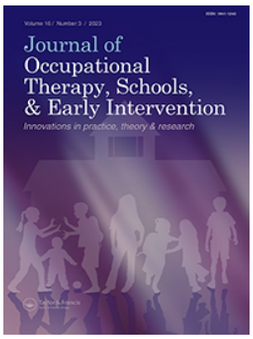

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Translation, Adaptation and Validation of the Portuguese Version of Children's Assessment of Participation and Enjoyment / Preferences for Activities of Children (CAPE / PAC)

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ABSTRACT

This study aimed to translate, adapt linguistically and culturally, and validate the Portuguese version of the Children's Assessment of Participation and Enjoyment/Preferences for Activities of Children (CAPE/PAC). CAPE/PAC is a tool that measures the participation of children and youth with and without disabilities in leisure activities, considering behavioral, contextual and affective aspects. The Portuguese version resulted from a process of translation, back-translation, analysis by experts and pilot application to obtain evidence of content validity. The instrument was administered with 361 children – 306 without disabilities and 55 with disabilities – from five school clusters in the district of Porto, aged 6 to 18 years old. Data were analyzed for internal consistency – to determine the degree of homogeneity of the instrument's items – as well as for the standardization of the participation of children and youth with and without disabilities, and their comparison with evidence from studies evaluating similar constructs. The results revealed that the Portuguese version of CAPE/PAC exhibits emerging evidence of reliability and validity.

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Participation; recreation and leisure activities; CAPE/PAC; children and youth with and without disabilities; inclusive education

Introduction

The participation construct has been defined by the involvement in real-life situations (World Health Organization, WHO, 2007), being translated into behavioral (such as time on the task), emotional (interest, satisfaction, sense of identification with peers), and cognitive (self-regulation and learning strategies) elements (Fredricks & Mccolskey, 2012). This multidimensional understanding of participation under the terms of the WHO (2007), refers to the hierarchical top of human functionality has, therefore, served as the maximum indicator of the sense of belonging and social inclusion. It is in this sense that participation, as an expression of involvement and progress, has been the next step in inclusive education policies at national and international levels, where mere access does not, *per se*, guarantee quality contexts for all (European Agency for Special Needs and Inclusive Education, EASNIE, 2011b; Sanches-Ferreira et al., 2019).

Likewise, the results of several studies have shown the importance of promoting children's participation due to their positive influence on health, on the development of skills

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appropriate to their age, as well as on the physical, psychological and emotional well-being of the individual (Almasri, Palisano, & Kang, 2019; Brown & Thyer, 2019; Dahan-Oliel, Shikako-Thomas, & Majnemer, 2012). Through the participation in different life contexts, children develop skills, foster self-concept, form friendships, express their creativity, reach levels of well-being, and determine the meaning and purpose for their lives (Law et al., 2006; Powrie, Kolehmainen, Turpin, Ziviani, & Copley, 2015; Solish, Perry, & Minnes, 2010).

The concept of *participation* has been considered the main factor in the educational success of students with and without disabilities (Eriksson, Welander, & Granlund, 2007; Hassani, Alves, Avramidis, & Schwab, 2021; Law et al., 2006; Sanches-Ferreira et al., 2019) and as a fundamental human right (United Nations, UN, 2006; United Nations Educational, Scientific and Cultural Organization, UNESCO, 1994). In fact, the *Convention on the Rights of Persons with Disabilities* (UN, 2006) is an example of this by defending in its article, specifically in Article 3, the principles of respect for individual dignity and autonomy, nondiscrimination, full and effective participation and inclusion in society, respect for difference and diversity, equal opportunities, accessibility, and respect for the rights of children and women with disabilities. In the same way, the different publications of EASNIE – refer to the importance of "*active participation in all aspects of school life is essential for students to take full advantage of learning for adulthood, work and citizenship*" (EASNIE, 2011a, p. 9), and therefore "*changes in terminology, attitudes, and values that reflect the added value of diversity and equal participation are necessary*" (EASNIE, 2014, p. 6). Originally adopted in 1975 and amended in 2004, the Individuals with Disabilities Education Act (IDEA) stated that improving educational results for children with disabilities is dependent on "ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency" (Section 1400, c, 1). Likewise, the No Child Left Behind Act (2001) stablished the full participation requirement for all children – including those with disabilities – as part of the school accountability system, stating that the performance and progress of every student should be of equal importance to schools.

