

ANALYSIS OF ACHIEVEMENT MOTIVATION OF ELEMENTARY LEVEL STUDENTS BETWEEN THE AGE GROUP 6 AND 14⁺ WITH SPECIAL REFERENCE TO STUDENTS OF CLASS-VIII IN WEST BENGAL

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Abstract: The greatest challenge of this century is to motivate students so that they can achieve success in school. Making students to learn and sustaining their interest in what they are learning is one of the major objectives of teacher education programs formulated by NCTE (National Council for Teacher Education). Motivation is a strong force in achievement. Motivations are of two major types, intrinsic and extrinsic. Intrinsic motivation is based on the internal factors such as self-determination, effort, challenge and curiosity while extrinsic motivation incorporates external factors such as rewards and punishment. Achievement Motivation has been defined as the extent to which individuals differ in their need to strive to attain rewards, such as physical satisfaction, praise from others and feelings of personal mastery (Mc Clelland, 1985). Individuals with high achievement motives usually act in ways that will enable them to outperform others, meeting or surpassing some standards of excellence or do something unusual. This study also attempts to determine the impact of achievement motivation on students' academic engagement. Total 1003 students of class -VIII were taken as the sample representative of the population from 5 districts out of 23 districts of West Bengal .The sample was treated with the tool to boost up their achievement motivation and by administration of Rao achievement motivation test (developed by Dr.D.Gopal Rao of NCERT) two groups are formed viz. Higher achievement related (HAR₂) and General achievement related (GAR).These two groups are subjected to same learning environment and their achievement test scores are recorded. . To study the correlation between achievement test scores and corresponding scores of achievement motivation (AM); Pearson's Product Moment Coefficient of Correlation was computed taking into consideration of scores of both the categories viz., HAR₂ and GAR.

Index terms: Motivation, Achievement, Intrinsic, Extrinsic, Curiosity, Administration, Learning environment.

1. Introduction

The theory of Achievement Motivation (AM) illustrates the built-in relationship between an individual's distinguishing characteristics and his/her need to achieve a goal in life. In accomplishing so, it also takes into account the nature of competitive driving force a person has to achieve predetermined goals. Achievement Motivation (AM) theory was proposed, boosted and refined by a set of researchers Murray (1938), Lowel (1953), Atkinson, Clark and McClelland (1961) over a long span of time. According to this theory, an individual's desire to achieve some objective in life or the dire need to achieve a specific qualitative or quantitative thing is governed by several internal factors such as strong urge, determination, punctuality, continuous drive along with numerous external factors (also known as environmental ingredients) such as compulsions, imperativeness of organizations, demands of the family and the society as a whole. An individual's need to achieve something and the cause behind his/her overall motivation to successfully reach a certain goal, according to the AM theory often comes from within and is strongly related to the need for power and affiliation sensed by the concerned person. However, the theory also fondly explains that it is imperative for a school to thoroughly understand the reason behind a child's motivation to achieve learning objectives and propagate the message to the teachers in an attempt to inspire them as well to design their lessons. Passing along such inspirational messages to non-teaching employees becomes all the more imperative in schools because the success of school system is dependent on performance of both the teachers and other employees. The management and parents are no less important. Taking the above factors into consideration, that can have a strong influence on a school's success rate, it is very important to thoroughly investigate the backgrounds of the potential teachers and employees before hiring them. In doing so, the selection committees should pay enough attention towards the personal characteristics of an interviewee as well as the reasons behind his/her motivation or need for achievement.

Apart from the points mentioned above, there are various other factors that can potentially influence and interact with a student's achievement motivation. It is found that an Individual's values (realizing the importance of achieving goals keeping in consideration of personal relationships and living conditions), educational panorama , cultural background, external support from the teachers and elders in the form of appraisals, declaration of results , appropriate and timely rewards, encouraging and

celebrating accomplishments, recognizing success, providing constructive feedback and helping them evolve from within by providing proper support mechanism, are all equally significant and play a vital role in achieving the essential motivation. Apart from looking for self-drive, the educational institution must evaluate and nurture a child's internal and external need for motivation to get the best out of them. The achievement motivation theory also states that, no matter how many motivational schemes a school may introduce, no matter how good the incentives are for achieving pre-determined goals; they can only play their part and contribute to the overall organizational success, only and only if the individual is willing to stand up and grab them. Without the willingness and self-drive of children, great results are always impossible to achieve. At the same time, no matter how motivated the child is in achieving learning goals, lack of proper encouragement and motivation from the school environment in the form of prizes, incentives, promotion to higher class, financial assistance, etc., can always put negative thrust upon them.

