

FROM SELF-KNOWLEDGE TO SELF-CONCEPT: REVIEW ON CONSTRUCTS AND INSTRUMENTS FOR CHILDREN AND ADOLESCENTS¹

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ABSTRACT. This study aimed to identify the material available in the literature about the self-knowledge and to find instruments to assess this construct aimed at the audience of children and adolescents, based on Cognitive-Behavioral Therapy. As a method, a literature review was performed in the PubMed, PsycINFO, Lilacs and Scielo databases. During the choice of descriptors, there was an overlap between the concepts self-knowledge and self-concept. From this, both concepts were treated as synonyms, adopting the term self-concept to refer to the two concepts. The search resulted in 11 articles that met the selection criteria. The studies were published from 2008 to 2018, with varied objectives, ranging from health problems to psychic symptoms and disorders in childhood and/or adolescence; self-concept was shown to be related to greater well-being and quality of life. In addition, seven instruments were found to assess self-concept in childhood and/or adolescence, two of which were adapted to the Brazilian population. In conclusion, there are still few studies in the literature on this subject, as well as a lack of instruments to assess it in the Brazilian population of children and adolescents. Thus, this study confirmed that self-knowledge is a complex and multidimensional construct and the need for further studies in the area.

Keywords: Self-knowledge; children and youth self-concept scale; literature review.

DO AUTOCONHECIMENTO AO AUTOCONCEITO: REVISÃO SOBRE CONSTRUTOS E INSTRUMENTOS PARA CRIANÇAS E ADOLESCENTES

RESUMO. O objetivo deste trabalho foi identificar o que há na literatura sobre o autoconhecimento e encontrar instrumentos disponíveis para avaliar tal construto voltado para o público de crianças e adolescentes, embasados na Terapia Cognitivo-

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Comportamental. Como método, foi desenvolvida uma revisão de literatura nas bases de dados PubMed, PsycINFO, Lilacs e Scielo. Durante a escolha dos descritores notou-se uma justaposição entre os conceitos autoconhecimento e autoconceito. A partir disso, ambos os conceitos foram tratados como sinônimos, adotando o termo autoconceito para se referir aos dois conceitos. A busca resultou em 11 artigos que atenderam aos critérios de seleção. Sobre os estudos, os anos de publicação variaram de 2008 a 2018, com objetivos variados, englobando desde problemas envolvidos com a saúde até sintomas e transtornos psíquicos na infância e/ou adolescência. O autoconceito mostrou se relacionar ao maior bem-estar e qualidade de vida. Além disso, foram encontrados sete instrumentos que avaliam o autoconceito na infância e/ou adolescência, sendo dois com adaptação para a população brasileira. Concluiu-se que ainda há poucos estudos na literatura sobre esse assunto, como também uma lacuna de instrumentos para avaliá-lo na população brasileira infanto-juvenil. Dessa forma, este estudo confirmou que o autoconhecimento é construto complexo e multidimensional e que há a necessidade de mais estudos na área.

Palavras-chave: Autoconceito; escala de autoconceito infanto-juvenil; revisão de literatura.

DEL AUTO CONOCIMIENTO AL AUTO CONCEPTO: REVISIÓN SOBRE CONSTRUCTOS E INSTRUMENTOS PARA NIÑOS Y ADOLESCENTES

RESUMEN. El objetivo de este estudio fue identificar qué hay en la literatura sobre el autoconocimiento y encontrar instrumentos disponibles para evaluar este constructo dirigido al público de niños y adolescentes, basado en la terapia cognitivo-conductual. Como método, se desarrolló una revisión de la literatura en las bases de datos PubMed, PsycINFO, Lilacs y Scielo. Durante la elección de los descriptores, hubo una yuxtaposición entre los conceptos de autoconocimiento y autoconceito. A partir de esto, ambos conceptos fueron tratados como sinónimos, adoptando el término autoconceito para referirse a ambos conceptos. La búsqueda arrojó 11 artículos que cumplieron con los criterios de selección. Con respecto a los estudios, los años de publicación oscilaron entre 2008 y 2018, con objetivos variados, desde problemas de salud hasta síntomas y trastornos psíquicos en la infancia y / o adolescencia, se demostró que el autoconceito se relaciona con un mayor bienestar y calidad de vida. Además, encontramos siete instrumentos que evalúan el autoconceito en la infancia y / o adolescencia, dos con adaptación a la población brasileña. Resulta que todavía hay pocos estudios en la literatura sobre este tema, así como una brecha de instrumentos para evaluarlo en la población juvenil brasileña. Por lo tanto, este estudio confirmó que el autoconocimiento es una construcción compleja y multidimensional y la necesidad de realizar más estudios en el área.

Palabras clave: autoconocimiento; escala de autoconceito de niños y jóvenes; revisión de literatura.

Introduction

Studies and interventions with a focus on mental health promotion have been growing in the sphere of primary care. The promotion of mental health aims to encourage

the healthy development of the individual, considered an additional strategy to effectively and productively carry out their daily activities, seeking well-being for themselves and a healthy relationship with the environment. Mental health encompasses some psychosocial dimensions, such as positive emotions, perceived quality of life, positive psychological and social functioning, as well as a sense of belonging to groups. In this sense, it is understood that mental health is not simply the absence of mental disorders, it also involves the individual's perception of their well-being and quality of life (McAllister, Knight, & Withyman, 2017).

One of the tools that can help in this process of individual perception is self-knowledge. This is considered by the World Health Organization a skill for life and defined as the "[...] ability to recognize yourself, including your character, strengths and limitations, desires and disappointments" (World Health Organization [WHO], 1997, p. 2), does not cover only the set of ideas of how a person sees themselves, but also how they behave (Goleman, 2006). According to Aránega, Sánchez and Pérez (2019), self-knowledge helps to manage unpleasant emotions and is part of emotional awareness, in which the individual is able to identify mood states, apply and manage them according to the situations experienced. Thus, self-knowledge enables individuals to recognize when they are stressed or feeling under pressure, and they can be influenced at all times by the situations they experience and the behavioral responses of other people (Vazire & Wilson, 2012).

