
Validation of the Child and Adult Social Support Scale (CASSS) which measures social support in the Indonesian Version

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Abstract

Social support has an important role, so that students in online learning can reduce the various problems they face. Social support here comes from parents, teachers, classmates, close friends, and the school itself as an institution. Based on this, it is necessary to do research related to social support to get an overview of the support from whom students need in online learning. Furthermore, this can be used as input to intervene in the problems faced by students. To conduct this research, it is necessary to have a measuring tool to conduct social support research. One of the comprehensive measuring tools in measuring social support is the Child and Adult Social Support Scale (CASSS) which has been made by Malecki and Demaray (2002).

This study aims to: (1) adapt the Indonesian version of the CASSS measuring instrument, and (2) test the psychometric properties of the measuring instrument that has been adapted in Indonesian. The results show that the CASSS measuring instrument that has been adapted shows that the loading factor value of all items is above 0.7. Based on this, it can be said that all items (60 items) in the CASSS scale which are the observed variables have good validity on the latent variables on each dimension of the Social Support construct. Meanwhile, each dimension also has a good factor load on the Social Support construct. This shows that all CASSS items have good validity values so that they can be used for further research. The results of the reliability calculation show that all subscales of the CASSS Scale have a reliability value above 0.9 using the alpha technique.

Introduction

There is a lot of research on student issues related to social support. Various problems have occurred among Indonesian students including the emergence of academic stress, decreased achievement, decreased motivation to learn, fatigue, etc (Agustina & Wisnumurti, 2019; Wibowo and Susanto, 2014).

There are several factors that can reduce various things that can help students to reduce these conditions, including social support. Based on this, it is necessary to carry out

various studies related to social support so as to get an overview of the support from whom students need in learning. To conduct this research, it is necessary to have a measuring tool to conduct social support research. One of the comprehensive measuring tools in measuring social support is the Child and Adult Social Support Scale (CASSS) which has been made by Clark and Malecki (2019).

The definition of social support used in the development of CASSS (2000) is closely related to Tardy's (1985) model and is widely interpreted. Tardy's (1985) model includes five conceptual problems: direction, disposition, description/evaluation, content, and network. Referral refers to the notion that social support is given and received. Disposition is the availability of support in terms of what people have access to, versus the enactment of support or the actual utilization of support resources. Social support is usually described and/or evaluated. Description of social support involves investigating what types of social support are received and from whom they receive it, while evaluation of social support is a measurement of an individual's satisfaction with the support he or she receives. The content of social support can be separated into four types, which vary depending on the situation: emotional (i.e., trust, love, and empathy), instrumental (i.e., helpful behavior), informational (i.e., providing advice), and appraisal support (i.e., offering evaluative feedback). The fifth conceptual problem identified by Tardy's (1985) is social support networks. The network is made up of various people who provide support. Individual networks can include family, friends, neighbors, coworkers, and community professionals. Based on this model, we view social support as individuals' perceptions of general support or specific support behaviors (available or reacted) from people in their social networks, which enhance their functioning and/or may protect them from adverse outcomes. Sources of support (social networks) as measured by CASSS (2002) include parents, teachers, classmates, close friends, and school. In addition, CASSS (2002) utilizes four types of supportive behavior from each source including emotional, instrumental, informational, and appraisal support.

The urgency of the research, the large number of needs to measure social support both in the context of education and development, so that a comprehensive standard measuring tool is needed in identifying social needs. This measuring tool can not only be used for research purposes but can also be used as a psychological assessment tool, regarding the perceived social support of children and adolescents and how they consider it important for children and adolescents.

Methods

The subjects in this study were 250 high school students in East Java aged 15-19 years. This study uses a survey technique by distributing questionnaires as a data collection instrument. with The Child and Adult Social Support Scale (CASSS). Administration is done by providing a link to fill out the questionnaire via an electronic device.

