LEARNING DISCREPANCY IN RELATION TO PERSONALITY FACTORS AMONG PRIMARY SCHOOL

By

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ABSTRACT

This study focuses on discrepant achievers, that is, over achiever and under achiever in relation to certain personality factors among the primary school students. In the present study, the investigator has adopted the correlation method of normative survey research design. The data were collected in two phases for the present study. In the first phase, the data were collected from 500 samples from the identified schools using the Intelligence test battery. And for achievement, the marks secured by the samples in the annual examination were taken into account. After completing the first phase of the data collection, the discrepant achievers that is, under and over achievers were found out using the quartile ranking method. Accordingly, there were 40 under achievers and 48 over achievers found and they were labelled as discrepant achievers. Hence, these 88 samples were subjected to second phase of data collection. As in the second phase of data collection, the data were collected from the identified discrepant achievers using children's personality questionnaire. Finally, it is concluded that the personality traits of the selected primary school students does affect their scholastic achievement.

Key words: Discrepant Achievers, Over Achievers, Under Achievers, Learning discrepancy

INTRODUCTION

The introduction of the new research construct of discrepant achievement implies the possibility of labeling any instructional group into three major categories, namely over achievers, normal achievers and under achievers. Over achievers are those whose educational performance is higher than what is expected from them on the basis of their mental ability. The two groups i.e., under achievers and over achievers put together are labeled as discrepant achievers, those who deviate from normal educational performance and hence perform either above or below the levels expected from them on the basis of their mental potential. The classification normally opens up a basic ethical question of the obligation of an educational system to provide appropriate instructional strategies for dealing with each of these groups and ensure that no students in an educational system is allowed to perform at a level lower than what is expected from him in terms of his measured intelligence. The acceptance of the new construct has also posed several important research questions, only a few of which have been taken up by researchers for detailed study. The two extreme groups, namely over and

under achievers, together classified as discrepant achievers, differ significantly from the group of normal achievers, and need to be looked upon as a single group and studied as such.

Previous research has suggested that student achievement can be influenced by a number of factors. These can be classified into four broad categories: personal characteristics, organizational skills, cognitive processes and social factors. In the category of personal characteristics, ability is one important variable (Schiefele and Csikszentmihalyi, 1995), as is confidence (Ward, 1994). Motivational factors have also been shown to have an effect on students' levels of achievement (Eppler and Harju, 1997). Research studies have investigated the effects of different components of motivation, either singly or in various combinations, including motivation by external factors like the need for financial or job status rewards (Riipinen, 1994), internal factors such as the need to enhance personal growth (Grasha, 1990; Yamauchi and Li, 1993; Sagie, 1994; Ward, 1994; Farideh, 1996), assessment or interest- orientation (Lawrence et al, 1985), motivation to achieve success, or even motivation to avoid failure (Riipinen, 1994; Ward, 1994; Nathawat and

Singh, 1997). Schiefle and Csikszentmihalyi (1995) reported a connection between persistence and achievement while others (Karabenick and Knapp, 1991; Daubman and Lehman, 1993; Grayson et al, 1995; Newman and Schwager, 1995; Ryan and Hicks, 1997) reported that achieving students were often more likely to seek help if they needed it and to do so in an effective, efficient way.

Significance of the study

Researches on discrepant achievement conducted so far have confined to limited areas within the major field. Most of these studies have been addressed to the investigation of casual factors of one form of discrepant achievement, namely, under achievement, in defined curriculum areas. Parallel investigations relating to over achievement are lesser in number. There has not been any attempt made to probe some of the related areas in discrepant achievement. For example, reasons for discrepant achievement, possible measures to reduce the incidence of under achievement, intervention strategies to reduce the discrepant achievement etc. have not been properly attempted by researchers (Bindu, 2007).

There has not been any attempt to evolve a comprehensive theory of discrepant achievement and consequently we have failed to evolve a model of instruction, which will reduce the incidence of under achievement, or increase the incidence of normal achievement or over achievement. Further, the existing studies help us to understand certain basic dimensions related to discrepant achievement which includes psychological dimensions like motivation, adjustment and attitudes, social and other environmental dimensions. Researches, which help to identify some of the major psycho-family variables of discrepant achievement in various school subjects, would be invaluable in extending the frontiers of knowledge relating to the phenomenon of discrepant achievement. The present study is, therefore, intended to study the association of personality factors with discrepant achievement among the primary school students.

Design of The Study

Since the major objective of the present study is to identify the discrepant achievers i.e., over achievers and under achievers, and to find out the influence of personality traits, it requires to adopt the normative survey research design. The investigator selected 240 VI standard students from Govt. Hr. Secondary School, Sulur and 260 students from Govt. Hr. Sec. School, Irugur randomly.

The data were collected into two phases. In the first phase, the data were collected from 500 samples from the identified schools using the Intelligence Test Battery in native language developed by Ravi (2004). And for achievement, the marks secured by the samples in the examination were taken into account. After completing the first phase of the data collection, the discrepant achievers that is, under and over achievers were identified using the quartile ranking method. Accordingly, there were 40 under achievers and 48 over achievers, identified as discrepant achievers. Hence, these 88 samples were subjected to second phase of data collection. As in the second phase of data collection, the data were collected from the identified discrepant achievers using Children's Personality Questionnaire in native language developed by Ravi (2004).

