

Emotional Engagement and Academic Achievement of Elementary School Children

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ABSTRACT

This research investigated the correlation between emotional engagement and academic achievement of elementary school going children of Murshidabad district of West Bengal. Additionally, it determined the level of emotional engagement. The study used descriptive survey method. Self-made Student Emotional Engagement Scale was used to collect data. Mean, SD and Pearson product moment correlation were used to treat the data. The study revealed that the level of overall emotional engagement along with its indicators was moderate among majority of the children. Furthermore, with few exceptions, it was found that emotional engagement and its indicators were positively correlated to the academic achievement of the elementary school going children.

Keyword: Student Engagement, Emotional Engagement

INTRODUCTION

Research focused on student engagement has garnered significant interest within the global research community for multiple compelling reasons. It has been recognized as a pivotal factor in mitigating dropout rates (Audas & Willms, 2001; Connell et al., 1995; Finn, 1989). This phenomenon serves as a wellspring of motivation, enabling students to surmount the hurdles of academic tasks and bolstering their resilience (Martin & Marsh, 2009). Furthermore, researchers have established a robust positive correlation between student engagement and academic achievement (Xiani, Muthukrishnan, & Sidhu, 2019; Gunuc, 2014; Hoff & Lopus, 2013; Fall & Roberts, 2012; Dotterer & Lowe, 2011; An, Hannum, & Sargent, 2007; Carine, Kuh, & Klein, 2006; Klem & Connell, 2004; Willms, 2003), as well as with occupational outcomes (Abbott-Chapman et al., 2014).

The review of existing literature has identified many studies have found a positive correlation between overall student engagement and academic achievement. However, only a few research endeavours have delved into the intricate connections between distinct dimensions of student engagement, namely behavioral, cognitive, and emotional engagement, and their impact on academic achievement. Scholarly works emphasize the significance of investigating these dimensions individually, as they contribute uniquely to academic success (Pagan, 2018; Rodriguez & Boutakidis, 2013).

One particularly recognized facet of student engagement is emotional engagement, characterized by students' affective responses within academic environments (Sagayadevan & Jeyaraj, 2012). This dimension encompasses a spectrum of positive and negative reactions directed at teachers, peers, academic pursuits, and the school environment itself. Researchers have elucidated its pivotal role in the realm of academics. Emotional engagement plays a crucial role in fostering students' affinity towards their educational institutions and influencing their motivation to undertake work-related tasks (Wara, Aloka & Odongo, 2018; Fredricks, Blumenfeld & Paris, 2004).

Literature review has highlighted an apparent imbalance in the study of student engagement, with emotional engagement receiving comparatively less attention than its counterparts, behavioural and cognitive engagement. While a handful of researchers have explored the connection between emotional engagement and academic achievement, the findings have yielded inconclusive results. For instance, Xiani, Muthukrishnan & Sidhu (2019) observed a positive relationship between emotional engagement and academic achievement among left-behind children in China. Dotterer and Lowe (2011) identified a positive correlation between what they termed "psychological engagement" (equivalent to emotional engagement) and academic performance in both struggling and non-struggling fifth-grade students. Conversely, Pagan (2018) failed to establish a positive relationship between emotional engagement and academic achievement in high school students participating in music classes. Fall & Roberts (2012) noted a negative relationship between identification with school (a facet of emotional

engagement) and academic engagement among post-secondary students in the USA. A study conducted by Rodriguez & Boutakidis (2013) among Mexican American students found that while emotional engagement predicted academic achievement for non-immigrant students and children of immigrants, it was not a significant predictor for immigrant students' academic success. Notably, all these efforts encompassed emotional engagement within the broader context of overall student engagement. Only a solitary study by Wara, Aloka & Odongo (2018) investigated into emotional engagement as a distinct entity in relation to academic engagement. Given these backdrops, the present study aspired to achieve the following objectives:

OBJECTIVES OF THE STUDY

- i. To find out the frequency of elementary school going children in different levels of peer bonding, teacher-student bonding, class bonding, school bonding and overall emotional engagement.
- ii. To study the relationship of peer bonding, teacher-student bonding, class bonding, school bonding and overall emotional engagement with the academic achievement of boys, girls and elementary school going children irrespective of gender.
- iii. To study the relationship of peer bonding, teacher-student bonding, class bonding, school bonding and overall emotional engagement with the academic achievement of fourth graders, eighth graders and elementary school going children as a whole.

