

A Study of Locus of Control in Relation to Grade and Gender in High School Children

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ABSTRACT

The aim of the present study was to examine the effect of grade and gender on locus of control in high school children. METHOD The sample comprised of one thousand adolescents (500 males, 500 females) studying in various schools from grades IX to XII, 125 in each class. The age of the participants ranged from 14 to 17 years. The Rotter Internal – External (I-E) locus of control scale (Rotter, 1966) was used in the study. Descriptive statistics were calculated, t- test and analysis of variance were employed. RESULTS The main effects for grade and gender emerged to be significant, though interaction effects between grade and gender was non significant. The mean scores of IX and XI grade students were significantly higher than the mean scores of X and XII grade students. The X and XII grade students, however, scored less on locus of control in comparison to IX and XI grade students. Significant differences emerged between grade IX and X, grade IX and XII, grade X and XI and grade XI and XII. t-test showed that number of females were significantly higher on external locus of control than males. The results of the current study demonstrated that number of adolescents with external orientation were more in comparison to adolescents with internal orientation.

Key words : Locus of control, gender, children

INTRODUCTION

Control is important to psychological functioning. Decades of research in sociology and psychology have demonstrated that a sense of control is a robust predictor of physical and mental well being¹⁻⁹, and perhaps even longevity¹⁰⁻¹¹. Both experimental and correlational studies have shown that across the life span, from earliest infancy to oldest age, individual differences in perceived control are related to a variety of positive outcomes, including health, achievement, optimism, persistence, motivation, coping, self esteem, personal adjustment, and success and failure in a variety of life domains.

Locus of control examines the extent to which

individuals feel that they are generally in control of what happens to them in their lives. An individual's beliefs and attitudes regarding control over personal successes and failures are vitally important concepts to consider when studying one's actions and performance. In addition to demonstrating a positive correlation between internal locus of control and valued behaviours, researchers have shown that external locus of control is related to low motivation. Studies have shown that externally controlled individuals are less academically motivated and are less likely to confront challenges,¹² seek information relevant to problem solving,¹³ or look for opportunities for reinforcement¹² than are internally controlled individuals. Whether or not

children have an internal or external locus of control, is an important aspect in their school achievement as well as in their relationships with their parents.

Changes in locus of control have been reported to be a function of gender differences.¹⁴ Locus of control is a behavioural disposition said to influence human behaviour across a wide spectrum of situations related to learning and achievement.¹⁵⁻¹⁷

With regard to gender, research regarding the construct of locus of control has generally shown that women tend to be more external than men.¹⁸ However, often findings with regard to gender differences in relation to locus of control and academic performance have been mixed.⁸

There is much empirical support for this theory that internality increases as years pass¹⁹. Some research aimed at the issue of the relationship between age and locus of control has concluded that it is not necessarily the mere passing of years, an increase in chronological age, that predicts increased internality, but rather it is the person's increase in mental age (and thus vocabulary, personal responsibility, and life experience) that correlates with a greater sense of personal control and efficacy²⁰⁻²¹. The salient role of a child's environment in the development of his or her sense of a locus of control is also emphasized in a study by DeMann, Leduc, and Labreche – Gauthier (1992)²² on the influence of certain parental practices (e.g. encouragement of independence) which help to foster a belief in internal control.

The above mentioned derivations from earlier researches led to the formulation of the current study, which intended to examine the effect of grade and gender on locus of control in high school children.

METHODOLOGY

Sample comprised of one thousand adolescents

(500 males, 500 females) studying in various schools. Four grades were included in the study (grade IX, grade X, grade XI and grade XII. Equal number of subjects from class IX to class XII were taken i.e. N=125 in each class. The age of the participants ranged from 14 to 17 years. The sample was relatively homogenous with respect to socio-economic status. Majority of the participants belonged to middle socio-economic status.

TOOL

The Internal – External (I-E) Locus of Control Scale (Rotter, 1966)²³. This scale was developed by Rotter (1966) to measure generalized expectancies for internal versus external control of reinforcement. The scale consists of 23 items and 6 additional buffer items in a forced choice format covering a broad variety of situations. A low score implies an internal locus of control and high score, an external locus of control.

STATISTICAL ANALYSIS

Analysis was done to examine the intensity of internality and externality of males and females of grades IX, X, XI, and XII separately. Mean + 1 SD was used as a cut off point on the global measure of locus of control for 1000 subjects. t- test and analysis of variance was employed.

