

**THE RELATIONSHIP OF LOCUS OF CONTROL AND  
SELF-CONCEPT TO GRADE POINT AVERAGE**

**BY**

**DELOIS ARNESTINE HOGAN**

THE RELATIONSHIP OF LOCUS OF CONTROL AND  
SELF-CONCEPT TO GRADE POINT AVERAGE

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In Partial Fulfillment  
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Master of Arts

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by  
Delois Arnestine Hogan

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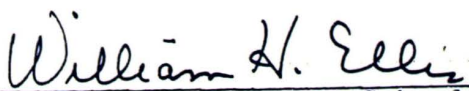


To the Graduate Council:

I am submitting herewith a Research Paper written by Delois Arnestine Hogan entitled "The Relationship of Locus of Control and Self-Concept to Grade Point Average." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

  
Linda Ludolph  
Major Professor

Accepted for the Council:

  
William H. Ellis  
Dean of the Graduate School

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# CHAPTER I

## INTRODUCTION

Educational research has attempted for many years to determine factors related to student achievement. The relationship of variables such as age, sex, socioeconomic status, child-rearing practices and teaching methods to academic achievement have been investigated. Much recent research has centered on the relationship of locus of control and self-concept to academic success or failure. However, a review of the literature reveals that studies have produced conflicting results concerning the relationship of locus of control and self-concept to achievement in school (Lefcourt, 1966; Wylie, 1961). Numerous locus of control studies have reported that the belief in one's own ability to control what happens (internal locus of control) is related to higher achievement (Crandall, Katkosky and Crandall, 1965; Lefcourt, 1966; Wolk and Ducette, 1973). Conversely, Shultz and Pomerantz (1976) found that locus of control did not distinguish high and low achievers, and Drummond, Smith and Pinette (1975) found that externally-oriented students were higher achievers. Likewise, results of self-concept studies are mixed. Coopersmith (1967) and Caplan (1967) found that positive self-concept was related to higher achievement. Results by Rubin, Dayle and Sandige (1977) indicated a moderate relationship between self-esteem

and school performance, and Brownfain (cited in Wylie, 1961) reported that higher achievers had negative self-concepts. These findings suggest that the relationship of self-concept and locus of control to achievement is inconclusive and warrants further examination.

### Locus of Control

Locus of control is defined as the belief in one's own ability to control reinforcements. Rotter (1966) characterized persons differing in perceptions of control as internals or externals. Internals believe that they are solely responsible for the rewards or reinforcements that their environment provides them. Externals, on the other hand, believe their rewards are due to luck, chance, fate, or other people in their lives (Rotter, 1966).

Lefcourt (1966) defined the limits within which the locus of control variable should have its greatest utility in order to draw appropriate conclusions from research literature. Locus of control, according to Lefcourt (1966), should not be regarded as an omnibus trait similar to competence or intelligence. He stated, "It can better be defined as a circumscribed self-appraisal pertaining to the degree to which individuals view themselves as having some causal role in determining specified events. The perception of control is a process, the exercise of an expectancy regarding causation; and the terms



internal and external control depict an individual's more common tendencies to expect events to be contingent or non-contingent upon their actions" (Lefcourt, 1976, p. 153).

It is generally accepted that the change of students' maladaptive causal perceptions of success and failure should improve their academic performance (Bar-Tal, 1978). Based on an examination of research studies, Bar-Tal (1978) concluded that it would be desirable to change students' attributions in a direction emphasizing ability and effort as the causes for success and lack of effort as the cause of failure.

In an examination of the research on locus of control, Chan (1978) found that consideration of locus of control was helpful in understanding a child's view of placement of responsibility for events in his life and in evaluating the maturity of his conception of success and failure. According to Chan (1978), the construct of locus of control has important implications for cognitive functioning and, thus, must be considered when assessing a child. He concluded that excessive feelings of failure are depressants on cognitive growth because they diminish a child's motivation to alter his behavior or to learn new behaviors. These feelings affect school performance, lower IQ scoring, depress achievement scores and complicate the meaning of psychometric scores generated on standardized tests.

