

Internalizing/Externalizing Problems: Review and Recommendations for Clinical and Research Applications

Thomas M. Achenbach, PhD, Masha Y. Ivanova, PhD, Leslie A. Rescorla, PhD,
Lori V. Turner, MA, Robert R. Althoff, MD, PhD

Objective: More than 75,000 articles have been published on internalizing and externalizing problems. To advance clinical and research applications of internalizing/externalizing concepts and data, our objectives were as follows: to provide an overview of recent research on internalizing/externalizing problems assessed at ages 1½ to 18 years; to identify issues raised by methods for assessing such problems; and to develop recommendations for more precise, consistent, informative, and productive assessment of such problems.

Method: A total of 4,870 peer-reviewed articles published from January 1, 2012 through December 31, 2014 were systematically reviewed and identified by the search terms “internalizing” or “externalizing,” followed by detailed coding of 693 articles that reported use of measures meeting criteria for methodologically sound assessment of internalizing/externalizing problems.

Results: Many articles reported data based on measures that did not meet criteria for methodologically sound assessment of internalizing/externalizing problems. The 693 articles that used measures meeting criteria for

methodological soundness and that qualified for detailed coding reported findings for 649,457 children living in 65 societies on all inhabited continents. Data were obtained from parents, teachers, children, clinicians, caregivers, and others. Samples included general population, clinical, school, at-risk, multicultural, welfare, and various ethnic/racial and socioeconomic groups. Many analytic methods were used to test associations of diverse variables with internalizing/externalizing problems.

Conclusion: The diverse procedures used to assess internalizing/externalizing problems pose challenges for clinical and research applications. To meet the challenges, recommendations are provided for using assessment instruments supported by published standardization, reliability, validity, and normative data to advance clinical services and research.

Key words: internalizing, externalizing, psychopathology, children, dimensional hierarchies

J Am Acad Child Adolesc Psychiatry 2016;55(8):647–656.

The terms “internalizing” and “externalizing” are widely used to describe 2 broad-band groupings of behavioral, emotional, and social problems. These terms were introduced in 1966 to describe factor-analytically derived groupings of problems found for clinically referred children.¹ (We use the term “children” to include adolescents.) Since 1966, these terms have been used as key words for more than 75,000 articles in peer-reviewed journals listed in PsycINFO, PubMed, and Web of Science (January 28, 2016). A 2012 special issue of the journal *Development and Psychopathology*² featured 27 articles on externalizing problems. This was followed by a 2014 special issue of the same journal that featured 25 articles on internalizing problems.³ The editors introduced the 2014 special issue by saying, “Internalizing and externalizing expressions of dysfunction comprise one of the most widely agreed upon classifications of behavior disorders in psychopathology research.”^{3(p1189)}

Other journals have also published special issues on internalizing/externalizing problems⁴ as well as meta-analyses of associations of internalizing/externalizing scores with constructs such as attachment.⁵ Moreover, analyses of associations among psychiatric diagnoses have

yielded broad-band groupings designated as internalizing and externalizing.⁶ Books have also been devoted exclusively to internalizing or externalizing problems.^{7,8}

DSM

In the introduction to the *DSM-5*, the American Psychiatric Association⁹ cites findings demonstrating that scientific efforts to validate disorders have been more useful for suggesting large groupings of disorders than for validating individual diagnostic categories. In particular, the

...clustering of disorders according to what has been termed *internalizing* and *externalizing* factors represents an empirically supported framework. Within both the internalizing group (representing disorders with prominent anxiety, depressive, and somatic symptoms) and the externalizing group (representing disorders with prominent impulsive, disruptive conduct, and substance use symptoms), the sharing of genetic and environmental risk factors, as shown by twin studies, likely explains much of the systematic comorbidities seen in both clinical and community samples.^{9(p13)}

The *DSM's* endorsement of internalizing/externalizing groupings reflects recognition of their value for guiding



Clinical guidance is available at the end of this article.

clinical and research thinking about associations among diagnoses. However, for internalizing and externalizing groupings to be clinically useful, assessment procedures are needed for determining which children have clinically elevated levels of internalizing and/or externalizing problems.