Here we are particularly concerned with the elementary school students (from primary to upper primary) because they are beginners and constitute the future backbone of our country. Achievements in their life will bloom the flower of our nation and tune the music of development. Achievement motivation created in them by manipulation of school environment is expected to yield their excellent performance.

1.1 Statement of the problem

Motivation is the principle drive for all of our attempts. Motivation relates to the dynamics of our behavioral manifestations, which involves our needs, drives, ambitions and desires in life. Achievement motivation is based on reaching apprehended target or success and fulfilling all of our aspirations in life. This study deals with the following problems: i) Identification of the parameters of Achievement Motivation present in the tool prepared by the researcher to increase achievement motivation ii) Recognizing the bond or relationship between achievement motivation and academic performance of students.

1.2 Objectives

The objectives of the study are the following.

- To identify the parameters of achievement motivation.
- To identify a strong reason for deficiency in learning in the elementary level classes of govt. schools of West Bengal.
- To recognize the factors for creation or boost up of achievement motivation among elementary level students.
- To develop a tool for boost up of Achievement Motivation (AM) of learners.
- To know the relationship between Achievement Motivation and Academic Achievement.

1.3 Hypothesis

- A. No psychological tool can boost up achievement motivation of upper primary learners.
- B. There is no significant correlation between Achievement Test Scores and level of Achievement Motivation.

2. Review of related literature

Terry Heick (2019) in her "10 Strategies to Promote Curiosity in Learning" states that achievement motivation and curiosity are interconnected specially for elementary students.

- i. Curiosity is a human instinct, but like most instincts, it can be refined through observation and practice.
- ii. Curiosity is embedded at the core of the instructional design process.
- iii. Analyze curiosity: Help students see its parts, or understand its causes and effects.
- iv. Reward curiosity.
- v. Make curiosity personal.
- vi. Let students lead. It's difficult to be curious if the learning is passive and the student doesn't have any control.
- vii. Spin content. Frame content like a marketer—as new, controversial.
- viii. Focus on questions, not answers.
- ix. Connect this to that.
- x. De-school it. Let the content stand on its own.

If we promote and encourage curiosity of our children, their achievement motivation peaks to top and they become more active.

Pranita Jagtap (2018) The present paper was an exploration, an experiment to study the points of predictions of achievement motivation of early adolescent girls—social and economic status, intelligence quotient and academic records. The sample of this research work consists of 132 girls studying in secondary schools of Pune City, Maharashtra. Projective test of

achievement motivation by Deo-Mohan was used to measure achievement motivation. To assess economic, educational and social status of the family, socio-economic scale was used, developed by Dubey and Nigam (2005). Raven's (1960) Standard Progressive Matrices (SPM) was used for measuring IQ. Though, academic progress of the students was determined on the basis of school marks percentages obtained in school. Pearson's correlation coefficients and stepwise multiple regression was done to investigate the best pattern of variables for predicting achievement motivation. Data analysis expressed that achievement motivation of students was significantly correlated with academic performance. It was found that scores of achievement motivation, intelligence and socioeconomic status are not having any significant correlation. Multiple regressions were operated and results revealed that academic performance was significant predictor of achievement motivation.

K.S.Reddy,M.Uddin (2018) in their book mentioned factors associated with learner under the heading “Factors Influencing Learning”. They identified eight factors associated with elementary level learning viz. Motivation, Readiness and will power, Ability of the learner, Level of aspiration and achievement, Attention, General health condition of the learner, Maturation of the learner and Factors related to learning material. Out of these factors Motivation and Level of aspiration are playing pivotal role. (i) Learners have learning objectives. Motivation directs them the path leading towards the fulfillment of learning objectives. More the motivation, faster the achievement of learning objectives. (ii) Aspiration should be set according to ability of the learner. Keeping low aspiration level without realizing the high potentiality of the learner and on the other hand, keeping high aspiration level having poor innate ability; both the cases affect negatively creating maladjustment or inferiority complex as the case may be. Correction to these tendencies is required.

