

Commentary: Pitfalls in the Use of Brief Screening Measures of Coping

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The construct of coping has become a central component of empirical research in pediatric psychology. This burgeoning interest in coping reflects a shift in the field towards assessing adaptive functioning in both chronically ill children and children with acute medical conditions. Unfortunately, there is no consensus about a "gold standard" measure to assess coping in pediatric psychology. The lack of a gold standard is due, at least in part, to the fact that there are many different definitions of coping and that the emphasis on type of coping varies markedly from study to study. Even in circumstances where two studies examine the same coping strategy or coping style, the items tapping this coping strategy are often quite different.

Clinical researchers also are typically interested in examining a number of factors (e.g., the health care delivery system, family factors, and certain individual traits) in addition to adaptive mechanisms, such as coping, when studying adjustment in pediatric patients. Thus, brief measures of coping are often desired. The Kidcope (Spirito, Stark, & Williams, 1988) is an example of a screening measure of coping for the clinical researcher. The Kidcope contains 10 common cognitive and behavioral coping strategies designed to cut across situations. At the same time, it was recognized that these coping strategies would not be appropriate for all situations, and that there would be times when additional items would be needed to examine certain questions. The items were not categorized into any higher order structure because the function of a particular coping strategy was believed to vary by situation. Clearly, the brevity of the Kidcope has been its greatest appeal.

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Over the years, there has been an interest in analyzing Kidcope data using a higher order factor structure (e.g., positive/negative, approach/avoidance) rather than individual coping strategies. Such summary scores are particularly helpful when using multiple regression analyses to examine the contribution of coping, among other variables, to overall adjustment. We have collected over 3,000 Kidcopes which has allowed us the opportunity to examine the factor structure of the measure using the entire sample as well as several large, well-defined subsamples (e.g., adolescents vs. children, male vs. female) and several specified situations (e.g., disease-related problems, parent/child conflict). In one instance, we had over 600 cases in which adolescents completed the Kidcope according to how they would respond to a suicidal friend. Using the entire sample, a five-item single-factor structure emerged. When divided by gender, the female sample had the same five-item structure, and the males had the same single-factor structure with one additional item. We also selected a subsample of chronically ill children and performed factor analyses for different problems selected by these patients (e.g., hospitalization, medical procedures, concerns about the progression of their disease). Both two-factor and single-factor structures emerged, depending on the type of situation. For example, a two-factor structure (i.e., approach/avoidance) emerged when the problem selected involved aversive medical procedures, but a single-factor structure resulted when the stressor was an extended period of hospitalization.

The changing factor structure described above should not be a surprise. The categorization of a coping strategy, whether it be empirical or conceptual, cannot be separated from the situation. That is, the function or classification of a coping strategy (e.g., adaptive/nonadaptive) does not remain identical across situations. Nonetheless, researchers often need a way to reduce their data prior to statistical analyses. Are there any solutions to this dilemma of varying factor structures across situations for researchers seeking global dimensions of coping? Several strategies might be considered. First, developing factors specifically for a data set is one approach. Studies must have a sufficiently large population to factor analyze the data collected in a specific project, for example, 150 to 200 subjects in the design. This often poses a problem for pediatric psychology researchers because the number of subjects available, especially for intervention studies, may be smaller than the number required for factor analysis. A second possible approach is to gather a panel of experts, describe the situation in which coping is being presented to the subjects, and then let the panel of experts decide what strategies should be grouped as positive/negative, approach/avoidance, and so on, based on the conceptual model of interest.

In the case of the Kidcope, as well as other screening measures that have a small number of items, a third option would be to examine each item or subscale. Although the brevity of scales like the Kidcope is appealing, there is a great deal of information lost in using screening measures. Thus, examining the data item

by item helps to better explore the intricacies of the coping process. Several items from the scale most pertinent to the situation could be selected a priori for use in regression analyses. When examining single items as reflecting a specific coping strategy, it is particularly important to gather test-retest reliability data in order to justify examining each item separately. Ideally, this would be done for each study. However, this would be rather time consuming and would increase the complexity of the project. Fourth, a scale with multiple items per coping subscale which has an a priori system for determining higher order scales can be used. These scales necessarily take longer than brief scales. The Self-Report Coping Survey (Causey & Dubow, 1992) is a 34-item scale which has two subscales (seeking social support and problem solving) labeled "Approach" and three subscales (distancing, internalizing, and externalizing) labeled "Avoidance." The categorization of these subscales (e.g., positive versus negative) can be decided according to the situation used in a particular research project. That is, Avoidance is not always negative nor is Approach always positive.

Finally, when coping is a primary variable of interest, there is no substitute for an interview. Interviewing children in depth about their coping strategies often enhances understanding of the nature of the coping process compared to self-report measures, particularly brief screening measures. Interviews are typically derived from a theoretical model (e.g., monitoring/blunting; Miller, Sherman, Combs, & Kruus, 1992; primary/secondary/relinquishing control strategies; Band, 1990). Consequently, summary scores for specific constructs are usually derived which most researchers find useful. Interviews increase the time needed for data collection, which is a drawback in some instances. In some projects, administering a self-report screening measure, and then interviewing subjects regarding their use of the two or three most frequently reported coping strategies, would be one way to maximize both limited resources and understanding of data collected. Considering all of these options in the design of a study will contribute substantially to the ultimate yield of a data set on coping in pediatric populations.

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