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Thoughts

A STUDY OF SELF-REGULATION AND ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS OF PUDUCHERRY REGION

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Abstract:-The Research is taken to study the Self-regulation and Academic Achievement of the Higher Secondary students in Pondicherry Region. The Normative Survey Method is adopted to study the dependent and independent variables and its relationships. In order to study the Self-regulation and Academic Achievement, the researcher chooses the Higher Secondary Schools as the Population. The Population consists of 56 Higher Secondary Schools of which 28 are Government and 28 Private. Among these 56 schools, 21 are Single Sex and 35 are Co-education types. On the basis of the Area, there are 36 schools in urban area and 20 schools in the rural area. Self-regulation Questionnaire was used in the study. Descriptive Analysis Differential Analysis and Correlation Analysis were used in the study. The mean, median and mode of the self-regulation are found to be 124.39 124.00, 123.22 and 17.97. The mean, median and mode of the academic achievement are found to be 74.45, 12.74, 76.80 and 81.50. Self-regulation of the Higher Secondary students forms a Positively Skewed Platykurtic Distribution and the Academic Achievement of Higher Secondary students form a Positively Skewed Leptokurtic Distribution.

Keywords: Self-Regulation And Academic Achievement , Pondicherry Region , Normative Survey Method .

INTRODUCTION

Educational Excellence contributes significantly to the academic success and professional placement of an individual. It is an index of scholastic performance and academic brilliance. It reveals the level of educational accomplishment in various subjects taught in educational institution. Scholastic Performance is given by means of Academic Achievement and extra-curricular activities. Academic Achievement of the students is mainly due to functioning of three domains of behaviours, namely, Cognitive, Affective and Conative. In order to maintain the functioning of these behaviours for achievement, the individual is expected to have a certain routine activities. These routine activities become goal-directed activities within the individual's mental life. The human being should regulate his intrinsic thought, affect and behaviour to achieve his goal. Regulation implies modulation of thought, affect and behaviour through deliberate use of specific mechanisms and supportive meta-skills. The process of Self-regulation is initiated through routine activities which are goal-directed. Self-regulation appears to be the stable element in attempting to guide behaviour along a specific path to a directed goal. Hence Self-regulation is a process, internal and transactional, that enable an individual to guide his goal-directed activities over time and across changing circumstances. It is an important feature in Cognitive, Affective and behavioural changes. Many interrelating features appear to govern Self-regulation with no single factor responsible for its success or failure. The ability to self-regulate may have advantages in the course of an individual's mental life especially within the achievement oriented context.

Apart from procedural, epistemic and conceptual divergences in various models of Self-regulation, basic personal factors, such as goal setting, self-monitoring, activation and use of goals, discrepancy detection and implementation, self-evaluation, self-conscience, self-efficacy, meta-skills, boundary conditions, and self-regulation failure, characterize the process of self-regulation. Perception of self-control accompanying the process

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of self-regulation and self-monitoring promotes confidence in self and performance of a given task. The mechanisms of self-regulation are important in any behavioral change strategy.

NEED FOR THE STUDY

The Self is often conceptualized as the executive agent of the personality, responsible for regulating an individual's activities. Research on Self-regulation has focused on the individual's capacity to monitor and modify behaviour, cognition and affect, in order to achieve a goal. Student's improvement can be done through various Self-regulating models. Particularly strengthening Self-regulatory activities enhance the cognitive affairs which in turn improves the general and academic abilities of the individual. At the present situation, Higher Secondary students are mostly lacking due to the improper planning in their academic activities. Due to the lacking in planning their standards in academic aspects are not worth. Self-regulation makes the respective planning and improves their academic vision. Successful students report that the use of Self-regulated learning strategies accounted for most of their success in school10. High achievers set specific, realistic   and systematic learning goals for themselves and self-monitor frequently. In order to self-regulate, students must learn to self-compare their performance and become proactive learners. Self-regulation skills can be taught, learned and controlled. It involves controlling behaviour, motivational beliefs and cognitive strategies for learning. These ideas create the positive relation between Self-regulation and performance in studies. If one develops Self-regulating practices, then it may lead to better Academic Achievement. To improve Academic Achievement one has to know about their Self-regulating practices. This is also helpful for teachers and parents. Hence there is a need for the study of Self-regulation in relation to Academic Achievement.

DEFINITION OF THE TERMS USED

1. Self Regulation

Self-regulation is the ability to control our own behaviour. It is the work horse of the human personality. Self-regulation is an integrated learning process, consisting of the development of a set of constructive behaviours that affect one's learning. These processes are planned and adapted to support the pursuit of personal goals in changing learning environments. It has been described as the process whereby students activate and sustain cognitions and skills, which are systematically oriented toward the attainment of their goals'.

