

## Structural Equation Modeling of Teacher and Peer Social Support with Academic Performance and Buoyancy Mediated by Competence and Academic Excitement

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### Introduction

The purpose of this study was to investigate the mediating role of academic competence and academic excitement concerning teacher and peer social support with academic performance and buoyancy of female high school students.

### Method

The research method was a correlation with structured equation modeling. Among all the secondary school students of the eleventh grade, who were studying in Tehran in 2017-18, 500 students were selected through multistage cluster random sampling. FAM and Taylor's (1999) academic performance, Martin and Marsh (2006) academic buoyancy, Diperna and Elliott's (1999) academic competency assessment, Pekran, Goetz, Titz and Perry's (2005) academic excitement, social support of peers Biodery, Sharp and Otis (2008) and the social support of peers Persido and Heller (1983) were administered on students.

### Results

Based on the model presented, the teacher's social support and buoyancy were mediated by competency and academic excitement. But this relationship

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was not approved for peer support. Peer support was directly related to academic buoyancy. However, the academic performance variable was explained as  $R^2=65\%$  and the buoyancy variable as  $R^2=30\%$ . Direct, indirect coefficients and the total effect of the variables showed that the teacher's social support had the greatest total effect (0.60), student's academic competence (0.47) effect on student's academic performance; negative academic excitement (0.44) affects academic performance; positive academic performance; positive academic emotions showed the least effect (0.15) on academic performance. Students' academic competence has the greatest effect on students' buoyancy (-0.54), academic competence (0.30), peer social support (0.27), positive emotions (0.26), and negative emotions (0.22). Teacher social support showed the least impact (0.07) on students' buoyancy. In other words, increasing academic competence or academic excitement, or social support of the teacher towards its standard deviation causes a direct effect of 0.65 on students' academic performance. Increasing academic competence, academic excitement, teacher social support and peer social support, academic competence, or student's academic excitement relative to its standard deviation causes a direct effect of 0.30 on students' buoyancy.

### Conclusion

Based on the findings of this research, the promotion of students' competence and teachers' social support should be considered as important variables affecting educational performance and academic buoyancy.

**Keywords:** Academic performance, Academic buoyancy, Teacher and peer social support, Academic competence, Academic excitement

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