

ROLE OF ACADEMIC BUOYANCY IN ENHANCING STUDENT ENGAGEMENT OF SECONDARY SCHOOL STUDENTS

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Abstract

Secondary school students who are in their adolescent stage needs to be kept engaged in school related activities by developing their capabilities to deal with minor setbacks of academic life. This can be achieved by developing academic buoyancy in students and raising their level of engagement in school. Therefore, the purpose of this research was to study academic buoyancy and student engagement of secondary school students. This study was also intended to ascertain the relationship between academic buoyancy and student engagement. The study adopted descriptive research methodology of correlation and causal comparison type. Participants included 1169 secondary school students of Greater Mumbai studying in State Board of Maharashtra. Academic Buoyancy Scale and Student Engagement Instrument were administered to participants. Parametric techniques, 't' test, ANOVA and Correlation 'r' were used to test the hypotheses. Study results revealed no significant difference with respect to both the type of family and type of school for academic buoyancy. For student engagement, the result showed significant difference for both the type of family and type of school. The study also revealed significant relationship between academic buoyancy and student engagement. Finally, eduational implications of the result are discussed.

Introduction:

The role of education is inevitable in the wholistic development of an individual. It is the education which shapes the personality of a child. It not only helps an individual grow but also aids in the development of a nation. Thus for any nation to progress, it must educate all it's citizens. The school proves to be an formal agency of developing young minds. There are numerous factors which affects the growth of students'. Careful attention to these factors can lead to academic progress of children. Every student requires a type of ability that allows him / her to respond appropriately to the routine academic presssures and challenges experienced in

school. Absence of such type of capability may cause harm to student's self-confidence when facing academic failures and stress. A psychological construct that prepares students to face challenges in academic life with greater confidence is known as 'Academic Buoyancy'. It is a factor that help students deal with relatively ongoing academic difficulty. Therefore looking at the importance of academic buoyancy in the student's academic life, the researcher decided to study academic buoyancy of seconadary school students. Another factor that facilitates students' academic growth is the student engagement. Educational paradigm of student engagement is rooted in the philosophy of John Dewey (1897). The phrase "student engagement" has come to refer to how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other. Student engagement has been defined as "participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes" (Kuh et al., 2007). Student engagement can be understood differently by different educators. Also it may hold different views from place to place. It has become the latest center of attention to improve learning and teaching. And thus, the researcher has aimed to study student engagement.

Rationale and Need of the Study

The greatest wealth and strength of any nation is its youth. The future of a nation lies in the hands of its future generations. Thus, in order to ensure a bright future for our country, we first need to strengthen and empower our youth. Education plays an important role in this empowrement. To educate all youth is one of the greatest challenge India is facing from so many years. To overcome this, the Government of India came up with 'Sarva Shiksha Abhiyan (SSA). Large number of students were benefited because of SSA. SSA had a great impact in terms of raising educational output in terms of quantity. But it also raised a question on the quality of education. Increasing number of students in classrooms cannot alone serve the purpose of educating India. To raise the quality of education, we must pay careful attention in developing certain anilities among students. Focus on such qualities can help students' effectively deal with challenges of school life and keep them engaged in school related activities. Our students undergo continuous evaluation in their academic life. This continuous evaluation keeps them updated about their performance. But sometimes due to weak performance and unexpected failure students tend to lose their confidence. Cut-throat competitions, vast syllabus, infinite expectations from parents, teachers and society at large. This deteriorates child's self image and

the child starts losing confidence in ownself. This also leads to decreased engagement in school life. To continue schooling in an engaged manner requires students to be academically buoyant who can face acdemic challenges and overcome it effectively. Student Engagement is other important factor which determines students growth and development significantly. Hence the research aims at studying Academic Buoyancy in relation to Student Engagement.

Secondary school students who are in their adolescent stage needs to develop their capabilities to deal with minor setbacks of academic life. This can be achieved by developing Academic Buoyancy in students. Hence, it is nessesary to study Academic Buoyancy of secondary school students. In order to get maximum positive outcomes from any educational programme, one needs to actively participate in activities of that programme. Such Student Engagement is needed for students for their all round development. Thus, it is essential to study Student Engagement of secondary school students. Academic Buoyancy being construct of positive psychology helps students raise their confidence, self concept, motivation level. It thus help students in developing their Student Engagement. Many research studies conducted abroad and in India have proved its role in attaining educational objectives. Therefore, it is necessary to study Academic Buoyancy of secondary school students in relation to their Student Engagement.

