A cluster analysis of school refusal behavior: Identification of profiles and risk for school anxiety

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ABSTRACT

The aim of this study was to identify the different school refusal behavior profiles and to determine whether these profiles differ from one another based on four situational factors, three response systems and the total score on school anxiety. 1113 Spanish students (52.29% boys) aged 8–12 years ($M = 9.53$; $SD = 1.10$) were recruited. The School Refusal Assessment Scale-Revised and the School Anxiety Inventory for Children were administered. Non-School Refusers, School Refusers by Positive Reinforcement, School Refusers by Negative Reinforcement and School Refusers by Mixed Reinforcement were identified. The Mixed Reinforcement group was the most maladaptive profile in terms of school anxiety as compared to the non-school refusers and positive reinforcement groups. Practical implications of the research are discussed.

1. Introduction

School refusal behavior is a heterogeneous construct that subsumes different manifestations of school attendance problems such as truancy, school refusal, school phobia (Kearney, 2003, 2008), including those cases that justify the refusal to attend school in terms of manifesting (or not) emotional difficulties or anxiety symptoms (García-Fernández et al., 2016; Inglés, Gonzálvez, García-Fernández, Vicent, & Martínez-Monteagudo, 2015). On the other hand, school anxiety refers to a set of cognitive, motor and psychophysiological reactions that individuals express in school situations and that are determined to be threatening, ambiguous and/or dangerous (García-Fernández, Inglés, Marzo, & Martínez-Monteagudo, 2014).

It is estimated that up to 28% of students report school refusal behavior at some point during their academic career (Kearney, 2001, 2007; Pina, Zerr, & Gonzales, 2009). To these figures, the negative consequences associated with this problem may be added, such as low academic performance (Barry, Chaney, & Chaney, 2010; Thornton, Darmody, & McCoy, 2013; Yahaya et al., 2010), worse emotional adjustment (Nelemans et al., 2014; Sanmartín et al., 2017), higher risk of presenting behavioral problems, consumption of narcotic substances and/or alcohol (Dembo et al., 2013, 2016), or sleep problems (Bauducco, Tillfors, Özdemir, Flink, & Linton, 2015; Fukuda et al., 2010).

1.1. School refusal behavior profiles

Currently, the functional model proposed by Kearney and Silverman (1993) is a classification system that establishes four types of school refusal behavior and represents the main causes that maintain this conduct. The first two functions refer to school refusal

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behavior maintained by negative reinforcement (Avoidance of school- based stimuli that provoke Negative Affectivity [ANA] and Escape from aversive Social/Evaluative situations [ESE]). The latter two functions refer to school refusal behavior maintained by positive reinforcement (Pursuit of Attention from Significant Others [PAS] and Pursuit of Tangible Reinforcement outside of school [PTR]).

There are multiple causes of school refusal behavior, therefore, proposals that consider this group to be homogeneous without bearing in mind that more than one cause can act as an explanatory factor within the same group are rejected (Gonzálvez et al., 2017; Sanmartín et al., 2017). However, there is little previous scientific literature on the identification of the different profiles of school refusal behavior. In this field, it is important to highlight the study by Dube and Orpinas (2009) who analyzed the profiles of school refusal behavior in a sample of 99 US students with attendance problems (M = 12.5; SD = 1.38; range = 8–15 years). Three different profiles were distinguished: a mixed school refusal profile that combines explanatory factors formed by positive (to gain positive tangible rewards) and negative (to avoid fear- or anxiety- producing situations and escape from adverse social or evaluative situations) reinforcements; a profile of school refusal by positive reinforcement, which only includes factors related to obtaining the care from loved ones or receiving tangible external reinforcements to school; and a non-school refusal profile. Despite these findings, a number of limitations arise from the theoretical review since no subsequent research has been found to support the formation of these profiles, either in other countries or in larger samples (Inglés et al., 2015).

1.2. School refusal behavior and school anxiety

Much of the scientific literature examining the relationship between school refusal behavior and other variables has reported that students who base their rejection of school on negative reinforcement show a positive and significant correlation with generalized anxiety disorders, social anxiety and depression (Haight, Kearney, Hendron, & Schafer, 2011; Kearney & Albano, 2004). On the contrary, students whose school refusal is justified by the achievement of tangible reinforcements outside the school obtain significantly positive correlations with externalizing behaviors such as oppositional defiant disorder (Dahl, 2016; Ingul, Klockner, Silverman, & Nordahl, 2012). On the other hand, regarding those students who base their rejection of the school on obtaining the attention of others, it has been evidence-supported that they are associated with both internalizing (separation anxiety disorder) and externalizing (oppositional defiant disorder) problems (Kearney & Albano, 2004).

While numerous studies have analyzed the relationship between school refusal and various anxiety disorders (Haight et al., 2011; Kearney & Albano, 2004), a knowledge gap exists with regards to its relationship with school anxiety. Only the study performed by Gómez-Núñez et al. (2017) with a sample of 1003 Spanish children between 8 and 12 years of age (M = 10.03; SD = 1.25) has been found. The results revealed that school refusal behavior acted as a positive predictor of high anxiety scores in School Punishment Anxiety when the refusal to attend school was based on the avoidance of school situations that generate negative affectivity (negative reinforcement), on the escape of aversive social situations or evaluation (negative reinforcement) and on obtaining attention from significant individuals (positive reinforcement). School Punishment Anxiety refers to anxiety provoked by school failure (e.g. "repeat course") and others related to school punishment (e.g., "if I get caught cheating on a test"). Despite these findings, the mentioned work only evaluated a situational dimension of school anxiety and a broader analysis is necessary in order to determine the relationship between school refusal behavior and the different school situations that can generate anxiety (School Punishment Anxiety, Victimization Anxiety, Social Evaluation Anxiety and School Evaluation Anxiety) and the three response systems (Cognitive, Behavioral and Psychophysiological).

1.3. The present study

In order to solve the limitations identified from the theoretical review, the aim of this study was twofold: (1) to identify the school refusal behavior profiles in a representative sample of Spanish children through cluster analysis and (2) to establish new empirical evidence on the relationship between school refusal behavior profiles and school anxiety. Based on these objectives, the following research questions have been formulated: (1) how many school refusal behavior profiles arise from the combination scores of the four factors of the SRAS-R? and (2) do differences exist in the school anxiety scores between the profiles identified?

According to the functional model proposed by Kearney and Silverman (1993) and the school refusal behavior profiles identified by Dube and Orpinas (2009), four different groups (e.g. Non-school refusal, School Refusal by Positive Reinforcement, School Refusal by Negative Reinforcement, and School Refusal by Mixed Reinforcement) were expected to be found. Regarding the findings of Goméz-Núñez et al. (2017), it was expected that the School Refusal by Mixed Reinforcement profile would obtain higher scores on school anxiety than the other profiles.

2. Method

2.1. Sample

This study took place in Spain and a normative sample of students without absenteeism data were recruited using a cluster random sampling through five geographical areas (center, north, south, east and west) of the province of Alicante. Sixteen primary schools from rural and urban areas participated and four classrooms were randomly selected from each school, with approximately 91 participants per center.

The initial sample consisted of 1256 children from 3rd to 6th grade of Primary Education. Although at least one member of the