NEED-ACHIEVEMENT: A STUDY WITH REFERENCE TO SCHOOL ECOLOGY

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A B S T R A C T

In several methodological steps, the present study examined the level of need-achievement, perception of students towards their school and most importantly the effect of perceived schools physical & psycho-social environment on the need-achievement on a sample of 180 higher secondary school students. Results reported that 34% higher secondary school students are having high level of achievement motivation, 44% are having average level of achievement motivation and 22% of adolescents are having low level of achievement motivation Sample participants also perceive the environment provided in terms of physical and psycho-social in their school as average. Among the predictors H, i.e., Student Teacher Interaction ($r = .393$), D, i.e., Acceptance ($r = .330$) and B, i.e. Cognitive Encouragement ($r = .291$) were found to be significant predictors, whereas Rejection (E) as a dimension of school environment was found to be inversely a significant predictor ($r = -.164$) that influence the criterion variable. Paper concluded that to develop the strong desire for excellence among our children school staff should provide a better psycho-social environment to students.

Keywords: Achievement Motivation, School Ecology (Creative Stimulation, Cognitive Encouragement, Permissiveness, Acceptance, Rejection, Control, Physical aspects of the School and Student Teacher Interaction).

INTRODUCTION

One of the most important tasks facing all societies is the problem of detecting and fostering human talents. As all nations are committed to development, this concern has assumed the essential feature of a revolution which has no precedent in human society. Raising the standard of living of our people is not merely a matter of growth and development of physical resources; it needs the education and socialization of the whole population. Education and socialization facilitates new ways of life, thought and work, while the development of physical resources is a means to an end. The adequate development of physical resources is also not possible without the proper development of human resources. Hence it is increasingly being realized that human resource development is necessary condition, if not sufficient for achieving the national good. All round development of a nation or society depends upon proper or adequate development of both its physical and human

resources. The development of all the determinants (socio-cultural) of nation development is only possible through human resources having high need-achievement. There are a number of factors that influence the need-achievement behaviour and the environmental factors are among the important one's. As David McClelland's in the Achieving Society (1961) concluded that there are four factors that directly influence achievement behavior: race/environment, child-rearing practices, religious values, and social class. Thus, McClelland stated that a race must possess initial levels of n-Achievement and this initial level must also interact in a favorable environment. According to McClelland, a good example of this model could be Jews in America. On the other hand, blacks are low in initial levels of achievement motivation and are not likely to interact in favorable environments (as cited in Louis Castenell, 1984).

Need-achievement (Achievement Motivation) is actually a strong psychological motive, a desire to excel which is learned and can be fostered among our children by providing them a healthy and congenial atmosphere for

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their development. It is a widely researched topic in both the fields of psychology and education. Achievement motivation can best be understood by examining the meanings of "achievement" and "motivation" separately. Achievement typically stresses the importance of accomplishment and attainment with effort involved (Mandel & Marcus, 1988). Motivation relates to an individual's reason for engaging in an activity, the degree to which an individual pursues the activity, and the persistence of the individual (Graham & Weiner, 1996).

Achievement motive is a concept developed by the social psychologist McClelland to denote the strong urge felt by an individual or society for achievement in various aspects like education, culture, money, etc. that satisfies the need of self-esteem. The achievement motive is the deciding factor in attaining success in different fields. An achieving society is characterized by the history of a strong and persistent achievement motivation. According to Atkinson and Feather (1966), "Achievement motivation is conceived as a talent disposition which is manifested in overt striving only when the individual perceives performance as instrumental to a sense of personal accomplishment." Individuals high in achievement motivation are at their best when they can maintain a high level of involvement in ensuring the excellence of activities under their coordination or control. Persons with high need-achievement like work situations where they can work independently and they like to search their environment and to make use of available resources in an innovative way. That is why McClelland says...... "Increasing the need-achievement level by half a standard score unit in any country would be more effective in promoting economic growth than tonnes of guns and butter".

After realizing the importance of need-achievement, the immediate need becomes to search out ways to improve their level of need-achievement. It is hoped that present study will explore some specific factors attached to develop the need-achievement of adolescents of our society and schools physical and psycho-social environment is one of them.

In this study, school ecology has been used to describe the network of interrelationships between different physical aspects of the school and schools psycho-social environment provided by its biotic components (Teachers). The term ecology has been used in very confined manner from school context. School environment may hinder or support children's development and achievement motivation (Goudenow, 1993 & Esposito, 1999). Keeping in view the different aspects of schools ecology, it was felt necessary to study the influence of different aspects of the school on the development on need-achievement. Some studies have been conducted previously to study the relationship between school environment and need-achievement like Chaturvedi (2009) found that there is significant relationship between school environment and need-achievement of children.

