

Age and gender differences in social anxiety symptoms during adolescence: The Social Phobia Inventory (SPIN) as a measure

Klaus Ranta^{a,b,*}, Riittakerttu Kaltiala-Heino^{a,c}, Anna-Maija Koivisto^{a,d},
Martti T. Tuomisto^{e,f}, Mirjami Pelkonen^{g,h}, Mauri Marttunen^{g,h,i}

^a School of Public Health, University of Tampere, Tampere, Finland

^b Department of Adolescent Psychiatry, Turku University Central Hospital, Turku, Finland

^c Psychiatric Treatment and Research Unit for Adolescent Intensive Care (EVA), Tampere University Hospital, Tampere, Finland

^d Research Unit, Tampere University Hospital, Tampere, Finland

^e Department of Psychiatry, Tampere University Hospital, Tampere, Finland

^f Department of Psychology, University of Tampere, Tampere, Finland

^g Department of Adolescent Psychiatry, University of Kuopio and Kuopio University Hospital, Finland

^h National Public Health Institute, Department of Mental Health and Alcohol Research, Helsinki, Finland

ⁱ Peijas Hospital, Department of Adolescent Psychiatry, Helsinki University Hospital, Vantaa, Finland

Received 24 March 2005; received in revised form 26 June 2006; accepted 7 December 2006

Abstract

The aim of the present study was to examine age and gender differences in social anxiety symptoms during adolescence, and to investigate the psychometrics of the Social Phobia Inventory (SPIN) among adolescents. The SPIN was administered to a large general population sample ($n=5252$) of Finnish adolescents aged 12–16 years. Age and gender trends in scores and internal consistency and factorial composition of the SPIN were examined in this sample. The test–retest reliability of the SPIN was examined in a smaller sample of adolescents ($n=802$). Results showed that girls scored higher than boys on the SPIN full scale and three subscales across the whole age range. Eighth graders (14- to 15-year-olds) scored higher than seventh and ninth graders on the full scale, for boys the differences were significant. Good test–retest reliability ($r=0.81$), and internal consistency ($\alpha=0.89$) were found for the SPIN. An exploratory factor analysis (EFA) performed on a random half ($n=2625$) of the population sample yielded a one-factor model accounting for 38% of the variance between items. This one-factor model, plus an alternative three-factor model, were examined in the holdout half of the population sample ($n=2627$) by means of a confirmatory factor analysis (CFA). Some support was gained for both factor structures. Our results indicate that symptoms of social phobia may increase in mid-adolescence. The SPIN appears to be a reliable self-report instrument among adolescents.

© 2007 Elsevier Ireland Ltd. All rights reserved.

Keywords: Reliability; Factor structure; Adolescents; Social phobia

1. Introduction

Social phobia (SP) is a common anxiety disorder causing significant impairment. In epidemiological samples the onset of SP has been found to occur in

* Corresponding author. Department of Adolescent Psychiatry, Turku University Central Hospital, Kunnallissairaalan tie 20, 20700, Turku, Finland. Tel.: +358 2 3131722; fax: +358 2 3133580.

E-mail address: klaus.ranta@tyks.fi (K. Ranta).

early to mid-adolescence, the mean age of onset being 10 to 16 years of age (Wittchen and Fehm, 2001). In European adolescent samples from general population the prevalence of DSM-IV social phobia is 2–3% (Essau et al., 1999; Wittchen et al., 1999). In addition to SP as a clinical disorder, a significant percentage of adolescents, 27–47%, reports at least one social fear, the most common being fear of speaking in public (Essau et al., 1999; Wittchen et al., 1999).

In adolescence social anxiety may cause significant impairment in both educational activities and in making friendships (La Greca and Lopez, 1998; Beidel et al., 1999). Longitudinal studies suggest that adolescent anxiety disorders may be risk factors for affective or anxiety disorders in adulthood (Pine et al., 1998), and that SP, specifically, is associated with an elevated risk for major depression or development of hazardous alcohol use in subsequent years (Stein et al., 2001; Zimmermann et al., 2003).

