

INFLUENCE OF SELF-EFFICACY AND REFLECTIVENESS ON THE ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS

Research
Paper

ABSTRACT

The present study deals with the relationship between self-efficacy, reflectiveness and academic achievement of high school students. The survey method is used for the present study. The sample consists of 250 high school students from 16 schools in Tirunelveli district. The study reveals that there is a significant difference between IX and X standard students in their self-efficacy and academic achievement.

SELF – EFFICACY

Self-efficacy is the belief that one is capable of performing in a certain manner to attain certain goals. It is a belief that one has the capabilities to execute the courses of action required to manage prospective situations.

There is a distinction between self-esteem and self-efficacy. Self-efficacy relates to a person's perception of their ability to reach a goal, whereas self-esteem relates to person's sense of self-worth. For example, a person who is a terrible rock climber would probably have poor self-efficacy with regard to rock climbing, but this need not affect that person's self-esteem since most people don't invest much of their self-esteem in this activity. On the other hand, one might have enormous skill at rock climbing, yet set such a high standard for oneself that self-esteem is low. At the same time, a person who has high self-efficacy in general but is poor at rock climbing might think that he/she is good at rock climbing, or might still believe that he/she could quickly learn.

REFLECTIVNESS

Reflectiveness involves active, persistent and careful consideration to any belief supposed to form knowledge in the light of the grounds that support it. Further, conclusion to which its lead to personal development.

SIGNIFICANCE OF THE STUDY

Students are the future pillars of the world. They are expected to perform multidimensional roles. They should possess the qualities needed for the effective

performance of these roles. The success of the educational process depends very much on the thinking and ability of the students. Therefore the students should have a high level of self-efficacy and reflectiveness for their academic success. For a successful role performance one needs to have self-efficacy and reflectiveness. The students who are having self-efficacy will be confident, feel free and express freely. Self-efficacy and reflectiveness are important qualities of students which will help them to come up in a proper way as citizens of the world. Therefore, the investigator felt it necessary to study the relationship between self-efficacy and reflectiveness on the academic achievement of high school students.

OBJECTIVES OF THE STUDY

1. To find out the level of self-efficacy of high school students
2. To find out the level of reflectiveness of high school students
3. To find out whether there is any significant difference between IX and X standard students in their self-efficacy
4. To find out whether there is any significant difference between IX and X standard students in their academic achievement
5. To find out the relationship between self-efficacy and academic achievement of high school students

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- To find out the relationship between reflectiveness and academic achievement of high school students.

METHODOLOGY

The investigator adopted the survey method to find out the relationship between self-efficacy and reflectiveness on the academic achievement of high school students.

SAMPLE

The study was carried out on a representative sample of 250 (109 boys and 141 girls) IX and X standard school students. The investigator used the random sampling technique. 16 schools in Tirunelveli District were selected.

TOOLS

- Self-efficacy scale developed by M. Vasimalai Raja and Dr. P. Anna Raja in the year 2008
- Reflectiveness Questionnaire developed by M. Vasimalai Raja and Dr. P. Anna Raja in the year 2008.

STATISTICAL TECHNIQUES

Statistical techniques such as mean, standard deviation, 't' test, chi-square, correlation and ANOVA were used.

Table 1

LEVEL OF SELF-EFFICACY OF HIGH SCHOOL STUDENTS WITH REGARD TO GENDER

Self-efficacy	Low		Moderate		High	
	Number	%	Number	%	Number	%
Boys	19	17.4	73	67	17	15.6
Girls	23	16.3	101	71.6	17	12.1
Total	42	16.8	174	69.6	34	13.6

It is inferred from the above table that 17.4% of the boys have low, 67.0% of them have moderate and 15.6% of them have high level of self-efficacy.

It is inferred from the above table that 16.3% of the girls have low, 71.6% of them have moderate and 12.1% of them have high level of self-efficacy.

It is inferred from the above table that 16.8% of the boys and the girls have low, 69.6% if them have moderate and 13.6% of them have high level of self-efficacy.

