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Communication Apprehension: Evaluation of Use of the Indonesian Language Version of the PRCA-24

Chelsea Tamara Aisyah and Lina Natalya
Fakultas Psikologi
Universitas Surabaya

Edwin Adrianta Surijah
Faculty of Health, School of Psychology and Counselling
Queensland University of Technology

Fakultas Ilmu Kesehatan, Sains, dan Teknologi
Universitas Dhyana Pura

Linda Lee McCroskey
Department of Communication Studies
California State University

Communication apprehension (CA) is the anxiety of an individual associated with actual or anticipated communication with others. The Personal Report of Communication Apprehension - 24 Items Version (PRCA-24) is a measurement implement constructed to measure the level of CA of an individual. This research was aimed at the evaluation of the use of the PRCA-24 within the context of research in Indonesia. The participants in the research comprised 336 undergraduate program university students, in an Indonesian university. The evaluation of this implement of measurement used, as an evidence source, validity, based upon internal consistency (analysis of the factors of exploration and reliability testing), and relatedness to another variable, i.e., assertiveness. Assertiveness was selected as the external variable, which predisposes people to communications apprehension behavior, and is measured using the Rathus Assertiveness Schedule (RAS). The results of the factor analysis and reliability testing indicated the dependability of the PRCA-24. This measurement implement also had positive and significant correlations with the variable of predisposition. This research produced implications for use of the PRCA-24 in a variety of different contexts, which will be further discussed in this paper.

Keywords: communication apprehension, PRCA, PRCA-24, exploratory factor analysis, assertiveness

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Communication apprehension (CA) is a phenomenon often experienced, by many people. McCroskey (1977) narrowly defined CA (in the Indonesian translation, the authors used the term "*kecemasan komunikasi*" - communication anxiety) as a level of anxiety or nervousness experienced by a person, related to real circumstances, or those which take the form of anticipation over communicating with someone else, and/or with a number of people. Bragg (2017) revealed that 30 to 40 percent of people have a high level of CA. McCroskey (1977) revealed that a person with a high level of CA will tend often, and to a great degree, to reject communicating with others. This does not mean that these people will never construct relationships with others, however the frequency of their connections will tend to be lower, compared to that of other people (McCroskey, 1977).

Besides this, research by Marinho et al. (2017) indicated that 63.9% of 1135 undergraduate students in Brazil felt anxious, when speaking in public. Research by Katz (as cited in Sugiarto & Kasturi, 2017) indicated that anxiety over speaking in public was often found, both in primary, secondary and tertiary student circles, and within the general public. The results of this research indicated that 85% of people experience anxiety when speaking in public. Anxiety over speaking in public is a problem in itself, which eventuates in

Correspondence concerning this article should be addressed to Lina Natalya, Fakultas Psikologi, Universitas Surabaya, Jalan Raya Kalirungkut, Surabaya 60293. Email: lina.metabus@gmail.com

many people even avoiding certain academic subjects, of even certain fields of study, which would require the ability to engage in verbal communication, such as when making presentations before a class (Sugiarto & Kasturi, 2017).

McCroskey (1977) specifically restricted the definition of CA to cover the trait of an individual, having many implications in their daily life. This is called "trait apprehension" and differs from "state apprehension" (Lamb, as cited in McCroskey, 1977). State apprehension is a normal thing, and is commonly experienced by a large portion of people. Because it is a particular condition and its characteristics normally are not permanent, however, it differs from trait apprehension, which is not a common condition, and the existence of which is disruptive. A person with a high level of trait CA normally has excessive anxiety with all forms of verbal communication (McCroskey, 1977).

Both males and females equally may experience CA, however, based upon research by Bartholomay and Houlihan (2016), it is known that females tend to have a higher degree of verbal CA (M = 53.30, SD = 14.97), compared to that of males (M = 43.88, SD = 11.20). It is therefore known that there is a significant difference in the level of CA between males and females (F = 23.87, $p < .001$).

Based upon the results of published research into CA, the authors found that there are many people who suffer such an impediment, in the form of anxiety over communicating verbally. Anxiety over communicating gives rise to negative effects, one of which is that the individual will find it difficult to socialize in their social environment (McCroskey et al., 1975). CA being experienced by an individual is also associated with feelings of loneliness (Chen, 2019). For this reason, the authors felt that it was extremely important that a precise and accurate measurement of CA be conducted. One of the measurement implements which may be used to measure levels of CA is the Personal Report of Communication Apprehension (PRCA), which began to be developed by McCroskey, in the period 1970 to 1980.

To date, there have been several revisions and versions of this measurement implement, the PRCA, however this research was focused upon the version having a total of 24 items, which is often referred to as the PRCA-24. Since the its creation, the PRCA has had multiple versions, including the PRCA-20, the PRCA-25, the PRCA-10, the PRCA-24A and the PRCA-24B. After deeper evaluation by Porter (1981), it was discovered that the PRCA-20 and the PRCA-25 were focused more on anxiety over undertaking public speaking. Certainly, this does not answer the need for measurement of all four aspects of communication. The PRCA-25 also has imperfect psychometric properties, so that when a deeper evaluation was conducted, what was found was there it was only the best 10 items which could measure PRCA. Based upon these criticisms, McCroskey (2006) developed the PRCA-24A. The difference between the PRCA-24A and the PRCA-24B is the existence of three types of relationships, measured by the PRCA-24B, i.e., relationships with strangers, acquaintances, and friends. It is this which caused the researchers to select the PRCA-24A, normally referred to as the PRCA-24, for evaluation.

