Journal of Psychiatric Research 101 (2018) 28–33

Contents lists available at ScienceDirect

Journal of Psychiatric Research

journal homepage: www.elsevier.com/locate/jpsychires

Construct validity and parent–child agreement of the six new or modified disorders included in the Spanish version of the Kiddie Schedule for Affective Disorders and Schizophrenia present and Lifetime Version DSM-5 (K-SADS-PL-5)

Francisco R. de la Peña[a], Marcos F. Rosetti[b], Andrés Rodríguez-Delgado[a], Lino R. Villavicencio[a], Juan D. Palacio[c], Cecilia Montiel[d,e], Pablo A. Mayer[f], Fernando J. Félix[g], Marcela Larraguibel[h], Laura Viola[i], Silvia Ortiz[b], Sofía Fernández[i], Aurora Jaímes[b], Miriam Feria[a], Liz Sosa[a], Lino Palacios-Cruz[a], Rosa E. Ulloa[f,*]

[a] *Instituto Nacional de Psiquiatría Ramón de la Fuente Muñiz, Ciudad de México, Mexico*
[b] *Universidad Nacional Autónoma de México, Ciudad de México, Mexico*
[c] *Departamento de Psiquiatría, Facultad de Medicina, Universidad de Antioquia, Medellín, Colombia*
[d] *Universidad de Zulia, Maracaibo, Venezuela*
[e] *Centro de Estudios de Postgrado, Universidad Latina de Panamá, Ciudad de Panamá, Panama*
[f] *Hospital Psiquiátrico Infantil Juan N. Navarro, Ciudad de México, Mexico*
[g] *Hospital Psiquiátrico Gustavo León Mojica, Aguascalientes, Mexico*
[h] *Clínica Psiquiátrica Universitaria, Facultad de Medicina, Universidad de Chile, Santiago de Chile, Chile*
[i] *Departamento de Psiquiatría Pediátrica del Hospital de Niños La Española, Facultad de Medicina, Montevideo, Uruguay*

ARTICLE INFO

Keywords:
K-SADS-PL
Parent-child agreement
DSM-5
Multicenter study

ABSTRACT

Changes to the Diagnostic and Statistical Manual of Mental Disorders fifth edition (DSM-5) incorporate the inclusion or modification of six disorders: Autism Spectrum Disorder, Social Anxiety Disorder, Intermittent Explosive Disorder, Disruptive Mood Dysregulation Disorder, Avoidant/Restrictive Food Intake Disorder and Binge Eating Disorder. The objectives of this study were to assess the construct validity and parent-child agreement of these six disorders in the Spanish language Schedule for Affective Disorders and Schizophrenia for School Age Children Present and Lifetime Version (K-SADS-PL-5) in a clinical population of children and adolescents from Latin America. The Spanish version of the K-SADS-PL was modified to integrate changes made to the DSM-5. Clinicians received training in the K-SADS-PL-5 and 90% agreement between raters was obtained. A total of 80 patients were recruited in four different countries in Latin America. All items from each of the six disorders were included in a factor analysis. Parent-child agreement was calculated for every item of the six disorders, including the effect of sex and age. The factor analysis revealed 6 factors separately grouping the items defining each of the new or modified disorders, with Eigenvalues greater than 2. Very good parent-child agreements ($r > 0.8$) were found for the large majority of the items (93%), even when considering the sex or age of the patient. This independent grouping of disorders suggests that the manner in which the disorders were included into the K-SADS-PL-5 reflects robustly the DSM-5 constructs and displayed a significant inter-informant reliability. These findings support the use of K-SADS-PL-5 as a clinical and research tool to evaluate these new or modified diagnoses.

1. Introduction

The semi-structured diagnostic interview Schedule for Affective Disorders and Schizophrenia for School-Age Children, Present and Lifetime Version (K-SADS-PL), which is based in the Diagnostic and Statistical Manual of Mental Disorders (DSM, fourth edition) (APA, 1994; Kaufman et al., 1997), has been validated in its Spanish version (Ulloa et al., 2006). Recently, the Spanish version of the K-SADS-PL was modified in order to integrate the changes made to the fifth edition (DSM-5) (APA, 2013), especially regarding six new or modified

* Corresponding author. Hospital Psiquiátrico Infantil Juan N. Navarro, Av. San Buenaventura S/N Col. San Buenaventura, Tlalpan, Ciudad de México, Mexico.
E-mail address: eulloa@hotmail.com (R.E. Ulloa).

https://doi.org/10.1016/j.jpsychires.2018.02.029
Received 4 December 2017; Received in revised form 26 February 2018; Accepted 28 February 2018

disorders: Autism Spectrum Disorder (ASD), Social Anxiety Disorder (SAD), Intermittent Explosive Disorder (IED), Disruptive Mood Dysregulation Disorder (DMDD), Avoidant/Restrictive Food Intake Disorder (ARFID) and Binge Eating Disorder (BED).