Syeda Sophia, MohsinUddin (2018). The authors concentrate on fostering creativity and observe that creativity and motivation are directly proportional. Teachers and parents are two banks in the life of a student. Stable and consistent love and care from them can change the life of a student. For instance, survival essentially needs breathing; in the same manner loving the child/student is natural for parents and teachers. No one tell us to breathe; similarly no one will tell us to love our children. Parenting /teaching is an art, if we know it, we succeed. We as teachers and parents need to say no to three negatives viz., stop, tell not to do and beat. We need to come up with new ideas of bringing up children at home as well as in school. Love is a natural need for nurturing the child even when it may seem sometimes not deserving. The motivating ways to deal with young stars are communication with open and rational mind, mutual respect and joyful advice. Children come up frequently with new ideas or alternatives but we do not take it seriously. Our ego comes in the way because we look towards them from the other side of the telescope and think that they are not capable of constructive thinking. It is a matter to remember that the youth of today representing the adult of tomorrow is full of vigor, ideas, innovation and creativity. We need to have faith in them; we need to enhance their creativity and motivation.

Francisco Peixoto et. al (2017) in their study “To learn, or to be the best? Achievement goal profiles in pre-adolescents” examined the profile differences in academic achievement and anxiety of 5th and 7th grade students after measuring their achievement motivation profiles. The sample constituted of 1652 Portuguese students who recorded their responses to the Achievement Motivation Scale and the Achievement Emotions Questionnaire. Cluster analysis of the sample lead to formation of six groups having cleared six motivational profiles. These six person-centered profiles were (1) task oriented, (2) ego oriented, (3) success oriented, (4) disengaged, (5) self-defeating oriented and (6) diffuse.

Coltin (2014) in his research work on children, between the ages of 5 and 14 found that they spend up to 80% of their school time out of school. These hours represent a chance to assist youngsters grow and acquire necessary social, emotional, cognitive and physical skills and to help them develop lifelong interests. In these hours they may be helped to develop their athletic and artistic performance skills.

3. Research Methodology and Data Collection

- Out of the 23 districts of West Bengal, 5 districts are selected randomly, then out of those 5 districts 15 government schools are selected both from rural and urban areas. These 15 schools are approached for the present study. The consent for 10 schools are accorded by the concerned Headmasters. Total 1003 sample students of those 10 schools are the representative of the population.
- Rao achievement motivation test developed by Dr. D. Gopal Rao of NCERT was collected from Agra Psychological Association and administered on the sample population. Three Pre-tool categories evolved viz., **Higher Achievement Related group (HAR₁)**, **Average Achievement Related group (AAR₁)** and **Lower Achievement Related group (LAR₁)**.
- Now they were subjected to a psychological tool for boosting up of their achievement motivation. The tool was prepared on the basis of the Parameters of achievement motivation viz., sense of control, objective awareness, threat free environment, changes, varied experience, competition, reward, responsibility, togetherness, praise, reflection and excitement, manage anxiety, high but attainable goals and fun.
- On administration of the said tool, new improved achievement motivation categories are found viz., **Higher Achievement Related group (HAR₂)**, **Average Achievement Related group (AAR₂)** and **Lower Achievement Related group (LAR₂)**.
- A new group was formed combining AAR₂ and LAR₂. The name of the new group is given **General Achievement Related group (GAR)**.

- The new boosted sample of 1003 with increased motivation was taught a topic of Physical Science with improved teaching method and an achievement test was administered. Test scores are recorded.