Holloway (1978) examined the relationship of locus of control and achievement. The results of his review of the literature indicated that internality was related to higher achievement. Holloway (1978) found that internals tended to receive higher grades than externals; they contracted for higher grades in a course where contracting was a course requirement; and they tended to be more persistent when seeking academic goals. Additionally, he found that when academic tasks demanded more internal control (alternative instructional design), internals performed well and externals performed more poorly. Conversely, where the control was external to the student (traditional instruction), externals were more likely to perform well and internals more poorly.

Similar results were reported by Parent, Foward, Canter and Mohling (1975) in a study investigating the effects of teaching strategy and personal locus of control on student performance and satisfaction. Fifty-four college students participated in the study. Internals and externals were identified on the basis of scores on the Internal-External Scale (Rotter, 1966) and randomly assigned to either a high discipline or low discipline mini-course. Results showed that students high on internal locus of control performed better under low discipline conditions, while high external control students performed better under high teacher discipline conditions.

Wright and Ducette (1976) conducted two studies on locus of control and achievement in two diverse educational situations. One study examined fifth graders in both the open and the traditional classroom setting; the other study examined college freshmen in a traditional and alternative classroom situation. The authors' results showed that locus of control did not correlate with achievement in either of the traditional settings, but did correlate in both alternative situations.

Bass, Ollendick and Vuchinich (1974) sought to determine the relationship that exists between locus of control and academic achievement as measured by grade point average (GPA). The study sample included 70 female and 36 male undergraduate students. The researchers' results indicated that differential study habits were an important factor in the locus of control-academic relationship for the males ( $r = -.28$ ;  $p < .05$ ), but not for the females ( $r = .04$ ;  $p > .05$ ) included in the sample.

In research completed by Keller, Golman and Sutterer (1978), the relationship of study habits to locus of control was tested. The Internal-External Scale (Rotter, 1966) was administered to 138 undergraduate psychology students and the results examined in relation to academic attitudes versus study habits, rate of progress, and final achievement based on differential predictions derived from attribution theory and social learning theory. The Internal-External Scale related only to academic attitudes ( $p < .05$ ). In an academic context, these



results indicated that locus of control is related more to attitudes than to habits or performance.

### Self-Concept

In addition to locus of control, Piers (1977) reported that a person's self-concept influences his expectations for success or failure. This researcher found that acceptance of responsibility for success and responsibility for failure involved very different motivations and attributions. In a study using sixth graders and tenth graders as subjects, Piers (1977) found that high self-esteem students accepted significantly more responsibility for success than low self-esteem students. Tenth graders accepted more responsibility for success than sixth graders, but self-esteem did not affect responsibility for failure.

Gadzella and Fournet (1976) examined the differences between high and low achievers and self-perceptions. Students rated themselves at the beginning, mid-term, and the end of the semester on a self-rating scale composed of 37 student-suggested characteristics of a quality student. High achievers rated themselves low on the initial rating, and then higher on the second and third ratings respectively. Low achievers' patterns were just the reverse. These results suggest that students' self-perceptions may be related to their level of academic performance.



Van Boven (1979) tested the hypothesis that positive self-concept is necessary for academic achievement and desirable behavior. Subjects were 20 students one year below grade level in reading and math. Students were tutored 14 weeks by parent volunteers. Self-concept, achievement and behavior were measured before and after the tutoring program by Rotters Test of Self-Concept, the Wide Range Achievement Test (reading and math), and questionnaires administered to teachers. Results showed increases in both achievement and behavior; however, one limitation of the Van Boven (1979) study was the lack of a control group.