Once the importance of participation is established, it should be noted that participation in leisure activities has been considered as central in the lives of children and young people (Ismael, Lawson, & Cox, 2015) by offering opportunities for fun, recreation, and the achievement of objectives (e.g., Powrie, Kolehmainen, Turpin, Ziviani, & Copley, 2015; Rosenblum, Sachs, & Schreuer, 2010). In early years, the child's main occupation is play and it is through play that children learn, develop and practice new competencies acquiring crucial cognitive, motor, communication and socio-emotional skills (Ismael, Lawson, & Cox, 2015). Play and leisure activities are often used interchangeably (Caldwell & Witt, 2011), representing intrinsic forms of motivation for goal achievement by being involved in positive and meaningful experiences. The social context of leisure activities represents important opportunities to learn social skills such as empathy, problem solving and working together (Caldwell & Witt, 2011). For that reason, the participation in leisure activities has even been identified as a factor that promotes inclusion in the community and a better quality of life (Badia, Orgaz, Verdugo, & Ullan, 2013; Dahan-Oliel, Shikako-Thomas, & Majnemer, 2012; Longo et al., 2017; Shikako-Thomas et al., 2012).

Since there is consensus on the importance of the benefits of participation for all students, the literature has shown that children and young people with disabilities participate significantly less in their life contexts than their peers (Eriksson, Welander, & Granlund, 2007; Sanches-Ferreira et al., 2019; Thaeri, Perry, & Minnes, 2016). There is

diverse evidence that children and young people with disabilities: participate in: (i) fewer activities and less frequently (Eriksson, Welander, & Granlund, 2007; King, Petrenchik, Law, & Hurley, 2009; Sanches-Ferreira et al., 2019); (ii) often alone or accompanied by adults (Engel-Yeger, Jarus, Anaby, & Law, 2009; Eriksson, 2005; Schreuer, Sachs, & Rosenblum, 2014); (iii) in more restrictive contexts (Sanches-Ferreira et al., 2019; Shields, King, Corbett, & Imms, 2014; Thaeri, Perry, & Minnes, 2016); (iv) and with fewer opportunities to choose activities (Majnemer et al., 2008; Palisano et al., 2011). In this context, and as an indicator of inclusion, participation has been the subject of several operationalization attempts, in order to frame and monitor both processes and support systems in disability.

Imms et al. (2016), in a conceptual analysis of scientific articles, identified two central components in the measurement of the participation construct: (i) the presence – i.e., "being there" – measured in terms of frequency and/or diversity of activities; (ii) and involvement – that is, the experience of participation while it is present. In the same systematic review, Imms et al. (2016) also revealed that the experience of participation translates, in operational terms, into indicators of involvement, motivation, persistence, social connectivity and affection; being also related to competence in the activity, sense of self and preferences.

In the study of participation, the most common method of analysis is to collect information from parents, teachers and health professionals (Bedell, Khetani, Cousins, Coster, & Law, 2011; Simeonsson, Carlson, Huntington, Mcmillen, & Brent, 2001), which has led to neglecting the perspective of the main actors, that is, children and young people. However, the evaluation in the first person, involving children and young people as the main informants, has been the privileged way to bring the researcher as close as possible to the real experience of participation of children and young people with and without disabilities (Eyssen et al., 2011; Imms et al., 2016; Maxwell, Augustine, & Granlund, 2012). Concurrently, attending to what the child has to say about his or her own life is in line with the top-down approach increasingly advocated in pediatric assessment (Brown & Chien, 2010). Traditionally, the bottom-up approach has been used privileging the evaluation of children's impairments (as static modifications of body structures and functions) by using standardized tools. In contrast, as referred by Brown and Chien (2010) the top-down approach "takes a global perspective and focus on the client's participation in his or her living contexts to determine what is important and relevant to him or her" (p.95).

