ORIGINAL ARTICLE

The assessment of emotional and Behavioural problems: Internal structure of The Strengths and Difficulties Questionnaire

Javier Ortuño-Sierra\textsuperscript{a}, Edurne Chocarro\textsuperscript{a}, Eduardo Fonseca-Pedrero\textsuperscript{a,b,*}, Sylvia Sastre i Riba\textsuperscript{a}, José Muñiz\textsuperscript{b,c}

\textsuperscript{a} Universidad de La Rioja, Spain
\textsuperscript{b} Centro de Investigación Biomédica en Red de Salud Mental (CIBERSAM), Spain
\textsuperscript{c} Universidad de Oviedo, Spain

Received 12 February 2015; accepted 22 May 2015
Available online 22 June 2015

Abstract The main purpose of this study was to analyze the internal structure and measurement invariance across gender and age of the Strengths and Difficulties Questionnaire (SDQ), self-reported version, in Spanish adolescents. The sample consisted of 1,547 participants, 606 were male (39.1%), with a mean age of 15.15 years (SD=1.99). Results from the confirmatory factor analysis showed a five-factor model and a bifactor model with correlated errors added as the most appropriate. Nevertheless, the bifactor model displayed lower and non-significant factor loadings. The hypothesis of measurement invariance of the SDQ scores across gender and age was supported. The level of internal consistency of the Total difficulties score was .84, ranging between .71 and .75 for the SDQ subscales. The study of the psychometric properties showed that the Spanish version of the SDQ, self-reported form, seems to be an adequate tool for the screening of emotional and behavioural problems during adolescence. Future research should analyze the internal structure of the SDQ in other regions and testing the measurement invariance across cultures.

© 2015 Asociación Española de Psicología Conductual. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

KEYWORDS
Adolescents; Factorial structure; Measurement Invariance; SDQ; Instrumental study

PALABRAS CLAVE
Adolescentes; estructura factorial; invarianza de medición;

E-mail address: eduardo.fonseca@unirioja.es (E. Fonseca-Pedrero).

http://dx.doi.org/10.1016/j.ijchp.2015.05.005
1697-2600/© 2015 Asociación Española de Psicología Conductual. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
Interest in the detection of children and adolescents at-risk for emotional disorders or behavioural problems has increased in the last two decades (Blanco et al., 2015; Carli et al., 2014; Fonseca-Pedrero, Paino, Lemos-Giráldez, & Muñiz, 2013). Despite the efforts in early detection, different research studies have suggested that only a minority of the adolescent population with needs of intervention in the area of mental health comes in direct contact with specialized services (Costello, Copeland, & Angold, 2011; Ford, Hamilton, Meltzer, & Goodman, 2008). Early detection, identification and treatment of those individuals at-risk may delay or prevent the onset of the clinical outcome; however prior to early identification and prevention efforts, we need brief, well-validated, and psychometrically sound assessment tools.

The assessment of emotional and behavioural problems in children and adolescents is a priority issue for public health policy. The Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) is a screening tool for behavioural and emotional problems that similarly allows the assessment of capacities in the social sphere. The SDQ is composed of 25 items, Likert response format with three options, which are grouped into five subscales: Emotional symptoms, Conduct problems, Hyperactivity, Peer problems, and Prosocial behaviour. The first four subscales form a Total difficulties score. In total, 15 items reflect problems and 10 strengths, of which five belong to the Prosocial subscale and five should be recoded, since they belong to the Total difficulties score. The inclusion of these positive items increased the acceptability of the instrument between parents and teacher. Moreover as it addresses contemporary issues like impulsiveness or bullying is widely accepted by clinicians.

Specifically, psychometric properties of the SDQ have been analyzed previously and different types of validity evidence, according to the international Standards, have been gathered (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014). Previous studies have indicated an adequate reliability scores in the self-report version of the SDQ (Gómez, 2012; Muris, Meesters, & van den Berg, 2003); nevertheless, a significant number of studies have detected low values of reliability through Cronbach’s alpha coefficient (α < .60), especially in the subscales of Conduct problems and Peer problems (Capron, Therond, & Duyme, 2007; Mellor & Stokes, 2007; Muris & Maas, 2004; Ranning, Helge Handegaard, Sourander, & March, 2004; Ruchkin, Jones, Vermeiren, & Schwab-Stone, 2008; Ruchkin, Koposov, & Schwab-Stone, 2007; Yao et al., 2009).

Factorial studies conducted in order to test the internal structure of the SDQ scores, self-reported version, yielded contradictory results. Previous studies, using confirmatory factor analysis (CFA), have supported the five-factor model (Emotional symptoms, Conduct problems, Hyperactivity, Peer problems, and Prosocial behaviour) as the most appropriate solution (He, Burstein, Schmitz, & Merikangas, 2013; Ruchkin et al., 2008; Svedin & Priebe, 2008; Van Roy, Veenstra, & Clench-Aas, 2008; Yao et al., 2009); however, other studies concluded that a solution with three dimensions was as satisfactory as the five-factor solution (Percy, McCrystal, & Higgins, 2008; Ruchkin et al., 2008). The three-factor model is composed by: a) Internalizing symptoms, resulting of the Emotional and Peer problems subscales, b) Externalizing symptoms, comprising Conduct problems and Hyperactivity subscales, and c) the Prosocial subscale. Also, a five-factor model with two second order factors (Internalizing and Externalizing) (Goodman, Lamping, & Ploubidis, 2010) has been proposed. Nonetheless, Mellor and Stokes (2007) reported that none of the five subscales was essentially one-dimensional, questioning the adequacy of the internal structure of the five-factor solution.

Other research, likewise, discussed the adequacy of the setting of SDQ subscales, indicating that the factorial structure of the SDQ scores was not appropriate or was needed of modifications (Ortuño-Sierra, Fonseca-Pedrero, Paine, Sastre i Riba, & Muñiz, 2015; Percy et al., 2008; Ranning et al., 2004). One of the added values of the SDQ, the inclusion of several positive items, could be a key factor in explaining low levels in Cronbach’s alpha coefficient and the inconsistency of factorial solutions (Ortuño-Sierra et al., 2015). The fact that the difficulties subscales include these type of items can mean that they behave as part of a distinct construct (Dickey & Blumberg, 2004; van de Looij-Jansen, Goedhart, De Wilde, & Treffers, 2011).
دریافت فوری متن کامل مقاله

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