Boys' and girls' latent profiles of behavior and social adjustment in school: Longitudinal links with later student behavioral engagement and academic achievement?☆

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ABSTRACT

Using a person-centered approach, this study identified profiles of students exhibiting behavior and social adjustment problems in school. We conducted Latent Profile Analysis to identify these subgroups in a sample of 582 fifth and sixth graders. We found four profiles among girls—well-adjusted girls (66.10%); girls displaying externalizing behaviors and student–teacher conflict (4.75%); girls exhibiting internalizing behaviors and isolation from peers (10.17%); and girls with student–teacher nonclose interactions and nonprosocial behaviors toward peers (18.98%). We found three profiles among boys—well-adjusted boys (78.05%); boys displaying externalizing behaviors and student–teacher conflict (10.10%); and boys with externalizing, internalizing, and social problems with peers and teachers (11.85%). Next, we investigated longitudinal associations between these profiles and student behavioral engagement and academic achievement. Path analysis revealed that, compared to students with a well-adjusted profile, having a non-adjusted profile was associated with negative changes in teacher-reported behavioral engagement. Girls with an Externalizing Problem/Student–teacher Conflict profile or an Internalizing Problems/Peer Isolation profile also showed negative changes throughout the school year in their self-reported behavioral engagement and in academic achievement. We discussed these results and their practical implications in light of existing literature.

1. Introduction

Starting in elementary school, student engagement and achievement are key factors for lifelong positive outcomes, especially for academic and professional success (Lansford, Dodge, Pettit, & Bates, 2016; Rumberger & Lamb, 2003). Students who are engaged and successful in school are more likely to graduate from high school, to pursue post-secondary studies, and to have satisfying social relationships (Archambault, Janosz, Morizot, & Pagani, 2009; Baroody, Rimm-Kaufman, Larsen, & Curby, 2016; Kuncel, Hezlett, & Ones, 2004; Lewis, Huebner, Malone, & Valois, 2011). Many factors promoting or undermining student engagement and academic achievement have been identified (Collie, Martin, Papworth, & Ginns, 2016; Fredricks, Blumenfeld, & Paris, 2004; Lietaert, Roorda, Laevers, Verschueren, & De Fraine, 2015). For instance, students who display behavior and social problems are at greater risk of

negative school outcomes (Demaray & Jenkins, 2011; Li & Lerner, 2011; Maurizi, Grogan-Kaylor, Granillo, & Delva, 2013). These problems include externalizing behaviors, internalizing behaviors, negative interactions with teachers, and poor social integration among peers.

Extant studies focus on behavior and social problems as independent risk factors for disengagement and underachievement (e.g., Collie et al., 2016; Moilanen, Shaw, & Maxwell, 2010). These studies typically assess how each distinct problem is separately associated with these outcomes. Very few studies investigate how behavior and social problems may jointly impact student active involvement and academic achievement. Yet, behavior and social problems often co-occur and impair the same students (Demaray & Jenkins, 2011; Li & Lerner, 2011; Maurizi et al., 2013). Better understanding the co-occurrence of these problems is especially important at the beginning of adolescence. During this developmental period, students are at elevated risk of disengagement (Eccles et al., 1993). To achieve this goal, the present study relies on a person-centered approach. This sophisticated methodology allows the identification of latent profiles of students exhibiting shared patterns of behavior and social problems (Magidson & Vermut, 2002). We further investigated the longitudinal associations between student adjustment profiles and later academic achievement and disengagement, as measured by students and teachers. This last step allowed us to assess the predictive value of the identified profiles.

In a real-world setting, school practitioners routinely have to work with children who display multiple problems simultaneously. Knowing whether a student has a profile characterized by an accumulation of problems should convey information not readily available when considering each problem separately. This information is uniquely useful for forecasting later engagement or achievement problems, as perceived by teachers and students themselves. We anticipated that students at risk on multiple fronts will be particularly vulnerable to disengagement and low academic achievement. If so, they should be priority targets for multi-pronged interventions.

