently a valid conclusion about a clear, consistent empirical relationship between the two (Black student self-concept and academic persistence) remains nonexistent.

Some researchers argue that the inconsistencies in the literature exist due to the use of the global concept of self-concept in the research design. Rogers, Smith, and Coleman (1978) and Jhaj and Grewal (1983) found significant relationships between academic success and specific aspects of self-concept, but not the overall construct. Matsunaga (1972) theorized that the conflict in the literature existed due to the continued use of self-concept as a global construct because researchers have consistently chosen instruments that result in an overall global measure of selfconcept. He suggested that different aspects of selfconcept such as the individual's opinions of his or her ability to carry out particular tasks successfully would have a stronger relationship with academic achievement than overall self-concept. This aspect of self-concept is known as self-efficacy (Brookover, 1979; Nowicki, Jr., and Strickland, 1973). Matsunaga's (1972) findings suggested that studies should focus more on specific aspects of self-efficacy, as opposed to the overall construct of self-concept.

The present study examines the contribution of specific aspects of self-efficacy to academic performance (as indicated by first year GPA), and four-year academic persistence of African-American freshmen on a large, midwestern, predominantly White university campus.

### Method

### **Participants**

All entering 18-year old, American-born Black freshmen who lived in dormitories on a large predominantly White university in the central United States received a questionnaire packet (N=115). Only those students who completed the entire packet were selected for inclusion in this study (n=40). A follow-up study examining student enrollment status was done immediately after the first semester of the participants' fourth academic year.

### Procedure

The researchers made necessary contacts to obtain names of potential participants. Each participant received a packet containing a letter of introduction, a research participation consent form, a copy of each of the measures, and a demographic sheet with instructions. Each instrument was a pencil-and-paper test and self-administered.

Information gained regarding individual subjects was held in strict confidence. Code numbers were assigned to each participant and only this number was used to identify participants on the instruments and demographic information sheets. The code was kept in a secure location under the control of the experimenter.

### Instruments

Each survey packet contained the letter of introduction and explanation, Consent for Research Participation Form (requested permission to check students' first year GPA from university records), the Student Demographic Questionnaire (SDQ), and the Personal Competency Rating Scale (PCR; Paul, Pulton, Ostrow, Morrill, and Kochenor, 1981):

(a) Student Demographic Questionnaire (SDQ): The SDQ was designed by the author and consisted of twelve items addressing participants' personal and academic backgrounds.

(b) Personal Competency Rating Scale (PCR): The PCR consisted of thirty 5-point Likert-type items designed to assess the extent to which individuals perceive themselves to possess competencies in four general areas: social, personal, problem-solving and functional. The PCR was used to measure the construct of self-efficacy in several different areas. The instrument resulted in a total score as well as subscale scores.

(c) The social subscale: addressed interpersonal relationship abilities, including communication, assertiveness, interpersonal problem-solving, and intimacy. The personal subscale contained items reflecting an individual's abilities to adapt, plan, exercise self-control, cope with failures, manage anxiety, differentiate feelings, and enhance physical attractiveness.

(d) The problem-solving subscale: examined problem-solving abilities including aspects of problemdefinition, alternative exploration, and resource organization.

(e) The functional subscale: measured the functional competencies involving computational, reasoning, reading, writing, and time-use.

Each of the subscales has been found to add to the overall measure. The instrument has content validity, and reliability has been found to be .85.

### **Data Analysis**

T-tests were used to examine persisters and nonpersisters' mean total PCR scores and freshmen GPA differences. Two multiple regression analyses were used to examine the contribution of the PCR subscale scores to academic persistence and freshmen GPA. In the first multiple regression, four-year academic persistence was designated as the dependent variable, while in the second freshmen GPA was the dependent variable.

### Results

Forty freshmen returned the survey packets. The sample was comprised of 60% (24) females and 40% (16) males. The largest group of students had fathers (39%) and mothers (43.6%) with at least a high school education and were from cities with a population in the range of 100,000–500,000 (48.7%). Table 1 presents parental educational backgrounds and population of cities of origin. These demographic results closely reflected that of the total Black freshmen population (N = 120). This was also true for the four-year attrition follow-up in which a 62.5% (25) attrition rate was found, closely resembling that of the total Black population over a four-year span (62%). Participants' mean high school GPA was 3.2 on a 4.0 scale. The mean ACT score was found to be 15.8.

Table 1 Demographic Information

Table 1a Frequencies of varying education levels of parents of student sample

Level	Fa	Father		Mother	
	#	%	#	%	
1	2	4.9	1	2.6	
2	16	39.0	17	43.6	
3	2	4.9	6	15.4	
4	7	17.1	10	25.6	
5	6	14.6	2	5.1	
6	0	0	0	0	
7	8	19.5	3	7.7	

Level 1 = Elementary 2 = High School 3 = Some College 4 = Bachelors 5 = Masters

6 = Ph.D. 7 = No Response

Table 1b Hometown Population sizes of student sample

Population	# *************************************	%
0- 50,000	14	35.8
50,001- 100,000	2	5.1
100,001- 500,000	19	48.7
500,001-1,000,000	0	0
1,000,000+	4	10.2

Table 2 presents comparisons between means and standard deviations for students who had persisted and those who had not at the time of the four-year follow-up. Results indicated significant (p<.01) differences between grade point averages of students who persisted and those who did not. No significant differences were found between the mean total perceived personal competency scores when scores of persisters and nonpersisters were compared.

