

ANXIETY PROBLEMS IN SCHOOL STUDENTS: A REVIEW OF THE SCIENTIFIC LITERATURE BETWEEN THE YEARS 2015-2020

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ABSTRACT

This study presents a systematic review conducted on anxiety in school students with the objective of analyzing the causes and consequences of this mental health problem in school students, through a systematic review from the years 2015 to 2020. For this purpose, a search was carried out in important scientific databases such as: Scopus, EBSCO and SciELO, using the most important keywords related to the topic. Selection criteria were applied to those papers that do not meet the proposed characteristics, through a rigorous selection process detailed by the search process flow of the PRISMA model. The main conclusions were the factors that could be considered as predictors of anxiety in children as the loss of habits and routines and psychosocial stress, children in poverty with problems of family cohesion and family dysfunctionality, as well as the socioeconomic level and nutritional status. Results show it is important to design prevention and early intervention programs in childhood and adolescence from the framework of transdiagnostic cognitive behavioral therapy, as well as to establish intervention proposals to promote prosocial behaviors in the educational institution.

Keywords: Systematic review, anxiety problems, school students.

INTRODUCTION

Mental health is the state of well-being in which the individual develops his or her skills, overcomes the normal stresses of life, works productively and fruitfully, and contributes something to his or her community, and therefore, not only the absence of conditions or illnesses. Since the 1970s, mental health came to be considered as a problem within public health, requiring an interdisciplinary and multisectoral vision by the State, in order to prevent it and avoid the economic burden it entails (Ticona, 2014).

Within the problem of mental health is school anxiety that is closely related to school phobia, considered as a serious difficulty to attend or remain in school regularly due to excessive and irrational fear associated with various school situations, which is a factor that impairs the social and cognitive development of children, such as having difficulty concentrating or maintaining such concentration, memorizing, organizing information, etc. In addition, if its intensity reaches pathological levels, experiences of fear, dread, alarm, panic can be manifested, these problems also associated with school rejection (Delgado et al., 2019).

In that sense, in order to contribute to the research, the following question was posed: What are the causes and consequences of anxiety in school

students between 2015 and 2020? On the other hand, the aim of the study was to know the causes and consequences of anxiety in school students between the years 2015 to 2020.

METHODOLOGY

The study corresponds to a systematic review of scientific articles elaborated between the years 2015 to 2020, this with the purpose of knowing that it has been investigated referring to the problem of *anxiety in school students*. This type of systematic review, as described by Vera (2009), Guirao-Gooris et al. (2008) and others, aims to examine the published literature and place it in a certain perspective, where the information found is summarized and analyzed through a search using rigorous procedures. The compilation of the information was carried out using the main scientific databases such as *Scopus*, *EBSCO*, *Scielo*, using terms or keywords such as: *Systematic review*, *anxiety* problems, *school students*, mainly works written in English, Spanish and/or Portuguese. Those articles were selected since they contained information related to anxiety problems in school students, during the years 2015 to 2020, in addition to having qualitative, quantitative and / or mixed approaches.

Selection and evaluation process

A total of 75 scientific articles were identified (20 in *EBSCO*, 30 in *SciELO*,

25 in *Scopus*). After going through the selection process according to the detailed inclusion and exclusion criteria, as well as those duplicate works, these were reduced to 15 articles that refer strictly to *anxiety*

in school students, as can be seen in Figure 1, referring to the *selection flow of the PRISMA model unit of analysis* (Coronel et al., 2020).