1.1. Student engagement and academic achievement

Student engagement and academic achievement have major implications for school perseverance and success (Connell & Wellborn, 1991; Finn, 1993). Students with good academic achievement usually have better self-perceptions in school and positive academic trajectories, leading to professional success (Archambault et al., 2009; Connell & Wellborn, 1991; Ferrer & Riddell, 2002). Student achievement in school is associated with higher motivation and engagement, just as motivation and engagement also support student achievement (Archambault et al., 2009).

Student engagement is a three-dimensional construct. It includes emotional, cognitive, and behavioral components (Fredricks et al., 2004). Emotional engagement is students' sense of belonging to school and their perception of task relevance (Finn, 1993; Fredricks et al., 2004). In class, students experience emotions such as interest, boredom, enthusiasm, and appreciation (Fredricks et al., 2004). Cognitive engagement encompasses students' self-regulation abilities, from which arises a desire to master difficult skills (Fredricks et al., 2004). For example, cognitively engaged students plan their assignments ahead and use effective strategies to avoid or to correct mistakes. Behavioral engagement refers to students' observable actions; students who are behaviorally engaged tend to participate in class, listen to their teacher, follow instructions, and put effort into schoolwork (Finn, 1993; Fredricks et al., 2004; Wang & Eccles, 2012). This dimension of student engagement is an important and proximal predictor of academic achievement and perseverance (Archambault et al., 2009; Baroody et al., 2016; Fredricks et al., 2004; Reyes, Brackett, Rivers, White, & Salovey, 2012).

The assessment of student behavioral engagement tends to reflect both the child's characteristics and the particular vantage point of the evaluator (Smith, 2007). Student engagement and achievement vary as a function of individual characteristics such as gender. Boys tend to have weaker engagement and achievement than girls (Archambault et al., 2009; Roorda, Koomen, Spilt, & Oort, 2011; Wang, Willett, & Eccles, 2011; Yeung, 2011). Assessing behavioral engagement also depends on the source of assessment (Smith, 2007). Most quantitative studies based on large samples of participants rely on either teachers' or students' points of view of student behavioral engagement (Rimm-Kaufman, Baroody, Larsen, Curby, & Abry, 2015). Given that both perspectives are reliable, together they provide a complete portrait of boys' and girls' engagement (Lietaert et al., 2015).

1.2. Behavior and social adjustment

According to Cummings, Davies, and Campbell's (2000) model of adjustment development, student adjustment problems include externalizing behaviors, internalizing behaviors, and social problems. Although a majority of students are well-adjusted, a few of them display these problems in the school context (Achenbach & Edelbrock, 1978; Collie et al., 2016; Hamre & Pianta, 2001; Moilanen et al., 2010; Riberdy, Tétreault, & Desrosiers, 2013; Wentzel, 2015b). Student externalizing problems include hyperactivity, inattention, aggressiveness, and opposition (Achenbach & Edelbrock, 1978; American Psychological Association (APA), 2013; Corsini, 2002). Students displaying these disruptive behaviors may tend to fidget, to be agitated when expected to be calm, to not pay attention to details, to get angry easily, to argue a lot, or to be verbally or physically mean to others (APA, 2013; Goodman, 2005; Moilanen et al., 2010). Such behaviors are easily observable by teachers and peers. Conversely, internalizing behaviors often go unnoticed, as they affect students' thoughts and emotions (Achenbach & Edelbrock, 1978; Corsini, 2002). Among youth, anxious and depressive thoughts are the main forms of internalizing problems (Moilanen et al., 2010). Children with anxiety tend to be overly worried, to avoid specific situations, to feel unsafe, and to be distracted (APA, 2013; Moilanen et al., 2010). Likewise, children with depressive problems often have an unstable or irritable mood, are sad or morose, and are sometimes overly tired (APA, 2013; Moilanen et al., 2010).

In school, some students also experience social problems with teachers or with peers. Social problems represent difficulties on