

Validation of the Polish version of the Self-reported Experiences of Activity Settings (SEAS) questionnaire

Walidacja polskiej wersji kwestionariusza Self-reported Experiences of Activity Settings (SEAS)

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Key words

activity, assessment of feelings, participation, occupational therapy, recreation

Abstract

Introduction: Despite the growing interest in various forms of leisure time management and their influence on various aspects of human life, still not enough attention is paid to understanding individual experiences of participation in classes. It is important not only what we do, but also how the activity affects overall well-being, functioning and role play in society.

Objective: The aim of this work is to present the process of validation of the Polish version of the Self-reported Experiences of Activity Settings (SEAS) questionnaire.

Material and methods: The study was conducted in a group of 153 people aged 10-22 years (mean 15.5 ± 3.3). The study participants were divided into four groups. The process of translation and cultural adaptation was carried out according to international rules developed by ISPOR.

Results: The alpha Cronbach index for the whole questionnaire was 0.953. The internal alpha Cronbach index for question groups in the Polish version of the TeDeMAR questionnaire was higher or equal to 0.70 and close to the values of this index in the English version of the questionnaire. The results of the constancy test performed in group 4 showed no statistically significant differences ($p > 0.05$) between the individual question groups.

Conclusions: The TeDeMAR questionnaire, as the Polish version of the SEAS questionnaire, met all validation criteria.

Słowa kluczowe

aktywność, ocena odczuć, uczestnictwo, terapia zajęciowa, rekreacja

Streszczenie

Wprowadzenie: Pomimo rosnącego zainteresowania formami zagospodarowania czasu wolnego i jego wpływu na wiele aspektów życia, ciągle jeszcze zbyt mało uwagi poświęca się zrozumieniu indywidualnych doświadczeń ich uczestników. Ważne jest nie tylko co robimy, ale także to, jak wykonywane zajęcia wpływa na ogólne samopoczucie, funkcjonowanie i pełnienie ról społecznych.

Cel: Celem pracy jest przedstawienie procesu walidacji polskiej wersji kwestionariusza Self-reported Experiences of Activity Settings (SEAS).

Material i metody: Badania przeprowadzono w grupie 153 osób w wieku 10-22 lat (średnia 15,5 ± 3,3). Badani zostali podzieleni na cztery grupy. Proces tłumaczenia i adaptacji kulturowej został przeprowadzony według międzynarodowych zasad opracowanych przez ISPOR.

Wyniki: Współczynnik alfa Cronbacha dla całego kwestionariusza wyniósł 0,953. Wskaźniki zgodności wewnętrznej alfa Cronbacha dla grup pytań w polskiej wersji kwestionariusza TeDeMAR były większe lub równe 0,70 i bliskie wartościom tego współczynnika w wersji angielskiej kwestionariusza. Wyniki badania stałości testu wykonane w grupie 4. wykazały brak istotnych statystycznie różnic ($p > 0,05$) pomiędzy poszczególnymi grupami pytań

Wnioski: Kwestionariusz TeDeMAR jako polskojęzyczna wersja kwestionariusza SEAS spełnił wszystkie kryteria walidacji.

The individual division of this paper was as follows: A – research work project; B – data collection; C – statistical analysis; D – data interpretation; E – manuscript compilation; F – publication search

Article received: 02 Jan. 2020; Accepted: 22 Mar. 2020

Please cite as: Kulis A., Batorowicz B., Chrabota U. Validation of the Polish version of the Self-reported Experiences of Activity Settings (SEAS) questionnaire. Med Rehabil 2019; 23(4): 4-9. DOI: 10.5604/01.3001.0014.1510

Internet version (original): www.rehmed.pl

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INTRODUCTION

The Convention on the Rights of the Child adopted by the United Nations General Assembly in 1989 gives all children the right to participate in recreational activities, as well as cultural and artistic life. This may take the form of extracurricular activities carried out at school or outside of school organised by other institutions. Regardless of the place of implementation, they should develop the child's interests, shape his/her personality and teach social behaviours through interaction with peers. This is especially important in the age of digitisation, when spending time in front of a computer or playing video games become more attractive and accessible than meeting with friends and spending time together doing extra-curricular activities. According to the assumptions of occupational therapy, children's involvement in such activities depends not only on their interests, but also on the environment in which such activities are organised¹. This regards not only the physical environment, i.e. the place where the classes are conducted, but also the social environment - a peer group that can support the child.

Despite the growing interest in various forms of leisure time management and their impact on many aspects of human life, still not enough attention is paid to understanding the individual experiences of their participants. Of importance is not only what we do, but also how the activity performed affects general well-being, functioning and social roles. In an era when access to various forms of recreational activities is quite broad, an important issue is not only how the activity affects the child, how it is developed, but also whether participation in it provides the child with a sense of satisfaction.