4. Data Analysis

Table: 4.1

Formation of three groups (pre-tool) on the basis of scores from Rao AM test

Total no. of Sample	Class interval of Scores	Frequency (f)	Group name corresponding to f	Total no. of HAR ₁ +AAR ₁ +LAR ₁
1003	51-60	305	High Achievement Motivation (A M) Related group (HAR ₁)	1003
	41-50	410	Average A M Related group (AAR ₁)	
	31-40	288	Low A M Related group (LAR ₁)	

Table: 4.2

Formation of the three groups on the basis of scores from Rao Achievement Motivation (AM) Test (After the application of the tool for boosting up of AM)

Total no. of Sample	Class interval of Scores	Frequency (f)	Group name corresponding to f	Total no. of HAR ₂ +AAR ₂ +LAR ₂
1003	51-60	580	High Achievement Motivation (A M) Related group (HAR ₂)	1003
	41-50	318	Average AM Related group(AAR ₂)	
	31-40	105	Low AM Related group(LAR ₂)	

Table-4.3

Calculation of Pearson's Product-Moment Coefficient of Correlation(r)between Achievement Test Scores and Achievement Motivation Scores of both HAR₂ and GAR groups

Group	N	∑X	∑Y	∑X ²	∑Y ²	∑XY	r
HAR ₂	580	40647	32480	2916963	1822168	2279681	0.23
GAR	423	28780	18738	2010768	845418	1285121	0.36

Variable X is score obtained in the Achievement test and **Variable Y** is score obtained in Rao Achievement Motivation (AM) test.

Calculation of Pearson's Product-Moment Coefficient of Correlation where

∑X=sum of the X scores,

$\sum Y$ =sum of the Y scores,

$\sum X^2$ =sum of X^2 ,

$\sum Y^2$ = sum of Y^2 ,

$\sum XY$ =sum of the product of paired X and Y scores,

N = Number of paired scores.

FORMULA USED TO CALCULATE Pearson's Product-Moment Coefficient of Correlation:

Being more convenient, the raw score method of computation is adopted

1. For HAR₂ group

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

= +0.23

2. For GAR group

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

= 0.36

For the unique intrinsic features of Karl Pearson's Product Moment Coefficient of Correlation, it has been computed to establish positive relationship between Achievement test scores and Achievement motivation.

4.1 Interpretation

Table: 4.3 includes Variable X (Achievement test scores) and Variable Y (Scores of Rao Achievement Motivation Test) to calculate Pearson's Product Moment Coefficient of Correlation between X and Y of both HAR₂ and GAR categories. This is done to understand the effect of achievement motivation (AM) on academic achievement of students. Both the groups yielded positive correlation 0.23 and 0.36 respectively. It is interpreted as the following: 'AM has positive direct effect on academic achievement of elementary school students'.

4.2 Testing Hypothesis

A. Table 4.2 shows that the psychological tool based on the components of Achievement Motivation was effective because on administration of Rao Achievement Motivation Test the number of high achievement related category considerably increased (from 305 to 580). So, due to effect of tool to boost up achievement motivation, actually the considerable increase of high achievement related group has taken place. Therefore **the null hypothesis is rejected**.

B. By calculation of Pearson's Product-Moment Coefficient of Correlation(r) between Achievement Test Scores and Achievement Motivation Scores of both HAR₂ and GAR groups; the results show that for HAR₂ the coefficient of correlation is +0.23 and that for GAR group it is +0.36. It reveals that there is positive and significant correlation between Achievement Test scores and level of Achievement Motivation. Therefore **the null hypothesis is rejected**.

5 Findings and Conclusion

By analysis of components of achievement motivation and using them to prepare the tool to boost up achievement motivation of upper primary learners, it is found that the parameters of achievement motivation if used judiciously help a lot for development of improved desired behavior and learning.

It is also found that positive and significant correlation between achievement test scores and level of achievement motivation exists. Teachers of elementary schools should use the teaching environment and teaching methodology in such a fashion that the learners find themselves in a threat-free environment and be energized to excel each other in their peer group.

In fine we conclude, teachers and parents must be aware of achievement motivation of primary and upper primary children because they are the future economists, teachers, scientists and leaders of our country. If they are motivated enough to achieve success in life, then only they can come out with flying colors. Positively motivated children can never involve themselves in evil acts, because it encourages healthy competition. Great scholars ,versatile talented citizens, great patriots, innovative men of science , born teachers, Nobel Laureates , sports personalities are inspiration of our children.

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