1-1-1980

The Relationship of Self-Concept and Locus of Control

Dirk David Sheehan

Eastern Illinois University

This research is a product of the graduate program in Educational Psychology and Guidance at Eastern Illinois University. Find out more about the program.

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Author
THE RELATIONSHIP OF SELF-CONCEPT AND LOCUS OF CONTROL

(TITLE)

BY

DIRK DAVID SHEEHAN

B.A. in Psychology, East Texas State University, 1978

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Science in Education IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS

1980

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE
ACKNOWLEDGMENTS

This writer extends special acknowledgment to Dr. Paul D. Overton, Professor at Eastern Illinois University for his suggestions which led to the development of this study and to Jeff Peters, Psychology teacher at Rantoul High School for his help in obtaining subjects for this study.
THE RELATIONSHIP OF SELF-CONCEPT
AND LOCUS OF CONTROL

BY

DIRK DAVID SHEEHAN

B.A. in Psychology, East Texas State University, 1978

ABSTRACT OF THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Science in Education at the
Graduate School of Eastern Illinois University

CHARLESTON, ILLINOIS
1980
Purpose of the Study:

The primary purpose of this study was to investigate whether relationships could be found between certain characteristics of one's self-concept and locus of control. This paper is a report of that study.

Method of Study:

Data contained in this study were gathered by utilizing the Tennessee Self Concept Scale and the Rotter's I-E (Internal-External) Scale. A total of one hundred 1980 Rantoul High School psychology and physics students were administered the above standardized tests. The sex factor was included to see if there were any noticeable characteristics among students with relationship to their test scores.

The Rotter's (1966) Locus of Control (I-E) Scale consists of a twenty-nine item forced-choice questionnaire with six filler items to make the test's purpose somewhat more ambiguous. The items deal specifically with the subjects' perceptions about the nature of the world and their control over life's events. The test was scored in the external direction with the score indicating the number of external choices.

Fitt's (1965) Tennessee Self Concept Scale is an objective Likert-type instrument measuring three internal and five external dimensions of self-concept. These two areas are denoted as the "internal" and "external" reference
points. An internal frame of reference indicates how a person describes himself, as opposed to an external reference point indicating how the person uses external sources to describe himself. The internal reference point is divided into three areas: identity, self satisfaction, and behavior. The external point of view is divided into five areas including physical self, moral-ethical self, personal self, family self, and social self. The "P" scale indicates an overall level of self-esteem. Fitts has described the test as a well-standardized, multidimensional scale that measures self-concept. The scale has been shown to have high internal consistency, test reliability, and construct validity.

Conclusions:

This study was an examination of the relationship between the Internal-External (Locus of Control) Scale and the P + N scale of the Tennessee Self-Concept Scale, indicating a positive or negative self concept. This study utilized high school Physics and Psychology students. From this study, the following conclusions were drawn:

1. There were 60 (60.0%) males and 40 (40.0%) females, for a total of 100 students. A t-test for two independent samples was used to test differences between male and female subjects. For the I-E scale, \( t (98) = -0.455 \) with \( p = 0.6499 \). For the TSCS, \( t (98) = -0.292 \) with \( p = 0.7708 \). There was no
significant difference between scores made by males and females on the I-E scale and the TSCS.

2. Of these groups, 74 (74.0%) were 18 years old, and 26 (26.0%) were 17 years old during testing. Thus it was concluded that the average subject age was 18.

3. Data obtained from the I-E scale indicated that males tended to be more internal than females. The two groups obtained means above their national norms. Both groups' scores within their TSCS norms. Females on the whole, tended to obtain higher average self-concept scores than the males on the TSCS.

4. When the scores were combined, scores made on the I-E scale were negatively correlated with scores obtained on the TSCS, thus high scores on the I-E scale tended to indicate lower scores on the TSCS; while low scores on the I-E scale were correlated with higher scores on the TSCS.

5. Given an I-E scale score, within the boundaries of this study, one can validly predict scores on the TSCS.

Recommendations:

The following recommendations are stated as guides for further study relative to the characteristics of the relationship between locus of control and self-concept:
1. It is recommended that a study be undertaken to investigate exactly how people become internally and externally motivated.

2. It is recommended that a study be undertaken to investigate the problems encountered in maintaining a positive self-concept and what things contribute to a positive versus a negative self-concept.

3. It is recommended that further study be done in the areas comparing locus of control with self-concept.

4. It is recommended that further study be done to determine why females tend to have a more external orientation when compared to males.

