



**A STUDY TO DEVELOP A VALIDATED SCALE TO MEASURE THE
LEVELS OF MOTIVATION AND ENGAGEMENT IN LEARNING
AMONG EARLY ADOLESCENTS IN TWO LOW SOCIO-ECONOMIC
DISTRICTS IN SRI LANKA**

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Low participation in learning of secondary students is a matter affirmed by examinations, mostly in low socio-economic districts in Sri Lanka. One of the central factors contributing to this situation may be students' motivation and engagement in learning. Therefore, this study tried to find out the levels of motivation and engagement among early adolescents. Motivation and Engagement Scale-Junior School (MES-JS) was employed to collect data and the confirmatory factor analysis was employed to measure the construct validity of the scale in relation to two low socio-economic districts. But it did not give a robust factor solution. Then, it was decided to conduct exploratory factor analysis (EFA). This paper aimed to investigate the EFA procedures conducted to derive a robust factor solution. This study employed quantitative research design to determine early adolescents' levels of motivation and engagement in learning in two low socio-economic districts in Sri Lanka. MES-JS (Martin, 2014) was administered among 100 Sinhala and Tamil-medium eighth grade students (50 students from each gender). The mean age of the students was 12.8 years. Schools were represented by type two government schools located in the Monaragala and Nuwara Eliya districts in Sri Lanka. This study used the PCA method of extraction to determine the final factor solution. The method used was the scree test in combination with eigenvalues to decide the number of factors to retain. The items in the four-factor solution demonstrated factor loadings between 0.601 and 0.823 and the four factors accounted for 59.05% of the total variance. The EFA analyses derived four factors in relation to early adolescents' motivation and engagement in learning in two low socio-economic regions of Sri Lanka. With an accurate and useful description of the underlying construct and with the theoretical meaning of the items in those factors, factor one was named "Failure Avoidance and Anxiety" (FAA), as it represents two lower-order factors (failure avoidance and anxiety) in negative motivation. Factor two was named "Positive Motivation" (PM), as it represents two lower-order factors (valuing and learning focus) in positive motivation. The third factor was named "Uncertain Control" (UC), as it represented most items in the uncertain control lower-order factor related to negative motivation. The fourth factor was named "Positive Engagement" (PE), as it represented all lower-order factors (planning, task management and persistence) in positive engagement. Overall, FAA and UC represent students' negative motivation for learning, and PM and PE represent students' positive motivation and engagement in learning.



Keywords: Low socio-economic districts, Early adolescents, Motivation, Engagement, Exploratory factor analysis

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