In addition, self-knowledge can often be a prerequisite for the development of empathy and, consequently, result in effective communications and healthier interpersonal relationships, knowledge of resources and limitations associated with the norms and rules of the social environment in which it operates, as well as the consequences of these for themselves. Thus, self-knowledge includes: a) personal resources (ability to observe yourself, recognize your own resources and be able to express them and have self-control); b) external resources (perception of support from the family, community and institutions); c) personal difficulties (recognition of deficits, difficulties and sources of stress) (Aránega et al., 2019; Del Prette & Del Prette, 2017).

Because self-knowledge is a life skill, it can be learned or improved at any stage of the life cycle. However, the earlier the person develops it, the more likely they are to face the challenges of everyday life in a positive and adaptive way (WHO, 1997). Some studies emphasize the importance of self-knowledge in childhood and adolescence, stating its great impact on daily behavior, reflecting on decision-making and school success and, consequently, on future professional careers (Vazire & Wilson, 2012).

According to Subasree and Nair (2014), self-knowledge helps children and adolescents to understand their own value, building their confidence to face everyday situations. It is in this scenario that self-knowledge is seen as a health promotion tool, as it is related to the increase in individual resources and skills that favor well-being and psychological health (Oliveira, 2012).

Among the approaches that meet the principles of mental health promotion, Cognitive-Behavioral Therapy (CBT) stands out. This is a psychological approach that has been referenced in the literature, especially with regard to health promotion programs, due to the use of strategies and interventions with positive results in this area (Murta & Barletta, 2015). Thus, according to these authors, CBT is directly related to health promotion, as it enhances the positive aspects of mental health, acting on some factors of subjective well-being.

One of the focuses of the CBT is to expand functional beliefs in relation to the cognitive triad, in addition to enhancing the interpretation and understanding of the environment in a functional way, enabling adaptation and coping strategies. In this sense, considering that the CBT works with beliefs related to yourself and others and intensifies individual resources, it favors the development of a positive sense of self-knowledge, based on the identification of thoughts, feelings, behaviors and bodily reactions (Murta & Barletta, 2015). Thus, the earlier a person understands this process of recognizing their thoughts and distortions and how they affect emotional and behavioral responses, the more likely they are to develop adaptive and healthy thoughts and behaviors (Friedberg et al., 2014).

Based on this idea, it is understood that mapping the repertoire of self-knowledge in children and adolescents can be an alternative for outlining interventions and helping to minimize future problems (Justo, Santos, & Andretta, 2017). One of the ways for such mapping is to describe in a standardized way the frequency and intensity of repertoires of behaviors, attitudes and skills, a process that is part of the psychological assessment. Among all the aspects that involve the large area of psychological assessment, the in-depth study of the construct stands out, as it is the initial stage of any work that contains measurements of an object of study (American Education Research Association, 2014; Pasquali, 2010).

Self-knowledge is a complex construct that involves different domains. Due to its multiplicity, it is related to different concepts, such as self-monitoring (Del Prette & Del Prette, 2017), self-concept (Sisto & Martinelli, 2004), self-control (Sisto, Rueda, & Urquijo, 2010) and self-esteem (Peixoto, 2003). Nevertheless, this overlapping of concepts ends up leading to imprecise understandings of these constructs and the consequent difficulty in properly measuring them.

In this context, considering the complexity of self-knowledge, the gap in reviews of self-knowledge and its instruments, and the need to improve instruments and interventions with this subject, the objective of this study was to carry out a review to identify the material available in the literature about the self-knowledge construct and, through this, to find the instruments available to assess such a construct aimed at the public of children and adolescents, based on CBT.

Method

To meet the proposed objective, the literature review method was used. According to Botelho, Cunha and Macedo (2011, p. 123), the literature review is “[...] the first step towards the construction of scientific knowledge [...]”, as it is through it that new theories and the recognition of gaps in the existing literature emerge. It is noteworthy that there are several ways of preparing literature synthesis that, depending on the research objective, have different methodological steps. This review followed the steps: 1- identification of the topic and selection of the research question; 2- establishment of inclusion and exclusion criteria; 3- identification of pre-selected and selected studies; 4- categorization of selected studies; 5- analysis and interpretation of results; 6- presentation of the review/synthesis of knowledge; as well as the PICO strategy was used to define the research question (Botelho et al., 2011). This, in turn, resulted in two questions “What is there in the literature about self-knowledge and what are the existing instruments for the infant-juvenile age group for its assessment?”.

To select the descriptors, the Health Sciences Descriptors (DeCS) were initially used and the terms were searched in Portuguese, English and Spanish, but there was no result found when searching for self-knowledge and its translations. Because of this, a search was also made in the Medical Subject Headings (MeSH). In this system, when considering 'self knowledge', the search was directed to 'self concept', then, later, we returned to DeCS in search of 'self-concept' and the same was found. Based on this process, self-concept and self-knowledge were adopted as a unified construct.

Another descriptor used was 'cognitive therapy', which, according to the MeSH hierarchy, encompasses all other associated terms, such as 'cognitive behavioral therapy'. It is noteworthy that we chose this descriptor, due to the theoretical basis of this study. The other terms 'child', 'adolescent', 'adult' were found in the descriptors. Finally, the following descriptors were used: *autoconceito*, 'self concept', *autoconcepto*, *Terapia Cognitiva*, 'cognitive therapy', *criança*, 'child', *niño*, 'adolescent', *adolescente*, *adulto*, 'adult'.

Data were collected in November and December 2018 and this search was updated in August 2019. This collection was carried out in journals indexed in the following regional and international bibliographic databases: PUBMED, PSYCINFO, LILACS - Latin American and Caribbean Literature in Health Sciences, and SciELO - Scientific Electronic Library Online. The specific search used for each of the bases is listed in Table 1:

Table 1. Description of searches performed in the respective databases

Databases	Search
PUBMED and PSYCINFO	((‘self concept’[Abstract]) AND ((child OR adolescent) NOT adult) AND (cognitive therapy))
SCIELO and LILACS	((autoconceito OR self concept OR autoconcepto [Ab]) and ((criança OR child OR niño OR adolescente OR adolescent) NOT adulto OR adult) AND (terapia cognitiva OR cognitive therapy))

Source: The authors.