This underpins the development of top-down measurement tools, valuing the children's self-assessment of the experience of participation by themselves. A set of self-report measures of participation and/or leisure are available, such as Assessment of Life Habits (Fougeyrollas et al., 1998), the Child and Adolescent Scale of Participation (Bedell & Lash, 2004), Child and Adolescent Scale of Environment (Bedell & Lash, 2004), Participation in Childhood Occupations Questionnaire (Bar-Shalita, Yochman, Shapiro-Rihtman, Vatine, & Parush, 2009) or Children's Leisure Assessment Scale (Rosenblum, Sachs, & Schreuer, 2010).

The choice of CAPE/PAC (King et al., 2004) for the validation of a Portuguese version was due to its alignment with school context activities and the fact that in several studies (Bult et al., 2010; King et al., 2007; Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012) it was considered an easy-to-understand self-report instrument for children, proving

to be adequate to access their perspective on participation in daily leisure and recreational activities.

The translation of an assessment needs a proper cultural adaptation under the risk that the results obtained are not a reflex of the phenomena in the respective country (Bult et al., 2010; Longo, Badia, Orgaz, & Verdugo, 2012). This is even more important for assessments measuring complex constructs such as participation. Stevelink and van Brakel (2013) reported a lack of cultural equivalence of participations instruments among countries, that is whether an instrument was being used in two or more cultures in the same way. Therefore, cross-cultural adaptation is essential for participation instruments beyond their direct translation (Bult et al., 2010).

CAPE/PAC has a multidimensional structure making it possible to measure the number of activities in which a child or young person participates, but also to characterize contextual factors (with whom they participate, where the activity takes place) and personal factors (satisfaction with the activity and preference), as well as the interactions of these same factors (Imms et al., 2016). Thus, the CAPE/PAC contributes to obtaining individual or group patterns of participation, which enable a more comprehensive and holistic assessment of the current participation of individuals and, at the same time, access their preferences for activities. Participation and preference are constructs that are often associated, but the relationship between the activities performed and the preference for activities of children and young people has been neglected (Bult, Verschuren, Lindeman, Jongmans, & Ketelaar, 2014; King et al., 2004). Imms et al. (2016) indicated that preference is a precursor of the participation action, in which children and young people choose to participate in the activity considering the importance and interest that it has for themselves. Preference proved to be the main predictor of the diversity of participation (Shields, Synnot, & Kearns, 2015).

The interest of this instrument also lies in its suitability for a broader age group, as it is suitable for children and young people between the ages of 6 and 21. The suggested activities are compatible with the period of childhood and adolescence, are easy to understand and the neutral illustrations allow both children and young people to identify with the activities regardless of age (King et al., 2004).

It is not surprising, therefore, that the CAPE/PAC has been used in several countries, namely in Spain (Longo et al., 2014), Puerto Rico (Colón, Rodríguez, Ito, & Reed, 2008), the Netherlands (Bult et al., 2010), Sweden (Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012), Norway (Nordtorp et al., 2013), Greece (Anastasiadi & Tzetzis, 2013), Germany (Fink, Gebhard, Erdwiens, Haddenhorst, & Nowak, 2016) and Jordan (Almasri, Palisano, & Kang, 2019), attesting to its importance/usefulness and cross-cultural validity (Brown & Thyer, 2019). The different adaptations of the CAPE have reported varying levels of reliability and validity evidence, with the PAC demonstrating more consistent results. These results are in line with what happens in the original version of the instrument, where the lower robustness of the CAPE compared to the PAC reflects the multiplicity of factors (namely its inseparability of environmental aspects) that can influence the performance of an activity and that is not only dependent on the individual.

In the systematic review by Cordier et al. (2016) on the study of the psychometric properties of self-report instruments for children between 2 and 18 years old, the CAPE/PAC is recognized as an instrument that is accompanied by good quality studies that contemplate a complete assessment of its psychometric properties, including internal

consistency, reliability and measurement error (e.g., Nordtorp, Nyquist, Jahnsen, Moser, & Strand, 2013). Like the international scenario, in Portugal, the participation construct has guided the discourses and policies on inclusion, whose practices require support in mechanisms and tools for effective measurement and monitoring. It is in this context that we present in this study the process of translation, adaptation and validation of the Portuguese version of the CAPE/PAC.

