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Profiles of adolescent stress: The development of the adolescent stress questionnaire (ASQ)

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Abstract

The importance of stress in the understanding of adolescent health and well-being is widely documented. The measurement of adolescent stress has however been subjected to sufficient methodological and conceptual criticism in recent times to warrant a concerted re-evaluation of the exercise. This study sought information on the nature of adolescent stressors, building on a previous instrument developed by the first author to ask adolescents themselves to inform the development of a pool of new items reflecting stressor experience and to advise on the wording of these items to comprehensively assess that experience. This pool of items was then administered as a self-reported questionnaire to a large sample of school-age adolescents ($N > 1000$) together with a scale to assess the intensity of distress arising from stressor occurrence. Principal components analysis of the questionnaire yielded 10 internally reliable dimensions of adolescent stress, the nature of which were consistent with the available literature on adolescent stressor experience. Scales constructed from this PCA related positively to measures of anxiety and depression, and negatively to a measure of self-esteem, suggesting that they were valid measures of adolescent stress. Test–retest reliability was good for all scales. The resultant Adolescent Stress Questionnaire (ASQ) is therefore suggested to have potential for the measurement of adolescent stress in both research and clinical contexts.

Keywords: Adolescent stress; Measurement scale

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Introduction

Of all life-stages adolescence is arguably the one most marked by rapid and potentially tumultuous transition (Brockman, 2003; Cook & Furstenberg, 2002). This is to be seen not just in the domain of biological development where changes are externally manifest (Siefert & Hoffnung, 2000) but is equally evident in the progression of both cognitive (Eccles, Wigfield, & Byrnes, 2003) and psychosocial (Muzi, 2000) maturity from that of childhood to that of the fully functioning adult. While the transition through adolescence is inevitable (Price, 1985) the speed and magnitude of these changes overtax the capacity of many young people to cope (Collins, 2001; Davis, 2003; Jessor, 1993) and the resulting phenomenon of adolescent stress is now well recognized (Byrne & Mazanov, 2002).

The experience of stress at whatever age is acutely uncomfortable (Ursin & Olff, 1993); what is more important however is the capacity of stress to adversely affect individual states of health either through direct impact or through the mediation of health risk behaviours (Rice, 1999). The time course over which stress might be expected to influence the development of significant physical pathology is probably too great for any reliable association between stress and somatic illness to become evident in adolescence (Mandler, 1984). There is persuasive evidence however that the experience of adolescent stress relates consistently to the occurrence of psychiatric symptomatology of clinical significance (Grant, Compas, Thurm, McMahon, & Gipson, 2004; West & Sweeting, 2003), including depression (Deardorff, Gonzales, & Sandler, 2003; Diaz, Symantov & Rickert, 2002; van der Wal, de Wit, & Hirasing, 2003), suicidal ideation (Diaz et al., 2002) and actual risk of suicide (Johnson et al., 2002). In this regard, and in line with the broader base of evidence on adolescent stress (Byrne & Mazanov, 2002) girls seem to be more vulnerable in the face of adversity than boys (Brooks, Harris, Thrall, & Woods, 2002; Stevens, Murphy, & McKnight, 2003).

But adolescence is also a time when risks are laid down for chronic conditions which will only become manifest in later adulthood. The experience of adolescent stress has been systematically associated with a range of health compromising lifestyles and behaviours (Larouche, 1998; Murphy et al., 2001; Neumark-Sztainer, Story, French, & Resnick, 1997) including the failure to control obesity (Mellin, Neumark-Sztainer, Story, Ireland, & Resnick, 2002), physical inactivity (Allison, Adlaf, Ialomiteanu, & Rehm, 1999), early and possibly heavy alcohol use (Allison et al., 1999; Udry, Li, & Hendrickson-Smith, 2003) and the onset of cigarette smoking (Byrne & Mazanov, 2003; Tyas & Pederson, 1998). There can be no doubt therefore that the experience of adolescent stress constitutes an issue of central importance to the broader understanding of adolescent health. In this context the availability of a valid and reliable instrument with which to measure adolescent stress is essential.

The methodology surrounding the measurement of stress has long been controversial and this applies just as strongly to studies of adolescents (Mullis, Young, Mullis, & Raltage, 1993; Grant et al., 2004) as it does to the more widely researched area of adult stress (Henderson, Byrne, & Duncan-Jones, 1981). The issue of interview versus inventory (or self-report questionnaire) approaches has been debated for both age groups but while there is some attraction in the experiential and contextual detail which interview methods may elicit they are both time consuming and labour intensive, and not therefore practical for large sample studies of adolescent health; moreover, they lack anonymity and may not therefore yield truly unbiased information in