A factor analytic investigation of the BASC-2 Behavioral and Emotional Screening System Parent Form: Psychometric properties, practical implications, and future directions ☆

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ABSTRACT

The Behavior Assessment System for Children, Second Edition (BASC-2) Behavioral and Emotional Screening System Parent Form (BESS Parent; Kamphaus & Reynolds, 2007) is a recently developed instrument designed to identify behavioral and emotional risk in students. To describe the underlying factor structure for this instrument, exploratory (EFA) and confirmatory factor analyses (CFA) were conducted utilizing two subsets of a large, nationally-representative sample. The results of the EFA suggested that the BESS Parent contained a four-factor latent structure (i.e., Externalizing, Internalizing, Adaptive Skills, and Inattention), which was supported by CFA. Results support further investigation into utilizing four subscales in addition to an overall risk score; distributional and reliability information for the BESS Parent subscales is provided. Practical implications for school psychologists interested in early identification and directions for future research are discussed.

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1. Introduction

The importance of early identification and early intervention is highlighted by the array of studies indicating that a large number of children have unidentified and untreated emotional and behavioral problems (Kataoka, Zhang, & Wells, 2002; Mills et al., 2006). Although the recommendation for universal

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screening to identify children is decades old (e.g., Cowen, Door, & Orgel, 1971), the practice of screening within schools has gained momentum more recently (Albers, Glover, & Kratochwill, 2007). This growth is due, in part, to the advances in screening methodology and instrumentation, making the practice of screening increasingly more feasible, cost-effective, and accurate (Levitt, Saka, Romanelli, & Hoagwood, 2007).

Multiple-gating screening systems have been proposed as an efficient approach to screening for emotional and behavioral problems in children (Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007). Within a multiple-gating approach, a first gate is used to screen all children within a population. For children who are identified as "at-risk" through this first gate of screening, a second gate is applied in which additional assessment takes places. This second gate can utilize a more comprehensive tool or an additional screener from a different informant (Kamphaus, Dowdy, Kim, & Chin, in press). Additional gates, involving more comprehensive assessments, continue to be applied to those identified as at-risk. In essence, more intensive, specific, and precise measurement tools are provided at each gate to narrow down the population of students to those with increased levels of risk. Multiple-gating approaches have been shown to reduce costs associated with inefficient identification and increase diagnostic accuracy (Hill, Lochman, Coie, Greenberg, & The Conduct Problems Prevention Research Group, 2004; Lochman & The Conduct Problems Prevention Research Group, 1995).

Although there is a variety of support for a multiple-gating process, questions remain about the number and the type of informants who should be included in such a process (Johnston & Murray, 2003; Kamphaus et al., in press). The child and adolescent assessment literature generally recommends collecting ratings from multiple informants (Frick, Burns, & Kamphaus, 2009). However, when working within a screening framework in which brevity and efficiency are essential, the addition of informants translates to the addition of both time and resources. In a time of educational budget cuts, which affect financial resources for assessment materials as well as staff time, brief, quick, and accurate approaches to behavioral and emotional assessment methods are needed. Therefore, utilizing a sole informant as the first gate in a multiple-gating screening approach may be the most feasible and desired option. Furthermore, there is some research to support the use of only one informant within a screening framework. In particular, evidence suggests that gathering information from multiple informants adds little variance to the identification process above and beyond what was provided by the first informant (Biederman, Keenan, & Faraone, 1990; Jones, Dodge, Foster, Nix, & The Conduct Problems Prevention Research Group, 2002; Lochman & The Conduct Problems Prevention Research Group, 1995). Therefore, perhaps only one informant is sufficient.

Initially, when the one-informant approach is selected for the first gate screening, the question then becomes which informant to utilize for maximum efficiency and efficacy. The known lack of agreement among raters (Achenbach, McConaughy, & Howell, 1987) complicates this issue and suggests that different raters provide different types of information, all of which could be valuable (Kamphaus et al., in press). The choice of which informant to utilize likely depends on a variety of factors including the age of the child, the setting in which the problem occurs, and the type of problem that is being assessed. Parents, teachers, and the children themselves each have the potential to be optimal informants depending on the situation and information sought (Smith, 2007). For example, based on a review of the literature, Smith (2007) suggested that clinicians should collect parent-reports for younger children, teacher-reports for externalizing problems in older children, and self-reports for internalizing problems in older children.

The current lack of clarity regarding what informant or informants to utilize as a first gate in a screening system, combined with seemingly paradoxical research suggesting one informant may be sufficient and other research confirming low levels of cross-informant agreement, speaks to the need for research that informs what first-gate screening practice is most efficient and accurate. In particular, further research investigating the incremental validity of using different informants at various assessment gates (Johnston & Murray, 2003) and investigating what unique information is obtained by various informants is needed. Investigations into the latent factor structure across informants (i.e., parents, teachers, and self) can determine which constructs are being measured when different raters provide screening information. Then, depending on the desired information and other contributing factors such as the age of the child, practitioners, researchers, or both can determine which rater(s) to utilize. Such advances can help move the science of screening forward so screening can be accomplished in an efficient and cost-effective manner.

The Behavior Assessment System for Children, Second Edition (BASC-2) Behavioral and Emotional Screening System (BESS; Kamphaus & Reynolds, 2007) is a recently developed set of measures consisting of brief (30 items or less) parent-, teacher-, and self-report rating scales designed to quickly screen children and adolescents in preschool through high school. The BESS manual suggests that the age of the child or