METHOD

The study employed descriptive survey method to attain the objectives.

POPULATION AND SAMPLE

All children pursuing elementary education in Murshidabad district of West Bengal were the population for the study. For selecting representative sample from population, two upper-primary with higher secondary school (having grade five to grade twelve) and four primary schools (having grade one to grade four) were randomly chosen by using multistage sampling. These selections gave rise to two upper-primary with higher secondary schools and four primary schools in total. All students of grade eight from chosen two upper-primary with higher secondary schools and grade four from chosen four primary schools were finally selected as sample of the study. The sample consisted of 230 students in total (Grade four = 54; Grade eight = 176; Male = 104; Female = 126).

Tool

Student Emotional Engagement Scale was constructed to collect data regarding emotional engagement of elementary school children of grade four and grade eight. This four-point rating scale consisted of 14 items under four indicators of emotional engagement: peer bonding, teacher-student bonding, class bonding and school bonding.

Students' academic achievement was determined by calculating mean of scores obtained from addition of scores secured in 1st term, 2nd term, and 3rd term examinations conducted by respective schools.

DATA ANALYSIS TECHNIQUES

Mean, SD, and Pearson Product Moment Correlation were applied for analysing obtained data.

DATA ANALYSIS AND RESULTS

Description of Means and Standard Deviations of Peer Bonding, Teacher-Student Bonding, Class Bonding, School Bonding and Overall Emotional Engagement

The means and standard deviations of overall emotional engagement along with its indicators are presented in Table 1. Mean values of peer bonding, teacher-student bonding, class bonding, school bonding and overall emotional engagement are 9.07, 8.87, 12.28, 13.68 and 43.90 respectively. Standard deviations of 1.71, 1.88, 2.13, 2.11 and 5.74 are found for peer bonding, teacher-student bonding, class bonding, school bonding and overall emotional engagement respectively.

Table 1: Mean and Standard Deviation of Peer Bonding, Teacher-Student Bonding, Class Bonding, School Bonding and Overall Emotional Engagement

| | Peer Bonding | Teacher-Student Bonding | Class Bonding | School Bonding | Overall Emotional Engagement |
|------|--------------|-------------------------|---------------|----------------|------------------------------|
| Mean | 9.07 | 8.87 | 12.28 | 13.68 | 43.90 |

| | | | | | |
|----|------|------|------|------|------|
| SD | 1.71 | 1.88 | 2.13 | 2.11 | 5.74 |
|----|------|------|------|------|------|

Frequency of Elementary School Going Children in Low, Moderate, And High Levels of Peer Bonding, Teacher-Student Bonding, Class Bonding, School Bonding and Overall Emotional Engagement

Table 2 presents data on the distribution of elementary school children based on their peer bonding levels, both in terms of numbers and percentages. It is evident that 40 students (17.39%) fall into the low peer bonding category, whereas 50 students (21.74%) are in the high peer bonding category. Meanwhile, the majority of students, 140 (60.86%), exhibit a moderate level of peer bonding.

Table 2: Frequency of Children in Low, Moderate, And High Levels of Peer Bonding

| | Low | Moderate | High |
|-----------------|-------------|--------------|-------------|
| No. of Students | 40 (17.39%) | 140 (60.86%) | 50 (21.74%) |

Legend: Low (3-7.35) Moderate (7.36-10.78) High (10.79-12)

Table 3 reveals that a mere 22 (9.57%) children are categorized as having low levels of teacher-student bonding, in contrast to the high category, which encompasses 52 (22.61%) children. However, a significant majority of 156 (67.83%) children exhibit a moderate level of teacher-student bonding.

Table 3: Frequency of Children in Low, Moderate, And High Levels of Teacher-Student Bonding

| | Low | Moderate | High |
|-----------------|------------|--------------|-------------|
| No. of Students | 22 (9.57%) | 156 (67.83%) | 52 (22.61%) |

Legend: Low (3-6.98) Moderate (6.99-10.75) High (10.76-12)

It can be observed from Table 4 that 46(20%) children fall into the low category, nearly double the count in the high category, which stands at 27 (11.74%). However, number of children in moderate level remain almost same as of peer bonding and teacher-student bonding.