The text selection procedure was based on the following inclusion criteria: a) complete scientific articles; b) English, Portuguese and Spanish languages; c) studies whose objective was related to self-concept; d) based on Cognitive Therapy; e) sample age group from 8 to 19 years, as this is the age group comprising literate children and adolescents according to the WHO (Brasil, 2007). Additionally, the exclusion criteria were: a) duplicate articles; b) publications that despite mentioning self-concept in the abstract, this was not the main objective of the study; c) articles that included adults in the sample, considering an adult as an individual over 19 years of age.

Studied found in the databases were selected in two stages. In the first, studies were selected by titles and abstracts. It should be explained that we chose to search self-concept in the abstract of the article, as without this condition there were many studies in which self-concept was not the primary objective, thus distancing themselves from the

objective of the review. The second moment included reading the articles in full. Articles were selected and full read by two evaluators who independently assessed the material to ensure the rigor of inclusion and exclusion criteria and, therefore, maintain the quality of the review.

After selecting the articles, the main information was transferred to a coding form, containing the following items: year of publication, country, published journal, study objective, target audience, how the self-concept construct was defined, study design, instrument that evaluated the self-concept, the results in relation to this theme and the theoretical basis. After filling, the results were analyzed. To meet the objective of investigating the instruments found by the review, we searched for data in the literature on the instruments found in the selected articles. The results were included in a second coding form only on the instruments with the following information: name, authors, objective, target age group, number of items, whether it included subscales, types of response scales and whether they were adapted to Brazil.

Results

Literature search results

As a result of the initial search, 49 articles were found which, after reading the titles and abstracts, resulted in a total of 17 articles. After the full reading by the two evaluators, it was noticed that three articles had been excluded accordingly, two had divergences and another article had doubts if it met the inclusion criteria. Thus, a consensus meeting was held, in which these three remaining articles were discussed (two divergences and one uncertain). After this meeting, the two evaluators reached a consensus, excluding these three publications. Thus, a total of 6 articles were excluded. Therefore, 11 articles comprised the literature review. The steps can be seen in Figure 1.

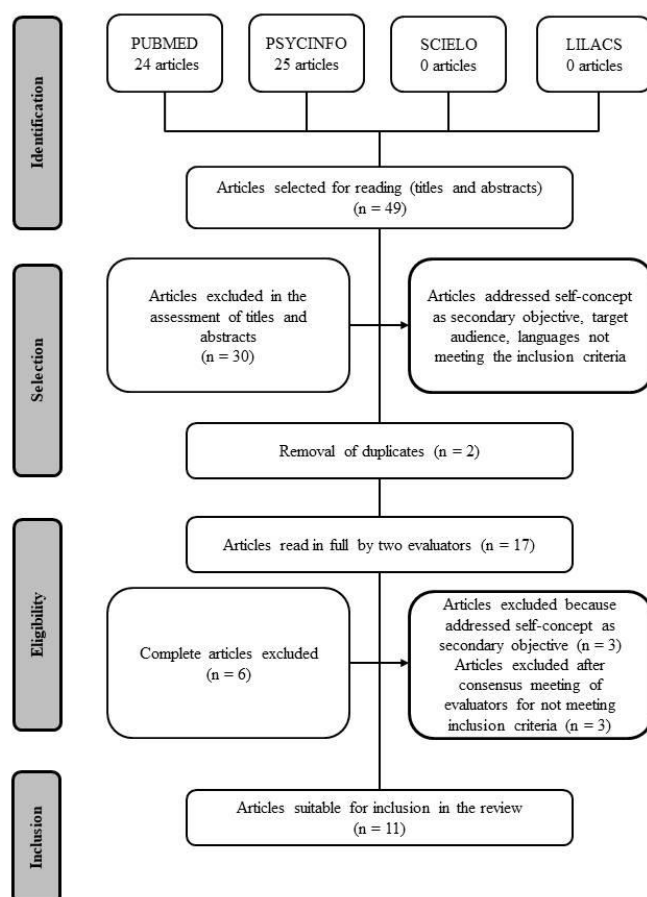


Figure 1. Flowchart for selection of articles included in the review.
Source: The authors.

Characterization of included studies

Regarding the 11 articles included in the review, 63.63% (N=7) had a cross-sectional design and the others had a longitudinal design. The years of publication ranged from 2008 to 2018, with a greater concentration in 2012, 2014 and 2016. There was no publication in the years 2010, 2015 and 2017 (Figure 2). As for the country of origin, all included studies were international, with a higher occurrence in the United States. There was only one multicenter study carried out in Germany and Switzerland.

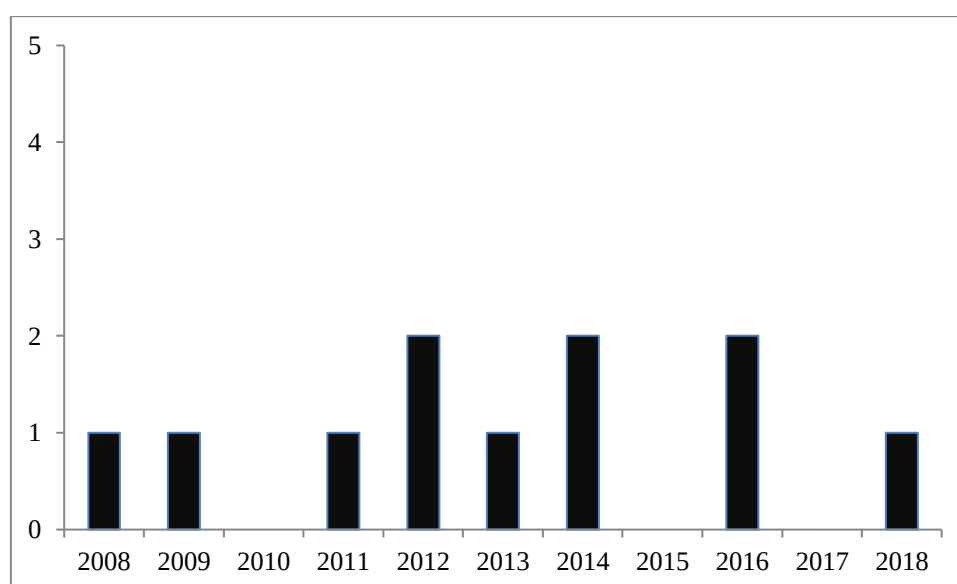


Figure 2. Distribution of years of publication of articles selected for review.
Source: The authors.