Taking the above-mentioned considerations into account, the Self-reported Experiences of Activity Settings (SEAS)² - Your Experience from the Place of Recreational Activity (TeDeMAR) questionnaire was validated.

SELF-REPORTED EXPERIENCES OF ACTIVITY SETTINGS (SEAS) QUESTIONNAIRE

Description of assumption and structure of original questionnaire

SEAS is based on a person- and experience-focused approach that is related to the place of performing a given activity. The quality and type of experience are important for the development and health of children and the youth³. The involvement of participants in activities that are challenging (and thus, stimulate the development of skills) is also significant, interaction with others builds a sense of belonging and a positive relationship among people (self-awareness and self-understanding)⁴.

Participation of children in activities may be assessed in a variety of ways, e.g. as the result/degree of performance of the proposed activity or satisfaction with it⁵, as barriers and factors supporting the performance of activities⁶, or as subjective assessment of the possibilities and difficulties of participating in them⁷.

The SEAS questionnaire is based on the concept of places of activity, an important issue is where children and young people spend their time² and gain experience (playing hopscotch in front of their homes, kicking a ball on a pitch or sitting on a bench with a friend). The place of activity combines two inseparable and important elements for experience: activity and location - place. This is an important issue, because playing ball outside one's home alone is a completely different experience than playing football on a pitch with friends or playing in a club. Experiencing places of activity is the experience resulting from a specific place where the child spends time, unlike the concept of quality of life, which relates to emotional and interpersonal experiences gained from activities performed in different places, which cause an increase in well-being.

Even if children with disabilities are physically present in the activity places with other children or adults, they may not be engaged or involved in the activity. This can cause feel-

ings of loneliness and isolation, or lack of control over what is happening around them - and by definition, these values are the attributes of participation⁹. To participate means to have a sense of experience, engagement and participation in what is happening¹⁰. An engaged child feels a sense of fulfilment or a sense of closeness to others and/or thus, has a better sense of understanding him/herself and his/her skills⁸. Experiencing participation at specific activity locations is important when combined with a sense of fun and satisfaction, challenges, choice, self-determination and self-expression¹¹.

Parents are most often asked about the participation of children and young people or the data is collected - by observation of third parties², therefore, the majority of tools used for assessing participation are those based on the opinion of people who know the child (parent or teacher). For example, The Participation and Environment Measure for Children and Youth¹² is used to assess barriers and factors supporting children's participation by enquiring their parents. However, experiences are subjective, personal, because we differ individually in terms of the need for belonging, personal achievements or self-confidence, understanding of oneself and one's surroundings⁵. For that reason, the opinion of the interested parties - children and youth - is important, thus, it is obvious that tools are needed for leisure activities that would allow children and young people with varying degrees of disability to express their own opinions.

SEAS was created in response to this need, in order to enable comprehensive measurement of youth experience in leisure activities, at home or in their community and from their perspective. According to the original assumption, in order to better understand the relationship between the features of a given activity site and children's experiences, it is recommended to use the SEAS tool with MEQAS - a questionnaire for direct measurement of features and quality of the environment (e.g. aesthetic, social, physical aspects, and those related to the possibilities offered by

a place of activity). MEQAS is completed on the basis of observation by a trained occupational therapist or other trained persons¹³.

SEAS is the result of an interdisciplinary team of researchers conducting a research project in Canada with young people aged 13 to 23. SEAS allows young people to express their own opinions on experiences in emotional and interpersonal spheres and is tailored to the needs of each person (healthy or disabled), who understands language at the level of a primary school 3rd grader (in Canada²).

SEAS

The questionnaire is divided into two parts. The first part concerns general questions related to activities, familiarity with the place, activities and people with whom the given activity was performed. The second part consists of 22 questions respectively regarding:

- mood during a given activity (two questions),
- feelings associated with given leisure activity (four questions),
- attitude towards oneself during activity (two questions),
- freedom of choice and opportunities (three questions),
- getting to know oneself and undertaking new actions (three questions),
- influence of the presence of others on the relations with the subjects and the sense of belonging to a group (six questions),
- amazing experiences that took place during the performance of a particular activity (two questions).

At the end of the questionnaire, there are leading questions regarding the understanding of the questionnaire and a place to share one's feelings after completing the survey.

Based on the results of the study, a seven-grade bipolar rating scale and HARTER format were chosen (possibility of positive and negative answers, encouraging true rather than desirable answers) (Figure 1).