Review of Related Literature

The reviewed literature contained the research studies, thesis and dissertations. **Collie, Rebecca J. and Ginns, Paul and Martin, Andrew J. and Papworth, Brad (2017)** studied Academic Buoyancy Mediates Academic Anxiety's Effects on Learning Strategies: An Investigation of English- and Chinese-Speaking Australian Students. The study aimed at exploring relations between academic anxiety and students' use of a range of learning strategies (memorisation, elaboration, personal best [PB] goals and cooperation). The results found mediation effects of academic buoyancy across the four learning strategies. In addition, anxiety was positively associated with memorisation, elaboration and PB goals in the mediation analyses. **Kimbark, Kris and Peters, Michelle L. and Richardson, Tim (2017)** studied Effectiveness of the Student Success Course on Persistence, Retention, Academic Achievement, and Student Engagement. The purpose of this sequential mixed methods study was to determine if participation in a SSC influences persistence, retention, academic achievement, and student engagement on a community college campus. Results of this study indicate that a relationship

exists between participation in the SSC and persistence, retention, academic achievement in English and mathematics, and student engagement. Strati, Anna D. and Schmidt, Jennifer A. and Maier, Kimberly S. (2017) studied Perceived Challenge, Teacher Support, and Teacher Obstruction as Predictors of Student Engagement. This study explored associations between students' perceptions of challenge, teacher-provided support and obstruction, and students' momentary academic engagement in high school science classrooms. Students' perceptions of challenge were positively related to their momentary reports of engagement in science learning activities, while teachers' instrumental support was positively associated with engagement across all levels of perceived challenge. Teachers' emotional obstruction was negatively associated with student engagement. Teachers' instrumental obstruction had less consistent associations with student engagement, and was only associated with declines in engagement during those moments when students perceived greater challenge in class. Broeckelman-Post, Melissa Ann and Tacconelli, Angelica and Guzmán, Jaime and Rios, Maritza and Calero, Beverly and Latif, Farah (2016) Teacher Misbehavior and Its Effects on Student Interest and Engagement. This study sought to investigate whether there was any relationship between teacher misbehaviors and student interest and engagement. There was a difference in teacher misbehaviors between the two universities where this study was conducted, but not in student interest or engagement. Putwain, David W. and Daly, Anthony L. and Chamberlain, Suzanne and Sadreddini, Shireen (2015) studied Academically Buoyant Students Are Less Anxious about and Perform Better in High-Stakes Examinations. Aims of the study were to test a model specifying reciprocal relations between test anxiety and academic buoyancy and to establish whether academic buoyancy is related to examination performance. Findings of the study revealed that academic buoyancy protects against the appraisal of examinations as threatening by influencing self-regulative processes and enables better examination performance. Sujisha, T. G. and Manikandan, K. (2014) studied Influence Of School Climate On School Engagement Among Higher Secondary School Students. The present study was conducted to investigate the influence of school climate, sex and type of family on school engagement. Results revealed that school climate is significantly influencing school engagement. The findings provide empirical evidence regarding how student perceptions of school climate along with sex and type of family influence the patterns of school engagement. Martin Andrew J. (2013) studied Academic buoyancy and academic resilience: Exploring

everyday' and 'classic' resilience in the face of academic adversity. This study is the first to examine the extent to which (a) academic buoyancy and academic resilience are distinct (but correlated) factors, and (b) academic buoyancy is more relevant to low-level negative outcomes (anxiety, uncertain control, failure avoidance), whereas academic resilience is more relevant to major negative outcomes (self-handicapping, disengagement). The findings, showed that academic buoyancy and academic resilience represented distinct factors. Also, academic buoyancy was more salient in negatively predicting low-level negative outcomes whereas academic resilience was more salient in negatively predicting major negative outcomes.

Statement of the Problem

'Academic Buoyancy of Secondary School Students in relation to their Academic Resilience and Student Engagement.'