In a similar study, Houck and Houck (1976) investigated the relationship between academic achievement and self-concept in children with specific learning disabilities (LD). Thirty-seven LD students ages eight to 14 years were given the primary Self-Concept Scale and the Wide Range Achievement Test. Nineteen of the students were enrolled in self-contained special classes; eighteen received services from resource teachers. The results indicated that LD students in the two settings did not differ in academic achievement or self-concept, and that there was little correlation between academic achievement and self-concept as measured in the study for this population.

According to some researchers, negative self-concept is usually associated with low academic achievement. White, Holland and Yeatts (1978) tested the hypothesis that students scoring

in the lower 26% on the Iowa Test of Basic Skills would have significantly lower and more negative self-social feeling than students in the upper 74% of the achievement tests scores. All students in the lower 26% were assigned to a basic education program. Based on the results of the Me Scale (Yeatts, Morrison 1974) only one factor was significant: "Competence in manual activities." The Me Scale is a predominantly non-verbal scale consisting of 50 silhouette-type pictures relating to the life-style of adolescents. The respondent is asked to look at each of the pictures and register his feelings about the picture by placing an X on the facial expression that best represents his feelings. The hypothesis that lower achievers have more negative self-concept feelings was not confirmed. Based on these results, it was concluded that low achievement does not necessarily indicate a low or poor self-concept. It is the opportunity to excel and meet desires and ambitions that determines self-concept differences, according to the researchers.

In an experiment in which the level of intelligence was controlled, Dean (1977) examined the effects of self-concept on learning with gifted children. Participants were 48 eighth grade students: 24 girls with a mean IQ of 147.9, and 24 boys with a mean IQ of 138.5, as measured by Lorge Thorndike Intelligence Test. Self-concept was measured by the Self-Esteem Inventory (SEI). Dean's (1977) results indicated that

pre-adolescent boys and girls with higher self-perceptions achieved greater mastery of verbal and non-verbal learning than their lower self-perception counterparts.

One criticism of self-concept scores is that they are merely a reflection of the pupils more or less objective appraisal of his own scholastic standing and aptitude. Stenner and Katzenmeyer (1976) conducted a study to determine if self-concept is merely an objective appraisal of ability. Using a sample of 225 sixth graders, the researchers administered two ability tests (verbal and non-verbal), six achievement tests, and seven scales of the Self Observation Scales (SOS). Results showed that 76 percent of the correlations between the predictor variables and the criterion variables were significant beyond the .01 level. The multiple correlation between the SOS Scales and each criterion variable ranged from a low .39 (non-verbal IQ) to a high .50 (verbal IQ). The SOS correlated to a significantly greater degree with achievement areas than with non-verbal IQ, thus supporting the conceptual independence of self-concepts and ability. These results suggest that obvious differences in various groups' scholastic performance may be due to affective rather than cognitive determiners.

Non-intellective self-report variables as predictors of scholastic achievement were examined by Binder, Jones and Strawig (1970). Two studies were conducted using 346 seniors from the class of 1965 and 317 seniors from the class of 1966



enrolled in rural schools as subjects. The researchers sought to compare self-expectations and self-concept of ability. Correlation procedures were utilized to determine the relationship between self-expectations, self-concept of ability, aptitude and grade point average. All correlation coefficients were significant at or beyond the .01 level except the boys' self-concept of ability-aptitude correlation. These results suggest that self-expectations and self-concept of ability are associated with scholastic achievement among rural high school seniors, especially girls.

#### Purpose of the Study

A review of the literature reveals an inconsistent pattern of results concerning the relationship of locus of control and self-concept to achievement. It is the purpose of the present study to further examine the relationship of locus of control and self-concept to achievement as measured by grade point average. It is hypothesized that:

- (1) there will be a significant relationships between internal locus of control and high achievement in school;
- (2) there will be a significant relationship between positive self-concept and high achievement in school; and
- (3) positive self-concept will be significantly related to internal locus of control.