Table 4: Frequency of children in low, moderate, and high levels of class bonding

| | Low | Moderate | High |
|-----------------|----------|--------------|-------------|
| No. of Students | 46 (20%) | 157 (68.26%) | 27 (11.74%) |

Legend: Low (5-10.14) Moderate (10.15-14.41) High (14.42-16)

Values presented in Table 5 shows the distribution of students across various levels of school bonding. Specifically, it highlights that 33 children (14.35%) are classified within the low category, while 45 children (19.56%) are placed in the high category. Notably, the majority of students, comprising 152 (66.09%), fall into the moderate category.

Table 5: Frequency of children in low, moderate, and high levels of school bonding

| | Low | Moderate | High |
|-----------------|------------|--------------|-------------|
| No. of Students | 33(14.35%) | 152 (66.09%) | 45 (19.56%) |

Legend: Low (7-11.56) Moderate (11.57-15.79) High (15.80-16)

Table 6 depicted the distribution of children according to their level of overall emotional engagement. Notably, a substantial portion of children, amounting to 126 (54.78%), are situated within the moderate level of emotional engagement. Furthermore, nearly equal numbers of children are categorized as low (36, 15.66%) and high (39, 16.96%) in terms of their emotional engagement, demonstrating a balanced distribution.

Table 6: Frequency of children in low, moderate, and high levels of Overall Emotional Engagement

| | Low | Moderate | High |
|-----------------|-------------|--------------|-------------|
| No. of Students | 36 (15.66%) | 126 (54.78%) | 39 (16.96%) |

Legend: Low (22-38.15) Moderate (38.16-49.64) High (49.65-56)

7.3 Correlation between Emotional Engagement and its Indicators with Academic Achievement of Boys, Girls, and Elementary School Children irrespective of Gender.

Table 7 represents the correlation coefficients for peer bonding and academic achievement are 0.32, 0.36, and 0.35 for boys, girls, and elementary school children irrespective of gender, respectively. These correlations hold statistical

significance at the 0.01 level. These findings suggest that boys, girls, and elementary school children irrespective of gender, who regularly share their feelings with classmates tend to achieve significantly higher academic success.

Turning to teacher-student bonding, the correlation coefficients for teacher-student bonding and academic achievement are standing at 0.45 for boys, 0.44 for girls, and 0.45 for elementary school children irrespective of gender (Table 7). These correlations also reach significance at the 0.01 level. It can be concluded that boys, girls and elementary school children irrespective of gender who often feel their teachers are supportive tend to achieve significantly higher levels of academic achievement.

Likewise, the correlation coefficients between class bonding and academic achievement for boys, girls, and elementary school children irrespective of gender are 0.32, 0.40, and 0.37, respectively (Table 7). These correlations are significant at the 0.01 level. It is evident that a heightened enthusiasm for participating in various class activities corresponds with increased academic accomplishment for boys, girls and elementary school children irrespective of gender.

The correlation coefficients between school bonding and academic achievement for boys, girls and elementary school children irrespective of gender are 0.41, 0.35, and 0.38, respectively (Table 7). These correlations are significant at the 0.01 level. It is apparent that boys, girls and elementary school children irrespective of gender who feel a stronger sense of attachment to their school environment tend to achieve significantly higher academic success.

Lastly, when considering overall emotional engagement the correlation coefficients with academic achievement are 0.50, 0.56, and 0.53 for boys, girls and elementary school children irrespective of gender, respectively (Table 7). These correlations are significant at the 0.01 level. This implies that boys, girls and elementary school children irrespective of gender with markedly higher emotional attachment to school, class, teachers and peers tend to show distinctly higher levels of academic attainment.

Table 7: Correlation of Emotional Engagement and Its Indicators with Academic Achievement of Boys, Girls, and Elementary School Children irrespective of Gender

| Emotional Engagement and Its Indicators | Boys | | | Girls | | | Elementary School Children irrespective of Gender | | |
|---|------|-----|-------|-------|-----|-------|---|-----|-------|
| | N | df | r | N | df | r | N | df | r |
| Peer Bonding | 104 | 102 | 0.32* | 126 | 124 | 0.36* | 230 | 228 | 0.35* |
| Teacher-Student Bonding | 104 | 102 | 0.45* | 126 | 124 | 0.44* | 230 | 228 | 0.45* |
| Class Bonding | 104 | 102 | 0.32* | 126 | 124 | 0.40* | 230 | 228 | 0.37* |
| School Bonding | 104 | 102 | 0.41* | 126 | 124 | 0.35* | 230 | 228 | 0.38* |
| Overall Emotional Engagement | 104 | 102 | 0.50* | 126 | 124 | 0.56* | 230 | 228 | 0.53* |

