

ROMANIAN TRANSLATION AND LINGUISTIC VALIDATION OF THE CHILDREN AND ADOLESCENT SOCIAL SUPPORT SCALE (CASSS)

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Abstract

A growing body of research is focusing on identifying protective factors that may increase the chances of positive psychosocial functioning in adolescents facing adversity. Previous studies documented the role of perceived social support in risky and aggressive behavior and the need for psychometric instruments to assess this variable. The present study aims to validate at linguistic level the Romanian version of Children and Adolescent Social Support Scale (CASSS; Malecki, Demaray, & Elliott, 2000). CASSS is a 60-item measure divided into five subscales, each subscale corresponding to a specific component of the social network (parents, teachers, friends, classmates and school). The scale was piloted for content and general linguistic clarity, following standard methods of linguistic validation. Participants (secondary school students, 13-19 years) completed on-line the Romanian translated version of CASSS. Two weeks later, students filled in the original English version of the scale. A Wilcoxon signed rank test was conducted to determine whether there was a statistically significant difference between the original and translated versions of the instrument. Subsequently, Spearman correlation coefficients were calculated. Psychometric properties of the translated version of CASSS and recommendations are further discussed.

Keywords: social support; adolescents; linguistic validation; protective factors

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Introduction

Social support commonly refers to “an individual’s perceptions of general support or specific supportive behaviors (available or enacted upon) from people in their social network, which enhances their functioning and/or may buffer them from adverse outcomes” (Malecki & Demaray, 2002, p. 2).

According to Tardy’s model (1985), social support is a multidimensional concept consisting in five components, as it follows: (1) the first one is known as *direction* and it explains that social support is both given and received; (2) the second dimension, *disposition*, distinguishes between the availability of social support and the actual use of social support; (3) the third dimension, i.e. *description / evaluation*, concerns the quantity and quality of social support; (4) the *content* dimension encompasses four types of social support: emotional (e.g. trust, empathy), instrumental (e.g. money, time), informational (e.g. information, advice) and appraisal (e.g. evaluative feedback); (5) the *network* dimension of social support refers to the source of social support (e.g. parents, teachers, peers) (Tardy, 1985). Each particular dimension of social support can operate differently on certain outcomes for children and adolescents (Demaray & Malecki, 2002a; Demaray & Malecki, 2002b; Rueger, Malecki, & Demaray, 2010).

Social support has been generally found to promote positive social-emotional (Demaray & Elliott, 2001), academic (Demaray & Malecki, 2002a) and behavioral outcomes in students (Malecki, Demaray, & Elliott, 2000; Moran & DuBois, 2002), regardless the level of stress experienced. This type of psychosocial influence is known in the literature as the main effect of social support (Cohen & Wills, 1985).

Research has highlighted a broad range of main effects of social support depending on the agents offering it. Hence, parental support was associated with positive outcomes in children and adolescent students, such as academic goal orientation (Demaray & Malecki, 2002b). Social support from all sources predicted students’ social skills and self-concept (Malecki & Demaray, 2002). In relation to behavioral outcomes, social support has been associated repeatedly with positive behavior indicators (King, Huebner, Suldo, & Valois, 2006; Moran & DuBois, 2002) and lower frequencies of aggressive behaviors in adolescents (Kumar, Lal, & Bhuchar, 2014).

In addition to the main effects of social support, a growing body of research suggests that social support may promote desirable psychosocial outcomes in adolescents facing adversity, such as physical or sexual abuse, community violence and chronic poverty. This type of influence is known in the literature as the stress-buffering effect of social support (Cohen & Wills, 1985).

Classmate support appears to have a stress-buffering effect, in terms that higher levels of classmate support were associated with fewer maladjustment indicators and emotional symptoms in students at risk (Demaray & Malecki, 2002a). Family and friends support had a stress-buffering effect on adolescent victims of bullying, preventing poor academic achievement (Rothon, Head, Klineberg, & Stansfeld, 2011). Close friendship support was positively associated with psychological adjustment of adolescents exposed to relational aggression (Prinstein, Boergers, & Vernberg, 2001). Both parental support and peer social support held a protective effect against low self-esteem in adolescent girls victimized by a dating partner (Richards & Branch, 2013). Teacher support and close friend support was linked with fewer aggressive behaviors in adolescents' exposed to chronic community violence (Benhorin & McMahan, 2008).

Based on research findings, it appears that social support may impact children and adolescents' outcomes at various levels. Thus it is important to cautiously consider assessment issues, such as sources of support (i.e. parents, teachers, classmates, close friends, and school) and types of supportive behaviors from each particular source (i.e. emotional, instrumental, informational, and appraisal support), when weighing the influence of perceived social support on different types of outcomes (behavioral, educational, emotional, etc.).