The target audience of these articles ranged from studies including children and adolescents (63.63% - N=7), and studies with only adolescents (36.36% - N=4). No articles were found with a target audience only with children. It is noteworthy that this classification was based on the definition of the World Health Organization that determines adolescence between 10 and 19 years old and children under 10 years old (Brasil, 2007).

With respect to the objectives of the studies, there was great diversity, ranging from problems involved with health to psychiatric symptoms and disorders. Therefore, studies were found that related self-concept with social phobia in children with epilepsy, overweight, Chronic Tic Disorder, Psychiatric disorders in general treated in an inpatient or outpatient setting, intention to smoke in adolescents, emotional trait and state, and Depressive Disorder.

Since we sought to investigate definitions of self-concept, only four articles were found that explained it: a) in one of them, the authors understood it as the perception and knowledge of oneself, b) two studies presented a socio-cognitive perspective, in which there is a social construction of descriptive attributes so that the individual can define themselves, and c) the last article defined only the academic self-concept, as a representation structure of the academic skills and competences that a person has. The rest of the articles (N=7) did not define self-concept. Still from this number, despite the lack of a definition, in some cases it was possible to understand domains that encompassed the self-concept or other concepts related to this construct (identified in the subscales), but in other articles no definition or correlation was identified (more details in Table 2).

The main results found in relation to self-concept in each included study were also investigated. It was identified that self-concept is negatively associated with symptoms and mental disorders, such as social anxiety, chronic tic disorder and depression, and consequently has a positive association with improvement in symptoms, positive emotions, self-efficacy, among other positive aspects. These findings are summarized in Table 2.

Table 2. Main results found in relation to self-concept on each topic of the included studies

Study topic related to self-concept	Main results related to self-concept
Social phobia and epilepsy	Self-concept domains (physical appearance, freedom from anxiety, popularity) progressively increased from baseline to follow-up.
Overweight	Reduction in perceived peer rejection -> reduction of social anxiety -> improvement in social functioning -> greater self-concept. Correlation between nutritional knowledge and self-efficacy and self-concept.
Chronic Tic Disorder	Negative association between: - Disorder and self-concept, being greater when there are comorbidities (CTD + OCD / CTD + OCD + ADHD). - Severity and impairment of tic and self-concept.
Outpatient care and hospitalization	Lower self-concept in hospitalized patients.
Intention to smoke	Younger adolescents showed lower self-concept compared to older adolescents and are more susceptible to the effects of cigarette advertisements.
Emotional trait and state	Discrepancy in the belief that students think they feel (trait assessment) and what they really feel (state assessment). Students with greater self-concept overestimate positive emotions and vice versa.
Depression	Individuals with depression had impoverished self-concept and self-referential adjectives with negative content.

Source: The authors.

Characterization of instruments found in the studies

Through the studies included in the review, we investigated which measurement instruments the authors of each study used to assess self-concept. Altogether, seven instruments were found, which differed from each other in terms of the number of items, response scales and age group of the target population. It is noteworthy that some instruments are not exclusive to assess self-concept; and others are not intended for this purpose, such as those evaluating self-esteem, but the authors used it in their studies to measure self-concept. Of these seven instruments, only two are adapted to the Brazilian population. The instruments found and their characteristics are listed in Table 3.

Table 3. Description of the instruments used in the included studies regarding instrument name, author and date, objective, target age group, number of items, subscales that make up each instrument, response scale and adaptation to the Brazilian population

Instrument	Authors (Year)	Objective	Age group	Number of items	Subscales	Response scale	Instrument
Piers-Harris Children's Self-Concept Scale II	Piers & Herzberg (2002)	Self-report scale that quantitatively assesses self-concept	7 to 18 years	60 items	Physical Appearance and Attributes Freedom from anxiety Intellectual and school status Behavioral adjustment Happiness and satisfaction Popularity	Dichotomous (Yes or No)	Not found
The Self-Perception Profile for Children (SPPC)	Harter (1985)	Self-report scale that assesses children's general sense of self-esteem, self-competence and self-perception	8 to 12 years	36 items	School competence, social acceptance, athletic competence, physical appearance and behavioral conduct	4-point Likert scale. There are two opposite descriptions, the child has to choose which description they identify with the most and then how much of the chosen description is perceived as actually true or partially true.	Yes
The Self-Perception Profile for Adolescents (SPPA). Harter Self-Perception Scale for Adolescents (SPSA)	Harter (1988)	Self-report scale that assesses the general sense of self-esteem, self-competence and self-perception of adolescents.	13 to 18 years	45 items	School competence, social acceptance, athletic competence, physical appearance, behavioral conduct, professional competence, romantic resource and ending friendships.	4-point Likert scale. There are two opposite descriptions, the adolescent has to choose which description they identify with the most and then how much of the chosen description is perceived as actually true or partially true.	Not found
Cooper Smith self-esteem	Coopersmith (1967)	Self-report scale to assess self-esteem in adolescents. The author considers self-esteem as the evaluation of oneself, including attitudes of approval and disapproval and the degree to which the person feels worthy,	15 to 19 years	25 items	Lie scale, general self, peers/social, home/parents, school/academic.	Dichotomous (like me, different from me).	Not found

		capable, significant and successful.					
Self-Description Questionnaire (SDQ) II	Marsh (1994)	Measure and analyze individual and group differences in self-concept in adolescents.	13 to 17 years	102 items	Academic (reading, math, and general school) and non-academic (honesty and trustworthiness, physical skills, verbal, physical appearance, emotional stability, relations with parents, same-sex, different-sex) self-concepts.	6-point Likert scale (false; most often false; more false than true; more true than false, most often true and true)	Notfound
Cognitive Triad Inventory for Children (CTI-C)	Kasl ow et al. (1992).	Developed to investigate the negative cognitive triad in children and adolescents, containing 36 items assessing respondents' views of self, world and future.	9 to 17 years	36 items	Visions of self, world and future.	3-point Likert scale. (yes, maybe and no)	Yes