Since need-achievement is the mother of inventions and developments, this study provides some important suggestions to teachers and school staff for making their students optimally motivated for real achievements. It is hoped that this study will provide information for parents, educators and school administrators to reflect upon various factors that help students in developing higher achievement goals. In so doing, they can investigate the possibility of introducing those factors in their school, which may consequently lead to enhancing students' need-achievement levels. Further in the present competitive world every aspirant student is feeling the pressure of their secure future rather they should feel insecure in terms of career, choice of profession to live a healthy life. Hence studying achievement motivation at higher secondary level becomes important, because this stage is the base for different competitive examinations and basis for future life development.

Why Empirical Study: Empirical research is the study using empirical evidence. An empirical research reports a study that used quantitative research methods, which generate numerical data and seek to establish causal relationships between two or more variables. Hence this study also falls under the empirical research by employing the Correlational (Prediction) design of research with the main objectives of studying the need-achievement and school ecology of Senior Secondary School Students along with the perceived effect of different dimensions of School Ecology on their Need-Achievement based on numerical data.

The participants for this study were purposively drawn from different Govt. Higher Secondary Schools of South Kashmir (J&K). Total sample of 180 students were selected for the study.

Instruments: After consulting different tools for the measurement of achievement motive, the investigator used the Deo-Mohan (Pratibha & Asha, 1985) achievement motivation scale for studying the

achievement motivation of the senior secondary school students because it measures the achievement motivation spread over three factors viz, academic factor, factors of general field of interest (competition in curricular and co-curricular activities) and factors related to social interests spread over fifteen factors.

An adapted version of school environment inventory was used to measure the student's perception about the total environment of the school, which will include physical aspects of the school, socio-psychological environment and teacher pupil interaction. The original School Environment Inventory (SEI) was developed by Dr. Karuna Shanker (2002).

Procedure: Before the administration of the tools, the nature of the data and the purpose of research were discussed with the concerned Principals of the schools and the sample population. Then the tools were administered. After the administration of the tools to the selected samples the scoring was done strictly in accordance with the directions in the tools manuals. The collected data was statistically analyzed through appropriate statistics.
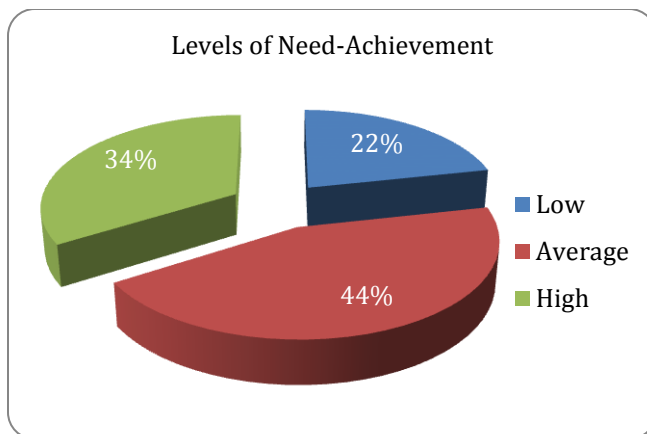

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What the Data Say: From the perusal of the above graphical representation of the data 34% higher secondary school students are having high level of achievement motivation, 44% are having average level of achievement motivation and 22% of adolescents are having low level of achievement motivation. The large segment of the higher secondary school students is having average level of achievement motivation.

Table 1. Showing the performance of sample subjects on various scales of adapted version of School Environment Inventory.

Dimension	Mean	Std. D.	Dimension	Mean	Std. D.
A: Creative Stimulation	39.51	10.07	E: Rejection	21.55	5.78
B: Cognitive Encouragement	22.91	7.03	F: Control	19.60	5.11
C: Permissiveness	21.87	6.64	G: Physical Aspects of the School	20.11	6.11
D: Acceptance	23.08	6.45	H: Student Teacher Interaction	24.01	6.69

The perception of school environment (Ecology) was measured through an adapted version of school environment inventory. Since the tool was administered on the sample of higher secondary school students, the data was analyzed separately for each dimension of the tool. 180 higher secondary school students participated in the study. After the administration of the tool Mean and SD was calculated separately for each dimension of the scale which are given in the above table.

Table 2. Showing the Norms for each sub-scale (Dimension) of the adapted version of school environment inventory which were separately calculated.