5. It is recommended that further study be done to determine what effects on internal locus of control and a positive self-concept have on adaptation to society.
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CHAPTER I
INTRODUCTION

Purpose of the Study

The primary purpose of this study was to investigate whether relationships could be found between certain characteristics of one's self-concept and locus of control. This paper is a report of that study.

Method of Study

Data contained in this study were gathered by utilizing the Tennessee Self Concept Scale and the Rotter's I-E (Internal-External) Scale. A total of one hundred 1980 Rantoul High School psychology and physics students were administered the above standardized tests. The sex factor was included to see if there were any noticeable characteristics among students with relationship to their test scores.

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Limitations

Several limitations should be taken into consideration when analyzing the results of this study. The first is the tendency of the student to select responses on both tests that are socially desirable as opposed to how they actually see themselves. The clarity of the individual's awareness, the availability of adequate symbols for expression, the willingness of the individual to cooperate, the
individual's feeling of personal adequacy, and his feeling of freedom from threat also have a bearing on the answers of each test. For the purposes of this study, the above variables will not be taken into consideration because of the lack of adequate controls within the testing environment.

Definitions

For the purpose of this study, the following definitions are provided: locus of control - the degree to which an individual perceives his reinforcements to be contingent upon his own behavior (internal) or are controlled by forces outside his realm of control such as "luck" or "fate" (external). [Self-concept - a group of feelings and cognitive processes which make up a person's total impression of his attitudes and feelings about himself.]
CHAPTER II
RELATED RESEARCH
The Self Concept

Self-concept as a determinant of human behavior is not a recent theoretical concept. Much of the recent theory of the self-concept stems from William James.¹ His concept of the self included the spiritual, material, and social aspects which were combined into one state, the ego. Freud, like James, considered the ego to be an important part of an individual's state of being.² Although true, his ego state acted as a peace keeper between the Id impulses and the Superego. During the years preceding the establishment of psychology as a science, much of man's theoretical constructs found their basis in religious thought. The implementation of the scientific method brought with it, the rejection of the supernatural or religion, and a requirement to obtain empirical data supporting the self construct. Some of the most significant contributions to the self-concept theory in

²Sigmund Freud, A General Introduction to Psycho-analysis, (Garden City, New York: Garden City Publishing Co., 1943).
recent years are attributed to Carl Rogers. He allows for the possibility of a subconscious, but indicates that "awareness" of such undiscovered items may then have a definite influence on behavior.³ Because behavior is consistent with the theories and concepts of the self construct, then it is possible to see the dual role of self: self as object and self as process. Snygg and Combs have also added a great deal to the theoretical self construct. Their primary emphasis involves the phenomenal field of the behaving organism. Thus a person behaves in relation to how he perceives the situation and himself at any given moment. How a person feels and thinks as he perceives his environment has a direct bearing on the course of his actions.⁴ Because the self construct is made up of multiple awareness and feelings, Shavelson has indicated that definitions of the self-concept are inconsistent and tend to vary from one study to the next.⁵ Some studies have found as many as seventeen different conceptual abilities.

A second problem in measuring self-concept is due to the lack of data on self-concept measurement instruments.


In addition to the problems of inconsistency and measurability is the tendency of the study to select responses that are socially desirable as opposed to how they actually see themselves. Shavelson further asserts that self-concept test scores can be related to as many as four general areas of experience: academic, social, emotional, and physical. Several studies indicated that self-concept is a rather stable construct and should not be confused with self-esteem, which oscillates between daily success and failure. These two self constructs have, however, been used interchangeably in several studies.6

Purkey has brought the concept of self into full focus and found a high correlation between self-concept and school achievement.7 Brookover has also indicated that the way one perceives himself has a definite impact on his academic performance. In addition, students' self-concept of ability and grade-point average were found to be significant and positively correlated.8


How one perceives his successes and failures has a great impact on how one sees himself. Along with the recent developments of enhancing self-concept in the classroom research on the locus of control has been found to have an impact upon school achievement.

**Locus of Control**

Utilizing Rotter's (1954) Social Learning Theory, I-E refers to the degree to which an individual perceives his reinforcements to be contingent upon his own behavior (internal control) or are controlled by forces outside his realm of control such as "luck" or "fate" (external control). Rotter reported that internally motivated people tend to have a strong achievement motivation than their external counterparts. He also explained that internals are more likely to develop their own self-concept and not be affected to any great extent by significant others as would the externals. Where externals are more likely to be affected by their external environment, internals are less likely to be manipulated by their environment, if they are aware of it. Internals tend to repress failures more than externals and thus work harder at improving themselves,

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while externals have already accepted those external factors that have determined, and will continue to determine their successes or failures.11