Source: The authors.

Discussion

The aim of this review was to investigate and describe the material available in the scientific literature about the self-knowledge of children and adolescents, based on CBT, as well as the instruments available to assess this construct in children and adolescents. Thus, the studies found, their attributes and particularities were reported, as well as the instruments used in these studies and their characteristics were also described.

Although the literature defines self-knowledge as an important skill for the promotion of mental health in general, there are still divergences on the definition of this construct (Tomás & Oliver, 2004) and this dissonance between definitions and terms was noticed in the process of choosing the descriptors. In the process of defining the research question, the term self-knowledge was adopted, as it was the psychological construct of interest for the present study. However, after creating the research question, it was necessary to define the search strategies and part of that process was choosing the descriptors. Thus, it was noticed that the definition of self-knowledge is mixed with self-concept, a consequence of which is the fact that the term self-knowledge is not a descriptor. Looking at the definitions of these terms in the literature, it was understood that both are defined as the individual's understanding and perception of themselves (Sisto et al., 2010; Sisto & Martinelli, 2004), as was also identified in the articles included in the review that relied on this same definition of self-concept (Jones, Blocher, Jackson, Sung, & Fujikawa, 2014; Gottlieb, Martinovich, Meyers, & Reinecke, 2016).

Despite this difficulty with the a priori construct, it was decided to continue the study with it, because, according to the American Education Research Association (2014) and Pasquali (2010), the absence of solid theories about a construct cannot be an obstacle to its theoretical deepening; at this point it is necessary to raise all empirical evidence to

reach the beginning of a new theory. Thus, the terms self-knowledge and self-concept were unified, and the term used as a descriptor was self-concept to meet the requirements of the study to investigate self-knowledge, as well as to meet the inclusion criteria.

Another point about self-concept is that its definition also encompasses a socio-cognitive construction, as the perception that individuals have of themselves is related to the experiences throughout their developmental trajectory (Shadel, Tharp-Taylor, & Fryer, 2008). This process also occurs with self-knowledge, since in its composition there are external resources, that is, the perception that the subject has about the support of the family, community and possible institutions that they are inserted into (Aránega et al., 2019; Del Prette & Del Prette, 2017). Consequently, this similarity of definition constructions is also another factor that allowed the overlapping of self-knowledge and self-concept constructs.

Self-concept can be an important protective factor, which, in turn, makes it a fundamental element in prevention and mental health promotion programs. For example, self-concept can be established as a proximal or distal goal in programs focused on the person, that is, in interventions aimed at strengthening the cognitive and behavioral resources of children and adolescents (Murta & Barletta, 2015). Furthermore, these authors point out that the increase in health protection factors can impact on the reduction of problems and risks, favoring full healthy development.

CBT has been considered a reference approach for prevention and health promotion programs. Murta and Barletta (2015, p. 15) agree with this idea when they state that "[...] one way to leverage individual resources in programs focused on the person is to develop a positive sense of self-efficacy, self-concept and self-knowledge, based on the identification of thoughts, feelings, behaviors and bodily reactions". In this way, the authors point out that the way CBT works with resignification of beliefs, management of emotions and an increase in the knowledge of one's own functioning is in line with the promotion of well-being and the prevention of negative outcomes.

With this understanding, this study was based on CBT. We opted for it, as it advocates that the patient understands the view of themselves, the world and the future in a functional way, as well as that the interpretation of the situation will influence their emotions and behaviors (Beck, 2013; Friedberg et al., 2014). Therefore, this understanding helps in the development of self-knowledge, which is why it is believed that CBT enhances this process. It is known that defining a theoretical approach during the search process narrowed the results, but it was necessary, since it is important a theoretical basis to guide and support research (Marconi & Lakatos, 2003).

Through the review, it was possible to observe the variety of issues that are related to self-concept, as studies were identified that investigated this concept with health problems such as, for example, overweight (Jelalian, Sato, Hart, 2011), a lack of nutritional knowledge (Rabiei, Sharifirad, Azadbakht, & Hassanzadeh, 2013) and intentions to smoke (Shadel et al., 2008, Shadel, Tharp-Taylor, & Fryer, 2009). There were also studies linking self-concept with psychiatric disorders, such as Depressive Disorder (Dozois, Eichstedt, Collins, Phoenix, & Harris, 2012; Gottlieb et al., 2016) and Chronic Tic Disorder (Hanks, McGuire, Lewin, Storch, & Murphy, 2016; Storch et al., 2012) and, there were still investigative studies on the difference of self-concept in trait or emotional state (Bieg, Goetz, & Lipnevich, 2014) and patients who were hospitalized versus patients with outpatient care (Choi & Ferro, 2018). In this way, it was noticed a diversity that self-concept studies can provide. This variety also occurs in Brazilian studies, and research

was found on self-concept in adolescents and its relationship with psychological, social and physical aspects (Mendonça & Fleith, 2005; Peixoto, 2003).