Stanine	Levels	CRS. A	COE. B	ACC. C	PER. D	REJ. E	CON. F	PAS. G	TPI. H
9	High	61+	33+	33+	33+	32+	29+	31+	34+
8	--	55-60	30-32	30-32	30-32	29-31	27-28	28-30	31-33
7	--	50-54	27-29	26-29	27-29	26-28	24-26	25-27	28-30
6	Average	45-49	23-26	23-25	24-26	23-25	21-23	22-24	24-27
5	--	40-44	19-22	19-22	20-23	20-22	18-20	19-21	21-23
4	--	35-39	16-18	16-18	17-19	17-19	15-17	16-18	17-20
3	Low	30-34	13-15	12-15	14-16	14-18	12-14	13-15	13-16
2	--	25-29	10-12	9-11	11-13	10-12	9-11	10-12	10-12
1	--	0-24	0-9	0-8	0-10	0-9	0-8	0-9	0-9

The mean performance on dimension A, as reflected in table 2, measuring students perception about teachers activities that provide such conditions and opportunities to stimulate for creative thinking was 39.51, this mean lies to 5th stanine, meaning that that the students perception was at the average level so for their teachers effort to stimulate them for creative thinking is concerned. In other words government schools can provide such an environment where on the average, teachers stimulate their students for creative thinking only occasionally and not often.

The mean score on the scale B, measuring the student's perception regarding teacher's behavior through encouragement and action to stimulate cognitive development of their students was found to be 22.91 as reflected in the above table. This mean again lie in the 5th stanine. This means that students perception about their cognitive encouragement provided in the school is average. From this finding it can be safely concluded that the students were encouraged by their teachers only occasionally for cognitive development.

Mean performance on dimension C, measuring students perception about school environment in which students get the opportunity to express their views freely and could get according to their desires without any interruption from teachers side, was found to be 21.87, which again lies in the 5th stanine, which refers to an average level of perception of students about this variable. The school climate of govt. schools provide climate where students could occasionally express their views freely and without any interruption from teachers side.

The mean performance of sample subjects on scale D of school environment inventory was 23.08, the student's perception about the teachers love and the readiness to accept the feelings of students in a non-threatening manner. This mean lies in the 5th stanine, means average level of perception of students about this dimension. It can be safely concluded that on the average the teachers of govt. schools showed their love for their students occasionally and they did not accept the feeling of their students too in a non-threatening manner.

The mean performance of sample students on scale E of school environment inventory was 21.55. This scale measures the student's perception about the school climate where teachers reject the right of a student to deviate and to act as a free and autonomous person. Here again the mean lies in the 5th stanine referring to an average level of students perception indicating that students perceive that teachers rarely as only one time rejects to recognize the student right to deviate or to accept their students as a free autonomous person from teachers point of view.

The mean performance of students of govt. schools on F dimension was 19.60. This value also lies in the 5th stanine, meaning by that the students perception was on average level. In other words students perceived that they sometimes found the school atmosphere autocratic and imposed several restrictions on students to discipline them.

On the dimension G, the mean score of sample subjects is 20.11. This value again lies in the 5th stanine referring to an average perception. This finding leads to conclude that so far as perception of govt. school students is concerned they believe that their schools were often having adequate physical and infrastructural facilities.

The mean score on dimension H of the inventory was found to be 24.01 which also lie in the 5th stanine. This indicates that the student's perception about the teacher pupil interaction to stimulate the achievement orientations was average. Teachers on the average try to develop the desire to excel motive among the students.

Table 3. Represents Step-wise Multiple Regression analysis, Dimensions of Home Ecology as predictors of need-Achievement of Higher Secondary School Students.

Model	R	R Square	Adjusted R Square	Change Statistic R Square Change	F
1	.519	.269	.265	.269	72.83**
2	.600	.360	.354	.091	55.45**
3	.642	.412	.403	.052	45.82**
4	.654	.428	.416	.016	36.49**

Tale 3 represents the different dimensions of school ecology (A, B, C, D, E, F, G, & H) that appeared as significant predictors of need-achievement (criterion variable). In all 8 facets only four i.e. H, D, B & E were upheld as significant predictors (all F values are significant at 0.01). Above table gives 4 predictors of the model. Multiple correlation is found to be R= .654 for Students Teacher Interaction (H), Acceptance (D),