As an alternative to diagnostic categories, Insel *et al.*¹⁰ have proposed Research Domain Criteria (RDoC) as a basis for classifying psychopathology. To replace diagnostic categories, the RDoC would classify psychopathology in terms of dimensional measures of neurobiological/behavioral aspects of various hypothesized domains. The RDoC are in keeping with other transdiagnostic efforts to identify relations among problems that *DSM* portrays as categorically separate. However, the RDoC do not specify procedures for assessing children in terms of the hypothesized RDoC domains, nor do the RDoC specify constructs for phenotypic psychopathology.

Dimensional Scales for Internalizing and Externalizing Problems

Following the introduction of the terms “internalizing” and “externalizing” to describe factor-analytically derived groupings of problems,¹ reviews of empirical efforts to identify sets of co-occurring problems documented internalizing/externalizing groupings of problems in multiple studies.^{11,12} Thereafter, dimensional scales designated as internalizing and externalizing were incorporated into various instruments for assessing both child psychopathology^{13,14} and adult psychopathology.¹⁵ Moreover, ad hoc internalizing/externalizing scores have been computed from various measures in many studies.¹⁶

Hierarchical Relations Among Internalizing, Externalizing, and Other Dimensions

From their inception, internalizing and externalizing groupings have been viewed as broad-band dimensions comprising sets of narrow-band dimensional syndromes, which, in turn, comprise sets of co-occurring problems.¹ According to this hierarchical–dimensional model for psychopathology, the base of the hierarchy comprises many specific problems rated on Likert scales. Ratings of specific problems thus provide building blocks for the assessment and taxonomy of psychopathology. The next level of the hierarchy comprises dimensional syndrome scales, each of which comprises a set of mutually associated problems whose ratings are summed to yield syndrome scale scores. The succeeding level of the hierarchy includes internalizing and externalizing groupings of mutually associated syndromes. Internalizing and externalizing scale scores are computed by summing the scores for the syndromes comprising each grouping.

Hierarchical–dimensional models that span from specific problems to broad-band dimensions thus enable us to view psychopathology in ways that do not require forced choices regarding how to categorize each child. Instead of categorizing children, hierarchical–dimensional models display each child’s particular pattern of problems on profiles of

dimensional scale scores. Hierarchies of dimensional scale scores can reveal relations among problems more effectively than categories do. To alert providers to clinically elevated dimensional scores, norms are needed to provide metrics for comparing each child’s scores with scores obtained by population samples of peers.

Purposes of the Present Review

The terms internalizing and externalizing have come into widespread use for designating broad-band groupings of correlated (comorbid) behavioral, emotional, and social problems. These terms are also being widely used for groupings of comorbid diagnoses. To advance clinical and research applications of internalizing/externalizing concepts and data, our review had several purposes, as follows: first, to provide an overview of recent research on internalizing/externalizing problems by systematically reviewing articles that were published in peer-reviewed journals, that were identified via the search words internalizing or externalizing, and that reported data related to these problems; second, to identify issues raised by differences in how children’s internalizing/externalizing problems have been assessed; and third, to develop recommendations for more precise, consistent, informative, and productive clinical and research applications of internalizing/externalizing concepts and data.

The findings were intended to provide foundations for studies (e.g., meta-analyses) of associations between children’s internalizing/externalizing problems and other variables (e.g., parental psychopathology), as outlined in the Discussion section. As detailed in the Method section, we coded studies for various characteristics. Next, we examined the results for evidence on which to base conclusions about how internalizing/externalizing problems are being assessed. We then used the findings to develop recommendations for advancing clinical and research applications of internalizing/externalizing concepts and data.

METHOD

We followed guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement.¹⁷

Initial Search

We began by identifying articles listed in PsycINFO that met the following criteria:

1. They were identified via the search terms “internalizing” or “externalizing.”
2. They were in English.
3. They were published in peer-reviewed journals during the 3 years from January 1, 2012 through December 31, 2014.
4. They reported tests of associations of internalizing or externalizing scores with other variables.
5. They were not reports of instrument development, meta-analyses, reviews, or individual cases.
6. They reported data for ages 1½ to 18 years, whether or not they also included data for ages outside that range. We excluded studies that reported data only for infants or adults because we found too few qualifying studies of infants and adults to permit

Download English Version:

<https://daneshyari.com/en/article/4931742>

Download Persian Version:

<https://daneshyari.com/article/4931742>

[Daneshyari.com](https://daneshyari.com)