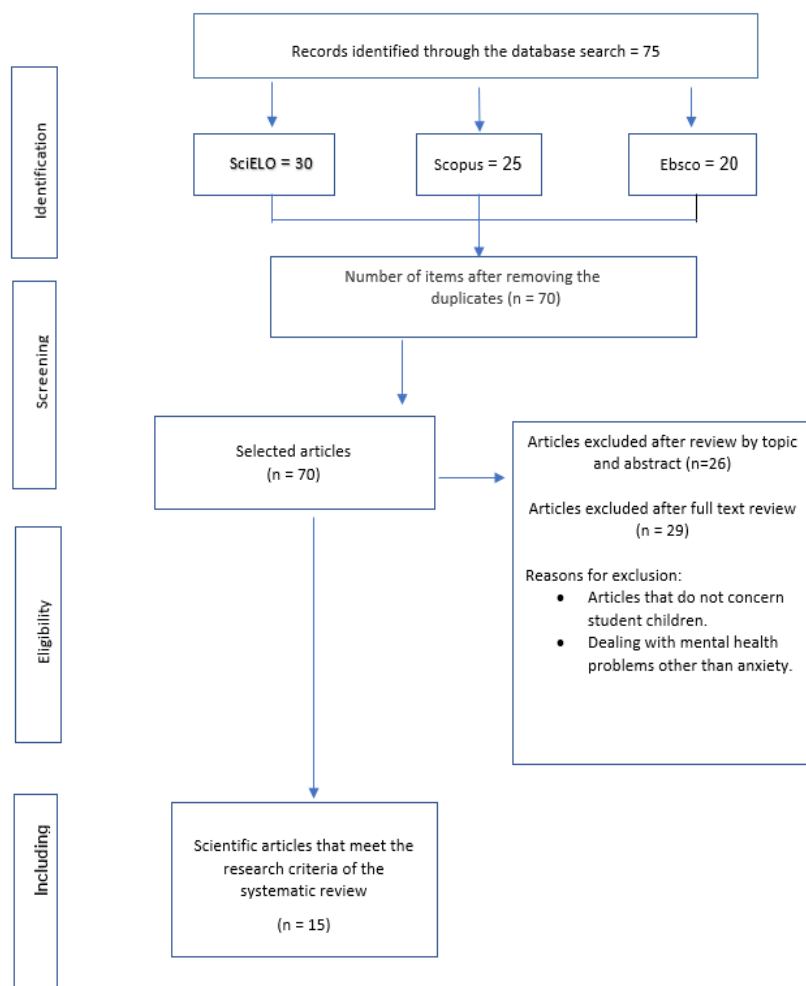


Figure 1. PRISMA model analysis unit selection flowchart (Coronel et al., 2020).

RESULTS

The search for information was carried out in the databases *EBSCO*, *SciELO*, *Scopus*, where a total of 75 research papers were found, which after going through the selection criteria, 15 articles were chosen (Table 1).

Table 1. *Choice of articles*

Database	Initial quantity	Final quantity
EBSCO	20	2
SciELO	30	2
Scopus	25	11
Total	75	15

Source: Own elaboration.

The coding process of the selected data was carried out, transferring them into a matrix with respect to the name of the article, its reference, year of publication, the population and sample studied, the instrument applied, the result of the study and the contribution achieved (Table 2).

Table 2. *List of selected articles*

	AUTHOR	TITLE	COUNT RY	POPULATI ON AND SAMPLE	INSTRUMENT	QUALIT ATIVE	QUANTIT ATIVE	CONCLUSIONS / RESULTS
1	(Espada et al., 2020)	Good Practices in Child and Adolescent Psychological Care before COVID-19	Spain	Children of China		x		Two factors that may be affected are loss of habits and routines and psychosocial stress, according to early studies reflecting on the psychological impact of COVID-19 quarantine.
2	(Lora-Muñoz & Moreno-García, 2016).	Negativism, anxiety, and social withdrawal as predictors of attention deficit hyperactivity disorder symptomatology	Spain	259 boys and 241 girls	Scale for the evaluation of ADHD. List of symptoms of oppositional defiant disorder in DSM-IV-TR State/Trait Anxiety Questionnaire in Children BAS. Socialization Battery 1, 2, 3.		x	The variables most implicated in the increase of attention deficit hyperactivity disorder are state anxiety, oppositional defiant symptoms and social withdrawal.