Tools used for the present study

For the present investigation, the following tools were translated, developed and validated by the investigator.

1. Group Test of Intelligence (translated into the native language)

2. Personality Traits (translated into the native language)

Group Test of Intelligence (Tamil)

The test battery was developed in Tamil, the native language of the samples to measure the general intelligence of the pupils whose age is between 9 to 15 years. This Group test consist of five sub-tests. Each tests carry 20 items.

The reliability value of the test is 0.79. The average time taken for each and every subtest was also measured and it is presented in Table 1.

No.	Sub-test	No. of Items	Time limit
I	Verbal Analogy	20	5 minutes
II	Verbal classification	20	5 minutes
III	Proverbs	20	5 minutes
IV	Number series	20	8 minutes
V	Verbal reasoning	20	10 minutes
Total No. of Items and Time		100	33 minutes

Table 1. The details of Group Test of Intelligence in Tamil.

Children's Personality Questionnaire (CPQ)

The children's Personality Questionnaire (CPQ) is an aid for the elementary school guidance specialist and for the teacher in the classroom. The CPQ was developed and standardized by R.B. Porter and R.B. Cattell. The CPQ is a standardized test with two forms, A and B, each divided into two parts as A_1, A_2 and B_1, B_2. Each part can be given in a class period, to an individual. There is no time stipulation to complete this questionnaire.

The CPQ yields a general assessment of personality development by measuring fourteen distinct dimensions or traits of personality, which have been found by psychologists to define approach the total personality. By working with these fourteen scores individually and in combination, the psychologist can obtain predictions of school achievement, especially under achievement, the tendency towards delinquency, the likelihood of leadership potential, the possible need for clinical help in avoiding excessive emotional disturbance and so forth. The test is designed for children of age group between 8 and 12.

The investigator used only form A (Form A_1 and A_2) for the present study. Originally it was in English version, but the investigator translated it in the native language and standardized. The item correlation was followed to standardize the tools. The CPQ has totally 140 items (both Form A_1 and A_2) Each form includes fourteen personality factors; these factors are identified with a symbol of alphabet viz., A, B, C, D and so forth for convenience of reference. The authors have recommended conversion of raw scores into standard ten score called 'stens'. The score has a ten-point range with a mean of 5.5 stens, of 5 and 6 to represent the average or middle range. Norms are provided separately for boys and girls.

Table 2 gives the details of each factor and its qualities in two extremes such as high extreme (above the mean of 5.5 stens) and low extreme (below the mean of 5.5 stens). The investigator also conducted a pilot study using the standardized CPQ to find out the reliability. The reliability value of the CPQ from split-half method was 0.78 for Form A_1 and 0.82 for Form A_2. The standardized CPQ was used for the final data collection. After the data collection, as recommended by the authors of the CPQ, the investigator converted the raw score into stens score based on the norms given for boys and girls for each and every factor. The stens score value of each factor was considered for further analysis of t-test.

Identification of over and under Achievers

In order to identify the discrepant achievers i.e., under achievers and over achievers, the ranking method for ability and achievement was employed in the present study. In this method an individual's quartile rank in intelligence and achievement are separately worked out and compared. Thus, if a subject has the same quartile rank in both intelligence and achievement tests, he is a normal achiever. If the quartile rank in achievement is above than the quartile rank in intelligence, he is an over achiever. If the quartile ranks in achievement is less than the quartile rank in intelligence, he is an under achiever. Table 3 shows the quartile values of Intelligence and achievement score of the selected primary school students.

As per the quartile rank method of comparison between the ability and the achievement of the individual, 40 under achievers and 48 over achievers were identified from the total sample of 500.

Results and Interpretations

The collected data were analyzed with the help of SPSS software to find out the mean, standard deviation and t-value. The results are presented in Table.4

Table 4 shows the mean score difference in different personality factors between under achievers and over

Sl. No.	Low Sten score description (A child with low score is)	Letter identifying Factor	High Sten score description (A child with high score is)
01.	Reserved, Detached, Critical, Cool	A	Outgoing, Warmhearted, Easy-going, Participating
02.	Less intelligent, Concrete - thinking, Lower scholastic mental capacity	B	More intelligent, Abstract - thinking, Bright, Higher Scholastic mental capacity
03.	Affected by feelings, Emotionally less stable, Easily upset, Changeable, Lower ego strength	C	Emotionally stable, Faces reality, Calm, Higher ego strength
04.	Phlegmatic, Deliberate, Inactive, Stodgy, Phlegmatic temperament	D	Excitable, Impatient, Demanding, Overactive
05.	Obedient, Mild, Conforming, Submissive	E	Assertive, Independent, Aggressive, Stubborn, Dominant
06.	Sober, Prudent, Serious, Taciturn	F	Happy-go-lucky, Headless, Gay, Enthusiastic
07.	Disregards rules, Undependable, By-passes obligations, Weaker superego strength	G	Conscientious, Persevering, Stoid, Rule - bound, Stronger superego strength.
08.	Shy, Restrained, Diffident, Timid	H	Venturesome, Socially bold, Uninhibited, Spontaneous.
09.	Tough - Minded, Self - Reliant, Realistic, No - nonsense	I	Tender-minded, Dependent, Over-protected, Sensitive
10.	Vigorous, Goes readily with group, Zestful, Given to action	J	Doubting, Obstructive, Individualistic,Reflective, Internally restrained, Unwilling to act.
11.	Forthright, Natural, Artless, Sentimental	N	Shrewd, Calculating, Worldly, Penetrating
12.	Self - assured, Placid, Secure, Serene, Untroubled Adequacy	O	Apprehensive, Worrying, Depressive,Troubled, Guilt Proneness
13.	Casual, Careless of social rules, Untidy, Follows own urges, Low integration	Q_3	Controlled, Socially -precise,Self - disciplined, Compulsive, High self - concept control
14.	Relaxed, Tranquil, Torpid, Unfrustrated	Q_4	Tense, Driven, Overwrought, Fretful

Table 2. Brief Description of the fourteen CPQ Personality Factors

achievers in Achievement among the selected primary school students. As per the Table, except the factors F (Expedient & Conscientious) and J (Practical & Imaginative), all other factors are statistically significant at 0.01 level. Hence, it can be concluded that the personality factors influence the discrepant achievement i.e., under achiever and over achiever in Achievement among the selected primary school students.

Summary and Conclusions

From the results and the findings of the present study, it is concluded that the personality factors influence the learning discrepancy among the selected primary school students. Menon (1973) in her comparative study of the personality characteristics of over and under achievers of high ability tested the following hypothesis: There will be significant difference in the socio-personal characteristics motivational traits and interest patterns of over and under achieving superior ability groups.

The study revealed that over achieving groups of superior and general ability is less extravert and less maladjusted than under achievers. It was found that demographic factors and socio-economic status markedly influenced over and under achievement. Nair (1975) and his associates studied the influence of sixteen personality variables, which are related to under achievement in mathematics among high intelligence subjects. The study found that eight adjustment variables, viz., sense of personal freedom, personal adjustment, test anxiety, withdrawing tendencies, nervous symptoms, general anxiety, social adjustment and social standards are helpful in discriminating between high intelligence normal achievers and high intelligence under achievers. In the present study, except the factors like F (Expedient & Conscientious) and J (Practical & Imaginative), other selected personality factors are influencing the discrepant achievement of the selected primary school students.

Variablescc	Quartile Values		
	Q1 (25)	Q2 (50)	Q3 (75)
Intelligence	12	47	65
Achievement in Science	14	68.50	81.75

Table 3. Quartile values of the selected variables

Factors	Groups	N	Mean	SD	DF	t-value	Level of sig.
A (Reserved & Outgoing)	Under Achiever	40	5.48	1.52	86	4.084	at 0.01
	Over Achiever	48	6.60	1.07			
B (Less & More Intelligent)	Under Achiever	40	2.98	1.19	86	4.504	at 0.01
	Over Achiever	48	4.35	1.60			
C (Emotional outburst & stable)	Under Achiever	40	5.08	1.67	86	4.214	at 0.01
	Over Achiever	48	6.58	1.67			
D (Humble & Assertive)	Under Achiever	40	4.45	1.77	86	-5.519	at 0.01
	Over Achiever	48	2.63	1.33			
E (Sober & Happy-go-lucky)	Under Achiever	40	4.50	1.72	86	-4.929	at 0.01
	Over Achiever	48	2.71	1.68			
F (Expedient & Conscientious)	Under Achiever	40	5.63	2.18	86	0.218	Not significant
	Over Achiever	48	5.71	1.38			
G (Shy & Venturesome)	Under Achiever	40	4.97	1.70	86	7.519	at 0.01
	Over Achiever	48	7.77	1.77			
H (Tough & Tender minded)	Under Achiever	40	4.85	1.70	86	3.982	at 0.01
	Over Achiever	48	6.13	1.30			
I (Trusting & Suspicious)	Under Achiever	40	4.70	1.71	86	4.557	at 0.01
	Over Achiever	48	6.40	1.76			
J (Practical & Imaginative)	Under Achiever	40	4.60	1.79	86	-1.882	Not significant
	Over Achiever	48	3.92	1.61			
N (Forthright & Shrewd)	Under Achiever	40	4.97	1.89	86	-5.644	at 0.01
	Over Achiever	48	2.85	1.64			
O (Placid & Apprehensive)	Under Achiever	40	3.90	1.66	86	-4.603	at 0.01
	Over Achiever	48	2.27	1.65			
Q_3(Casual & Controlled)	Under Achiever	40	5.08	1.93	86	5.019	at 0.01
	Over Achiever	48	7.08	1.82			
Q_4(Relaxed & Tensed)	Under Achiever	40	4.70	2.11	86	-3.433	at 0.01
	Over Achiever	48	3.21	1.96			

Table 4. Mean score difference in personality factor between under achiever and over achiever in Achievement among the selected primary school students.

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