Children and Adolescent Social Support Scale (CASSS) was developed to assess children and adolescents' perceptions of social support (Malecki et al., 2000). The instrument is based on Tardy's model of social support (1985) and it delivers a comprehensive and reliable insight on the following aspects: (1) the frequency of a specific supportive behavior that an individual receives from a certain source and (2) the importance given by the individual to particular supportive behaviors.

Objectives

Considering the multiple effects and associations of social support on psycho-social and educational development of children and adolescent highlighted by previous research, there is a need for validated measures of this psychological construct, appropriate for the Romanian adolescent population.

The National Institute of Public Health (2009; 2016) revealed concerning data regarding the situation of aggressive behaviors in Romanian adolescents: 25 percent of adolescents, enrolled in public schools, were involved at some point in aggressive behaviors (i.e. physical, verbal or emotional aggressive behavior). The incidence rate of aggressive behaviors displayed an ascending trend, compared to the previous decade. More recent data suggests that in early adolescence the most prevalent form of aggressive behavior is physical violence, while emotional or verbal violence (i.e. bullying) is most frequently used in late adolescence years (National Institute of Public Health, 2016). A series of factors that may protect the Romanian adolescents against the use of aggressive behaviors were described, such as: family support, school connectedness, community social support, relationship with peers, etc. (National Institute of Public Health, 2016).

To the best of our knowledge, up to the point this study was conducted, there was a very limited number of available measures of social support, suitable (i.e. translated and linguistically validated) for the Romanian adolescent population (e.g., Zimet, Dahlem, Zimet, & Farley, 1988).

The objective of this study is to develop a conceptually and semantically equivalent Romanian version of the CASSS (Malecki et al., 2000) and to further evaluate the psychometric characteristics of the translated version of the instrument on a Romanian adolescent sample. The CASSS (Malecki et al., 2000) can be used in research and practice for the assessment of social support in children and adolescents. The translated version might be used to effectively identify specific factors which support healthy development and prevent deviant and aggressive behaviors in Romanian adolescent students, as well as to identify significant associations between the perceived social support and psycho-social variables related to optimal social and educational functioning of adolescents.

Method

Participants

The instrument (CASSS) was piloted on 18 adolescent Romanian students (region: Cluj-Napoca, Romania), aged between 13 to 19 years ($m=16.55$, $SD=2.09$). In order to ensure an acceptable level of respondents' English competence, the targeted population consisted in students enrolled in a public English-Romanian bilingual school (Note: students were enrolled in school based on the results of a standard English proficiency test). The majority of respondents were female ($N=12$). Participants completed an on-line version of the scale. Parental consent for research participation was previously obtained for participants under the age of 18, via consent form.

Instruments

Children and Adolescent Social Support Scale (Malecki et al., 2000) is a 60-item instrument that measures perceived social support in children and adolescents (grades 3-12). The instrument comprises five subscales, each referring to a specific source of social support (Parents, Teacher, Classmate, Close friend, and People in my school). Each subscale has 12 items, measuring emotional support (items 1 to 3), informational support (items 4 to 6), appraisal support (items 7 to 9), and instrumental support (items 10 to 12). The items of the scale describe supportive behaviors, e.g. *My parent(s) nicely tell me when I make mistakes*, *My teacher(s) treats me fairly*, *My close friend understands my feelings*. Participants are asked to read the statements and to respond by rating (a) how often they perceive a specific support from a given source (i.e. frequency rating) and (b) how important is for them to perceive that specific support (i.e. importance rating). Frequency is evaluated on a six-point Likert scale, scores ranging from 1=Never to 6=Always, while importance ratings are on a three-point Likert scale, scores ranging from 1 = Not important to 3=Very important. Instructions and example items are provided by authors, clarifying that participants have to circle two numbers for each item (i.e. one for frequency, one for importance) (Malecki et al., 2000).

Literature indicates good psychometric properties of the original (English) version of the CASS, i.e. alpha Cronbach (α)=.97 for Total Frequency score and α =.96 for Total Importance scores (Rueger et al., 2010; Malecki &

Demaray, 2003). For Frequency ratings, each subscale indicated good to excellent reliability: Parent ($\alpha=.88-.96$), Teacher ($\alpha=.90-.96$), Classmate ($\alpha=.91-.96$), Close friend ($\alpha=.93-.97$), and People in my school ($\alpha=.95-.96$). Similarly, for Importance ratings, the subscales revealed good to excellent reliability: Parent ($\alpha=.84-.93$), Teacher ($\alpha=.88-.93$), Classmate ($\alpha=.90-.95$), Close friend ($\alpha=.84-.97$), and People in my school ($\alpha=.93-.95$) (Malecki et al., 2000). Furthermore, test-retest reliability analysis revealed moderate to large magnitude correlations (Rueger et al., 2010).