1.1. Validity of the six diagnoses

There were several changes in the DSM-5, the manner in which disorders are grouped (i.e. ASD), in their diagnostic criteria (i.e. SAD and IED), as well as the addition of new disorders (i.e. DMDD, ARFID and BED) (APA, 2013). Changes for ASD included the removal of a subdiagnosis, arrangement of diagnostic criteria into two domains (social communication/interaction and restrictive and repetitive behaviors) instead of three and an independent evaluation of symptom severity for each diagnostic domain. These changes have been reported to result in higher specificity, sensitivity and stability for ASD (Frazier et al., 2012; Gibbs et al., 2012; Huerta et al., 2012; Mandy et al., 2012; McPartland et al., 2012; Tahery and Perry, 2012). Changes in the diagnostic criteria for SAD focused on a fear of performance evaluation, making it a generalized disorder rather than a phobia (APA, 2013). The inclusion of these new criteria points towards SAD as a valid diagnosis in children and adolescents (Bögels et al., 2010). Changes in IED diagnostic criteria addressed the lack of definition and frequency of aggressive behavior (APA, 2013); validity studies lead to an improved detection of subjects with recurrent and problematic impulsive aggressive behavior (Coccaro, 2012; Coccaro et al., 2014, 2017). DMDD was incorporated into the DSM-5 in order to provide a diagnostic location for chronic irritability instead of considering it as bipolar non-specific manifestation (Rao, 2014); nevertheless DMDD and bipolar disorder present phenotypes that commonly overlap in clinical settings (Mitchell et al., 2016). Furthermore, DMDD could not be differentiated from Oppositional Defiant Disorder (ODD) in a general population child sample study (Mayes et al., 2016) nor in a clinical research setting (Axelson et al., 2012), which in turn suggests a low diagnostic delimitation of the DMDD construct with other disorders. A previous diagnosis, Feeding Disorder of Infancy and Early Childhood, was rearticulated as Feeding and Eating Disorders (FED) to include subjects of all ages. This FED dimension includes BED and ARFID. An extensive review examining the evidence for BED in reference with DSM-5 diagnostic criteria supports the duration/frequency criterion and emphasizes the importance of loss of control and marked distress as a primary marker around binges (Wilfley et al., 2016). Clinical (Fisher et al., 2014; Nicely et al., 2014) and non-clinical (Kurz et al., 2015) studies have reported that patients with ARFID are distinct from those with other FED. Restrictive eating disturbances in a non-clinical middle childhood sample were evaluated using the Eating Disturbances in Youth-Questionnaire, identifying three variants of early-onset restrictive eating disturbances and weight problems, inadequate overall food consumption, limited accepted amount of food and food avoidance based on a specific underlying fear (Kurz et al., 2016).

Given that these changes have been only recently incorporated and have resulted in large quantitative and qualitative modifications, new validity studies in diagnostic clinical interviews are needed.

1.2. Parent-child agreement

Diagnostic clinical interviews often involve summarizing information from both, parents and their children. Investigations using multi informants have shown a moderate to high agreement between parents and adolescents with ASD about behavioral, emotional and functioning problems (Jepsen et al., 2012). There are no specific reports of parent-child agreement for SAD, but across studies that use different structured or semi-structured interviews appeared that children are better informants describing their mental states, somatic symptoms and relational problems than their parents (Reutersköld et al., 2008; Weems et al., 2011). A similar situation occurs with IED. While there are no studies describing parent-child agreement about this disorder, some studies in youths with Disruptive Behavior Disorders (DBD) have shown a low correlation between parents and offspring reports (Nguyen et al., 1994), yet other reports show that parents provide better information than children describing externalized disorders (Edelbrock et al., 1986). Parent-child agreement in the questionnaire on eating and weight patterns showed no concordance in terms of the number or type of binge eating, overeating episodes or compensatory weight control behaviors (Steinberg et al., 2004). No information was found describing parent–child agreement for neither DMDD nor ARFID. In order to understand the variability between parent-child responses, for instance, in terms of age and sex, inter-informant reliability studies for these six new or modified disorders are needed.

The main objectives of the present research were to establish construct validity and evaluate parent-child agreement for the six new or modified disorders included in the Spanish version of the K-SADS-PL-5.

2. Materials and methods

2.1. Ethical considerations

The present research was approved by the Internal Review Boards of participant institutions. All participants signed the informed assent and consent forms.

2.2. Study participants

The sample was composed of children and adolescents ($n = 80$, 6–18 years old) referred for medical-psychiatric evaluation in any of the 7 clinical sites from the four participating countries (see *Sites Description* below), from February to August 2016. Both, the parent/guardian and the child/adolescent were interviewed for 1 to 4 sessions, each lasting from 30 to 120 min.

Full diagnostic information of subjects in the current sample can be found in a supplementary table.

2.3. Instrument description

The K-SADS-PL-5 is a semi-structured diagnostic interview designed to summarize the information provided by the parent/guardian, child/adolescent and other sources of information into a clinical diagnosis. A trained clinician conducts the interview and uses both parent/guardian and child/adolescent responses to establish the better clinical estimation for each of the symptoms in every disorder. With this interview it is possible to determine temporality, either as current (last six months) or past episodes. This study only took into consideration those identified as current disorders. The K-SADS-PL-5 is integrated by a set of screening questions as well as six supplemental questionnaires. The screening process includes an introductory interview covering the reason for consultation and general patient data as well as a screening section of the primary symptoms of each disorder. When at least one symptom is scored as definitive in the summary, the evaluation of the disorder is completed in the corresponding supplement. In order to fulfill the aims of this research all items for the six new or modified disorders were completed in the screening section. The General Assessment Function Scale (GAF) and the World Health Organization Disability Assessment Schedule (WHODAS) were also integrated into the screening. Supplement 1 includes Depressive and Bipolar Disorders, Supplement 2 includes Psychotic Disorders, Supplement 3 includes Anxiety, Stress and Obsessive Compulsive Disorders, Supplement 4 includes Behavior Impulse and Control Disruptive Disorders, Supplement 5 includes Substance Use Disorders and FED and the supplement 6 includes Neurodevelopmental Disorders.