2. Academic Achievement

Academic achievement refers to the marks obtained by the students in their Tenth Standard Annual Examination.

OBJECTIVES OF THE STUDY

1. To study Self-regulation of the Higher Secondary Students,
2. To study the Academic Achievement of the Higher Secondary Students,
3. To find out the significant relationship if any between the Academic Achievement and Self-regulation and in its components of the Higher Secondary students.

HYPOTHESES OF THE STUDY

1. The Self-Regulation of the Higher Secondary students is not normally distributed.
2. The Academic Achievement of the Higher Secondary students is not normally distributed.
3. There is no significant relationship between the Academic Achievement and Self-regulation and in its components of the Higher Secondary students.

METHODOLOGY

SAMPLING PROCEDURE

In order to study the Self-regulation and Academic Achievement, the researcher chose the Higher Secondary Schools as the Population. The Population consists of 56 Higher Secondary Schools of which 28 are Government and 28 Private. Among these 56 schools, 21 are Single Sex and 35 are Co-education types. On the basis of the Area, there are 36 schools in urban area and 20 schools in the rural area.

The researcher chose six schools randomly from the Population of the Higher Secondary Schools of Pondicherry Region. The selected sample nearly constitutes 10.34% (Six schools out of 56 schools) of the

Population. There are 299 students in the selected sample of schools.

TOOLS

The tools used in the study are

1.Self-regulation Questionnaire and
2.Personal Data Sheet.

STATISTICAL TECHNIQUES USED

The data have been analyzed using the following statistical techniques.

1.Descriptive analysis
2.Correlational analysis

RESULTS AND DISCUSSION

Figure-1 is showing the descriptive analysis of Self-regulation and Academic Achievement

Statistical Measures	Total Self-regulation (N=299)	COMPONENTS				Academic Achievement
		Home Work (N=299)	Class work (N=299)	Hard questions (N=299)	Well in school (N=299)	
Mean	124.39	31.45	30.46	33.21	29.26	74.45
Median	124.00	31.00	31.00	33.00	29.00	76.80
Mode	123.22	30.10	32.08	32.58	28.48	81.50
Standard Deviation	17.97	5.28	5.56	6.14	4.72	12.74
Quartile Deviation	12.00	3.50	3.50	4.00	3.00	7.03
$S.E_M$	1.04	0.31	0.32	0.36	0.27	0.74
$S.E_\sigma$	0.74	0.22	0.23	0.25	0.19	0.52
Sk	0.065	0.256	-0.291	0.103	0.165	-0.553
Ku	0.279	0.269	0.250	0.266	0.272	0.203
Fiduciary Limits of Mean	122.35 to 126.43	30.85 to 32.05	29.82 to 31.09	32.51 to 33.91	28.72 to 29.80	73.00 to 75.89
Fiduciary Limits of Standard Deviation	16.53 to 19.41	4.86 to 5.70	5.11 to 6.01	5.65 to 6.63	4.34 to 5.10	11.71 to 13.76

Figure-1

DESCRIPTIVE ANALYSIS – SELF-REGULATION

The Self-regulation of the Higher Secondary students is found to form a Normal Distribution with a Mean of 124.39 and a Standard Deviation of 17.97. The Median and the Mode of the distribution are found to be 124.00 and 123.22 respectively. The sample Mean becomes a parameter within the Fiduciary Limits of 122.35 to 126.43 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 1.04. With 95 per cent confidence the Standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 16.53 to 19.41, as the Standard Error of the Standard Deviation is found to be 0.74. The Quartile Deviation is found to be 12.00, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 90, it is concluded that the Mean Self-regulation score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be 0.065, which is a positively skewed and consequently the scores are amassed at the left end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.279, which is a Platykurtic distribution. Hence, the Self-regulation of the Higher Secondary students forms a Positively Skewed Platykurtic Distribution.

DESCRIPTIVE ANALYSIS – HOMEWORK (COMPONENT OF SELF-REGULATION)

The Homework component of Self-regulation of the Higher Secondary students is found to form a Normal Distribution with a Mean of 31.45 and a Standard Deviation of 5.28. The Median and the Mode of the distribution are found to be 31.00and 30.10 respectively. The sample Mean becomes a parameter with in the Fiduciary Limits of 30.85 to 32.05 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 0.31. With 95

per cent confidence the Standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 4.86 to 5.70, as the Standard Error of the Standard Deviation is found to be 0.22. The Quartile Deviation is found to be 3.50, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 22, it is concluded that the Mean Self-regulation score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be 0.256, which is a positively Skewed and consequently the scores are amassed at the left end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.269, which is a Platykurtic distribution. Hence, the Homework Component of Self-regulation of Higher Secondary students form a Positively Skewed Platykurtic Distribution.