Summary

Recent studies by Lefcourt (1966),12 Strassberg (1974),13 and O'Leary (1974)14 have indicated that a definite relationship exists between internals who have a positive self-concept and externals who tend to have a negative self-concept. Internals also appear to be more successful in their daily lives.15 Another study found that locus of control and birth order were not related.16


These two relatively complicated constructs, locus of control and self-concept, have definite implications for teachers of all areas. Purkey indicated that the teacher's attitudes, beliefs, actions, and sensitivity as well as the atmosphere the teacher creates in the classroom, have a direct influence on how students view themselves as well as others in their environment.17 Because the self-concept is developed through contact with significant others, and much of the child's growing years are spent with parents, teachers, and peers; the educational implications should not be taken lightly.18 People often react the way people expect them to. Combs states, "It is the people who see themselves as unliked, unwanted, unworthy, unimportant, or unable who are maladjusted, desperate, against whom we must protect ourselves, and who must be protected and sheltered from life."19

As indicated by Johnson (1975), those children who were overprotected and restricted by their parents resulted in an external orientation.20 Externals tend, on the whole, to

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17 Purkey, pp. 47-65.


report more incidents of depression and anxiety. Schizophrenics tend to score more externally than nonschizophrenics. Suicidal people at the time of their suicidal attempt often report a loss of control and loss of awareness of the future. Locus of control and self-esteem are not identical, though an internal locus of control should make positive self-esteem a more likely occurrence. At the same time, there is also a correlation between external orientation and abnormal personal functioning. Internals usually describe themselves as "clever, efficient, egotistical, enthusiastic, independent, self-confident, ambitious, assertive, boastful, conceited, conscientious, deliberate, persevering, clear thinking, dependable, determined, hard-headed, industrious, ingenious, insightful, organized, reasonable, and stubborn;" while externals most often describe themselves as "self-pitying."

Finally, externally appears to stem from a "learned-helplessness" while internal as children were treated with warmth, as responsible, independent, accepting, and enthusiastic.21

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CHAPTER III
THE RESULTS

Male and female students were investigated separately and then together to formulate a study of the correlation between the scores made on the I-E scale and the Tennessee Self-Concept Scale. A comparison was then made between overall test scores on the two tests. All areas of investigation were divided into three columns, male, female, and total (combination of male and female).

Overall Results

Table 1 indicates that there were a total number of one hundred students included in this study. Further investigation of Table 1 denotes that there were 60 (60.0%) males and 40 (40.0%) females in this study. In order to get a more comprehensive picture of the test scores as a whole, some of the relationships between the two groups will be reviewed.

An exact correspondence between the two sets of scores did not exist. In this situation, we proceeded to fit a straight line to the data. This straight line provided an average statement about the change in one test score with a change in another. Through utilization of the regression line, linear regression accounted for 25.6% of sample
## Table 1

Overall Results on the Internal-External and Tennessee Self Concept Scales

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IE mean = 10.34  Standard deviation = 3.75
Tennessee Self Concept Scale mean = 321.15  Standard deviation = 29.11

Linear regression accounts for 25.6% of sample variance and an estimated 24.6% of population variance.

Correlation $r(98) = -0.5058$, If there were no true correlation ($p=0$), a value of $r$ this large or larger could occur by chance alone with $p$ less than .00005.

Confidence Intervals for $p$.

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Slope of Linear Regression line:

$x' = 31.2631 + (-0.0651506)y$  deviation = 3.25
$y' = 361.748 + (-3.92627)x$  deviation = 25.24
variance and an estimated 24.6% of population variance. The overall mean of the I-E scale was 10.34 (standard deviation 3.75) with 321.15 (standard deviation 29.11) indicating the mean on the TSCS.

This regression line was located in order to minimize the sum of squares of the distances from the points to the line parallel to the Y axis. The problem was to estimate or predict, with minimum error, TSCS scores from I-E scale scores. Overall scores indicated a negative correlation (r=-0.5058), 98 degrees of freedom with p less than .00005. Through utilization of the regression line, scores on the TSCS may be predicted from scores on the I-E scale. These predicted values may be obtained from the following equations: $x' = 31.2631 + (-0.0651506)y$ with a standard error of 3.25177 and $y' = 361.748 + (-3.92627)x$ with a standard error of 25.2436. Confidence levels for p indicate .99 certainty that the population mean falls between 674 and 287 and .95 certainty that the upper level is 639 and 373. There were no significant differences between male and female scores.