Procedure

Permission to use the instrument in our study aiming to provide a Romanian version was granted from the corresponding author (C.K. Malecki, personal communication, March 30, 2016). Following the literature guidelines (Brislin, 1976; Van Widenfelt, Treffers, De Beurs, Siebelink, & Koudijs, 2005), the translation process was carried in several stages. Initially, the scale was translated from English to Romanian by two highly specialized Romanian translators. The translation was reviewed and adjusted by a team of experts (i.e. three academics in the field of Psychology). This step was followed by a back-translation process, performed by a contracted Romanian translator to deliver the English translation of the Romanian items. The third procedural step consisted in de-centering. In this phase, the back-translated version of the scale was compared to the original version of the scale, in order to ensure the equivalence and conceptual meaning of the items. Subsequently, the Romanian version was further refined by the team of experts, focusing on the clarity of the translated items, the meaning of the items being the main concern of this procedural step. Participants completed the translated version and few adjustments were made before the final version was attained.

In the pre-test phase of the study, 24 Romanian participants individually filled in an online Romanian version of the CASSS (Malecki et al., 2000). After two weeks from the first data collection, participants were asked to complete the original English version of the scale, this being the post-test phase of the study. From the initial sample ($N=24$), 18 respondents completed both versions of the instrument and were included in the analysis. Several statistical procedures were followed in order to linguistically validate the Romanian version of the scale.

Data analysis

According to the literature, in the case of Likert scale scoring it is recommended to consider summed scales or subscales in the data analysis process, rather than individual items (Gliem & Gliem, 2003). Accordingly, the scores for the items of each subscale were computed. All subsequent statistical analysis considered subscales as variables and not individual items.

The first step consisted in testing the equivalence between the two versions of the CASSS (i.e. Romanian translated version and original English version). A Wilcoxon Signed-Rank Test was performed to determine whether medians significantly differ between the two versions. Further, Spearman's Rank Correlation was performed to determine the relationship between the original and translated version scores. The null hypothesis and alternative hypothesis were formulated as it follows: H_0 - There is no positive monotonic association between the pre-test scores and the post-test scores; H_1 . There is a positive monotonic association between the pre-test scores and the post-test scores. The size of correlation coefficient was interpreted following the literature guidelines (Hinkle, Wiersma, & Jurs, 2003). Statistical analysis was performed using IBM SPSS Statistics 20.0.

Results*Descriptives*

Mean scores were calculated for both English and Romanian translated versions of the CASSS. For the Romanian translated version, the mean for Total Frequency equaled 256.61 ($SD=40.67$), while for Total Importance scores $M=132.88$, $SD=16.48$. Further descriptive data is displayed in Table 1.

Table 1. Mean values for the Romanian translated version and CASSS original English version scores (N=18 respondents)

	CASSS translated		CASSS English	
	M	SD	M	SD
Frequency				
Total Frequency	256.61	40.67	260.38	43.96
Parent	58.22	9.24	59.27	10.08
Teacher	54.88	11.55	55.38	11.81
Classmate	46.38	11.50	47.66	12.82
Close friend	59.22	9.90	58.22	10.17
People in my school	37.88	12.11	39.83	38.50

Table 1. Mean values for the Romanian translated version and CASSS original English version scores (N=18 respondents) - *continued*

	CASSS translated		CASSS English	
	M	SD	M	SD
Importance				
Total Importance	132.88	16.48	133.33	18.48
Parent	29.33	3.67	30.16	3.72
Teacher	28.66	4.58	28.83	4.25
Classmate	24.05	5.97	24.44	6.68
Close friend	30.05	3.36	29.22	3.60
People in my school	20.77	5.09	20.66	7.21

Psychometric properties

A Wilcoxon signed-rank test revealed no significant differences between the pre-test (i.e. CASSS Romanian translated version) and post-test ranks (i.e. CASSS original English version) for Total Frequency subscale ($Z = -.370$, $p=.711$) and Total Importance subscale ($Z=-.167$, $p=.868$) of the two versions of the CASSS. Similarly, there were no significant differences found across the subscales ranks (*see* Table 2).