Methods

Instrument

The CAPE and PAC developed by King et al. (2004), are two complementary self-report instruments for children and young people between 6 and 21 years of age, with and without disabilities, where they can evaluate their participation and preference in the activities presented.

The CAPE consists of 55 illustrated items, corresponding to formal and informal activities of daily life carried out outside school hours. The instrument thus evaluates the participation of the child/young person in five dimensions: (1) *diversity* – the number of activities performed in the last four months (Did you do this activity in the last 4 months? Answers "Yes" or "No"); (2) *frequency* – the frequency of participation in the activities ("How often did you perform the activity? Answers vary on a 7-point Likert scale, from 1= once in the last four months to 7 = 1 or more times a day); (3) *with whom* – the people involved in the activity with the child/young person (With whom did you perform the activity? Answers vary on a 5-point Likert scale, from 1= alone to 5=with others (teachers, other people); (4) *where* – the location of the activities (Where do you do the activity? Answers, 6-point Likert scale, from 1= at home to 5=in the community, outside your usual contexts); (5) *satisfaction – level of satisfaction* with the activity (How much do you like to do this activity? Answer, 5-point Likert scale, from 1=dislike to 5=love).

The 55 activities are categorized into domains – 15 formal and 40 informal activities – and into types – 12 recreational (e.g., "Playing in the playground"), 13 physical (e.g., "Cycling, inline skating or skating"), 10 social (e.g., "Talking on the phone"), 10 subject to training (e.g., "Playing a musical instrument") and 10 personal development (e.g., "Reading").

Being able to be used independently, the PAC is an extension of the CAPE, and aims to assess the preferences of children and young people in the 55 activities displayed on the CAPE; with a range of responses ranging from (1) I would not like to do it, and (3) I would really like to do it.

In terms of application, the materials made available, including the response form, allow children/young people to fill them out autonomously, with the help of an adult or, even applied by an adult through an interview, if necessary. In this case, individual cards illustrating the activities included in the CAPE manual should be used.

The reliability of the CAPE/PAC was originally examined through the analysis of its internal consistency and test-retest reliability. In a sample of 427 children and young with disabilities who participated in a three-year longitudinal study, Cronbach's alpha values for the different types of activities varied for PAC between 0.67 and 0.75 and for CAPE (frequency dimension) between 0.32 and 0.62. Test-retest reliability was computed for

CAPE, with values from 0.67 to 0.77 for Diversity dimension, 0.72 to 0.81 for Intensity dimension and 0.12 to 0.73 for Satisfaction dimension.

Procedures

Translation and Adaptation Procedures

The validation process of the instruments for Portugal began with the request for authorization to Editora Pearson Inc, holder of the copyright and use of the instrument, and later the establishment of a protocol with Editora Hogrefe. The translation of the instrument was performed by three people with experience in English (one of them being a certified translator) and training in Special Education and Inclusion and later discussed the adequacy of the items by the research team. The proposed changes aimed to simplify the understanding of the items and adapt their description. This version of the instrument was back-translated into English by a certified translator (not the certified translator that participated in the first translation). The research team compared this translation with the original English version, concluding that the content of the translated instrument remained unchanged. This version was tested on 5 students and discussed with 5 elementary school teachers, in order to evaluate the adequacy, clarity and comprehensibility of the items. The integration of students' and teachers' comments, which consisted mainly in slightly changes (e.g., pronouns and adverbs and sentence order) resulted in the latest version of the CAPE/PAC, which was tested with 361 children and young people from five school groups in the district of Porto, aged between 6 and 18 years ($M = 10.86$; $SD = 2.96$). Regarding gender distribution, 53.2% of the sample is male and 46.8% female.

