Social, emotional, and behavioral screening: A comparison of two measures and two methods across informants☆

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ABSTRACT

The current study is a correlational design comparing a multiple-gate social, emotional, and behavioral (SEB) screening system with a single-gate SEB screening system using a common criterion variable. Teachers and parents of 105 preschool students completed the multiple-gate Preschool Behavior Screening System (PBSS; Feeney-Kettler, Kratochwill, & Kettler, 2009) and the single-gate Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007). The measures were evaluated using Cronbach's alpha, Pearson correlations with each other, and conditional probability indices to represent accuracy in predicting scores from the Achenbach System for Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2000). Results indicated the PBSS was internally consistent ($\alpha = 0.87$ to 0.97), teacher-parent agreement for both measures was in the expected range ($r = 0.05$ to 0.40), and relations among scores from the measures were at the expected magnitudes and in the expected directions. Although both measures accurately predicted ASEBA results, the BESS was a better predictor for both groups of raters (i.e., teachers and parents) in most situations. The PBSS provided the advantage of also being a good predictor while providing internally consistent subscale scores that may be useful for intervention planning. The results are discussed including their implications for school psychologists seeking to select technically sound instruments that yield reliable scores from which valid inferences about SEB factors can be drawn.

1. Introduction

The importance of screening children for social, emotional, and behavioral (SEB) difficulties is established in the United States' policies for special education and regular education. The *Individuals with Disabilities Education Improvement Act of 2004* states that local education agencies shall "use technically sound instruments that may assess the relative contribution of cognitive and behavioral factors" when conducting evaluations, and further specifies that these instruments "are used for purposes for which the assessments or measures are valid and reliable" (p. 118). In addition, the *Every Student Succeeds Act of 2015* requires that public schools include in their accountability systems at least one indicator of school quality or student success other than academic skills that allows for meaningful differentiation in school performance; this change in policy provides the opportunity for SEB constructs to receive more attention in schools than they have in the past. The purposes of the current study were to collect psychometric information on the Preschool Behavior Screening System (PBSS; Feeney-Kettler et al., 2009) and to compare two methodologies of

screening in order to determine which method more accurately identifies children experiencing SEB difficulties in their learning environments. One method involves screening with a single abbreviated measure of SEB difficulties (Behavioral Assessment System for Children, second edition [BASC-2] Behavioral and Emotional Screening System [BESS]; Kamphaus & Reynolds, 2007), while the other method involves using multiple measures or gates that provide more information with each additional stage of screening (PBSS).

1.1. Importance of SEB screening

SEB difficulties include internalizing symptoms (e.g., those of anxiety and depression) and externalizing symptoms (e.g., those of hyperactivity and conduct problems), and can be mitigated or exacerbated by high or low levels of prosocial behavior, respectively. In our conceptualization SEB difficulties include impairments, disorders, or illnesses in the areas of social skills, emotions, behavior, and mental health.

SEB difficulties among children in the United States are a national public health concern that can no longer be ignored. Each year one out of five children endures some form of SEB difficulty, and the prevalence of such difficulties increases with age (Centers for Disease Control and Prevention, 2013). It is important to note that these prevalence rates only include children with identified difficulties; the rates would be higher if they included unidentified children. Additionally, the monetary costs of SEB difficulties among youth have approached a rate of $250 billion per year (National Research Council and Institute of Medicine, 2009). There are associated implications for society, schools, and families, including increased school dropout, incarceration, and suicide rates (National Alliance on Mental Illness, 2011), as well as increased familial stress and negatively impacted school climates. In the United States, most school doors are locked and children and teachers routinely practice drills to prepare for an assault or similar emergency.

Despite the acts of school violence and all that is known about SEB difficulty prevalence, including its relationship to psychopathology, there exists no universal national SEB screening program. For decades, children have been and continue to be screened in schools for vision and hearing difficulties, as well as for health conditions like scoliosis, following the medical model which posits difficulties are much easier and less costly to remediate in cases of early intervention and connection to appropriate treatment. Many districts and schools also screen for academic skills following the same philosophy. In a society that is pursuing success for all children, a key missing component is a focus on children's SEB well-being. Without adequate SEB health, it can be difficult to achieve academically, maintain a job, and function in society. A universal screening system for SEB difficulties, connected to preventive interventions, can identify those students most in need of assistance to avoid these negative outcomes.

If functioning properly, a universal screening system can (a) identify children at risk for SEB difficulties before symptoms progress and develop into disorders, and (b) assist in connecting at risk children and their families to appropriate preventive intervention services. Screening is a critical initial component of a multi-tiered system of supports (MTSS) for SEB difficulties. Such systems typically involve SEB programming at the universal level for all students in a population (Parisi, Ihlo, & Glover, 2014). An accurate SEB screening system identifies those students that need additional selective preventive interventions, while also providing evaluative information on universal preventive interventions. When receiving selective level programming, often as part of a group, a child is monitored for response to the preventive intervention. A child that does not respond positively is referred for a more intensive indicated preventive intervention, typically administered individually. An alternative MTSS may identify students for both the selective and indicated levels based on different threshold scores from the initial screening.

The literature on SEB difficulties states that many symptoms develop during early childhood (National Scientific Council on the Developing Child, 2008); thus it is optimal for screening of SEB constructs to begin during preschool. Unfortunately, there exists a lack of adequate screening measures for this age group (Dowdy, Ritchey, & Kamphaus, 2010), and the measures that do exist vary in their psychometric quality. We next discuss the prominent types of psychometric evidence that have been collected to evaluate SEB screeners.

1.2. Psychometric properties of existing SEB screeners

Evaluation of screening systems often involves evidence such as the reliability of their scores, agreement among raters, and relations with longer and more established measures. Reliability may be estimated by measuring the internal consistency, an indicator of the homogeny of a set of items that constitute a scale. Internal consistencies in the 0.70's can be considered moderate or fair, in the 0.80's can be considered moderately high or good, and in the 0.90's can be considered high or excellent (Murphy & Davidshofer, 2005).

Cross-informant agreement on rating scales may be characterized using Pearson correlations between sets of scores provided by multiple informants. Average correlations of behavior ratings between teachers and parents have been found in the small range in major meta-analyses of agreement studies (e.g., mean correlation of 0.27 in Achenbach, McConaughy, & Howell, 1987; mean correlation of 0.16 to 0.29, depending on construct, in Meyer et al., 2001; mean correlation of 0.25 to 0.30 depending on construct in De Los Reyes et al., 2015). Children's behavior is often context specific in that they exhibit one set of behaviors in school and exhibit an entirely different set of behaviors at home (Achenbach et al., 1987; De Los Reyes et al., 2015). The situation specificity of children's behavior highlights the importance of acquiring both teacher and parent perspectives on children's emotional and behavioral health.

Because screening systems are typically relatively brief measures used in place of more thorough assessment techniques, much of the validation evidence collected is in the form of relations to other variables, using as criteria scores from assessments that are too lengthy to be used for universal screening. This evidence may be in the form of correlations if scores from both measures are on interval scales. Correlations with magnitudes < 0.10 may be considered nonexistent, between 0.10 and 0.30 may be considered