33	(Lagos et al., 2018)	Differences in school anxiety as a function of sex and academic year in a sample of Chilean elementary school students	Chile	1639 girls and 1573 boys and ages between 8 and 15 years.	Coopersmith Self-Esteem Inventory School Anxiety Inventory for Primary Education	x	The results indicate that girls present significantly higher levels of anxiety than boys, although of a small magnitude. With respect to the academic year, statistically significant differences are observed between 4th and 5th grades, between 4th and 6th grades, and between 5th and 6th grades.
44	(Delgado et al., 2019)	School anxiety as an explanatory variable of cyberbullying in Spanish elementary school students	Spain	548 students (50.2% boys) in 5th and 6th grades of Primary Education.		x	Possible risk factors for being victimized, aggressor and aggressor-victimized, which makes possible a characterization of each role through school anxiety that allows improving the effectiveness of preventive strategies. The findings are discussed

							highlighting school anxiety as an explanatory variable of acting as a victim, aggressor and aggressor-victimized of cyberbullying, which can guide in the development of effective prevention programs. About half of the children had a tendency to present anxiety states, with a predominance of female adolescents and with risk factors such as age, sex and having some FGD.
55	(Velasco-Benitez et al., 2020).	Anxiety status and trait anxiety in Colombian schoolchildren and adolescents with and without functional gastrointestinal disorders	Colombia	Children aged 8-18 years who were identified as having functional gastrointestinal disorders (FGIDs)	Screen for Child Anxiety Related Disorders-Parent/Child Report (SCARED-C/P)	x	
66	(Zuppardo et al., 2020).	The Impact of Dyslexia on Self-Esteem, Social-Emotional Behavior and Anxiety in Schoolchildren	Italy	Children and adolescents with dyslexia (n = 41) were	Multidimensional Anxiety Scale for Children (MASC)	x	Students with dyslexia showed a lower level of self-esteem and higher levels of behavioral problems than their peers without difficulties.

				compared to their peers in the same class without difficulties (n = 25).			Although they presented more anxiety in general, the differences were significant only in social and separation anxiety. Due to its repercussions at school level, it is urgent to consider measures to remedy the consequences associated with learning difficulties, working directly on the emotional dimensions affected and reducing the academic difficulties of these students, as well as reflecting on the didactic methodologies in the class group.
77	(Cervantes-Perea et al., 2019).	Resilience, anxiety, poverty and depression in children in two Colombian cities	Colombia	The sample consisted of 73 students, aged 10-12 years old (22	Spence Children's Anxiety Scale (SCAS)	x	Children and youth experiencing poverty have an elevated rate of Depression and a high risk of Anxiety Disorders, which at the same time can be linked to substance abuse,

				females and 51 males), all of them			delinquency, suicide and other significant psychological disorders.
88	(Borgeaud et al., 2017).	Problems in separation from the theory of transitional phenomena in children diagnosed with separation anxiety disorder.	Chile			Case Study	The present investigation, supposes the existence of a relation between the problematic ones in the separation and the experience of the transitional thing in the dyad and contributes to the understanding of this relation from Winnicott's theory of the transitional phenomena.
99	(Aguilar- Yamuza et al., 2019).	Relationship between parenting style and depression and anxiety in children between 3 and 13 years old	Spain	554 children (288 boys and 266 girls) between the ages of 3 and 13, together	Child and Adolescent Behavioral Assessment System (BASC), and parenting style according to the Parental Parenting	x	Children with high anxiety scores tended to have parents with low levels of support, discipline and autonomy, together with a low level of satisfaction with parenting and role distribution in the mother. Finally, the usefulness of

				with their parents.	Questionnaire (PCRI-M) and different family variables.		these results for the development of parenting programs based on specific aspects of daily educational practice is discussed.
110	(Fernández- Martínez et al., 2019).	Effectiveness of the program Super Skills For Life in reducing symptoms of anxiety and depression in young Spanish children	Spain	123 Spanish- speaking children recruited from 10 schools.	Transdiagnostic prevention program designed for children with symptoms of anxiety and depression based on Super Skills for Life (SSL) cognitive- behavioral therapy.	x	The intervention significantly reduced emotional symptoms of anxiety and depression. Significant improvements were also found in symptoms of specific anxiety disorders and in the interference of anxiety in the child's life. It is therefore a valuable resource for the early reduction of anxiety and depression symptoms in young Spanish-speaking children.
111	(Ferrer et al., 2018)	Relationship of adolescent anxiety and depression with two transdiagnostic	Spain	314 adolescents (145 boys and 169	Childhood Anxiety and Depression Scale Revised;	x	Results confirmed that perfectionism (socially oriented and self-oriented) and rumination (negative

