<u>Title:</u> The Measurement of Student Disengagement: Contrasting Theoretical Hypotheses with Practical Realities Using a New Measurement Instrument

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<u>Abstract:</u> Student engagement is regarded as a meta-construct, encompassing indicators of students' affective, behavioral, and cognitive involvement in class or school in general (Fredricks et al., 2004). Its conceptual opposite is student disengagement, which captures withdrawal from activities at school along the same dimensions (Skinner et al., 2009). Although there are many competing conceptualizations for both constructs (see Wong & Liem, 2022 for a recent review), many leading theorists in the field concur that engagement and disengagement are distinct, albeit correlated, dimensions (e.g., Boekaerts, 2016; Fredricks, 2022; Reschly & Christenson, 2022; Salmela-Aro et al., 2021). However, this is rarely reflected in measurement practice, since most studies treat engagement and disengagement as opposite ends of a bipolar spectrum (Fredricks, 2022; Wong et al., 2024). This suggests that the engagement-disengagement distinction may not be as significant as theorists believe, or alternatively, that there is a lack of clarity on how it might be implemented in practice.

The present study examines the theoretical hypothesis that engagement and disengagement are distinct factors. Informed by a prior qualitative analysis of recent engagement measures, it is argued that extant (dis)engagement scales have methodological shortcomings, which have hindered a rigorous test of this hypothesis. In contrast, the present study employs a novel measure that is grounded in more precise conceptualizations of student engagement, as outlined in recent theoretical frameworks (Skinner & Raine, 2022; Wong & Liem, 2022). This scale contains balanced sets of engagement and disengagement items in terms of both number and content, allowing for a direct comparison.

A convenience sample of 3rd to 11th grade students (N=533) was drawn from schools in North Rhine-Westphalia and administered the questionnaire. Confirmatory factor analysis was used to compare the theoretically hypothesized unipolar model (four factors: emotional and cognitive-behavioral engagement and disengagement) to the alternative bipolar model (two factors: emotional and cognitive-behavioral (dis)engagement). Results show that, upon inclusion of an uncorrelated method bifactor, the bipolar model ( $\chi$ 2 = 456.63\*\*\*, CFI = .950, RMSEA = .046, SRMR = .040) has only a slight disadvantage in fit compared to the hypothesized unipolar model ( $\chi$ 2 = 427.26\*\*\*, CFI = .955, RMSEA = .043, SRMR = .040). The discussion re-evaluates the practical significance of the engagement-disengagement distinction, in light of present results.

Keywords: Engagement, Disengagement, Disaffection, Skalenentwicklung, Theoriebildung

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