Table 2

LEVEL OF REFLECTIVENESS OF HIGH SCHOOL STUDENTS WITH REGARD TO GENDER

Reflectiveness	Low		Moderate		High	
	Number	%	Number	%	Number	%
Boys	21	19.3	73	67	15	14
Girls	20	14.2	107	75.9	14	9.9
Total	41	16.4	180	72	29	12

It is inferred from the above table that 19.3% of the boys have low, 67.0% of them have moderate and 13.8% of them have high level of reflectiveness.

It is inferred from the above table that 14.2% of the girls have low, 75.9% of them have moderate and 9.9% of them have high level of reflectiveness.

It is inferred from the above table that 16.4% of the boys and the girls have low, 72.0% of them have moderate and 11.6% them have high level of reflectiveness.

NULL HYPOTHESIS 1

There is no significant difference between IX and X standard students in their reading efficacy, writing efficacy, speaking efficacy, personal efficacy, social efficacy, computer efficacy, co-curricular efficacy, leadership efficacy, scientific efficacy and self-efficacy.

Table 3
DIFFERENCE BETWEEN IX AND X STANDARD STUDENTS IN THEIR SELF-EFFICACY

Self-efficacy and its dimensions	IX (N=141)		X(N=109)		Calculated value of 't'	Remark at 5% level
	Mean	SD	Mean	SD		
Reading efficacy	14.23	1.99	14.68	6.58	0.69	NS
Writing efficacy	14.4	2	14.2	1.96	0.8	NS
Speaking efficacy	12.62	2.8	13.17	3	1.47	NS
Personal efficacy	16.16	1.67	16.11	1.7	0.21	NS
Social efficacy	13.01	1.64	13.21	1.69	0.96	NS
Computer efficacy	11.97	2.89	11.62	3.09	0.91	NS
Co-curricular efficacy	11.48	2.24	11.72	2.47	0.77	NS
Leadership efficacy	9.7	5.2	9.98	4.9	0.44	NS
Scientific efficacy	16.99	2.6	17.14	2.82	0.44	NS
Self-efficacy	122.1	12.64	123.2	14.77	0.64	NS

(At 5% level of significance the table value of 't' is 1.96)

It is inferred from the above table that there is no significant difference between IX and X standard students in their reading efficacy, writing efficacy, speaking efficacy, personal efficacy, social efficacy, computer efficacy, co-curricular efficacy, leadership efficacy, scientific efficacy and self-efficacy.

NULL HYPOTHESIS 2

There is no significant difference between IX and X standard students in their academic achievement.

Table 4
DIFFERENCE BETWEEN IX AND X STANDARD STUDENTS IN THEIR ACADEMIC ACHIEVEMENT

Academic achievement	IX (N=141)		X (N=109)		Calculated value of 't'	Remarks at 5% level
	Mean	SD	Mean	SD		
	323.83	85.9	355.19	77.62	3.02	S

(At 5% level of significance the table value of 't' is 1.96)

It is inferred from the above table that there is significant difference between IX and X standard students in their academic achievement.

While comparing the mean scores, X standard students (mean= 355.19) are better than the IX standard students (mean = 323.83) in their academic achievement.

NULL HYPOTHESIS 3

There is no significant relationship between self-efficacy and academic achievement in high school students.

Table 5
RELATIONSHIP BETWEEN SELF-EFFICACY AND ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS

Self-efficacy	Σx	Σy	Σx ²	Σy ²	Σxy	Df	Calculated 'r' value	Remarks at 5% level
Reading efficacy	84376	3606	30234680	57310	223893	248	0.071	NS
Writing efficacy	84376	3579	30234680	52223	210645		0.065	NS
Speaking efficacy	84376	3214	30234680	43424	1093450		0.143	S
Personal efficacy	84376	4034	30234680	65800	1364746		0.092	NS
Social efficacy	84376	3274	30234680	43572	1107135		0.061	NS
Computer efficacy	84376	2955	30234680	37149	994516		0.048	NS
Co-curricular efficacy	84376	2896	30234680	34922	973663		0.076	NS
Leadership efficacy	84376	2456	30234680	30564	818128		0.101	NS
Scientific efficacy	84376	4263	30234680	74511	1441270		0.044	NS
Self-efficacy	84376	30648	30234680	3803574	10361660		0.062	NS

(at 5% level of significance, for 248 df the table value of 'r' is 0.113)

It is inferred from the above table that there is no significant relationship between academic achievement and reading efficacy, writing efficacy, personal efficacy, social efficacy, computer efficacy, co-curricular efficacy, leadership efficacy, scientific efficacy and self-efficacy, but there is significant relationship between academic achievement and speaking efficacy.