RESULTS

In order to evaluate the effects of the variables of grade and gender on locus of control a 2x2 factorial design with 4 levels of grade and 2 levels of gender was employed. The main effects for grade ($F=15.57$, $p<.001$) and gender ($F=12.7156$, $p<.001$) emerged to be significant, though interaction effects between grade and gender was non significant

In the light of significant main effect of grades, the mean scores on locus of control as a global measure for 4 different grades were compared (Table 1) by applying t-test. The mean

scores of IX and XI were significantly higher than the mean scores of X and XII grade students. The X and XII grade students, however, scored less on locus of control in comparison to IX and XI grade students. Significant differences emerged between grade IX and X ($t=3.98$, $p<.01$), grade IX and XII ($t=5.97$, $p<.01$), grade X and XI ($t=3.25$) and grade XI and XII ($t=5.34$).

TABLE-1
Comparison between grades on Locus of Control

GRADES	X	S.D.
IX	10.88	3.38
X	9.70	3.25
XI	10.61	3.00
XII	9.24	2.74

The comparison between both the genders by applying t-test (Table 2) showed that females were significantly higher on external locus of control as compared to males.

TABLE-2

Gender differences on Locus of Control

Gender	Mean	S.D.	t-value
Male	9.76	2.71	3.45**
Female	10.45	3.54	

** $p<.01$

DISCUSSION

The results of this study indicated that gender has emerged to be a significant variable. It implies that gender, which refers, not only to biological sex but also to the psychological, social and cultural features and characteristics has an important role to play in internality/externality. In view of significant role of gender in locus of control,

the mean scores of male and female adolescents were computed. The mean scores revealed that female adolescents were higher on external orientation than male adolescents. Although, the literature does not reveal much information about the relationship between gender and locus of control, Crandall's (1969)²⁴ assertion could be used for explaining the obtained gender differences. Crandall (1969) suggested three antecedents to locus of control beliefs: (a) differential reinforcement histories, (b) differential sensitivity to positive and negative reinforcements, and (c) the learning of verbal statements the culture determines to be appropriate. These antecedents could be used for explaining gender differences in locus of control.

Changes in locus of control have been reported to be a function of sex differences.¹⁴ Locus of control is a behavioural disposition said to influence human behaviour across a wide spectrum of situations related to learning and achievement.¹⁵⁻¹⁷ Maccoby and Jacklin (1974)²⁵ concluded that gender differences in locus control varied by age, with a gender difference i.e. greater male internality, emerging only in the college years. With regard to gender, research regarding the construct of locus of control has generally shown that women tend to be more external than men.¹⁸ The past reviews²⁶⁻²⁷ indicate that men are found to be more internal than women. This difference remains even after controlling the socio-economic differences.

Further, there is sufficient information, in the literature referring to males being higher on action-oriented approach and females being higher on emotion-oriented approach for the solution of their problems. More external orientation on the part of female adolescents could be a function of academic/career related obstacles and inequalities at home and work place. This assertion gains support without doubt that men and women are perceived differently in social situations.

Age has turned out to be a significant variable from the view point of locus of control. Though it is difficult to draw definite inference about the effect of age on locus of control because there are sufficient number of adolescents with both internal and external orientation. However, it can be inferred that adolescents with external orientation are significantly more than adolescents with internal orientation. One plausible explanation for greater number of adolescents with external orientation could be derived from the traditional socialization practices in which religion and the present day evaluation system in educational practices have a dominant role to play.

To conclude number of adolescents with external orientation were more in comparison to adolescents with internal orientation. Further, the results regarding gender revealed that more number of females were higher on external locus of control. Number of methodological and conceptual problems impose certain limitations on these conclusions. First, the present study used Rotter's internal-external scale which is based on uni dimensional concept of locus of control. The recent literature has cast doubt on the uni dimensional concept of locus of control by asserting that externality /internality may vary from situation to situation. Second, the cross sectional nature of design imposes another limitation on the conclusions. Longitudinal research may further add to our understanding of the role of age and gender in locus of control.

The strength of this study lies in the fact that it has explored locus of control across different ages and gender. Although, locus of control has been used extensively by researchers as a variable, researches have failed to identify the developmental pattern of locus of control. Admittedly, the present study was carried out in the spirit of exploration, though on a large sample

of adolescents. It will be of interest to test the present findings by using different measures of locus of control based on uni dimensional as well as multidimensional perspectives.

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