The Psychosocial Adjustment to Illness Scale—Self-Report: Factor Structure and Item Stability

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The Psychosocial Adjustment to Illness Scale—Self-Report (PAIS-SR: Derogatis & Derogatis, 1990), a frequently used measure of adjustment in medically ill adults, was subjected to several exploratory factor analyses with principal-axes factor extraction and varimax rotation procedures. The sample consisted of participants with kidney, heart, liver, lung, and bone marrow transplant candidates (N = 280). The final analysis yielded a six-factor, 26-item instrument accounting for 59% of the variance. Coefficient alpha for the 26-item measure was .87, and internal consistency estimates for the factors ranged from .50 to .86. Strong correlations with other adjustment measures commonly used in the assessment of adults with chronic physical conditions support the validity of the PAIS-SR.

The Psychosocial Adjustment to Illness Scale (PAIS: Derogatis & Derogatis, 1990; Morrow, Chiarello, & Derogatis, 1978) is a measure of adjustment commonly used in the assessment of persons with chronic physical health conditions. Originally developed for individuals with cancer and their family members, the PAIS has two versions—a self-report form (PAIS-SR) and an interview format (PAIS). Both versions are designed to assess the quality of an adult’s psychosocial adjustment to a current medical condition. The 46-item PAIS-SR provides an assessment of seven primary domains of adjustment: (I) Health Care Orientation, (II) Vocational Environment, (III) Domestic Environment, (IV) Sexual Relationships, (V) Extended Family Relationships, (VI) Social Environment, and (VII) Psychological Distress.

Information concerning the factor structure of the PAIS-SR is inconsistent and limited. In the PAIS manual, Derogatis and Derogatis (1990) presented the original exploratory factor analysis (EFA) based on the assessment of 120 adults with lung cancer. Seven dimensions were identified in the analysis, and the hypothesized dimensional structure of the PAIS was supported. However, this analysis was performed only on data from the interview version, and the sample size was relatively small by most standards. Several items did not load on the intended scales of adjustment, whereas other items did load on intended scales. Items that did not load on the intended scales were still labeled according to their original intended classification. Also, internal consistency reliability coefficients for the PAIS-SR were reported in the manual, but only for a small, homogeneous sample of adults with heart disease (n = 69).

In a more recent study using a large sample (N = 502) of adults with cancer, Merluzzi and Martinez Sanchez (1997) found factor analytic support for the original seven domains, and they provided evidence for internal consistency and construct validity. Cronbach’s alpha coefficients for the scales were generally higher (range = 0.61 to 0.92) than those for the original PAIS-SR scales, and correlations between the PAIS-SR and other measures of adaptation were significant and in the expected direction. Although the Merluzzi and Martinez Sanchez (1997) factor analysis did support a seven-factor solution, several items did not load on the original rationality derived scales of adjustment. When taken together, the two published factor analyses of the PAIS-SR are not in complete agreement as to which items consistently load on which factors.

The primary purpose of this study was to further examine the stability of the PAIS-SR. In particular, it seemed most important to empirically test items that consistently formed factors across several studies. In this study we illustrate the similarities and differences in item loadings across the studies by Derogatis and Derogatis (1990) and Merluzzi and Martinez Sanchez (1997) and the current study. In addition, we examine the internal consistency and construct validity of the PAIS-SR. Using only those items loading consistently across all three studies, we hypothesize (a) confirmation of the original factor structure, (b) excellent overall internal consistency, and (c) significant relationships between poorer psychosocial adjustment as measured by the PAIS-SR and lower levels of health-related quality of life, higher symptom frequency, more symptoms of depression and anxiety, and greater use of coping strategies characterized by avoidance. Regarding this latter hypothesis, we expect that (a) lower levels of depression (Beck Depression Inventory, BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), anxiety (State-Trait Anxiety Inventory, STAI; Spielberger, 1970), and general mental health problems (SF–36 Health Survey; Ware, 1993) will be significantly correlated with healthier scores on the PAIS-SR Psychological Distress scale; (b) higher levels of physical functioning, general health, and vitality (SF–36 Health Survey) will be associated with healthier scores on the PAIS-SR Vocational Environment and Sexual Functioning scales; (c) higher levels of social functioning (SF–36 Health Survey) will be significantly correlated with healthier scores on the PAIS-SR Social Environment and Relationship with Partner and...