ASSESSING THE PSYCHOMETRIC PROPERTIES OF NEWLY DEVELOPED BEHAVIOR AND ATTITUDE TWITTER SCALES: A VALIDITY AND RELIABILITY STUDY (146 pp.)

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The purpose of this study was to explore the psychometric properties of the newly developed Twitter and Scholastic Synchronicity Scale (TSSS) and Twitter and Scholastic Apportionment Assessment (TSAA) items. The study also sought to understand if and how attitude and behavior positively and/or negatively related to undergraduate students’ academic performance. The TSSS scale focused on measuring how undergraduate students use Twitter for academics while the TSAA scale focused on their attitudes toward using Twitter for academics.

A comprehensive statistical analysis was conducted to explore both the validity and reliability aspects of these newly developed scales. An online survey collected research data from 327 undergraduate students at one institution. First, Exploratory Factor Analysis (EFA) was used to understand the underlying factor structure. Second, Confirmatory Factor Analysis (CFA) was used to check the proximity of the conceptual model’s results to the hypothesized model. Third, reliability and validity aspects of the measure were investigated using Classical Test Theory (CTT) and Rasch Analysis (RA). Fourth, Hierarchical Multiple Regression (HMR) was used to understand the relationship between students’ academics and the newly developed scales.

The results here provide evidence for the reliability and validity of the newly developed scales. CFA confirmed that research data support the hypothesized data, and RA indicated that
the items featured in these newly developed scales are based on a single measure. The HMR results indicated that students’ academic performance and Twitter scales (TSSS and TSAA) are strongly correlated. Both scales help to explain the variance in undergraduate students’ academic performance.