Our findings confirm data from other authors who have also found a large amount of research addressing problems related to the self-concept of elementary and high school students, which demonstrates an interest in studying this variable (Sisto & Martinelli, 2004). However, this diversity does not apply to the preschool-age group, as there are few investigations on this topic (Pinto, Gatinho, Silva, Veríssimo, & Santos, 2013). This data from the literature is also consistent with the results of the present study, as despite the use of the descriptor child ('child' and *niño*) without age filters, no study appeared with a target audience under seven years of age.

This review also surprisingly identified the absence of national studies on the subject. It should be noted that although self-concept has been a topic studied for over 20 years (WHO, 1997), studies focusing on it are from the last 11 years (2008-2019), according to the findings in this review. Since this topic is related to health promotion studies, it is hypothesized that this delay in investigating studies on self-concept, despite the preventive and community principles adopted in the 1970s and 1980s, the focus on these themes and the applicability of health promotion actions had emphasis and growth over the last 10 years (Schneider, 2015).

Also considering the context of health promotion, through the included studies, a positive association was found between self-concept and the following variables: social functioning (Jelalian et al., 2011), self-efficacy and nutritional knowledge (Rabiei et al., 2013) and positive emotions (Bieg et al., 2014). In this sense, these findings are in line with the literature that affirms self-concept as a protective factor (Gottlieb et al., 2016), which facilitates positive relationships and directly implies well-being and personal satisfaction (Esnaola, Goñi, & Madariaga, 2008; Martínez-Antón, Buelga, & Cava, 2007). Importantly, all longitudinal studies in this review showed an increase in self-concept after the intervention.

In relation to negative associations of self-concept, children and adolescents with a little repertoire of this skill can lead to the development of more anxiety (Jones et al., 2014), aggravating the symptoms of Chronic Tic Disorder, ADHD, OCD (Hanks et al., 2016), depression (Dozois et al., 2012; Hanks et al., 2016) and social phobia (Choi & Ferro, 2018; Jones et al., 2014). A negative association was also detected between self-concept and self-conflict, smoking intentions (Shadel et al., 2008, 2009) and negative emotions (Beig et al., 2014). These data can also be found in other studies claiming that stressful events during childhood and adolescence can cause less positive psychological consequences, thus affecting the perception of themselves and others, consequently changing the self-concept of these young people (Lipp, 2014).

Given this scenario that self-concept can be seen as a protective factor, together with the view that CBT helps in the formation and enhancement of this skill, interventions based on this approach that aim to promote self-knowledge/self-concept can generate positive results both in aspects related to the individual's well-being, as well as the prevention of symptoms and psychopathologies. Moreover, as already mentioned, the earlier the development of this skill, the more chances of positive results the child/adolescent can have, promoting health, well-being and quality of life into adulthood. Therefore, it is essential to study and intervene in childhood and adolescence in order to provide these individuals with greater levels of personal satisfaction throughout life (Faria, 2003; Silva, 2009).

With regard to the instruments found, they presented some expected divergences, such as the number of items, types of response scales, age range for which it is intended. However, there were also similarities. All instruments are self-report. This information is in line with the definition of self-concept corresponding to self-perception (Aránega et al., 2019; Sisto & Martinelli, 2004), so it makes sense that the instruments are for the child and adolescent to make an assessment of themselves.

In addition, all scales had subscales or domains that make up the self-concept. This result is consistent with the literature that states that self-concept is multidimensional, as it understands that it is determined by several factors or dimensions, such as the social, academic, physical domain, among other possibilities (Harter, 2012; Pinto et al., 2013).

Nevertheless, it is noteworthy that despite the presence of the subscales, they considerably differed from each other, as, for example, there are instruments that have items that assess happiness and satisfaction, others assess athletic competence, yet another assess honesty. This shows that there is a range of concepts within the self-concept that are very different from each other. This result raises a question about the need to try to standardize or narrow this construct in terms of definition to facilitate its measurement. That is, an instrument is valid when it evaluates what it is intended to measure (Markus & Borsboom, 2013), but this object being measured needs to have sufficient punctual and objective characteristics to be measurable and reflect the latent trait of the construct, otherwise, it becomes an instrument that is poor in validity and not very robust, making its use unfeasible (Hutz, Bandeira, & Trentini, 2015). Thus, it is emphasized that the problem is not to be multidimensional, but to be seen in the literature in a very different way in terms of constructs, as it is difficult to establish a standard for its evaluation/measurement.

According to Sisto and Martinelli (2004), in Brazil, a good part of instruments aimed at assessing self-concept are published in master's dissertations and doctoral theses and are not always available and easily accessible. It is observed that this data is still present, as unfortunately only two of the instruments found in this review have been adapted to the Brazilian population, one of which (*The Self-Perception Profile for Children* - SPPC) was not found in the literature, it is believed which is not open access. The second instrument (*Cognitive Triad Inventory for Children* - CTI-C) is not exclusively intended to assess self-concept, only part of it. Its main objective is to measure the cognitive triad, which corresponds to the view that the individual has about themselves, the world and the future (Kaslow, Stark, Printz, Livingston, & Tsai, 1992).

Finally, it was possible to see with this review that the self-concept/self-knowledge construct is subjected to overlapping, as its definitions are similar and the descriptors confirm this equivalence. Studies in this area are still scarce and need to be further investigated. With regard to the measurement of this construct, a gap in available instruments for this purpose for the Brazilian population of children and adolescents was also identified.

Final considerations

This study aimed to carry out a review of the material available in the literature about the self-knowledge for children and adolescents, based on CBT, as well as to identify the instruments to assess this construct in this target audience. In general, despite the scarce literature, the results confirmed that self-knowledge is a complex and

multidimensional construct, allowing a dialogue with self-concept, resulting in finding the same definition for both, being treated as a single construct (using the self-concept to deal with both).

Self-concept was understood as a protective factor for children and adolescents, contributing to the individual's well-being and personal satisfaction. Furthermore, it is a construct that responds to interventions, and is positively associated with other positive aspects of the individual, in the same way that it is negatively associated with symptoms, health problems and mental disorders. CBT is an approach that encourages patients to seek their potential and develop skills, and represent an alternative for the development of self-concept.