*Significant at the 0.01 Level of Significance

7.4 Correlation between Emotional Engagement and its Indicators with Academic Achievement of Fourth Graders, Eighth Graders and Elementary School Children as a whole

The correlation coefficients for peer bonding and academic achievement are 0.24, 0.31, and 0.35 for fourth graders, eighth graders, and elementary school students as a whole, respectively (Table 8). These correlations are significant at the 0.01 level, except for fourth graders. These results advocate that eighth graders and elementary school children as a whole, who regularly share their feelings with classmates tend to exhibit significantly higher academic attainment.

Similarly, the correlation coefficients for teacher-student bonding and academic achievement are 0.32, 0.36, and 0.45 for fourth graders, eighth graders, and elementary school children as a whole, respectively (Table 8). These correlations are significant at the 0.01 level, except for fourth graders. It can be concluded that eighth graders and elementary school children who often feel their teachers are supportive tend to achieve significantly higher levels of academic achievement.

The correlation coefficients between class bonding and academic achievement for fourth graders, eighth graders, and elementary school students as a whole are 0.56, 0.37, and 0.37, respectively (Table 8). These correlations are significant at the 0.01 level. It can be determined that higher excitement in attending various class activities is linked with higher academic accomplishment for fourth graders, eighth graders, and elementary school children.

The correlation coefficients between school bonding and academic achievement for fourth graders, eighth graders, and elementary school students as a whole are 0.30, 0.30, and 0.38, respectively (Table 8). These correlations are significant at the 0.01 level, except for fourth graders. It is evident that eighth graders and elementary school children who often feel more excited to attend school tend to achieve significantly higher academic success.

The correlation coefficients for overall emotional engagement and academic achievement are 0.55, 0.45, and 0.53 for fourth graders, eighth graders, and elementary school children as a whole, respectively (Table 8). These correlations are significant at the 0.01 level. This implies that fourth graders, eighth graders, and elementary school students with markedly higher emotional attachment to school, class, teachers and peers tend to show distinctly higher levels of academic attainment.

Table 8: Correlation of Emotional Engagement and Its Indicators with Academic Achievement of Fourth Graders, Eighth Graders and Elementary School Children as a whole

| Emotional Engagement and Its Indicators | Fourth Grade Student | | | Eighth Grade Student | | | Elementary School Children as a whole | | |
|---|----------------------|----|-------|----------------------|-----|-------|---------------------------------------|-----|-------|
| | N | df | r | N | df | r | N | df | r |
| Peer Bonding | 54 | 52 | 0.24 | 176 | 174 | 0.31* | 230 | 228 | 0.35* |
| Teacher-Student Bonding | 54 | 52 | 0.32 | 176 | 174 | 0.36* | 230 | 228 | 0.45* |
| Class Bonding | 54 | 52 | 0.56* | 176 | 174 | 0.37* | 230 | 228 | 0.37* |
| School Bonding | 54 | 52 | 0.30 | 176 | 174 | 0.30* | 230 | 228 | 0.38* |
| Overall Emotional Engagement | 54 | 52 | 0.55* | 176 | 174 | 0.45* | 230 | 228 | 0.53* |

*Significant at the 0.01 Level of Significance

CONCLUSIONS

The data analysis and results mentioned above revealed that the majority of elementary school children exhibited moderate to average levels of bonding with peers, teachers, classmates, and their school environment. Consequently, it can be inferred that elementary school students generally have an average level of attachment to their peers, teachers, classes, and schools. The study found that the relationships between peer bonding, teacher-student bonding, class bonding, school bonding, and overall emotional engagement with academic achievement were positive and significant for both boys and girls, irrespective of gender. This suggests that there is no gender difference present in connection between emotional engagement and academic achievement. Additionally, when examining these relationships across fourth and eighth graders, grade level appeared to have an effect. For peer bonding, teacher-student bonding, and school bonding, the relationships with academic achievement were positive but not significant for fourth graders. However, these relationships were not only positive but also significant for eighth graders and for elementary school children as a whole.

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