Males

Examination of Table 2 denotes that males averaged 10.20 on the I-E score with a standard deviation of 3.75, slightly lower than females. The male average on the TSCS indicated 320.22 with a standard deviation of 28.70, also slightly less than the females. Linear regression between
TABLE 2
MALE TEST SCORES ON THE INTERNAL-EXTERNAL AND TENNESSEE SELF CONCEPT SCALES

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IE mean = 10.20  Standard deviation = 3.75
Tennessee Self Concept Scale mean = 320.22  Standard deviation = 28.70

Linear regression accounts for 30.9% of sample variance and an estimated 29.3% of population variance.

Correlation r(58) = -0.5556, If there were no true correlation (p=0), a value of r this large or larger could occur by chance alone with p less than .00005.

Confidence Intervals for p
.90 C  -0.688 to -0.387
.95 C  -0.709 to -0.351
.99 C  -0.748 to -0.278

Slope of Linear Regression line:
\[ x' = 33.4455 + (-0.0725931)y \] deviation = 3.14456
\[ y' = 363.589 + (-4.25217)x \] deviation = 24.0668
the two scores accounted for 30.9\% of sample variance and
an estimated 29.3\% of population variance. The corre-
lation coefficient \( r(58) = -0.5556 \) and could occur by chance
alone with \( p \) less than .00005.

Females

Examination of Table 3 denotes that females had an
overall mean of 10.55 on the I-E scale with a standard
deviation of 3.79. Further investigation reveals that the
mean of scores on the TSCS was 321.95 with standard devia-
tions of 29.48 on either side of the mean. Linear re-
gression between the two scores accounted for 20.0\% of
sample variance and 17.6\% of population variance. The
correlation coefficient \( r(38) = -0.4477 \) and could occur by
chance alone with \( p = 0.0038 \).
### TABLE 3

FEMALE TEST SCORES ON THE INTERNAL-EXTERNAL AND TENNESSEE SELF CONCEPT SCALES

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IE mean = 10.55  Standard deviation = 3.79
Tennessee Self Concept Scale mean = 321.95  Standard deviation = 29.48

Linear regression accounts for 20.0% of sample variance and 17.6% of population variance.

Correlation \( r(38) = -0.4477 \), If there were no true correlation, \((p=0)\), a value of \( r \) this large or larger could occur by chance alone with \( p = 0.0038 \).

Confidence Intervals for P:  
.90 C -0.636 to -0.208
.95 C -0.666 to -0.158
.99 C -0.719 to -0.058

Slope of Linear Regression line:  
\[ x' = 29.0760 + (-0.0575431)y \] deviation = 3.43242
\[ y' = 358.691 + (-0.348259)x \] deviation = 26.7027
CHAPTER IV
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was an examination of the relationship between the Internal-External (Locus of Control) Scale and the P + N scale of the Tennessee Self-Concept Scale, indicating a positive or negative self concept. This study utilized high school Physics and Psychology students. From this study, the following conclusions were drawn:

1. There were 60 (60.0%) males and 40 (40.0%) females, for a total of 100 students. A t test for two independent samples was used to test differences between male and female subjects. For the I-E scale, $t_{(98)} = -0.455$ with $p = 0.6499$. For the TSCS, $t_{(98)} = -0.292$ with $p = 0.7708$. There was no significant difference between scores made by males and females on the I-E scale and the TSCS.

2. Of these groups, 74 (74.0%) were 18 years old, and 26 (26.0%) were 17 years old during testing. Thus it was concluded that the average subject age was 18.
3. Data obtained from the I-E scale indicated that males tended to be more internal than females. The two groups obtained means above their national norms. Both groups scored within their TSCS norms. Females on the whole, tended to obtain higher average self-concept scores than the males on the TSCS.

4. When the scores were combined, scores made on the I-E scale were negatively correlated with scores obtained on the TSCS, thus high scores on the I-E scale tended to indicate lower scores on the TSCS; while low scores on the I-E scale were correlated with higher scores on the TSCS.

5. Given an I-E scale score, within the boundaries of this study, one can validly predict scores on the TSCS.

Recommendations

The following recommendations are stated as guides for further study relative to the characteristics of the relationship between locus of control and self-concept:

1. It is recommended that a study be undertaken to investigate exactly how people become internally and externally motivated.

2. It is recommended that a study be undertaken to investigate the problems encountered in maintaining a positive self-concept and what things contribute to a positive versus a negative self-concept.
3. It is recommended that further study be done in the areas comparing locus of control with self-concept.

4. It is recommended that further study be done to determine why females tend to have a more external orientation when compared to males.

5. It is recommended that further study be done to determine what effects on internal locus of control and a positive self-concept have on adaptation to society.
BIBLIOGRAPHY

Articles and Periodicals