		mechanisms: perfectionism and rumination		girls) aged between 12 and 17.	"Ruminative Responses Scale" (RRS) and the "Perfectionism Scale for Adolescents and Children" (CAPS).			rumination and reflection) are associated with general anxious and depressive symptomatology and with disorder-specific symptoms. The findings have relevant implications for the design of prevention and early intervention programs in childhood and adolescence within the framework of transdiagnostic cognitive behavioral therapy.
112	(Vaz et al., 2020)	Behavior problems, anxiety, and social skills among kindergarteners	Brazil	38 preschooler s (52.6% girls)	Difficulties and Difficulties Questionnaire (SDQ), Preschool Anxiety Scale (PAS) and Preschool Social Behaviors Scale (PKBS-BR).	x		Correlation between anxiety, behavioral problems and social skills was verified, reinforcing the interdependence between aspects of socioemotional development. These findings can subsidize intervention proposals to promote pro-social behaviors at school.
	(Martínez-	Effectiveness of	Spain				Systematic	These interventions may be

113	Escribano et al., 2017).	mindfulness-based interventions for the treatment of anxiety in children and adolescents: a systematic review				review		effective in children and adolescents with anxiety symptoms and/or disorders. However, it is still a developing field, made up of studies with multiple limitations, and therefore requires further research.
114	(Escalante-Izeta et al., 2016).	Nutritional variables associated with anxiety and body self-perception in Mexican children according to the presence of overweight/obesity.	Mexico	259 boys and girls between eight and 12 years old who were not overweight /obese vs. 326 who were overweight /obese in three public schools in the State of	Reynolds and Richmond's Manifest Anxiety Scale (CMAS-R)		x	Participants who were not overweight/obese presented greater satisfaction with their body image (68.3%). No differences were found between BMI and total anxiety, nor with each of its dimensions.

115	(Álvarez-Villaseñor et al., 2020).	Anxiety in the presence of food in schoolchildren in Baja California Sur	Mexico	Mexico. 406 schoolchildren from 8 to 13 years of age	Does not indicate	x	There is an association between anxiety, socioeconomic level and nutritional status. Anxiety in the presence of food was present in 54.7% of the cases.
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The selected articles, as can be seen in Figure 1, where developed in the following countries Spain with 7 out of 15 articles chosen (Espada et al., 2020; Lora-Muñoz & Moreno-García, 2016; Delgado et al., 2019; Aguilar-Yamuza et al., 2019; Fernández-Martínez et al., 2019; Ferrer et al., 2018; and, Martínez-Escribano et al., 2017). Also articles from Colombia with 2 out of 15 articles

(Velasco-Benitez et al., 2020; and, Cervantes-Perea et al., 2019); Chile also with 2 out of 15 articles; also from Mexico with 2 out of 15 selected articles (Escalante-Izeta et al., 2016; (Álvarez-Villaseñor et al., 2020); finally there are articles from Italy (Zuppardo et al., 2020), and Brazil (Vaz et al., 2020) with one article each.