Table 2
Comparisons between means and standard deviations for students who were and no longer enrolled at the four-year follow-up

	Enrolled (N = 25)		No longer (N = 15)	
	Х	SD	X	SD
Total PCR Score	3.95	.45	3.77	.56
Freshmen GPA 1**	2.53	.79	1.91	.88

<sup>\*\*</sup>means that were significantly different at .01 level GPA 1 = the first year grade point averages

Table 3 presents the results of the multiple regression with four-year academic persistence as the dependent variable and each of the PCR subscales as the independent variables. In order to examine relationships with academic persistence, students were assigned numbers to indicate enrollment status after 3 1/2 years. The number one was assigned to those students who continued to be enrolled, while the number two was assigned to those who were no longer enrolled. The freshmen GPA and the PCR Personal subscale scores were found to be the only variables to significantly and uniquely contribute to the variance in academic persistence (F = 3.16; significant F = .05). Results indicated that students who perceived themselves to be more competent in areas of adapting, planning, exercising self-control, coping with failures, managing anxiety, and differentiating feelings persisted more often.

Table 3
Results of the Stepwise Multiple Regression
Using 4-year academic persistence
as the dependent variable

Variables in Equation	Beta	R square	F	Significant F
Freshmen GPA Personal Subscale	1549	.1533	3.16	.05
Scores	1870			
Constant	2.7164			

Table 4 presents the results of the multiple regression with freshmen GPA as the dependent variable and the PCR subscales as the independent variables. The PCR Functional subscale was found to be the only subscale that uniquely and significantly contributed to the variance in freshmen GPA (F=4.216; Significant F=.04). Results indicated that those students who perceived themselves to be more competent in areas of competencies involving computational ability, reasoning, reading, writing, and timeuse also tended to have higher freshmen GPAs than those who did not.

Table 4
Results of the Stepwise Multiple Regression
Using Freshmen GPA as the dependent variable

Variable in the equation	Beta	R square	F	Significant F
Functional	194 Ta -		1.00	
Subscale				
Scores	.4478	.1060	4.268	.04
Constant	.6199		11200	.07

### Discussion

The data tended to support previous studies identifying the importance of self-efficacy in students' academic persistence on university campuses. Burlew (1980) and Tracey and Sedlacek (1984) had also noted that personal characteristics of Black youth, such as self-perceptions, could also be used to predict educational attainment. Tracey and Sedlacek (1984) found positive self-concept to be predictive of the academic success of both Black and White students during the first semester.

Given that no significant differences were found between the overall total personal competency mean scores of persisters and nonpersisters, findings supported the premise that Matsunaga (1972) purported. In fact, only one aspect of self-efficacy as measured by the PCR was found to contribute significantly and uniquely to academic persistence and only one to freshmen GPA.

The significant contribution of first-year GPA and personal skills (as measured by the PCR personal subscale) to academic persistence appeared to indicate the importance of early assessment of Black freshmen's levels of academic skills (as related to freshmen coursework) and personal skill abilities as perceived by the student. For example, Black freshmen's previous performance in coursework similar to that required during the freshmen year would be closely scrutinized with strong recommendations for tutoring in those areas where students appear to be experiencing difficulty. Students would also be requested to self-assess ability levels in areas of adapting, planning, exercising selfcontrol, coping with failures, managing anxiety, and differentiating feelings. The importance of acquiring such skills in surviving to matriculation might be presented during student orientation and/or periodically scheduled programming addressing all areas. Balancing programs addressing both academic skills and personal skills seems critical.

It is also important to note that the results of this study support the notion that academic success and academic persistence are two different entities which require two dif-. ferent interventions if Black student academic achievement is to be enhanced on predominantly White university campuses. In spite of age-old recommendations advocating the teaching of skills measured by the PCR Personal subscale to Black students (Coelho, Hamburg, and Murphey, 1963; Haettenschwiller, 1971; Sedlacek and Brooks, 1976; Vontress, 1968), university program development traditionally has addressed only students' academic skill deficits, not skills associated with self-perceived personal competencies. The acquirement of the necessary interpersonal skills has consistently been ignored as a primary contributor to dropouts. This negligence might offer some explanation for the quite stable attrition rate for the overall university student population (50%), and for the consistently higher and stable attrition rate of Black students on predominantly White university campuses. It would seem that it is time for the focus of university program developers to be expanded to include another important aspect of what is necessary in order to survive campus life.

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