NULL HYPOTHESIS 4

There is significant relationship between reflectiveness and academic achievement of high school students.

Table 6

RELATIONSHIP BETWEEN REFLECTIVENESS AND ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS

Reflectiveness	ΣX	ΣY	ΣX^2	ΣY^2	ΣXY	Df	Calculated 'y' value	Remark at 5% level
	84376	22227	30234680	1993877	7516379	248	0.083	NS

(At 5% level of significance for 248 df the table value of 'r' is 0.113)

It is inferred from the above table that there is no significant relationship between reflectiveness and academic achievement in high school students.

FINDINGS

- 13.6% of the high school students have high level of self-efficacy.
- 11.6% of the high school students have high level of reflectiveness.
- There is no significant difference between IX and X school students in their self-efficacy.
- There is significant difference between IX and X school students in their academic achievement.
- There is no significant relationship between academic achievement and reading efficacy, writing efficacy, personal efficacy, social efficacy, computer efficacy, co-curricular efficacy, leadership efficacy, scientific efficacy and self-efficacy, but there is significant relationship between academic achievement and speaking efficacy.
- There is no significant relationship between reflectiveness and academic achievement in high school students.

INTERPRETATION

The 't' test result reveals that there is significant difference between IX and X students in their academic achievement. The X standard students are better than IX standard students in their academic achievement. This may be due to the fact that X standard students are highly motivated since they are appearing for government examinations. The parents and the teachers pay more attention on X standard students than on IX standard students.

There is significant relationship between academic achievement and speaking efficacy. This may be due to the fact that they are more serious about their responsibilities and possess more abilities to tackle any situations.

REFERENCE

- Best, J.W. (1996) *Research in Education* (7th edition) New Delhi.
- Bandura, Albert (1997), *Self-efficacy - The Exercise of Control*, New York.
- Baron, A. Robert (2004), *Social Psychologie*. Tenth edition.
- http://www.des.emory.edu/mtp/Bandura_2001_ARP.pdf.
- <http://www.Scrisd.com/doc/reflectiveness>.
- Shermis, Samuel. S (1999), 'Reflective thought, critical thinking', *Eric Educational Report*.
- Boy and Fales (1983). "Reflective Learning" *Journal of Humanistic Psychology*, Vol.23, No.2, pp.99-117.

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QUALITY PERSPECTIVE

CONCLUSION

To conclude the teacher education institutions have to create both space and opportunities in their programme for shifting their focus from a Teacher Oriented to a Student Oriented approach and teachers educators have to be oriented to implement the total quality teacher education programmes.

REFERENCE

- Arulsamy, S. and Siva Kumar, P. *Applying "Kaizen" for Quality in Education*. *Edutracks*. March 2005 Vol 4 No. 7.
- Beyond Chalk and Talk - Curriculum Framework*. *Hind Education Plus* - dt. 12.12.2005.
- Jerome S. Arcaro - (2006) *Quality in Education : An Implementation Hand Book*. New Elegant printers, New Delhi.
- Kumar, S and Patnik, P.S. (2004) *A study of Organisational Commitment, Attitude towards Work and Job Satisfaction of Post-graduate Teachers*. *Indian Educational Abstracts*. Vol. 4 No.2 July 2004.
- Krishna Kumar. *Quality of Education at the Beginning of the 21st Century - Lessons from India*. *Indian Educational Review*. Vol. 41 No(1) January 2005.
- Mumthas, N.S. *Professionalism among Teacher Educators*. *Edutracks*. November 2005 Vol.5 No.3.
- Mujibul Hasan Siddiqui (2004). *Technology in Teacher Education*. APH Publishing Corporation, New Delhi.