Table 1. Blueprint of CASSS Scale

	Emotional Support	Instrumental Support	Informational Support	Appraisal Support
Parent	1.2.3	10.11.12	4. 5. 6	7. 8. 9
Teacher	1.2.3	10.11.12	4. 5. 6	7. 8. 9
Classmate	1.2.3	10.11.12	4. 5. 6	7. 8. 9
Close Friend	1.2.3	10.11.12	4. 5. 6	7. 8. 9
School	1.2.3	10.11.12	4. 5. 6	7. 8. 9

Data Analysis

This study begins with an adaptation of the scale used for research. The scale adapted is the Child Adolescence Social Support Scale CASSS from (Malecki & Demaray, 2002). The process of adapting measuring instruments is carried out in accordance with the applicable procedures according to the ITC [2005]:

1. Preparation: At this stage, according to suggestions from the ITC, researchers are expected to license the measuring instruments used.
2. Translation Process
 - a. *Forward Translation* with two translators
 - b. Sintesis result of Forward Translation
 - c. *Backward Translation* with two translators
 - d. Sintesis result of Backward Translation
3. Reviewing Process
4. Tryout Item
5. Property psychometric analysis
 - a. Validity evaluation
 - b. Reliability evaluation

Furthermore, the data from the test items were analyzed using CFA (Confirmatory Factor Analysis). CFA is a type of structural equation model (SEM) that examines the hypothesized relationship between the indicator (item) and the latent variable that the indicator wants to measure. CFA analysis was carried out to determine whether the scale used in this study really represented the underlying theory or not [6].

Table 2. Data Analysis

Analysis	Value Received	
Validity	Content Validity Index (CVI)	CVI > 0,8
	Confirmatory Factor Analysis (CFA)	Loading factor > 0,5
	p-value	> 0,05 declared fit
	χ^2/df	Between 2 to 5
	Standardized Root Mean Square (SRMR)	Close 0 more fit, 0,06-0,08 as marginal fit
	Root Mean Square Error of Approximation (RMSEA)	Close 0 more fit, 0,06-0,08 as marginal fit
	Comparative Fit Index (CFI)	> 0,8 as marginal fit
Reliability	Cronbach's alpha	> 0,6 as good
	Construct Reliability (CR)	> 0,7 as good

Result and Discussion

Validity

Evidence Based on Test Content

In this process, researcher ask five experts to review and rate:

1. The expert reviewer evaluates the two components, namely, aspects of similarity (level of similarity in meaning, even though the terms are different) and comparability (similarity of language, phrases, terms, words, and sentences) in the

back-translation process with the original scale. In this process, expert reviewers are asked to rate them on a rating scale (range 1–7). The purpose of this process is to produce items that have the same language and meaning

2. The researcher asked the expert to conduct an assessment of the aspects of the test content that needed to be evaluated. The aspects are: (1) Relevance or relevance. namely whether the content of the test has conformity with the specific content domain to be measured, (2) Clarity or clarity. that is, whether the content of the test clearly reflects the specific content domain to be measured. is quite clear and easy to understand (3) Importance or the level of importance is how important the item is when it is associated with the research construct and context (Goodwin & Leech, 2003). The results mean score of Similarity is 1,13 and comparability is 1,01. According to Sperber (2004), equivalent items are items that have a mean score < 4. The results of the I-CVI calculation on the scale show that the I-CVI is at a value of 1.00. This means that all items on the scale adapted in this study have a good I-CVI and all items can be used in the study. If the I-CVI value is higher than 0.79. then the item is good and usable. (Zamanzadeh et al., 2015). The evidence above shows that this scale has evidence based on test content.

Evidence based on Internal Structure

The results of the Confirmatory Factor Analysis test show that the results of the Goodness of Fit test for the CASSS scale are shown in table 4. Based on the six criteria, goodness of fit indicates good fit, namely RMSEA, GFI, CFI, and NFI, while the AGFI and p-values indicate poor fit.