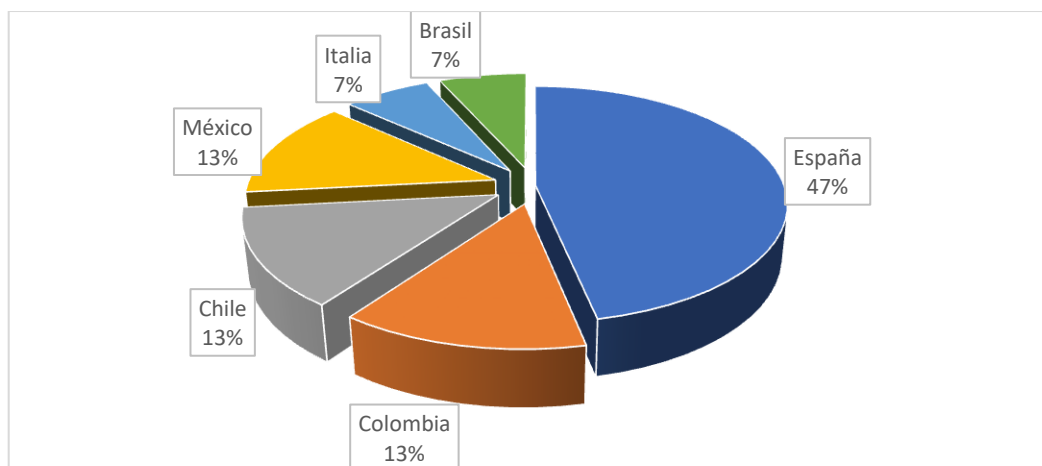


Figure 2. Sources of the selected articles.

Regarding the research approach, most of the studies correspond to quantitative studies with 11 of the 15 articles chosen (Lora-Muñoz & Moreno-García, 2016; Lagos et al., 2018; Velasco-Benitez et al., 2020; Zuppardo et al., 2020; Cervantes-Perea et al., 2019; Aguilar-Yamuza et al., 2019; Fernández-Martínez et al., 2019;

Ferrer et al., 2018; Vaz et al., 2020; Escalante-Izeta et al., 2016; Álvarez-Villaseñor et al., 2020). The qualitative papers are 2 of 15 selected articles (Espada et al., 2020) (Delgado et al., 2019); a systematic review paper (Martínez-Escribano et al., 2017) and a case study (Borgeaud et al., 2017)