Batorowicz et al.¹⁴ created a version with PCS graphic symbols and

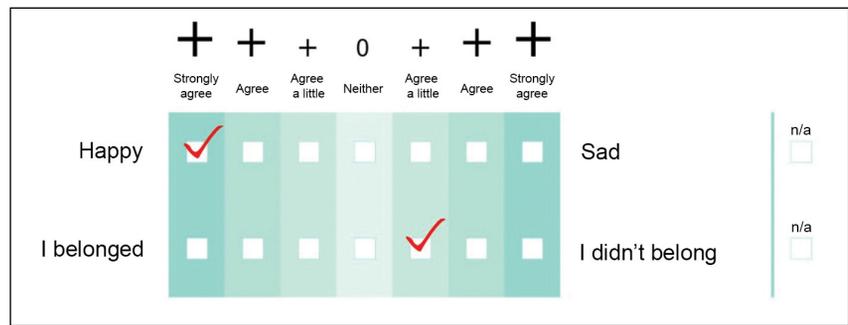


Figure 1

Evaluation scale used in the SEAS (TeDeMAR) questionnaire

an alternative method of answering the questions to enable children and young people to use Augmentative and Alternative Communication (AAC) to complete the questionnaire and who need support in understanding and reading the text, and answering with a method other than pointing or writing.

Validation of the original SEAS in English was based on the inclusion of a group of children and adolescents with severe disabilities in motor and communications areas (i.e. using substitute methods of communication and access) and young people with the need for comprehensive care.

The 5 scales obtained were defined as: personal growth, psychological engagement, social belonging, meaningful interactions as well as choice and control. SEAS demonstrated good psychometric properties. Five scales had very good to excellent reliability of internal consistency (Cronbach's alpha values ranged from 0.71 to 0.88), and correlations between the scales were from small to moderate (from 0.04 to 0.60). The credibility of retesting was moderate regarding psychological engagement, social belonging as well as choice and control, and excellent for personal growth and meaningful interactions. The average test-retest reliability was 0.68².

STUDY AIM

The objective of the work is to present the validation process of the Polish version of the Self-reported Experiences of Activity Settings (SEAS)² questionnaire – Your Experience

from Recreation Activity Site (TeDeMAR) on a group of children and youth participating in extracurricular activities.

MATERIAL AND METHODS

The use of tools in the new language requires checking the equivalence of the translation with the original language. The validation process is divided into two stages: translation and assessment of psychometric properties of the questionnaire^{15,16}.

Translation – broadly understood – covered cross-cultural adaptation (SEAS) and was carried out according to international principles developed by ISPOR (The Professional Society for Health Economics and Outcomes Research) principles of good practice for the translation and cultural adaptation for patient-reported outcomes¹⁷. Based on ISPOR guidelines, the adaptation process involved the following stages: 1. preparation; 2. direct translation from the original language into the target language; 3. standardisation of the new language version; 4. back translation; 5. back translation review; 6. harmonising the translated tool; 7. cognitive tool checking; 8. review of cognitive validation results with finalisation; 9. final language correction of the tool; 10. final report. A team of researchers including the author of the original SEAS questionnaire, the project director in Poland, local consultants - experts, independent translators and proof-editors participated in this process. These people have education in the field of medical and physical culture sciences, psychology, occupa-

tional therapy and physiotherapy. With the consent of the authors of the questionnaire, validation of the questionnaire began with sworn translation from English into Polish (forward translation). In the next stage, a language version suitable for children and young people was created. Then, the created questionnaire was evaluated by competent judges, asking them about the assessment of the content and wording used in the method and determining their intelligibility for children and adolescents aged 12 and above. After taking comments from the conducted research into account, a Polish version was prepared. During the next stage, back translation from Polish into the original language was performed. The content of the back translation was evaluated by the authors of the questionnaire as compatible with the original version. Subsequently, assessment of the degree of understanding of individual questions was carried out among a representative group of children and youth (group 1). The respondents were asked to complete the questionnaire after recreational activities and to assess the intelligibility of the questions, concepts and scale used in the survey. The respondents were to circle 'YES' if the question, individual terms and scales were fully understandable and 'NO' if they were incomprehensible or raised doubts. Then, comments on understanding the content and words used in the questionnaire were included. The layout of the questionnaire was, being agreed upon by the authors, copied from the original version.

Reliability of the TeDeMAR questionnaire was evaluated using the Cronbach alpha internal compatibility factor and "test stability assessment"^{18,19}.

The assessment of the Cronbach's alpha coefficient was carried out among a group of 153 subjects aged 10-22 years (average 15.5 ± 3.3). They were divided into four groups. The first group consisted of 56 healthy students from Primary School No. 158 in Kraków. Group 2 comprised 40 individuals with physical or mental disabilities, students

of the Special School Complex No. 11 in Kraków and the Special School Complex in Rzeszów. Group 3 consisted of 29 hearing impaired or deaf subjects (using sign language), students of J. Korczak Special Educational Centre in Kraków. Group 4 included 28 non-disabled children and youth participating in Rock'n'Roll classes at the Podwawelski Club in Kraków as well as cheerleaders from

Primary School No. 158 in Kraków (Table 1).

Test stability evaluation was carried out in Group 4. The respondents from this group were asked to complete the questionnaire twice, two weeks apart, after the same classes at the same place and at the same time (test, retest). Statistical analysis was performed using Excel and Statistica 12.

Table 1

Characteristics of the study group							
Group	Sex		Age		Test	Retest	
	K	M	min	max			mean ± SD
Group 1	31	25	12	15	13.5 ± 1.1 yr	Yes	No
Group 2	18	22	12	22	19.0 ± 2.3 yr	Yes	No
Group 3	19	10	16	22	18.9 ± 1.8 yr	Yes	No
Group 4	22	6	10	19	13.4 ± 2.4 yr	Yes	Yes
TOTAL	90	63	10	11	15.5 ± 3.3		

Table 2

Division into question groups
Personal growth
I learned a new skill
I became better at something
I was challenged
I tried something new
I grew or changed
I discovered things about myself
Psychological engagement
I was having fun
I felt in a good mood
I was interested
I felt excited
Social belonging
I got along with others
I belonged
I was supported and encouraged by others
I was valued by others
Meaningful interactions
I talked about my thoughts and feelings
I shared ideas about things important to me
I had good conversations with others
I shared something special
Choice and control
I could choose what to do for the most part
I was in control
I had a say in things
I was free of pressure

RESULTS

As a result of analysis regarding data from Group 1, a high degree of understanding of the Polish version of the TeDeMAR questionnaire was demonstrated. Each question was understandable for all respondents. When assessing the intelligibility of the scale, 50 subjects (89.3%) replied that the scale was comprehensible for them. The remaining respondents, after explanation from the researchers, stated that this explanation was sufficient and the assessment scale is understandable.

Similarly to the validation of the original questionnaire, the questions were combined into scales (Table 2). Cronbach's alpha coefficient values were calculated for questions in individual scales.

Cronbach's alpha internal compatibility factor was calculated for groups of questions combined as in the validation of the original SEAS questionnaire. Cronbach's alpha coefficient for the entire questionnaire was 0.953. Cronbach's alpha internal compliance rates for groups of questions in the Polish version of the TeDeMAR questionnaire were greater than or equal to 0.70 and similar to the values obtained for this factor in the English version of the questionnaire (Table 3).

The results of test stability assessment performed in Group 4 showed no statistically significant differences ($p > 0.05$) between individual groups of questions (Table 4).

DISCUSSION

Learning the opinions of children and young people regarding their assessment of activity is one of the challenges for modern occupational therapy. Most commonly, parents are asked questions and activity is assessed only from their perspective. A novelty is the preparation of the SEAS questionnaire addressed to children² and adolescents, in which they assess their own feelings after completing a given activity. Occupational therapy in Poland has been developing at the academic level for several years. There are no tools that could be used by students, future therapists when working with children and youth. There is a great need to validate the tools used by occupational therapists around the world and adapt them to the Polish language and culture.

The result of the research carried out and described in this article is the Polish version of the SEAS questionnaire. The obtained results con-

firmed the reliability of the TeDeMAR questionnaire in terms of basic psychometric properties. This can be demonstrated by satisfactory values of Cronbach's alpha coefficients (above 0.70), which are comparable to those obtained for the original English version². In addition, test stability analyses showed no difference between individual groups of questions.

Project planning was based on international validation standards prepared by ISPOR¹⁶, and the obtained results allowed for intercultural adaptation of the questionnaire according to most recent research standards.

Difficulties encountered during the research resulted, among others, from language differences (male and female expressions), the occurrence of a variety of words found in Polish but not in English, and the need to use phrases typical for the Polish language. Other researchers in the field of questionnaire validation encountered similar difficulties²⁰. These were solved thanks to consultations with Polish-language specialists and proofreaders, who presented the possibilities of writing verbs in the female and male forms and checked the correctness of the translated words.

CONCLUSIONS

The TeDeMAR questionnaire as the Polish version of the SEAS questionnaire met all validation criteria. Validation into Polish will allow the use of a questionnaire to study feelings among children and adolescents during the performance of recreational and leisure activities.

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Table 3

Comparison of alfa Cronbach coefficients for TeDeMAR and SEAS ²		
	TeDeMAR	SEAS
Personal growth	0.79	0.86
Psychological engagement	0.79	0.88
Social belonging	0.94	0.78
Meaningful interactions	0.82	0.71
Choice and control	0.70	0.78

Table 4

Mean differences and correlations between question groups in tests repeated after two weeks			
	Mean differences	SD	Correlation coefficient
Personal growth	0.006	1.8	0.965
Psychological engagement	0.187	1.2	0.106
Social belonging	0.169	1.3	0.168
Meaningful interactions	0.625	1.8	0.718
Choice and control	0.133	0.8	0.070

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