Table 3. Goodness of Fit for CASSS scale

Criterion	Acceptable Level	Result	Information
Goodness of fit			
p-value	³ 0.05	0.000	Poor fit
RMSEA	£ 0.08	0.048	Good fit
GFI	³ 0.90	0.99	Good fit
AGFI	³ 0.90	0.67	Poor fit
CFI	³ 0.90	0.99	Good fit
NFI	³ 0.90	0.97	Good fit

Meanwhile, the results of the second order CFA loading factor and t-value can be seen in Table 5. The results show that the loading factor value is more than 0.3 and the t-value is more than 1.96. The loading factor value of all items is above 0.7. Based on this, it can be concluded that all items (60 items) in the CASSS scale which are observed variables have good validity on the latent variables on each dimension of the Social Support construct. Meanwhile, each dimension also has a good factor load on the Social Support construct. This shows that all CASSS items have good validity values so that they can be used for further research.

Table 4. Loading factor & T-Value CASSS Scale

Item	Loading Factor	T-Value
1	0.65	
2	0.72	11.90

Item	Loading Factor	T-Value
3	0.72	13.55
4	0.82	13.86
5	0.83	15.15
6	0.85	14.65
7	0.79	14.95
8	0.79	14.54
9	0.67	12.76
10	0.76	12.84
11	0.78	12.29
12	0.68	12.12
13	0.77	
14	0.78	18.23
15	0.81	18.39
16	0.80	17.27
17	0.83	20.03
18	0.85	19.57
19	0.84	18.70
20	0.85	19.55
21	0.80	17.01
22	0.83	19.04
23	0.79	17.51
24	0.76	15.01
25	0.75	
26	0.74	17.77
27	0.81	19.20
28	0.88	19.24
29	0.89	18.89
30	0.89	19.50
31	0.86	18.55
32	0.87	19.06
33	0.83	17.80
34	0.85	18.28
35	0.85	18.31
36	0.80	17.90
37	0.86	
38	0.85	33.34
39	0.85	33.10
40	0.87	28.62
41	0.90	30.90
42	0.89	44.11
43	0.82	25.34
44	0.90	41.67
45	0.88	41.49
46	0.87	23.51
47	0.77	19.96
48	0.88	38.11

Item	Loading Factor	T-Value
49	0.85	
50	0.81	29.54
51	0.86	32.05
52	0.86	34.43
53	0.86	31.02
54	0.87	33.02
55	0.87	32.34
56	0.89	33.42
57	0.89	35.60
58	0.88	35.62
59	0.84	16.42
60	0.84	28.96

Reliability

The researchers calculated reliability using the alpha technique and the reliability of each construct was measured by Construct Reliability (CR). The value of construct reliability that is set is greater than 0.7. So, if the results of the contract reliability test show a number above 0.7 then it is reliable. The researcher also looks for the Variance Extracted and Reliability scores. The reliability of the construct to test the reliability can use the value of AVE (Variance Extracted). The AVE value is calculated as the total square of the standardized factor loading divided by the total square of the standardized loading plus the total variance of the error. An AVE value equal to or above 0.5 indicates a good convergence (Hair et al., 2014).

Table 5. Reliability CASSS

Construct	Alpha	CR	AVE
<i>Social Support</i>			
Parent	0.943	0.941	0.574
Teacher	0.962	0.968	0.655
Classmate	0.968	0.961	0.675
Close Friend	0.976	0.968	0.722
School	0.976	0.969	0.726

Conclusion

Based on the discussion, it is concluded that the CASSS with 5 subscales: Social support from parent, teacher's Social support, Classmate's Social support, Close friend's Social support and School's Social support were proven to meet the criteria of goodness of fit, validity and construct reliability. Furthermore, the scale had fulfilled reliability criterion comprehensively. Therefore, the developed scale was feasible to be used in collecting data to measure the student's social support in Indonesia. Based on the findings, it is concluded that the CASSS in the Indonesian Version has good psychometric properties.

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