Table 2. Wilcoxon test results for CASSS English and Romanian translated version

	Frequency				Importance			
	Z	P	Mdn		Z	p	Mdn	
			Pre-test	Post-test			Pre-test	Post-test
Total	-.370	.711	263.50	262.50	-.167	.868	133.00	133.50
Parent	-1.070	.285	60.00	59.50	-1.170	.242	28.50	31.00
Teacher	-.569	.569	56.50	57.00	-.071	.944	27.50	30.00
Classmate	-.228	.820	47.50	51.00	-.411	.681	24.00	24.50
Close friend	-.787	.431	60.00	59.00	-1.119	.263	29.00	29.00
People in my school	-.860	.390	36.00	38.50	-.989	.323	20.50	21.50

Note: Asymptotic significances are displayed. $p < .05$

Further, a Spearman's correlation test was run between the translated and original CASSS scores. There was a high, positive monotonic correlation between pre-test and post-test Total Frequency scores ($r_s=.88$, $p<.01$). Similar results were found for Total Importance scores, $r_s=.75$, $p<.01$. Subscales correlation coefficients indicated moderate ($r_s=.56$, $p<.05$ for Frequency

Classmate subscale) to very high correlations ($r_s=.91$, $p<.01$ for Frequency Teacher subscale). Importance subscale scores registered correlation coefficients between the two CASSS versions ranging from low ($r_s=.37$, $p<.05$ for Close friend subscale) to high correlation ($r_s=.77$, $p<.01$ for Teacher subscale). Detailed data on correlation test results is provided in Table 3. Based on results, the null hypothesis was rejected and the alternative hypothesis was accepted.

Table 3. Correlation coefficient analysis results between the pre-test and post-test scores

	Spearman's rho (r_s)	
	Frequency	Importance
Total	.88**	.75**
Parent	.81**	.67**
Teacher	.91**	.77**
Classmate	.56*	.53*
Close friend	.85**	.37*
People in my school	.90**	.76**

Note: Pre-test scores refer to the translated version of CASSS; Post-test scores refer to the original English version of CASSS. * $p<.05$; ** $p<.01$

Discussion

The purpose of this study was to translate and validate at linguistic level the Romanian version of Children and Adolescent Social Support Scale (CASSS; Malecki et al., 2000). Following standard methods of translation and linguistic validation, we aimed to develop a Romanian translated version of the instrument, conceptually equivalent to the original version. The Romanian version of the CASSS appears to be a linguistically valid measure of social support perceptions and needs in adolescence.

The results of Wilcoxon signed rank test revealed no significant differences between the subscales scores or the Total scores, suggesting that the two versions of CASSS (i.e. English and Romanian translated) are equivalent at linguistic level. In addition, the correlation analysis revealed positive significant correlations among the Total / subscales scores of the original version and the Romanian translated version of the instrument. The correlation coefficients indicated mostly high and very high correlations among the subscales, with only one low correlation value for Close friend Importance subscale (*see* Table

3). By revealing monotonic positive associations between all subscales' scores of the translated and original version of the instrument, the null hypothesis was rejected and the alternative hypothesis was supported. These results are suggesting that the Romanian translated version of CASSS is conceptually and semantically equivalent to the original English version of the instrument.

The multidimensional data provided through CASSS could be used effectively in educational context in at least two manners. Firstly, social support could be used in educational settings by Romanian teachers and school psychologists to address students' aggressive behaviors in adolescence. By identifying students' support needs and further devising strategies which might facilitate fulfilling the featured needs, the incidence of disruptive behaviors in schools may decrease. Secondly, the stress-buffering effects of social support might be valued when teachers and school psychologist are working with or assisting victims of aggressive behaviors and bullying in schools, extending in this manner the potential positive influence of social support beyond the educational settings.

Conclusions

Based on the results of this study, the Romanian version of the CASSS appears to be a linguistically valid measure of the perceived social support in adolescents. Nevertheless, there are several limitations of this study, related to the characteristics of the sample. First, the instrument was piloted on a small sample (N=18). Also, participants were mostly females (N=12). Consequently, cross-validation of the results obtained in this study and extensive psychometric analysis is recommended on more diverse samples of Romanian adolescents. Further investigations of CASSS Romanian translated version is currently undergoing on a larger sample of participants (N=240), aiming to extensively evaluate the psychometric characteristics of the instrument, as well as to describe the relationship between social support and the associated variables in adolescence.

The results of the present study may assist the expansion of perceived social support measurement in relation to several other psycho-social aspects of the educational and social functioning of the Romanian adolescents, allowing also for further trans-cultural comparisons. The present study may contribute to providing Romanian teachers and school psychologist with a valid instrument

that might support a deeper understanding of children and adolescent' perceptions and needs in terms of social support and the associated variables.

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