Data Collection Procedures

The process began with a request for authorization, from the Directorate-General for Education, for the administration of CAPE/PAC instruments in schools (survey number: 0335900006); followed by contact with school groups in the district of Porto. In the five school groups that agreed to participate, principals were asked to indicated classes from 1st, 2nd and 3rd cycles (1st cycle refers to 1st to 4th grades and students aged between 6 and 10 years; 2nd cycle refers to 5th and 6th grades, students aged between 11 and 12 years; 3rd cycle refers to 7th, 8th and 9th grades and students aged between 13 and 16 years). Students with disabilities with severe limitations in terms of comprehension and expression were not included in the study. A document explaining the study and the *informed Consent was sent to the* parents, authorizing the participation of their students. The implementation of the CAPE/cap was carried out by one of the members of the research team who went to all school groups. In front of each participating class, the explanation of the objectives of the study and the instructions on how to fill out the instruments was made from an introductory note, carried out by the research team, in order to standardize the application procedure. All students' doubts were clarified, thus ensuring the understanding of the requested task. Before starting the application of the instrument, students were asked about their willingness to participate in the study, making it clear that there were no negative consequences if they did not want to do so. This consent was obtained from all students, with and without disabilities. Ninety-five percent of students of the 380 students who were invited agreed to participate in the study.

Considering that CAPE/PAC allows pupils to respond to the instruments autonomously, older pupils, in particular in the 2nd and 3rd cycle (2nd cycle refers to 5th and 6th grades, students aged between 11 and 12 years; 3rd cycle refers to 7th, 8th and 9th grades and students aged between 13 and 16 years), completed the answer book individually. With younger students in the 1st cycle, it was necessary to apply the instrument in a small group (3 to 4 students), due to difficulties in reading and understanding the items. In the case of students who needed support in responding to the instrument, the completion was individual and accompanied by the full professor or special education teacher. All group applications of the instruments were performed in a classroom context. The individual applications were in classrooms provided by the school and that the students knew.

Data Analysis

In order to determine the activities applicable to Portuguese children and young people, the research team decided to include in the Portuguese version of the CAPE/PAC only the activities carried out by more than 10% of the sample, adopting the procedure used by Ullenhag, Almqvist, Granlund, and Krumlinde-Sundholm (2012).

The *t-test for paired samples* was used to analyze the differences in scores in the diversity dimension between the original version and the Portuguese version proposed for the CAPE/PAC, using the average of the standardized scores in both versions. The standardization of scores was calculated on a scale of 0–100 (by dividing 100 by the number of activities of each type of activity multiplied by the number of activities performed). For example, in the Portuguese version, physical activities include 10 items, so the value of this type of activity corresponds to 100/10 x the number of activities performed).

The data obtained were submitted to the reliability study and to the collection of validity indicators. The study of reliability related to internal consistency aimed to determine the degree of homogeneity of the items of the instrument. For this purpose, the guidelines of the manual were followed and the reliability study focused on the PAC Preference and Frequency scores for the activity items of the Portuguese version, for which Cronbach's alpha coefficients (1951) were calculated. This analysis focused only on the sample of students without disabilities ($n = 306$), since students with disabilities face different factors that challenge their participation in leisure activities and contribute to greater variability in diversity and frequency of participation. These factors include, for example, the issues of accessibility to activities and the level of social support they have.

Known-groups validity is a form of construct validation and refers to the extent to which a test or questionnaire can discriminate between two groups known to differ on the variable of interest (Davidson, 2014). To obtain this indicator, we compared the participation of students with and without disabilities, with data from the literature that has consistently demonstrated the lower involvement of students with disabilities (e.g., Colón, Rodríguez, Ito, & Reed, 2008; Ratcliff, Hong, & Hilton, 2018; Sanches-Ferreira et al., 2019) and the absence of differences in preference between the two groups of students (e.g., Sanches-Ferreira et al., 2019). Thus, we used the *t-test for independent samples* to test the following hypotheses: a) students with disabilities participate in a smaller number of activities and less frequently compared to students without disabilities; b) no differences in preference scores are expected between students with and without disabilities. The results were obtained using the software IBM SPSS 25.

Results

In total, 361 students aged between 6 and 18 years completed the CAPE/PAC, 306 students without disabilities, and 55 students with disabilities. The Portuguese version of CAPE/PAC was developed from the responses of students without disabilities, considering only the items of activities performed by more than 10% of these students. This analysis resulted in the exclusion of five items: "Participating in community associations" (10.8%), "Performing snow sports" (5.6%), "Fishing" (6.5%), "Volunteering" (8.8%), and "Doing paid work" (3.6%). Of the five items removed, three related to the domain of Physical Activities, one to Activities Subject to Training, and one to Personal Development Activities. Thus, the Portuguese version under test includes 50 items.