Gender differences in SP showing a preponderance of females over males of as much as 2 to 1 have been found among adolescents (Essau et al., 1999; Wittchen et al., 1999). The rise in the prevalence of SP has been reported to be twofold between ages 12–13 and 14–15 (Essau et al., 1999).

In the case of social fears or heightened social anxiety, mixed developmental patterns have been reported. Essau et al. (1999) reported a peak in social fears among 14- to 15-year-olds in comparison to 12- to 13-, and 16- to 17-year-olds in Germany. Olivares et al. (1999) found different patterns for boys and girls in symptoms of social anxiety in the age range of 14–17 years in a Spanish sample; for boys a continuous decrease from 14 to 17 years, for girls a decrease from 14 to 15 years, and again a rise at 16 or 17 years. Community surveys from the U.S.A. suggest that early to mid-adolescence (approximately 11 to 14 years of age) is associated with higher levels of self-reported social anxiety than later adolescent years for both genders (Inderbitzen-Nolan and Walters, 2000; Storch et al., 2004).

With the increasing options to treat SP in adolescence (Kendall, 1994; Beidel et al., 2000; Spence et al., 2000; Masia et al., 2001), the development of effective, easy-to-use, and age-sensitive screening instruments and diagnostic tools for the assessment of adolescent SP has become all the more important.

In the past research two self-report questionnaires have been developed to assess specifically social anxiety or SP among children and adolescents: the *Social Anxiety Scale for Adolescents* (SAS-A) (La Greca and Lopez, 1998) – an adaptation of the Social Anxiety Scale for Children-Revised (SASC-R) (La Greca and Stone,

1993) for use among adolescents – and the *Social Phobia and Anxiety Inventory for Children* (SPAI-C) (Beidel et al., 1995). Besides these, the *Social Worries Questionnaire-Pupil* (SWQ-PU) (Spence, 1995), a 13-item instrument, is available for measuring social anxiety among children and adolescents. Support has also been found for the validity of the *Social Phobia and Anxiety Inventory* (SPAI) (Turner et al., 1989) as used with adolescents (Clark et al., 1994).

Item domains assessing social anxiety among children and adolescents are also included in the multi-dimensional self-report instruments covering a broader range of anxiety symptoms such as the *Screen for Child Anxiety Related Emotional Disorders* (SCARED), the *Screen for Child Anxiety Related Emotional Disorders-revised version* (SCARED-R) (Birmaher et al., 1999; Muris et al., 1999), and the *Multidimensional Anxiety Scale for Children* (MASC) (March et al., 1997).

While reliable and valid, the usefulness of the SPAI and the SPAI-C for purposes of screening for SP may be limited because of the requirement for multiple scoring on several items and the time required in completing the scales. The SAS-A may be better suited to the assessment of cognitive components of SP because it contains no items measuring physiological arousal.

The *Social Phobia Inventory* (SPIN) (Connor et al., 2000), a brief 17-item measure of generalized SP, assesses a range of avoidance behaviors, physical symptoms and social fears. The SPIN has demonstrated solid psychometric properties when used with healthy adult volunteers and psychiatric patients. It is capable of distinguishing between subjects with and without SP, and of measuring treatment response. Items assessing fear, avoidance, and physiological distress make up the three subscales (fear, avoidance, and physiological subscales) (Connor et al., 2000).

In a clinical sample of adults with SP, a principal components analysis (PCA) of the SPIN yielded five main factors loading on items measuring fear and avoidance of talking to strangers and in social gatherings (factor I), fear and avoidance of criticism and embarrassment (factor II), physiological symptoms (factor III), fear and avoidance of people in authority (factor IV), and avoidance of being the center of attention and public speaking (factor V) (Connor et al., 2000).

Due to its brevity and simple design, the SPIN appears suitable for use both in epidemiological research and as a clinical screening instrument, also indicating its potential applicability among adolescents. However, further evidence for the usefulness of the SPIN in adolescent population samples is needed.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات