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Research Article

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Cross Cultural Adaptation and Validation of the Portuguese Version of the Community Service Attitudes Scale

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Abstract

The Community Service Attitudes Scale (CSAS) is a 46-item measure designed to assess students' attitudes towards community service in higher education. The study aimed to cross-culturally adapt and validate the CSAS to European Portuguese. The CSAS was translated into Portuguese and back-translated, content validation was performed by a review committee, and a pretest was completed by 30 undergraduate students. To assess content/face validity, reliability and stability participants were recruited from January to April 2023 at a higher health school. They completed an online questionnaire (*Google Forms*) on two occasions, one week apart. Ninety-five undergraduate health students completed the scale. 59.4% females and 40.6% males, age 21.04 (±1.79), 57.3% without previous community experience. Cronbach's alpha was greater than .80 for all dimensions of the instrument, the CSAS total score (.97) and the CSAS subscales (ranging from .88 to .95), indicating very good internal consistency. The intraclass correlation coefficient (ICC) obtained between test-retest, the total CSAS ICC was .96 and the ICC subscales ranged from .86 to .94, confirming good reliability. The Portuguese version of the CSAS (CSAS_P) is a valid and reliable instrument to assess university students' involvement and attitudes towards community service.

Keywords: Social responsibility attitudes assessment; Instrument Cross cultural adaptation; Test-retest reliability; CSAS Portuguese version

Introduction

Social responsibility (SR) is defined as the ability of individuals and companies to recognize and act on society's priority health needs and challenges, although it does not always mean directly synchronizing education, research, or service outcomes with these needs. It is a concept that has emerged from the World Health Organization's (WHO) definition of social responsibility in 1995 [1]. From the classical role of education, higher education institutions have taken on new roles to meet the needs of the community. Universities themselves are the best places to develop knowledge, conduct research and apply it to community service [2,3]. University Social Responsibility (USR) is a more recent concept that is central to and for these institutions and should be distinguished from corporate or business social responsibility [2]. In the last decade, there has been a proliferation of initiatives around the world to promote and support USR practices, with a particular focus on scientific evidence. Projects developed in the field of USR have a recognized potential due to their commitment to principles of equity, social justice, and citizenship [4]. For this reason, several universities tend to interpret and define a concept of USR for themselves, trying to make it explicit in their practices, whether

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by joining international networks or through isolated projects of limited duration, also by modifying curricula or even by allocating a space for personal training in this matter [5]. On the other hand, it is essential that universities can contribute to the sustainable development of society by improving the quality of people's lives, while at the same time helping to raise the level of teaching and research through the feedback and involvement of external partners [5]. In Portugal, many higher education institutions are developing RS actions, but there is still a need to deepen the concept and collect more data on how it is assessed and developed in the curricula of different study cycles [6]. Regarding academic skills, there is a pedagogical history of assessment tools, and the results are widely disseminated. For social responsibility, there is a gap in assessment tools and data on students' attitudes and dispositions to engage in these activities [6,7]. In our search for assessment instruments, we came across the Community Service Attitudes Scale (CSAS). This instrument assesses social responsibility in college students, and it has been used with dental hygiene and psychology students in the USA and with dental students in South Africa [8; 9,10]. However, we were unable to find any validated for the Portuguese language. This study aims to fill this gap and allow us to increase our knowledge of the attitudes of Portuguese undergraduate students towards the development of community work. The aim of this study was to cross-culturally adapt and validate the Community Service Attitudes Scale (CSAS) for European Portuguese.

Material and Methods

Before starting the translation and cross-cultural adaptation of the instrument, the original authors were contacted to obtain permission to use the questionnaire. The study approach consisted of two parts: a transcultural translation of the CSAS from English to European Portuguese and an analysis of the psychometric properties of the instrument (reliability and validity). The recommendation of Beaton et al. [11] was followed and consists of the following six steps: (1) translation, (2) synthesis, (3) back-translation, (4) expert committee review, (5) pretesting and (6) validation.

Instrument

The Community Service Attitudes Scale (CSAS) was developed by Shiarella et al [12] and is a 46-item measure of social responsibility in college students. The scale is based on Schwartz's model of altruistic helping behavior and is divided into four stages: Perception of Need to Respond, Moral Obligation to Respond, Reassessment, and Engaging in Helping Behavior. Each stage has subscales with a total of eight dimensions. Perception of Need to Respond has four subscales: Awareness, Actions, Ability and Connectedness. Moral obligation to respond includes two subscales: Norms and Empathy subscales. Reassessment includes the subscales Costs, Benefits, and Seriousness. Involvement in helping behavior includes the Intention to Involve subscale. Response is based on a seven-point Likert scale ranging from strongly disagreement to strongly agree [9,12].

Cross cultural adaptation

Translation (from english to portuguese) and (2.2.2) synthesis

Two bilingual independent translators, whose native language was Portuguese, carried out the translation process from English to Portuguese. One was a physical therapist with extensive clinical experience in musculoskeletal conditions and knowledge of English culture and language. The other had a degree in translation and interpretation and was familiar with English, but had no connection with the health sciences. It was explained that the translations should be semantic, not literal, with an emphasis on conceptual equivalence. The process resulted in two Portuguese translated versions of the original CSAS scale. A meeting was then held with the research team to reach a consensus on the translated version.

Back-Translation

The back-translation was carried out by two independent English-speaking translators who were fluent in Portuguese and blind to the original version of the CSAS. One had a degree in translation and interpretation and familiarity with Portuguese, but no connection with health sciences, and the other was an English teacher of health sciences with a bachelor's degree, a background in social responsibility, and familiarity with health terminology. As with the two independent translations, a consensus translation was reached.

Expert Committee Review

A panel of seven experts, four with social responsibility/ educational background and experience, one social worker, one social project manager, two directors of a social institution and members of the research team used the Delphi technique to obtain cross-cultural equivalence of the instrument. The experts rated the items on a scale of 1 to 5, where 1 was full agreement and 5 was no opinion. The expert consensus on item agreement was 80% or higher after one round, which allowed for the content validity of the scale.

Pretesting

A sample of thirty health care students from one university participated in the cognitive pretest. The aim was to assess whether the expert version of the instrument was understandable and whether the vocabulary and expressions were appropriate in the Portuguese context. There were no doubts about the content or order of the items.

The researchers accepted the final Portuguese version of the CSAS and proceeded to the validation step which will be presented below.

Validation Study

Participants

Participants were recruited from January to April 2023 at a higher health school. Inclusion criteria were being at least 18 years old, being a student, being able to read and understand Portuguese, being willing to complete the questionnaire and being able to give informed consent.

Ethical Considerations

The study was carried out in accordance with the Declaration of Helsinki and was approved by Egas Moniz Ethics Committee (Process No. 1106 of 30/06/2022). Student participation was voluntary, the anonymity of the participants was guaranteed and written informed consent was obtained from all students after the nature and objectives of the study were fully explained to them.

Procedures

The study was presented by email to all course coordinators of the one Portuguese university, with the link to the questionnaire, and all students were invited to participate. Data collection was conducted through an online questionnaire (Google forms). Students completed the questionnaire twice, one week apart.

Validation and Statistical Analysis

Factor analysis was performed using principal component analysis (PCA) and varimax rotation. The Kaiser-Meyer-Olkin test (.87) was used to evaluate the overall consistency of the data and to determine whether the factor analysis model used was appropriately fitted to the data. Additionally, Bartlett's test of sphericity was used to confirm the suitability of the exploratory factor analysis. Scale's reliability was evaluated using Cronbach's alpha coefficient, mean variance extracted, and composite reliability. Values equal to or greater than .7 for alpha, and composite reliability and values equal to or greater than .5 for average variance extracted were considered indicative of high internal consistency [13]. Test-retest reproducibility, which reflects stability over time with repeated tests, was analyzed by correlating the results of the initial score and subsequent scores (after one week), using intraclass correlation coefficient [14]. The minimum acceptable test–retest correlation coefficient was .7. All tests were performed at the 95% confidence level, unless otherwise indicated. Statistical analysis was performed using the Statistical Package for the Social Sciences (SPSS) software, version 28.

Results

A convenience sample of ninety-five undergraduate health students completed the scale. 59.4% women and 40.6% men, age 21.04 (±1.79), 57.3% without previous community experience.

Reliability Study

Internal consistency

Internal consistency was measured by calculating Cronbach's alpha. According to the authors it varies from zero to one and values above .7 are very good [13, 14]. The total score of the CSAS showed very good values of internal consistency (Cronbach α=.97). The internal consistency scores for the CSAS subscales showed strong evidence of reliability (coefficient alphas ranging from .88 to .95) (Table 1). The results of the Portuguese validation showed higher values than those of the original authors Shiarella et al. [12] or Perry et al. [8], which can be explained by the sample size.

Table 1: Internal consistency of the CSAS total and subscale.

	N		Cronbach α
Total CSAS	**95**		**0.97**
CSAS Phases	**N**	**Subscale**	**Cronbach α**
Activation step	95	Awareness	0.91
		Actions	0.92
		Ability	0.92
		Connectedness	0.92
Obligation step	95	Norms	0.95
		Empathy	0.92
Defense step	95	Costs	0.88
		Benefits	0.95
		Seriousness	0.94
Response step	95	Intention to engage in community service	0.94

Table 2: Test-retest reliability of the CSAS total and subscales.

	N		Cronbach α
Total CSAS	**66**		**0.96**
CSAS Phases	**N**	**Subscale**	**Cronbach α**
Activation step	66	Awareness	0.87
		Actions	0.91
		Ability	0.93
		Connectedness	0.93
Obligation step	66	Norms	0.94
		Empathy	0.86
Defense step	66	Costs	0.91
		Benefits	0.91
		Seriousness	0.92
Response step	66	Intention to engage in community service	0.9

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Test-retest reliability

The intraclass correlation coefficient (ICC) was used to assess the test-retest reliability. Total CSAS ICC was .96 and the ICCs for the subscales ranged from .86 to .94 (Table 2). The test-retest intraclass correlation coefficient obtained by sample size showed values above .80 and low variability, confirming the reliability of the test.

Discussion

Social responsibility and service learning is a way of connecting the academic environment with real life contexts. It is important to develop students' skills towards the community, but this is not always easy to assess. The CSAS scale has been validated with Greek and South African students with good psychometric values [8,10]. In Portugal there was a lack of instruments that could evaluate these skills in undergraduate students. From this study we can conclude that the psychometric properties (Cronbach's alpha and ICC values) were very good. Compared with previous studies the scores are higher [8,10]. This scale can be a useful tool for researchers and educators to understand students' involvement and commitment to community service projects, and its dimensions can assess which skills are already present and which need to be developed. Previous studies of community health students have shown that increased student awareness of community needs and better recognition of their role as health professionals is associated with engagement in community activities [9]. The Portuguese version of the CSAS (CSAS_P) is a valid and reliable instrument for assessing students' involvement and attitudes towards community service. It provides a simple, inexpensive way of monitoring the students' engagement in social responsibility.

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Conflict of interest: The authors declare no competing interests.

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