The students' answers to the original CAPE/PAC version were compared with their responses in the proposed Portuguese version, with the *t-test for paired samples* revealing statistically significant differences in the scores between the two versions (Table 1).

The Portuguese version recorded significantly higher standardized scores of diversities for the three types of modified activities compared to the original CAPE/PAC version.

The reliability of the Portuguese version was evaluated using *Cronbach's alpha coefficient* for the items of the five types of activities of the CAPE/PAC, whose values varied from .56 and .73 for the CAPE and between .74 and .85 for PAC (Table 2).

As happened in the pilot study that served as the basis for the analysis of the CAPE/PAC metric properties, the internal consistency values of the PAC Preference scores are higher than those of the CAPE Frequency scores, indicating a greater consistency in the preference demonstrated by the children over the activities in view of their effective participation in them.

In order to evaluate the known-groups validity, the differences in the participation pattern between students with and without disabilities were analyzed (Table 3).

Globally, students with disabilities participate in fewer activities and less frequently than children without disabilities. These differences assume statistical significance in

Table 1. Comparison of the mean of the standardized diversity scores in the original version and in the Portuguese version of the CAPE/PAC. (N = 361).

Activity type	Number of activities	Average Diversity	DP	Average difference (DP)	95% IC	Sig.
Recreational Activities						
Original version	12	64.1	22.4			
Portuguese version	12					
Physical Activities						
Original version	13	28.28	15.87	−6.92 (4.63)	−7.44, −6.40	<0.001
Portuguese version	10	35.20	18.99			
Social Activities						
Original version	10	72.1	19.40			
Portuguese version	10					
Activities subject of training						
Original version	10	23.95	19.91	−1.46 (3.64)	−1.87, −1.05	<0.001
Portuguese version	9	25.42	21.58			
Personal development activities						
Original version	10	48.95	20.76	−4.46 (3.28)	−4.83, −4.09	<0.001
Portuguese version	9	53.41	22.29			

Table 2. Internal consistency of PAC preference scores and CAPE frequency scores, from the Portuguese version (50 items). (N = 306).

		Domains		Activities Types				
	Global participation	Formal	Informal	Recreational	Physics	Social	Subject of training	Personal Development
PAC	.94	.85	.91	.80	.83	.74	.85	.81
CAPE	.85	.61	.85	.73	.56	.62	.65	.59

the total of activities and, specifically in the types of Activities Subject to Training and Personal Development. Regarding the PAC Preference Scores, there were no statistically significant differences between children with and without disabilities.

Discussion

The translation and adaptation of an instrument to a new culture are complex processes that require, on the one hand, the analysis of the appropriation of items for the intended population and, on the other hand, the guarantee of comparability of the data obtained with the instrument between different countries (Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012). The Portuguese version of the CAPE/PAC obtained after administration to 306 students without disabilities includes 50 items out of 55 on the original scale.

This reduction resulted, as mentioned in the presentation of the results, from the option of including only the items of activities actually performed by more than 10% of the children and young people in this sample. In addition, some items were slightly modified, in view of the need for clarification of their content identified by the research team at the time of translation into Portuguese and after listening to a group of teachers and students who analyzed and completed the scale, respectively. For example, item 10 was updated and the expression "Write letters" was modified to "Write messages (e-mail, letters, posts)," as had already been done in previous translations (e.g., Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012).

The Portuguese version of CAPE/PAC recorded an average of the standardized scores higher in diversity in the modified version, compared to the original version. In fact, scores on the diversity of activities in which children and young people participate are more relevant when the activities are adjusted to the culture. Unusual or even non-applicable activities in Portugal did not count on the participation of Portuguese children and young people. In this group of activities, there is the formal activity "Participate in community associations" and informal activities, "Performing sports in the snow," "Fishing," "Volunteering" and "Doing paid work."

The analysis of the psychometric properties of the Portuguese version of the CAPE/PAC shows positive indicators regarding the reliability and known-groups validity of the instrument. In line with the pilot study that served as the basis for the CAPE/PAC and with the different adaptation studies of the instrument (Anastasiadi & Tzetzis, 2013; Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012), the internal consistency values of the CAPE can be considered moderate, ranging between 0.56 and .73. In addition, the Portuguese version meets the expectation of greater stability in the preference of children

Table 3. Diversity, frequency, and preference of participation of children with and without disabilities in the Portuguese version of the CAPE/PAC. (N = 361).