Cognitive encouragement (B), and for Rejection (E). Further R Square which represents the contribution of predictor variable to criterion variable is also seen. Here we have R square change that is the actual contribution of predictor variable to the criterion variable. Hence the real covariance the magnitude of independent variable which contributes to the dependent variable (Need-Achievement) came out to be 26.9% for H, 9.1% for D, 5.2% for B and similarly 1.6% for E. Thus the real covariance, magnitude of predictor variable which contribute to criterion variable find out 26.9% for H alone (Step 1). With both H and D (Step 2), 36.0% of the variance was accounted for. With the combination of three predictors H, D & B (Step 3), 41.2% of the variance was accounted for and with the combination of all four variables H, D, B & E (Step 4), 42.8% of the variance was accounted in the criterion variable. Above table also gives four F tests, one for each step of the procedure. All steps had overall significant results.
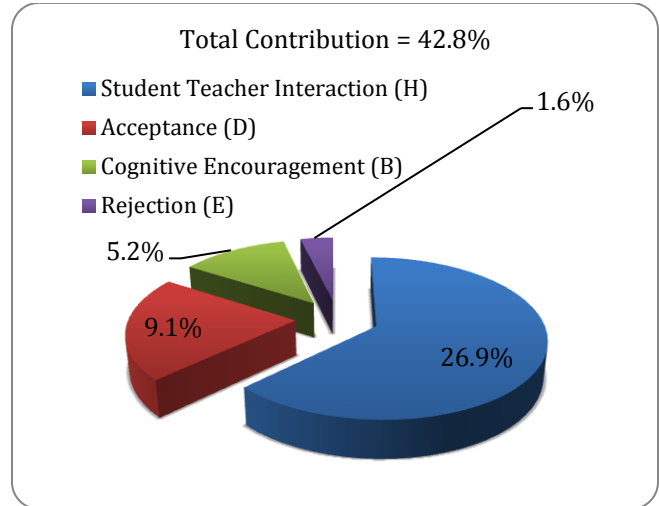

Figure 2. The actual contribution of independent variables to the dependent variable.

Table 4. Reporting the Coefficients.

Model	Standardized Coefficients Beta	t	Sig.	Partial Correlation (r)
(Constant)		12.565	.000	
H (Student Teacher Interaction)	.353	5.959	.000	.393
D (Acceptance)	.284	4.884	.000	.330
B (Cognitive Encouragement)	.246	4.245	.000	.291
E (Rejection)	-.126	-2.327	.021	.-.164

Above table 4 clearly indicates that H, i.e., Student Teacher Interaction, D, i.e., Acceptance, B, i.e. Cognitive Encouragement (r = .393 for H, r = .330 for D, r = .291 for B) were found to be significant predictors, whereas E, i.e., Rejection (r = -.164) as a dimension of school environment was found to be inversely a significant predictor that influence the criterion variable., means that increase in E variable leads to the decrease in the criterion variable and vice-versa. As the statistical value given above indicate that t = 5.959 for H, t = 4.884 for D, t = 4.245 for B and t = -2.327 for E. By having a look at the t values, we conclude that all the t values are significant for all the predictors, indicating the relationship between predictors and the criterion variable.

CONCLUSION

A close look into the above findings reveals that on the average govt. schools could provide an environment which is considerable to be average or slightly better average. As whole teachers of govt. schools could provide only occasionally the desirable socio-psychological environment for their students. That may be the reason that only 34% higher secondary school students are having high level of achievement motivation, 44% are having average level of achievement motivation and 22% of adolescents are having low level of achievement motivation. The large segment of the higher secondary school students is having average level of achievement motivation. To conclude we can say the environment of govt. higher secondary schools is just satisfactory not high. Moreover among the predictors Student Teacher Interaction (r = .393), Acceptance (r = .330) and Cognitive Encouragement (r = .291) were found to be significant predictors, whereas Rejection as a dimension of school environment was found to be inversely a significant predictor (r = -.164) that influence the criterion variable. This indicates that teacher's interaction with students, teachers love and the readiness to accept the feelings of students in a non-threatening manner and other activities to encourage their cognitive development had significant influence on their achievement motivation development while as rejection, where teachers reject

the right of a student to deviate and to act as a free and autonomous person was found to be inversely a significant predictor. Paper concluded that to develop a strong desire for excellence among our adolescents, the psycho-social environment of the school must channelize this strong desire.

IMPLICATIONS

From the findings of the study following implications can be made:

1. Teacher's behavior through encouragement and action to stimulate cognitive development of their students is very important for need-achievement development. Therefore teachers must provide cognitive encouragement to their students.
2. Teachers must provide love and the readiness to accept the feelings of students in a non-threatening manner.
3. School climate where teachers and other staff reject the right of a student to deviate and to act as a free and autonomous person should be minimized. As adolescents cannot be bound to be in chains.
4. The teacher pupil interaction to stimulate the achievement oriented behavior should be focused on by the teachers.

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