This work had as a limitation the choice of descriptors, as well as the inclusion criteria to bring a small number of studies. Thus, further studies are suggested with new combinations of descriptors and Boolean operators, as well as different inclusion criteria in an attempt to find other results. In addition, from this review, further studies with both constructs are suggested, not only reviews, but also intervention studies as a way to expand the knowledge in the literature aimed at children and adolescents, especially for the Brazilian population, since no studies were found with this audience. It should also be noted that there was a shortage of instruments for the Brazilian population. Therefore, it is necessary to develop validated instruments to assess self-knowledge in Brazilian children and adolescents.

Therefore, from this study, it was possible to understand the importance of carrying out a review to explore issues that are still little discussed in the literature. In addition, due to the scarcity of studies in the area of self-knowledge/self-concept, as well as the absence of instruments with this topic aimed at the Brazilian children and adolescents, the importance of this study as a starting point for further research, both to explore more about the topic, expand developmental studies and validation of scales and interventions based on CBT as a focus on promoting self-knowledge/self-concept for children and adolescents.

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References

- American Educational Research Association. (2014). *Standards for educational and psychological testing*. Washington. D.C.
- Aránega, A. Y., Sánchez, R. C., & Pérez, C. G. (2019). Mindfulness' effects on undergraduates perception of self-knowledge and stress levels. *Journal of Business Research*, 101, 441-446. doi: 10.1016/j.jbusres.2019.01.026

- Beck, J. (2013). *Terapia cognitiva: teoria e prática* (2a ed.). Porto Alegre, RS: Artmed.
- Bieg, M., Goetz, T., & Lipnevich, A. A. (2014). What students think they feel differs from what they really feel – academic self-concept moderates the discrepancy between students' trait and state emotional self-reports. *PlosOne*, 9(3), 1-9. doi: 10.1371/journal.pone.0092563
- Botelho, L. L. R., Cunha, C. C. de A., & Macedo, M. (2011). O método da revisão integrativa nos estudos organizacionais. *Gestão e Sociedade*, 5(1), 121-136. doi:10.21171/ges.v5i1.1220
- Brasil. Ministério da Saúde. (2007). *Marco legal: saúde, um direito de adolescentes* (Série A. Normas e Manuais Técnicos). Brasília, DF: Editora do Ministério da Saúde.
- Choi, C., & Ferro, M. A. (2018). Comparing self-concept among youth currently receiving inpatient versus outpatient mental health services. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 27(1), 69-74. Recuperado de: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5777692/>
- Del Prette, A., & Del Prette, Z. A. P. (2017). *Competência social e habilidades sociais: manual teórico-prático*. Petrópolis, RJ: Vozes.
- Dozois, D. J. A., Eichstedt, J. A., Collins, K. A., Phoenix, E., & Harris, K. (2012). Core beliefs, self-perception, and cognitive organization in depressed adolescents. *International Journal of Cognitive Therapy*, 5(1), 99-112. doi: 10.1521/ijct.2012.5.1.99
- Esnaola, I., Goñi, A., & Madariaga, J. M. (2008). El autoconcepto: perspectivas de investigación. *Revista de Psicodidáctica*, 13(1), 179-194. Recuperado de: <http://www.redalyc.org/articulo.oa?id=17513105>
- Faria, L. (2003). A importância do auto-conceito em contexto escolar. In C. M. L. Pires, P. J. Costa, S. Brites & S. Ferreira. *Psicologia, sociedade & bem-estar* (p. ?-?). Leiria, PT: Editorial Diferença.
- Friedberg, R. D., Hoyman, L. C., Behar, S., Tabbarah, S., Pacholec, N. M., Keller, M., & Thordarson, M. A. (2014). We've come a long way, baby!: evolution and revolution in CBT with youth. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 32(1), 4-14. doi: 10.1007/s10942-014-0178-3
- Goleman, D. (2006). *Emotional intelligence* (2a ed.). New York, NY: Basic Book.
- Gottlieb, L., Martinovich, Z., Meyers, K. M., & Reinecke, M. A. (2016). Treatment for depression enhances protection: findings from the Treatment for Adolescents With Depression Study (TADS). *International Journal of Cognitive Therapy*, 9(1), 38-56. doi: 10.1521/ijct_2016_09_02
- Hanks, C. E., McGuire, J. F., Lewin, A. B., Storch, E. A., & Murphy, T. K. (2016). Clinical correlates and mediators of self-concept in youth with chronic tic disorders. *Child Psychiatry & Human Development*, 47(1), 64-74. doi: 10.1007/s10578-015-0544-0