DESCRIPTIVE ANALYSIS – CLASS WORK (COMPONENT OF SELF-REGULATION)

The Class work component of Self-regulation of the Higher Secondary students is found to form a Normal Distribution with a Mean of 31.00 and a Standard Deviation of 5.56. The Median and the Mode of the distribution are found to be 31.00 and 32.08 respectively. The sample Mean becomes a parameter with in the Fiduciary Limits of 29.82 to 31.09 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 0.32. With 95 per cent confidence the Standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 5.11 to 6.01, as the Standard Error of the Standard Deviation is found to be 0.23. The Quartile Deviation is found to be 3.50, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 22, it is concluded that the Mean Self-regulation score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be -0.291, which is a negatively Skewed and consequently the scores are amassed at the right end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.250, which is a Leptokurtic distribution. Hence, the Class work component of Self-regulation of Higher Secondary students form a negatively Skewed Leptokurtic Distribution.

DESCRIPTIVE ANALYSIS – HARD QUESTIONS (COMPONENT OF SELF-REGULATION)

The Hard questions component of Self-regulation of the Higher Secondary students is found to form a Normal Distribution with a Mean of 33.21 and a Standard Deviation of 6.14. The Median and the Mode of the distribution are found to be 33.00 and 32.58 respectively. The sample Mean becomes a parameter with in the Fiduciary Limits of 32.51 to 33.91 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 0.36. With 95 per cent confidence the standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 5.65 to 6.63, as the Standard Error of the Standard Deviation is found to be 0.25. The Quartile Deviation is found to be 4.00, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 24, it is concluded that the Mean Self-regulation score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be 0.103, which is a positively Skewed and consequently the scores are amassed at the left end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.266, which is a Platykurtic distribution. Hence, the Hard questions component of Self-regulation of Higher Secondary students form a Positively Skewed Platykurtic Distribution.

DESCRIPTIVE ANALYSIS – WELL IN SCHOOL (COMPONENT OF SELF-REGULATION)

The Well in School component of Self-regulation of the Higher Secondary students is found to form a Normal Distribution with a Mean of 29.00 and a Standard Deviation of 4.72. The Median and the Mode of the distribution are found to be 29.00 and 28.48 respectively. The sample Mean becomes a parameter with in the Fiduciary Limits of 28.72 to 29.80 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 0.27. With 95 per cent confidence the Standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 4.34 to 5.10, as the Standard Error of the Standard Deviation is found to be 0.19. The Quartile Deviation is found to be 3.00, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 22, it is concluded that the Mean Self-regulation score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be 0.165, which is a positively Skewed and consequently the scores are amassed at the left end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.272, which is a Platykurtic distribution. Hence, the Well in School component of Self-regulation of Higher Secondary students form a Positively Skewed Platykurtic Distribution

DESCRIPTIVE ANALYSIS – ACADEMIC ACHIEVEMENT

The Academic Achievement of the Higher Secondary students is found to form a Normal Distribution with a Mean of 74.45 and a Standard Deviation of 12.74. The Median and the Mode of the distribution are found to be 76.80 and 81.50 respectively. The sample Mean becomes a parameter with in the Fiduciary Limits of 73.00 to 75.89 and is found significant at 0.05 levels, as the Standard Error of Mean is computed to be 0.74. With 95 per cent

confidence the Standard Deviation of the sample becomes a parameter within the Fiduciary Limits of 11.71 to 13.76, as the Standard Error of the Standard Deviation is found to be 0.52. The Quartile Deviation is found to be 7.03, which indicates a good index of score density at the middle of the distribution. Considering the neutral value of the scale namely 50, it is concluded that the Mean Academic Achievement score is higher than the scale average. The Coefficient of Skewness of the distribution is found to be -0.553, which is a negatively Skewed and consequently the scores are amassed at the right end of the scale. The Coefficient of Kurtosis of the distribution is found to be 0.203, which is a Leptokurtic distribution. Hence, the Academic Achievement of Higher Secondary students form a Positively Skewed Leptokurtic Distribution.

