

Mental Health and Locus of Control: A Comparison of Under Achievers and Over Achievers in Social Studies

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ABSTRACT

The present study aimed to explore how mental health and locus of control affect achievement discrepancy; and further to understand the differential effect of gender and residential locale in discriminating underachievers and overachievers in social studies. The study consumed data gathered from a group of 289 discrepant achievers in social studies, selected from a stratified random sample of 968 secondary school students by the regression method. Data collection was accomplished by administering the Mental Health Status Scale and the Adapted version of Rotter's I-E Scale. Analysis revealed the presence of significant difference between underachievers and overachievers with respect to their mental health and locus of control. The overachievers excelled the underachievers in both measures. Though significant gender difference in mental health exists among overachievers, the underachieving boys and girls were found alike in their mental health. The residential locale was found to exert significant decisive role in the mental health of both underachievers and overachievers. While significant difference was observed between overachieving boys and girls, the gender groups of underachievers were found to be almost alike in locus of control. Achievement discrepancy do not entertain any significant rural-urban difference in locus of control.

Keywords: *Discrepant Achievers, Underachievers, Overachievers, Mental Health, Locus Of Control.*

Discrepant achievers are students who show an incongruity between their ability and academic performance. There are two categories of discrepant achievers, underachievers and overachievers. When the actual achievement of a learner fall below the expected achievement, he or she is said to be an underachiever; and when the actual achievement of a learner exceeds what is normally expected from him/her, she/she is said to be an overachiever. Emerick (2012) concluded that a brilliant child not performing parallel to his mental ability is the most bewildering condition. Younger *et al.* (2005) reported, "the underachievement of girls and boys is a complex and multi-dimensional problem".

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Academic underachievement is considered to be one of the major important area related to the children's education and is continuously being studied for the last few decades (McCoach & Siegle, 2011). Remediation of underachievement necessitates diagnosis of the causes or factors associated with the phenomenon. Rimm (2008) mentioned that a number of personality related and school related factors coalesce to make middle schools more vulnerable for underachievement. Among the personality factors having strong influence on academic achievement, mental health and locus of control of the learner are at the top (Kaur, 2016; Motamedi, 2017; Pai *et al.*, 2018; Sardesai & Adsul, 2018). The manner in which these factors contribute to underachievement can be best understood by making a comparison with that of overachievers. This study compares the mental health and locus of control of discrepant achievers, and further explores the differential effect of gender and residential locale on these factors by making comparison between underachievers and overachievers in social studies.

Objectives

The study has the following objectives in view:

1. To compare the mental health of under achievers and over achievers in social studies.
2. To find out gender difference in the mental health of under achievers and over achievers in social studies.
3. To find out locale difference in the mental health of under achievers and over achievers in social studies.
4. To compare the locus of control of under achievers and over achievers in social studies.
5. To find out gender difference in the locus of control of under achievers and over achievers in social studies.
6. To find out locale difference in the locus of control of under achievers and over achievers in social studies.

METHODOLOGY

Descriptive survey method was adopted for the present study. The study made use of a sample of 289 discrepant achievers in Social Studies, selected from a stratified random sample of 968 secondary school students by the regression method (Farquhar, 1963), which is based on the deviation of the students' score from the regression line of the achievement measure on the ability measure.

Tools used

(a) ***The Mental Health Status Scale:*** The mental health of the participants was measured using the Mental Health Status Scale developed by Abraham & Prasanna (1981). It is a standardized instrument consisting of 16 sub-tests, measuring sixteen independent components of mental health viz.: (1) Optimism, (2) Adaptability, (3) Sense of security, (4) Regularity of habits, (5) Perception of reality (6) Emotional maturity (7) Social conformity (8) Freedom from sociopathic tendencies (9) Recreational pursuits (10) Mastery of environment (11) Positive attitude towards self (12) Positive attitude towards others (13) Freedom from negativism (14) Freedom from nervous symptoms (15) Freedom from withdrawing tendencies, and (16) Concept of degrees of freedom. Each of the sub-tests in the scale consists of eight statements; each correct item in the test being assigned with one point credit. For the present study, the sum of the total scores an individual gets for all the 16 sub-tests was treated as the mental health status score of that individual. The split-half

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reliability of the scale is computed to be 0.69 and the external validity, assessed by using teacher rating as external criteria, is found to be 0.67.