	Total *M*(SD)	*t*	Rec *M*(SD)	*t*	Phy *M*(SD)	*t*	Soc *M*(SD)	*t*	Training *M*(SD)	*T*	Pers. Develop. *M*(SD)	*t*
Diversity												
W/o disabilities	25.53 (7.53)	2.624**	7.71 (2.70)	1.312	3.52 (1.90)	1.654	7.21 (1.94)	1.285	2.29 (1.94)	2.377*	4.81 (2.01)	3.627***
W/ disabilities	22.67 (6.84)		7.20 (2.32)		3.05 (2.03)		6.83 (2.09)		1.71 (1.61)		3.87 (1.71)	
Frequency (1–7)												
W/o disabilities	2.53 (0.84)	2.658**	3.28 (1.36)	0.680	1.74 (1.04)	1.793	3.27 (1.07)	1.295	1.25 (1.14)	2.282*	2.85 (1.24)	4.013***
W/ disabilities	2.20 (0.80)		3.15 (1.14)		1.47 (1.08)		3.06 (1.22)		0.88 (0.95)		2.13 (1.08)	
Preference (1–3)												
W/o disabilities	2.14 (0.38)	0.185	2.20 (0.42)	0.759	2.10 (0.51)	1.226	2.50 (0.41)	1.997	1.97 (0.58)	1.071	1.88 (0.49)	0.582
W/ disabilities	2.07 (0.31)		2.16 (0.34)		2.01 (0.45)		2.38 (0.41)		1.89 (0.48)		1.84 (0.40)	

Note: ***$p < 0.001$.

and young people for activities compared to their participation in them. This was reflected in higher internal consistency values for PAC scores compared to CAPE diversity scores.

Regarding known-groups validity, we sought to demonstrate the validity of the results obtained with the CAPE/PAC by comparing groups; attesting to the alignment of the results with the differences in the pattern of participation described in the literature, namely the hypotheses that: (i) children and young people with disabilities participate in a smaller number of activities and less frequently compared to peers without disabilities (Jarus, Lourie-Gelberg, Engel-Yeger, & Bart, 2011; King et al., 2004, 2007; Ullenhag, Almqvist, Granlund, & Krumlinde-Sundholm, 2012); and (ii) there are no differences in preference scores between students with and without disabilities (Sanches-Ferreira et al., 2019). Overall, the results support the first hypothesis, with a clear tendency for students with disabilities to participate in a smaller number of activities and less frequently in all types of activities, which assumes statistical significance in the Global Score and in the Activities Subject to Training and Personal Development.

Limitations

The sample of this study was not representative, since it was not possible to guarantee the random selection of students recruited in all regions of Portugal. Indeed, the use of convenience sampling as a recruitment method and the geographical bias given the participants were recruited from one region of Portugal should be attended when reading these results.

Finally, CAPE/PAC responses were obtained through autonomous completion by older students without disabilities, small group completion by younger students, and individual interviews with students with disabilities. The type of researcher support varied depending on the needs and doubts of the students, with the researcher using the illustrated cards from the CAPE/PAC manual during the interviews. These limitations add to the bias inherent in any self-report measure.

Recommendations for Future Research

Although this study analyzed internal consistency and groups-known validity, future studies should address different types of validity including test-retest reliability and concurrent validity.

This study provided a basis for using the CAPE/PAC in Portugal. The results should be read considering the variety of characteristics of the group of students with disabilities. The option of circumscribing this group to students with an identified health condition could have revealed greater differences in the pattern of participation and require further studies.

Conclusion

The results of this study suggest that cultural adaptation and validation of an instrument does not consist on its direct translation. The Portuguese version of the CAPE/PAC met the analysis of the adequacy of its content for Portuguese students, either through the consultation of students in the translation and testing phase of the instrument or through the

analysis of activities that are not relevant or unusual in Portuguese reality. Using proper instruments adapted to the culture where it is used is fundamental.

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