CORRELATION CO-EFFICIENT BETWEEN ACADEMIC ACHIEVEMENT AND SELF-REGULATION AND ITS COMPONENTS

The correlation co-efficient between Academic Achievement and Self-regulation is found to be -0.150 for the Whole sample of N=299. It is significant at 0.01 levels for dfs. 297 It is concluded that there exists a negative, significant and negligible relationship between Academic Achievement and Self-regulation of the Higher Secondary students.

The correlation co-efficient between Academic Achievement and Home work (a component of Self-regulation) is found to be -0.140 for the Whole sample of N=299. It is significant at 0.05 levels for dfs. 297 It is concluded that there exists a negative, significant and negligible relationship between Academic Achievement and Home work (a component of Self-regulation) of the Higher Secondary students.

The correlation co-efficient between Academic Achievement and Class work (a component of Self-regulation) is found to be -0.173 for the Whole sample of N=299. It is significant at 0.01 levels for dfs. 297 It is concluded that there exists a negative, significant and negligible relationship between Academic Achievement and Class work (a component of Self-regulation) of the Higher Secondary students.

The correlation co-efficient between Academic Achievement and Hard questions (a component of Self-regulation) is found to be -0.063 for the Whole sample of N=299. It is not significant at 0.05 levels for dfs. 297 It is concluded that there exists a negative, insignificant but negligible relationship between Academic Achievement and Hard questions (a component of Self-regulation) of the Higher Secondary students.

The correlation co-efficient between Academic Achievement and Well in School (a component of Self-regulation) is found to be -0.127 for the Whole sample of N=299. It is significant at 0.05 levels for dfs. 297 It is concluded that there exists a negative, significant and negligible relationship between Academic Achievement and Well in School (a component of Self-regulation) of the Higher Secondary students.

Variables	N	Correlation Co-efficient	Sig. level (0.05)
Self-Regulation Academic Achievement	299	-0.150	NS
Home work (a component of Self-regulation) Academic Achievement	299	-0.0140	S
Class work (a component of Self-regulation) Academic Achievement	299	-0.173	S
Hard questions (a component of Self-regulation) Academic Achievement	299	-0.063	NS
Well in School (a component of Self-regulation) Academic Achievement	299	-0.127	S

CONCLUSION

1. Self-regulation of the Higher Secondary students forms a Positively Skewed Platykurtic Distribution.

1.1. Homework Component of Self-regulation of Higher Secondary students form a Positively Skewed Platykurtic

Distribution.

1.2. The Class work component of Self-regulation of Higher Secondary students form a negatively Skewed Leptokurtic Distribution.

1.3. The Hard questions component of Self-regulation of Higher Secondary students forms a Positively Skewed Platykurtic Distribution.

1.4. The Well in School component of Self-regulation of Higher Secondary students forms a Positively Skewed Platykurtic Distribution.

1.5. The Academic Achievement of Higher Secondary students form a Positively Skewed Leptokurtic Distribution.

2. The correlation co-efficient between Academic Achievement and Self-regulation is found to be -0.150 for the Whole sample of N=299. It is significant at 0.01 levels for dfs. 297

3. The correlation co-efficient between Academic Achievement and Home work (a component of Self-regulation) is found to be -0.140 for the Whole sample of N=299. It is significant at 0.05 levels for dfs. 297.

4. The correlation co-efficient between Academic Achievement and Class work (a component of Self-regulation) is found to be -0.173 for the Whole sample of N=299. It is significant at 0.01 levels for dfs. 297.

5.The correlation co-efficient between Academic Achievement and Hard questions (a component of Self-regulation) is found to be -0.063 for the Whole sample of N=299. It is not significant at 0.05 levels for dfs. 297.

6.The correlation co-efficient between Academic Achievement and Well in School (a component of Self-regulation) is found to be -0.127 for the Whole sample of N=299. It is significant at 0.05 levels for dfs. 297.

RECOMMENDATIONS

1. It is recommended that Self-regulation should be practiced by all the students' community in order to achieve more. Self-regulation practices improve the individual in all walks of life, particularly in academic aspects. Introspection method is highly recommended in view of planning for pursuing.

2. Self-regulation appears to be the central to the effective functioning of impulse control, time management, coping with stress and emotions etc. Hence, Counseling sessions, Training programmes, Intervention programmes, Self-modelling practices are recommended for improvement in regulating their Self.

3. Self-regulation skills can be taught, learned and controlled. In order to self-regulate, students must learn to self-compare their performance and become proactive learners. It is highly recommended that teachers could help students develop self-regulation by shifting the responsibility for learning to the students, demonstrating self-regulatory techniques, and adapting a learning academic environment.

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