(b) Adopted Version of Rotter's I-E Scale: The locus of control of the subjects was measured using an adapted version of the Internal-External Locus of Control Scale (I-E Scale), developed originally by **Rotter (1966)** and adopted to Indian context by **Arjunan and Abraham (2003)**. The original I-E Scale contains 29 forced-choice items, 23 of those items being designed to measure the locus of control expectancies and the remaining 6 being filler items. Each item consists of a pair of statements. The respondents have to choose between an internal and an external alternative. To suit the Indian culture and social background, the Rotter's Internal-External Scale was adapted to Indian context by incorporating some changes and adding three more filler items, thus the total number of items in the new version being 32. The adapted scale was found to have an external validity of 0.93 (correlation with the original scale in a bilingual sample) and a test-retest reliability (four weeks interval) of 0.88.

Procedure

The Underachievers and Overachievers were identified from a total sample of 968 subjects on the basis of their average score of social studies in two term-end examinations and an score obtained in Raven's Progressive Matrices Test of Intelligence. The tools were administered on the sample in small group situation under standardized conditions, their responses were collected in the response sheets, scored and consolidated on a master tabulation sheet. The method of classification suggested by Farquhar (1963) was used to classify the subjects into overachievers, normal achievers and underachievers. The response sheets of underachievers and overachievers alone were subjected to scoring. A personal data sheet was also attached invariably with all the tools and the data thus obtained were subjected to appropriate statistical treatment with SPSS and interpreted accordingly.

ANALYSIS AND INTERPRETATION

Hypothesis-1: The underachievers and overachievers will not differ significantly in their mental health.

Table 1: Comparison of the Mental Health of Underachievers (UAR) and Overachievers (OAR)

Groups	Statistical Indices				t-value	Level of Significance
	N	M	SD	SE _M		
UAR	156	82.11	11.497	.920	13.753	0.001
OAR	133	98.64	8.385	.727		

The t-value obtained on comparing the underachievers and overachievers with respect to their mental health is significant ($t = 13.753$; $p < 0.001$). The result shows that there is a true difference between the underachievers and overachievers in their mental health, the difference being in favour of overachievers.

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Hypothesis-2: There will be no significant gender difference in the mental health of underachievers and overachievers

Table 2: Comparison of the Mental Health of Boys and Girls in Underachievers and Overachievers

Groups	Gender	Statistical Indices				t-value	Level of Significance
		N	M	SD	SE _M		
UAR	Boys	79	83.01	12.093	1.361	0.994	Not significant
	Girls	77	81.18	10.852	1.237		
OAR	Boys	46	93.37	8.724	1.286	5.908	.01 Level
	Girls	87	101.43	6.737	0.722		

The results of the comparison of the mental health of gender based sub-samples of underachievers and overachievers show that while the underachieving boys and girls are alike in their mental health ($t = 0.994$; $p > .05$), the overachievers show a significant gender difference in their mental health ($t = 5.908$; $p < .01$). The overachieving girls excel the overachieving boys in their mental health.

Hypothesis-3: There will be no significant rural-urban difference in the mental health of underachievers and overachievers

Table 3: Comparison of the Mental Health of Rural and Urban Underachievers and Overachievers

Groups	Gender	Statistical Indices				t-value	Level of Significance
		N	M	SD	SE _M		
UAR	Rural	89	84.98	11.330	1.201	3.739	.01 Level
	Urban	67	78.30	10.650	1.301		
OAR	Rural	85	97.18	8.385	.910	2.742	.01 Level
	Urban	48	101.23	7.815	1.128		

Comparison of the rural and urban students in underachieving and overachieving groups with regard to their mental health shows that significant rural-urban difference exists in both groups of discrepant achievers. The estimated mean values of mental health for different groups shows that the rural underachievers excels urban underachievers in their mental health, while the phenomenon is reversed in overachievers where the urban students surpassed the rural students.

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Hypothesis-4: The underachievers and overachievers will not differ significantly in their locus of control.

