ABSTRACT

In the literature, several problems and issues regarding student engagement and teacher engagement are in vogue. Those issues indeed build the premises of the present study. Engaging students in their own learning has challenged educators for decades. Moreover, too many children commence school as unmotivated, uninterested, and disengaged. Prior studies have shown that adolescents" engagement tends to decrease in secondary education. In school intervention research, engagement is an important malleable factor and engagement is highly influenced by the capacity of school, family, and peers to provide consistent expectations. The pathways through which social contexts affect different dimensions of student engagement remain unclear in the student engagement because existing studies have not adequately explored these relationships.

This research utilized a quantitative, non-experimental research design specifically correlational design. The research was conducted in the context of secondary schools in West Bengal under WBBSE. The sample was selected using multistage sampling procedures. In the present study, the participants were 1232 tenth-grade students with 611 females and 621 males from randomly selected 35 government secondary schools from the seven districts of West Bengal, India. Student engagement was gauged using researcher's self-developed 23-item scale (11 negative items) consisting of three sub-scales: cognitive, behavioral, and emotional engagement. Students' perceived teacher engagement was gauged using researcher's self-developed 22-item scale (11 negative items) consisting of three sub-scales: perceived cognitive-physical, perceived socio-emotional, and perceived pedagogical engagement.

In this study, SPSS Version 26.0 for the entire data analysis and AMOS 23.0 was used to perform Confirmatory factor analysis of the measurement models of student engagement and perceived teacher engagement. The independent samples t-tests were used to test first three hypotheses ($H_0$1-3). However, $H_0$5 and $H_0$7 were tested using moderation analysis, whereas, $H_0$4, $H_0$6, and $H_0$8 were examined using mediation analysis.

Girls perceived that the teachers were significantly more engaged in teaching in all the engagement dimensions as compared to boys. Girls were found to be more engaged cognitively, behaviorally, and emotionally than boys. The results indicated that girls were found to be academically more successful than boys in terms of achievement. Thus, PSEE served as a protective factor for boys" engagement. The gender gap in cognitive and in emotional engagement is a significant cause in explaining the gender gap in students" academic achievement. Cognitive and behavioral engagement dimensions were equally beneficial for both boys as well as girls whereas, emotional engagement was more related to boys" academic achievement than that of girls. Thus, emotional engagement served as a protective factor for boys' academic achievement.

Teachers are aware of the fact that boys are more at risk to show lower engagement all three dimensions than girls. Second, the gender gap in students' perceptions of teacher engagement was confirmed. It is important that teachers are aware of the fact that boys are more at risk to perceive lower teacher engagement in all three dimensions. For boys, an additional focus on cognitive and emotional engagement is desirable because the present study indicated that both cognitive and emotional engagement appeared to be the protective factors specifically for promoting boys" achievement. Thus, by focusing more on cognitive and emotional engagement dimensions, the gender gap in academic achievement may be reduced. It is interesting for teachers to know that students" academic achievement is related to their perceptions of teacher engagement through the three dimensions of student engagement. It has been proved that awareness of a certain problem or situation can stimulate change in teachers' behaviours.

It is essential to remind likely areas that need further studies. These may include: Several experimental studies may be planned to examine which teaching methods (e.g. cooperative, constructivist) help enhancing student engagement in the context of classroom learning. There is a huge variation in the level of engagement across different activities as well as across the subject domains. Thus, domain-specific inquiry of student engagement thus would be more meaningful.