Variables of the Study

- 1. Independent Variable: Academic Buoyancy
- 2. Dependent Variables
 - a. Academic Resilience
 - b. Student Engagement

Operational Definition of the Terms

Academic Buoyancy: Academic buoyancy is defined as a capacity of secondary school students to effectively deal with minor setbacks, challenges, and difficulties related to poor communication skills, completing deadlines, co-curricular events, exam pressure, poor performance, difficult school work, and financial obstacles which are part of their everyday academic (both curricular and co-curricular) life.

- <u>Poor communication skills</u> is defined as an inability of secondary school students expressing one's views due to the lack of proper language or accent in everyday school life.
- <u>Completing Deadlines</u> is defined as an ability of secondary school students in submitting completed assigned task on or before time in everyday school life.
- <u>Co-Curricular Events</u> is defined as activities, programs and learning experiences that complement to what secondary students learn in everyday school life.
- <u>Exam Pressure</u> is defined as a feeling of low confidence and fear of performing low experienced by secondary school students in everyday school life.

• <u>Poor Performance</u> is defined as performance of secondary school students below the required standard in everyday school life.

• <u>Difficult School Work</u> is defined as difficulty faced by secondary school students in studying at school or at home in everyday school life.

• <u>Financial Obstacles</u> is defined as secondary school student's poor socio-economic status which obstructs their academic growth and success in everyday school life.

Student Engagement: Student engagement is defined as an interest and active involvement of secondary school students in school related activities. It consists of Affective/Psychological Engagement and Cognitive Engagement.

• <u>Affective/Psychological Engagement</u> refers to teacher-student relationship, peer support at school, and family support for learning experienced by secondary school students in their academic life which leads to their increased involvement in school life.

• <u>Cognitive Engagement</u> refers to control and relevance of school work, future aspirations and goals, and intrinsic motivation experienced by secondary school students in their academic life which leads to their increased involvement in school life.

Aim of the Study

To study academic buoyancy of secondary school students in relation to their academic resilience and student engagement.

Objectives of the Study

- 1. To study academic buoyancy of secondary school students on the basis of their
 - a. Type of Family b. Type of School
- 2. To study student engagement of secondary school students on the basis of their

a. Type of Family b. Type of School

3. To ascertain the relationship of academic buoyancy with student engagement of secondary school students on the basis of Total Sample.

Hypotheses of the Study

1. There is no significant difference in academic buoyancy of secondary school students on the basis of their

a. Type of Family b. Type of School

- 2. There is no significant difference in student engagement of secondary school students on the basis of their
 - a. Type of Family b. Type of School
- 3. There is no significant relationship of academic buoyancy with student engagement of secondary school students on the basis of Total Sample.

Research Method and Research Methodology used for the Present Study

The present study, has adopted the descriptive method of causal-comparative and correlational types. The correlational method has been used by the researcher to find out strength and extent of relationship of academic buoyancy of secondary school students in relation to their student engagement. The present study is casual comparative since it aims at comparing academic buoyancy and student engagement with respect to type of family and type of school.

Population and Sample of the Present Study

All students from Greater Mumbai studying in IXth standard of Archdiocean Board of Education (ABE) schools of State Board of Maharashatra comprised the population of the present study. The present study has included 1169 secondary school students from Greater Mumbai studying in IXth standard of ABE schools of State Board of Maharashtra.

Sampling and Sampling Techniques of the Present Study

For the present study, the researcher has used three-stage sampling to study academic buoyancy of secondary school students in relation to their academic resilience and student engagement. At the first stage, schools were selected on the basis of geographical location, using stratified random sampling. The strata selected were South Mumbai, North Mumbai and Central Mumbai. At the second stage, schools were selected on the basis of type of school, using stratified random sampling. The strata selected were Boy School, Girl School and Co-education School. Finally, at the third stage, students were selected using convenience sampling.

Sample Size and it's Composition

The study has included secondary school students studying in IXth standard of Archdiocean Board of Education (ABE) schools of State Board of Maharashtra. The sample of the study included 1261 IXth standard students. Due to incomplete data, the researcher excluded 92 students from the study. Thus, the final sample size used for the study was 1169 secondary school students studying in IXth standard of ABE schools of S.S.C. board from Greater Mumbai.