## CHAPTER II

### METHOD

#### Subjects

The subjects for the present study were 39 twelfth grade students enrolled at Fort Campbell Senior High School, Fort Campbell, Kentucky, during the academic year 1978-79. Subjects were dependents of active duty military personnel stationed at Fort Campbell. The sample was chosen from a class attending a senior advisory session, and included 21 girls and 18 boys ranging from ages 17 to 19 years. Selection was based on being present on the day of the survey. The results for one subject were omitted from the analysis because the data was illegible.

#### Materials

The subjects completed the Nowicki-Strickland Locus of Control scale, a paper and pencil measure consisting of 40 questions that are answered yes or no. The estimate of internal consistency for this test via the split-half method, corrected by the Spearman-Brown formula, is  $r = .81$  (for grade 12). Validity studies have reported correlations with the Intellectual Achievement Responsibility scale significant at the .01 level, and correlations with the Bailer-Cromwell score significant at the .05 level.

The subjects also completed the Texas Social Behavior Inventory, Form A (TSBIA), a 16-item objective measure of

self-esteem and social competence. The TSBIA is an abbreviated form of the Texas Social Behavior Inventory (TSBI), a 32-item scale which has proved effective in predicting interpersonal attraction in laboratory studies. The TSBIA correlates highly with the TSBI (.973 for males and .974 for females).

### Procedure

Subjects were asked to complete an information sheet with name, age, sex, and race. Before completing the surveys, the students were told they were participating in a study surveying student attitudes and that their answers would not affect their final grades. Grade point averages were computed for seven semesters beginning with the first semester ninth grade through the first semester of the senior year. Permission was obtained from the principal to obtain this data from student permanent record files. The Pearson product moment correlation technique was used to determine the relationship between locus of control and self-concept, locus of control and grade point average, and self-concept and grade point average.

## CHAPTER III

### RESULTS

The Pearson product moment correlation procedure was utilized to determine the relationships between self-concept (SC), locus of control (LC), and grade point average (GPA). The coefficients obtained are presented in Table 1.

Table 1

Intercorrelations of Locus of Control, Self-Concept and Grade Point Average for Total Student Sample.

	LC	SC
GPA	-.371*	.009
LC		-.196

\*p .05

Table 1 shows that locus of control is inversely related to achievement as measured by grade point average. The correlation of  $r = .371$  indicates that those students with internal locus of control were the higher achievers. These results confirm the first hypothesis for the present group; students with internal locus of control have higher grade point averages.

The correlation coefficient between self-concept and grade point average was not significant ( $r = .009$ ,  $p > .05$ ).

This finding does not support the second hypothesis that a positive self-concept is related to higher grade point average for the sample.

The third hypothesis, students with positive self-concepts have internal locus of control, was not confirmed by the results of the present study. For this sample, subjects with a positive self-concept did not necessarily have internal locus of control.



## CHAPTER IV

### DISCUSSION

The present study was conducted to further investigate the relationship of locus of control and self-concept to academic achievement. In general, adolescent boys and girls with internal locus of control achieved at a higher level than boys and girls with more external locus of control. These results are similar to findings in earlier studies reported by Parent et al. (1975) and Wright and Ducette (1976). However, the studies of these researchers concluded that the educational situation (alternative vs. traditional) also affected the performance of their subjects. The present study did not investigate this variable.

The second finding, self-concept is not related to grade point average in the present group, is similar to results reported by Rubin, Darle and Sandidge (1977). These researchers found self-concept had only a moderate relationship with achievement and that this relationship was the result of an interaction with other variables.

It must be noted that the results reported in the present study are reported on a military community. While confined to a small area in a primarily a rural setting, the community is representative of a diverse population both racially and ethnically. Therefore, it may be inappropriate to generalize these findings to the population at large.

Finally, more exploration is needed concerning locus of control and self-concept using varied conditions. Future research studies might compare locus of control and self-concept to achievement in parallel studies using both the military community and students enrolled in public education. Additionally, it might be worthwhile to investigate the relationship of locus of control and self-concept with other factors such as teaching methods, previous learning experiences, birth order and race.

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