- Harter, S. (2012). *The construction of the self*. New York, NY: The Guilford Press.
- Hutz, C. S., Bandeira, D. R., & Trentini, C. M. (Org.) (2015). *Psicometria*. Porto Alegre, RS: Artmed.
- Jelalian, E., Sato, A., & Hart, C. N. (2011). The effect of group-based weight control intervention on adolescent psychosocial outcomes: perceived peer rejection, social anxiety and self-concept. *Child Health Care*, 40(3), 197-211. doi:10.1080/02739615.2011.590391.
- Jones, J. E., Blocher, J. B., Jackson, D. C., Sung, C., & Fujikawa, M. (2014). Social anxiety and self-concept in children with epilepsy: A pilot intervention study. *Seizure*, 23(9), 780-785. doi: 10.1016/j.seizure.2014.06.011
- Justo, A. R., Santos, A., & Andretta, L. (2017). Programas de prevenção na infância. In R. M. Caminha, M. G. Caminha & C. A. Dutra. *A prática cognitiva na infância e na adolescência* (p. 59-75). Novo Hamburgo, RS: Sinopsys.
- Kaslow, N. J., Stark, K. D., Printz, B., Livingston, R., & Tsai, S. L. (1992). Cognitive triad inventory for children: development and relation to depression and anxiety. *Journal of Clinical Child Psychology*, 21(4), 339-347. doi: https://doi.org/10.1207/s15374424jccp2104_3
- Lipp, M. (2014). *Stress em crianças e adolescentes*. Campinas, SP: Papyrus.
- Marconi, M. A., & Lakatos, E. M. (2003). *Fundamentos da metodologia científica*. São Paulo, SP: Atlas.
- Markus, K. A., & Borsboom, D. (2013). *Frontiers of tests validity theory: measurement, causation, and meaning* (Multivariate Applications Series). New York, NY: Routledge.
- Martínez-Antón, M., Buelga, S., & Cava, M. J. (2007). La satisfacción con la vida en la adolescencia y su relación con la autoestima y el ajuste escolar. *Anuario de Psicología*, 38(2), 5-15. Recuperado de: <http://www.redalyc.org/articulo.oa?id=97017404013>
- McAllister, M., Knight, B. A., & Withyman, C. (2017). Merging contemporary learning theory with mental health promotion to produce an effective schools-based program. *Nurse Education in Practice*, 25, 74-79. doi: 10.1016/j.nepr.2017.05.005
- Mendonça, P. V. C. F., & Fleith, D. S. (2005). Relação entre criatividade, inteligência e autoconceito em alunos monolíngues e bilíngues. *Psicologia Escolar e Educação*, 9(1), 59-70. doi: 10.1590/S1413-85572005000100006
- Murta, S. G., & Barletta, J. B. (2015). Promoção de saúde mental e prevenção aos transtornos mentais em terapia cognitivo-comportamental. In *PROCognitiva Programa de Atualização em Terapia Cognitivo-Comportamental: ciclo 1* (Vol. 4, p. 9-62). Porto Alegre, RS: Artmed Panamericana.

- Oliveira, S. A. (2012). *Prevenção de saúde mental no Brasil na perspectiva da literatura e de especialistas da área* (Dissertação de mestrado). Instituto de Psicologia, Universidade de Brasília. Brasília.
- Pasquali, L. (2010). Testes referentes a construto: teoria e modelo de construção. In L. Pasquali. *Instrumentação psicológica: fundamentos e práticas* (p.165-198). Porto Alegre, RS: Artmed.
- Peixoto, F. (2003). *Auto-estima, autoconceito e dinâmicas relacionais em contexto escolar* (Tese de doutorado). Universidade do Minho, Braga.
- Pinto, A., Gatinho, A., Silva, F., Veríssimo, M., & Santos, A. J. (2013). Vinculação e modelo interno dinâmico do self em crianças de idade pré-escolar. *Psicologia, Saúde & Doença*, 14, 515-528. Recuperado de: http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S1645-00862013000300011
- Rabiei, L., Sharifirad, G. R., Azadbakht, L., & Hassanzadeh, A. (2013). Understanding the relationship between nutritional knowledge, self efficacy, and self concept of high school students suffering from overweight. *Journal of Education and Health Promotion*, 2, 1-6. doi: 10.4103/2277-9531.115834
- Schneider, D. R. (2015). Da saúde mental à atenção psicossocial: trajetórias da prevenção e da promoção de saúde. In S. G. Murta, C. Leandro-França, K. B. dos Santos & L. Polejack. *Prevenção e promoção em saúde mental: fundamentos, planejamentos e estratégias de intervenção* (p. 34-53). Novo Hamburgo, RS: Sinopsys.
- Shadel, W. G., Tharp-Taylor, S., & Fryer, C. S. (2008). Exposure to cigarette advertising and adolescents' intention to smoke: the moderating role of the developing self-concept. *Journal of Pediatric Psychology*, 33(7), 751-760. doi: 10.1093/jpepsy/jsn025
- Shadel, W. G., Tharp-Taylor, S., & Fryer, C. S. (2009). How does exposure to cigarette advertising contribute to smoking in adolescents? The role of the developing self-concept and identification with advertising models. *Addictive Behaviors*, 34(11), 932-937. doi: 10.1016/j.addbeh.2009.05.014
- Silva, B. C. L. (2009). *O autoconceito em crianças e pré-adolescentes numa amostra de famílias de origem e famílias de acolhimento* (Monografia final de curso). Universidade Fernando Pessoa, Porto.
- Sisto, F. F., & Martinelli, S. C. (2004). Estudo preliminar para a construção da Escala de Autoconceito Infanto-Juvenil (EAC-IJ). *Interação em Psicologia*, 8(2), 181-190. doi: 10.5380/psi.v8i2.3254
- Sisto, F. F., Rueda, F. J. M., & Urquijo, S. (2010). Relación entre los constructos autocontrol y autoconceito en niños y jóvenes. *Liberabit*, 16(2), 217-226. Recuperado de: <http://www.redalyc.org/articulo.oa?id=68617161010>

- Storch, E. A., Morgan, J. E., Caporino, N. E., Brauer, L., Lewin, A. B., Piacentini, J., & Murphy, T. K. (2012). Psychosocial treatment to improve resilience and reduce impairment in youth with tics: an intervention case series of eight youth. *Journal of Cognitive Psychotherapy: An International Quarter*, 26(1), 57-70. doi: 10.1891/0889-8391.26.1.57
- Subasree, R., & Nair, A. R. (2014). The life skills assessment scale: the construction and validation of a new comprehensive scale for measuring life skills. *Journal of Humanities and Social Science*, 19(1), 50-58. doi: 10.9790/0837-19195058
- Tomás, J.M., & Oliver, A. (2004). Confirmatory factor analysis of a Spanish multidimensional scale of self-concept. *Revista Interamericana de Psicología*, 38, 285-293. Recuperado de: https://www.researchgate.net/publication/293077271_Confirmatory_factor_analysis_of_a_Spanish_multidimensional_scale_of_self-concept
- Vazire, S., & Wilson, T. D. (2012). *Handbook of self-knowledge*. New York, NY: Guildford Press.
- World Health Organization (WHO). (1997). *Promoting health through schools. Report of a WHO Expert Committee on Comprehensive School Health Education and Promotion* (WHO Technical Report). Geneva, SW.

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