Tools used in the Present Study

The researcher has used the following tools in the present study:

- Academic Buoyancy Scale prepared by the researcher
- Student Engagement Instrument by Appleton, Christenson, Kim, & Reschly, 2006

Data Analysis Techniques used for the Present Study

The methods used to analysis data included Descriptive Analysis (Mean, Median, Mode, Standard Deviation, Skewness, Kurtosis, Fiduciary Limits and Graphical Representation which include Line Diagram and Bar Diagram) and Inferential Analysis ('t' test, ω^2 est, ANOVA, and Coefficient of correlation 'r').

Testing of Hypothesis 1

Hypothesis 1(a): There is no significant difference in academic buoyancy of secondary school students on the basis of their Type of Family (Joint and Nuclear).

Variable	Group	N	Mean	SD	t	Р	LOS		100w ²
							0.05	0.01	
AB	Joint	382	239.34	33.14	0.78	0.4364	NS	NS	-
	Nuclear	787	237.61	40.58					

Table 1: Relevant statistics of AB by Type of Family

Tabulated't' for df = 1167 is 1.96 at 0.05 level of significance and 2.58 at 0.01 level of significance

Interpretation of't': The obtained t-ratios for difference in type of family in academic buoyancy of secondary school students is 0.78 which is not significant at 0.05 level for 1167 degrees of freedom. Hence, the null hypothesis was accepted. Therefore it can be concluded that, there exists no significant difference in academic buoyancy of secondary school students on basis of their type of family.

Discussion: The findings of the study revealed no significant difference in academic buoyancy of secondary school students with respect to type of family. This gave researcher an idea that, students of both joint family and nuclear family exhibit the same level of academic buoyancy. This pointed out to to the fact that type of family does not affect the level of academic buoyancy of students.

Hypothesis 1(b): There is no significant difference in academic buoyancy of secondary school students on the basis of their Type of School (Boy, Girl and Co-Education).

Source of Variation	Sum of Squares (SS)	DF Mean Squares (MS)		F	Р	
Between Groups	1835.8013	2	917.9007	0.63	0.5328	
Within	1711520.6384	1166	1467.8565			

Table 2: Relevant statistics of AB by Type of School

Tabulated't' for df 857, 675 and 800 is 1.96 at 0.05 level of significance and 2.59 at 0.01 level of significance.

Interpretation of 'p'

The obtained p-values for difference in type of school in academic buoyancy of secondary school students is 0.5328 respectively which is greater than 0.05. Hence, the null hypothesis was accepted. Therefore it can be concluded that, there exists no significant difference in academic buoyancy of secondary school students on basis of their type of school.

Discussion: The findings of the study revealed no significant difference in academic buoyancy of secondary school students with respect to type of school. This gave researcher an idea that, students from Boy school, Girl school and Co-educational school exhibit the same level of academic buoyancy. This pointed out to the fact that type of school does not affect the level of academic buoyancy of students.

Testing of Hypothesis 2

Hypothesis 2(a): There is no significant difference in student engagement of secondary school students on the basis of their Type of Family (Joint and Nuclear).

Variable	Group	Ν	Mean	SD	t	Р	LOS		100 ω ²
							0.05	0.01	
SE	Joint	382	104.55	15.07	4.65	<.0001	S	S	1.79
	Nuclear	787	108.79	13.77	1				

Table 3: Relevant statistics of SE by Type of Family

Tabulated't' for df = 1167 is 1.96 at 0.05 level of significance and 2.58 at 0.01 level of significance **Interpretation of't'**

The obtained t-ratios for difference in type of family in student engagement of secondary school students is <0.0001 which is significant at 0.05 level for 1167 degrees of freedom. Hence, the null hypothesis was rejected. The w² estimate obtained is 0.0179. Thus, the effect size of type of family on student engagement is small. Thus it can be concluded that, there exists

significant difference in student engagement of secondary school students on basis of their type of family at 0.05 level of significance. The mean student engagement scores of males is lower than that of females. 1.79% of the variance in student engagement is associated with the type of family of the secondary school students.

Discussion: The findings of the study revealed significant difference in student engagement of secondary school students with respect to type of family. Thus, it proved the significant role type of family in improving student engagement of secondary school students. It was found that students of nuclear family were more actively engaged in academics as compared to students of joint family. This gave researcher an idea that students from nuclear family were treated equally like other elder members of the family which resulted in improved interpersonal skills. Also advanced facilities made available to them which resulted in working towards future goals as compared to students of joint family. It was also noted that the students from nuclear family had great support and involvement in their child's education. This boosted confidence of these students and raised their level of engagement in school related activities.