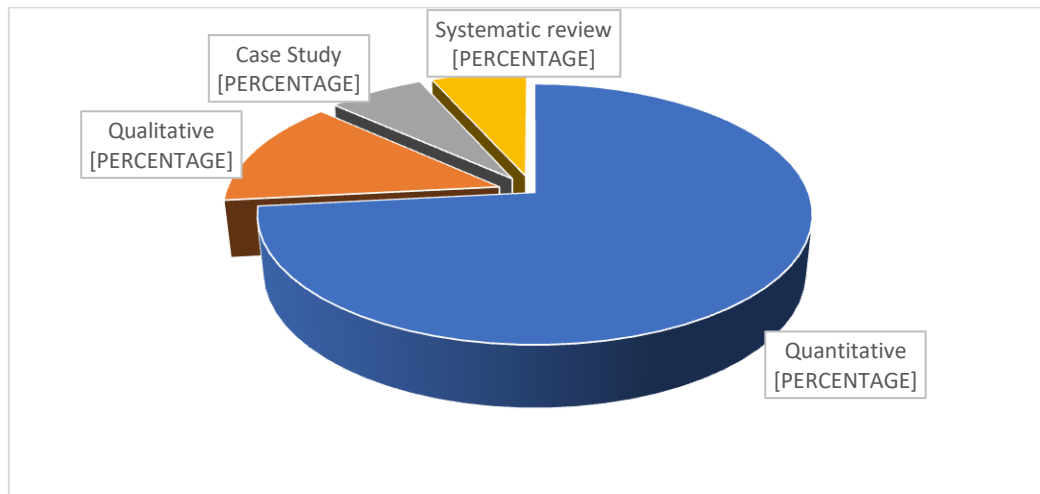


Figure 3. Focus of the selected articles

As for the types of instruments used, they were the Scale for the evaluation of ADHD. List of symptoms of oppositional defiant disorder in the DSM-IV-TR; Questionnaire of state/trait anxiety in children; BAS. Socialization Battery 1, 2, 3. and Coopersmith Self-Esteem Inventory (Lora-Muñoz & Moreno-García, 2016); the School Anxiety Inventory for Primary Education (Lagos et al., 2018); the Screen for Child Anxiety Related Disorders-Parent/Child Report (SCARED-C/P) (Velasco-Benitez et al., 2020); the Multidimensional Anxiety Scale for Children (MASC) (Zuppardo et al., 2020); the Spence Children's Anxiety Scale (SCAS) (Cervantes-Perea et al., 2019); the Behavioral Assessment System for Children and Adolescents (BASC), and parenting style according to the Parental Parenting Questionnaire (PCRI-M) and different family variables (Aguilar-Yamuza et al., 2019); the Transdiagnostic Prevention Program designed for children with symptoms of anxiety and depression

based on Super Skills for Life (SSL) cognitive-behavioral therapy (Fernández-Martínez et al., 2019); the Revised Child Anxiety and Depression Scale; "Ruminative Responses Scale" (RRS) and the "Perfectionism Scale for Adolescents and Children" (CAPS) (Ferrer et al., 2018); the Difficulties and Difficulties Questionnaire (SDQ), Pre-School Anxiety Scale (PAS) and Pre-School Social Behaviors Scale (PKBS-BR) (Vaz et al., 2020); and, Reynolds and Richmond's Manifest Anxiety Scale (CMAS-R) (Escalante-Izeta et al., 2016).

DISCUSSION

Factors that could be considered as predictors of anxiety in children, especially, due to the psychological impact of COVID-19 quarantine, is the loss of habits and routines and psychosocial stress, according to the first studies reflecting on this issue (Espada et al., 2020); and that could be reflected in attention deficit and hyperactivity (Lora-Muñoz & Moreno-García, 2016).

This problem affects in greater proportion, according to the studies reviewed in girls (Lagos et al., 2018; Velasco-Benitez et al., 2020); as well as in children in poverty, which at the same time can be related to the consumption of psychoactive substances, delinquency, suicide and other significant psychological disorders (Cervantes-Perea et al., 2019). Similarly, children with family cohesion problems and family dysfunctionality, have a tendency to suffer from anxiety (Borgeaud et al., 2017), as they also tended to present parents with low levels of support, discipline and autonomy, along with a low level of satisfaction with parenting and role distribution in the mother (Aguilar-Yamuza et al., 2019); behavioral problems and social skills, reinforcing the interdependence between aspects of socioemotional development (Vaz et al., 2020). As confirmed by Álvarez-Villaseñor et al. (2020), referring that socioeconomic level and nutritional status can also be considered predictors of anxiety in children.

In this sense, it is important to design prevention and early intervention programs in childhood and adolescence from the framework of transdiagnostic cognitive behavioral therapy (Ferrer et al., 2018); as well as to establish intervention proposals to promote pro-social behaviors at school (Escalante-Izeta et al., 2016). Although these interventions can be effective in children and adolescents with anxiety symptoms and/or disorders; however, it is still a developing field, formed by studies with multiple limitations, so it requires further

research (Martínez-Escribano et al., 2017).

CONCLUSIONS

Mental health is the state of well-being in which the individual realizes his or her capabilities, overcomes the normal stresses of life, works productively and fruitfully, and contributes something to his or her community; and, therefore, not merely the absence of disease or illness. Within the problem of mental health is *school anxiety* which is closely related to school phobia, considered as a serious difficulty to attend or remain in school regularly due to excessive and irrational fear associated with various school situations.

From the studies reviewed, it was found that among the factors that could be considered predictors of *anxiety* in children, especially due to the psychological impact of the COVID-19 quarantine, is the loss of habits and routines and psychosocial stress, which would be affecting girls to a greater extent; in those who could be found in situations of poverty; in children with problems of family cohesion and family dysfunction; with parents with a low level of support, discipline and autonomy; the consumption of psychoactive substances, delinquency, suicide and other significant psychological disorders; in children with problems of family cohesion and family dysfunctionality; with parents with low levels of support, discipline and autonomy; as well as those children in families with low socioeconomic status and poor nutritional status.

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