## Integrate Future Time Perspective and Learning Engagement: The Study of Mathematical Models of Learning for Junior High School Students

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The purpose of this study was tried to use future time perspectives, learning engagement, learning strategies, and academic emotions as factors to understand statistical influence, as well as construct mediation models of future time perspectives and learning achievements. The instruments were "learning strategy scale", "academic emotion scale", and separately compiled "future time perspective scale" and "math learning engagement scale". The study was conducted on 735 students who came from 107 middle school which were selected from the five districts of Taiwan: North, Middle, South, East, and Islands (Kinmen, Matsu). The results of the study showed that future time perspective, learning engagement and academic achievement was the best mediation model. The second good mediation model was future time perspective, learning strategies and academic achievements can only produce part of the mediation effect. Mathematics emotions cannot be used as a mediation variable. Based on the analysis results, this study had implications for class management in mathematics, customized or differentiated teaching.

Keywords: future time perspective, mathematics learning engagement, mathematics learning strategy, mathematics academic emotion, mediation models