Hypothesis 2(b): There is no significant difference in student engagement of secondary school students on the basis of their Type of School.

Tabulated't' for df 857, 675 and 800 is 1.96 at 0.05 level of significance and 2.59 at 0.01 level of significance.

Table 4 (A): Relevant statistics of SE by Type of School

Source of Variation	Sum of Squares (SS)	DF	Mean Squares (MS)	F	Р
Between Groups	16803.5961	2	8401.798	43.83	<.0001
Within	223488.3971	1166	191.671		

Variable	Group	Ν	Mean	SD	t	Р	LOS		100ω²
							0.05	0.01	
SE	В	367	102.29	15.45	9.07	<.0001	S	S	8.64
	G	492	111.24	12.56					
SE	В	367	102.29	15.45	4.52	<.0001	S	S	2.79
	С	310	107.37	13.78					
SE	G	492	111.24	12.56	4	<.0001	S	S	1.84
	С	310	107.37	13.78					

Interpretation of'p'

The obtained p-values for difference in type of school in student engagement of secondary school students is <0.0001 which is less than 0.05. Hence, the null hypothesis was rejected. Therefore it can be concluded that, there exists significant difference in student engagement of secondary school students on basis of their type of school. On further analysing the data, from t-ratios of type of school groups it was found that -i)There is significant difference in student engagement of secondary school students of Boy school and Girl school, ii)There is significant difference in student engagement of secondary school students of secondary school students of Boy school and Girl school, and Co-education school; and iii)There is significant difference in student engagement of secondary school students of Boy school students of Boy school and Co-education school; and iii)There is significant difference in student engagement of secondary school school.

Discussion: The findings of the study revealed significant difference in student engagement of secondary school students with respect to type of school. Thus, it proved the significant role type of school in improving student engagement of secondary school students. The mean score revealed that students studying in Boy schools were less engaged academically whereas students from Girl school were more active in school realted activities as compared to rest groups. This threw light on the fact that students of boys school exhibited poor relationship with their teachers, classmates and were less motivated and focused about future goals. At the same time, students from Co-educational schools were on a higher scale in terms of level of student engagement when compared with students of Boy school. This could be because of the mixed crowd i.e. both boys and girls which makes the school environment condusive and healhty for learning. It could be also because of healthy competition between two groups i.e. boys and girls which improves the school related engagement of students from co-educational schools.

Testing of Hypothesis 3

There is no significant relationship of academic buoyancy with student engagement of secondary school students on the basis of Total Sample.

Parametric technique, Coefficient of correlation 'r' test was used to test this hypothesis.

Table 5: Relevant statistics of the significance of 'r' of AB and SE for Total Sample

Variables	Group	Ν	r	Р	LOS		100r ²
					0.05	0.01	
AB and SE	Total Sample	1169	0.1581	<.0001	S	S	2.50

Tabulated 'r' for df 1169 is 0.062 at 0.05 level of significance and 0.081 at 0.01 level of significance.

Interpretation: For academic buoyancy and student engagement, obtained values of r for total sample is 0.1581 which is greater than tabulated value of r which is significant at 0.05 level of significance. Thus, null hypothesis is rejected for total sample. Therefore it can be concluded that, there exists significant relationship between academic buoyancy and student engagement of secondary school students for total sample. The relationship is positive in nature and the magnitude of the relationship is negligible for students of total sample. 2.5% variance in student engagement of secondary school students of total sample is due to academic buoyancy.

Discussion: The findings for overall sample showed significant relationship in academic buoyancy and student engagement. Thus, it can be concluded that for seconadary school students, academic buoyancy affects student engagement. This proved the fact that secondary students needs to be academically buoyant in order to be actively involved in school activities.

Conclusion of the Study

The research findings throws light on the importance of type of family and type of school in raising student engagement. Thus, school activities must be carefully planned in schools; especially boy's school which will create an oppourtunities for students to remain activitely engaged in school realted activities. Also, special attention must be paid to raise the level of student engagement of students belonging to joint family. The findings also speaks about how academic buoyancy affects student engagement. Therefore, we must take some measures to make our students academically buoyant which will motivate them to do better in their academics by tackling minor setbacks of acacdemic life. This will also help them in active engagement in school related activities and in turn will help them to reach heights of excellence.

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