Table 4: Comparison of the Locus of Control of Underachievers and Overachievers

Groups	Statistical Indices				t-value	Level of Significance
	N	M	SD	SE _M		
UAR	156	12.94	2.294	.184	5.990	.01 Level
OAR	133	14.60	2.428	.210		

The t-value obtained on comparing the underachieving and overachieving secondary school students with regard to their internal locus of control is significant ($t = 5.990$; $p < .01$). A closer observation of the mean values of locus of control, estimated for the groups, reveals that the overachievers are more internally oriented than underachievers.

Hypothesis-5: There will be no significant gender difference in the internal locus of control of underachievers and overachievers.

Table 5: Comparison of the Locus of Control of Boys and Girls in Underachievers and Overachievers

Groups	Gender	Statistical Indices				t-value	Level of Significance
		N	M	SD	SE _M		
UAR	Boys	79	13.15	2.397	.270	1.193	Not Significant
	Girls	77	12.71	2.176	.248		
OAR	Boys	46	13.41	2.508	.370	4.379	.01 Level
	Girls	87	15.23	2.144	.230		

Comparison of the gender groups in underachievers with regard to their internal locus of control shows that no significant difference exists between teaching efficiency groups ($t = 1.193$; $p > .05$). To put differently, the underachieving boys and girls are almost similar in their locus of control. The t-value obtained on comparing the overachieving boys and girls, however, is large enough to be significant at .01 level ($t = 4.379$; $p < .01$), exposing the presence of a significant difference between the groups. Inspection of the mean scores of locus of control reveals that the overachieving girls are more internally oriented than their counterparts.

Hypothesis-6: There will be no significant rural-urban difference in the locus of control of underachievers and overachievers

Table 6: Comparison of the Locus of Control of Rural and Urban Underachievers and Overachievers

Groups	Gender	Statistical Indices				t-value	Level of Significance
		N	M	SD	SE _M		
UAR	Rural	89	13.15	2.284	.242	1.322	Not Significant
	Urban	67	12.66	2.293	.280		
OAR	Rural	85	14.58	2.437	.264	0.158	Not Significant
	Urban	48	14.65	2.436	.352		

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The t-value obtained on comparing the locus of control of rural-urban students in neither of the groups of discrepant achievers is significant. It reveals that residential locale is not a significant factor in discriminating either the overachievers or the underachievers on the basis of their locus of control.

CONCLUSIONS

The present study revealed that the underachievers and overachievers differ significantly in their mental health ($t = 13.753$; $p < .01$), the difference goes in favour of overachievers. The Hypothesis-1 (*the underachievers and overachievers will not differ significantly in their mental health*) is, therefore, rejected. Comparison of the mental health of boys and girls in discrepant achievers revealed the presence of a significant gender difference in the case of overachievers ($t = 5.908$; $p < .01$), while no significant difference was found to exist between the gender groups in underachievers ($t = 0.994$; $p > .05$). The Hypothesis-2 (*there will be no significant gender difference in the mental health of underachievers and overachievers*) is, hence, partially substantiated. Rural-urban divide was found to be a significant factor discriminating both the underachievers ($t = 3.739$; $p < .01$) as well as overachievers ($t = 2.747$; $p < .01$) on the basis of their mental health. While the underachieving rural students excel their urban counterparts in their mental health, the direction of the difference is just reversed in the group of overachievers. The Hypothesis-3 (*there will be no significant rural-urban difference in the mental health of underachievers and overachievers*) formulated in this context is, hence, rejected.

The t-value obtained on comparing the locus of control of discrepant achievers is significant ($t = 5.990$; $p < .01$), the overachievers being more internally oriented than the underachievers. The Hypothesis-4 (*the underachievers and overachievers will not differ significantly in their locus of control*) is, hence, rejected. While the underachieving boys and girls are almost alike in their locus of control ($t = 1.193$; $p > .05$), a significant gender difference exists in the locus of control of overachievers ($t = 4.379$; $p < .01$), the girls surpassing boys in their internal orientation of mind. The Hypothesis-5 (*there will be no significant gender difference in the internal locus of control of underachievers and overachievers*), is, therefore, partially substantiated. The discrepant achievers are alike with regard to the internal locus of control of the students coming from rural and urban areas. The gender groups do not differ significantly in their locus of control either in underachieving ($t = 1.322$; $p > .05$) or in overachieving ($t = 0.158$; $p < .05$) groups. The Hypothesis-6 formulated in this context (*there will be no significant rural-urban difference in the locus of control of underachievers and overachievers*) is hence accepted.

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