The aim of this research was to conduct evaluation of the communications anxiety measurement implement PRCA-24. The PRCA-24 was developed to measure four communications contexts, i.e., dyadic, small groups, meetings and public speaking. Besides this, the PRCA-24 was also designed to help people experiencing anxiety to understand the levels of their anxieties, then, with this awareness, to handle that anxiety (McCroskey, 2006). Because of this, with this research it was hoped to discover a source of evidence of validity, as a way to conduct an evaluation of the PRCA-24, in its application in Indonesia. The source of validity examined was the source of evidence of internal consistency, and its connections to other variables (American Educational Research Association [AERA] et al., 1999). For a source of evidence of internal consistency, the researchers conducted analysis of exploratory factors, with Hypothesis 1.

Hypothesis 1. The results of the exploratory factors form four organizational factors of the PRCA-24.

Whilst to test the relationship with other variables, the researchers used an external variable, the predisposition to CA behavior, so that the hypothesis for this evidence source was Hypothesis 2.

Hypothesis 2. The PRCA-24 has a positive and significant correlation with the variable of predisposition to CA.

Method

The participants in the research were undergraduate tertiary students, in a study program in a private university in Surabaya. The total number of participants was 336 students, consisting of 261 females and 75

males. A large portion of the participants were in the age ranges of 19 (31.3%) and 20 (31.0%) years of age. As regards the method of sampling used in the research, there were two, i.e., purposive random sampling and accidental random sampling, wherein every subject was asked to fill in a measurement implement, online, through the online link (https://tinyurl.com/PRCA 24Indonesia).

In the research, CA was measured using the PRCA-24, as devised by McCroskey (2006), and adapted into Bahasa Indonesia. There were four communication contexts measured by the PRCA-24: (1) anxiety when speaking in a group setting; (2) anxiety when speaking in a meeting; (3) anxiety when speaking face to face with one other (dyadic); and (4) anxiety when speaking in public. Table 1 provides information about the specifics of the measurement implement PRCA-24.

Later, the scores for groups, for meetings, for dyadic, and for public speaking were totaled to obtain the overall score for CA. The number 18 is the average for the range of maximal scores, and minimal scores, for each communication context. The PRCA-24 score was between 24 and 124, meaning the higher the score obtained, the higher the level of anxiety. Table 2 indicates the method of scoring for the PRCA-24, in more detail.

The evaluation of the validity in this research involved two sources of evidence, i.e., exploratory factor analysis and reliability testing, to discover support for the sources of internal consistency and reliability testing evidence, and a source of evidence of connections to the other variable, assertiveness. Factor analysis is a method of examining constructs, based upon the influence of responses, in the variable measured (DeCoster, as cited in Adeli, 2012). Analysis of exploratory factors is a statistical analysis method, used to reduce data to smaller groups, based upon connections between each item and the responses from the subjects. The data may be analyzed further if the Kaiser-Meyer-Olkin (KMO) values are more than 0.5, and the Bartlett's significance values are less than 0.05. The KMO is an index used to examine the accuracy of factor analysis, and to determine whether all of the data obtained is sufficient for inclusion as a factor (Sutopo & Slamet, 2017). After this, Bartlett's test of sphericity was used to test the hypothesis that variables are not mutually correlated, within the population (Sutopo & Slamet, 2017).

Table 1
Blueprint of the PRCA-24

Communication Context	Favourable Items	Unfavourable Items	Total
Groups	2, 4, 6	1, 3, 5	6
Meetings	8, 9, 12	7, 10, 11	6
Dyadic	14, 16, 17	13, 15, 18	6
Public Speaking	19,21, 23	20, 22, 24	6
			24

Table 2
Method of scoring for the PRCA-24

Communication Context	Method of Scoring
Groups	18 – (1) + (2) – (3) + (4) – (5) + (6)
Meetings	18 – (7) + (8) + (9) - (10) – (11) + (12)
Dyadic	18 – (13) + (14) - (15) + (16) + (17) - (18)
Public Speaking	18 + (19) - (20) + (21) - (22) + (23) - (24)
Total	groups + meetings + dyadic + public speaking

Later, to determine the quantity of the best factors, to group the items, there were several suggestions for factor totals, which could be considered:

(1) A Priori Criterion, i.e., the number of factors which have been determined by previous research, or the theories at their bases (Sutejo, as cited in Siaputra & Natalya, 2016);

(2) Latent Root Criterion , i.e., the number of components having total eigenvalues of ≥ 1, because if a factor has a value of < 1, if it is no better than the original, this is caused by the original values having been standardized, so that their average is zero, and the variant is one (Sutopo & Slamet, 2017);

(3) Percentage of Variance Explained Criteria, i.e., the number of factors which are extracted, so that the cumulative percentage the total of the variants reaches a certain satisfactory level (Sutopo & Slamet, 2017). The percentage total of the variants used is the first factor which reaches a cumulative % value of ≥ 50% (Sutejo, as cited in Siaputra & Natalya, 2016); and

(4) Scree Test Criterion. The scree plot form is used to determine the number of factors to be removed (Sutopo & Slamet, 2017). At the moment the scree plot graph begins to incline gradually, the determination of the number of factors ceases.

The sources of evidence of internal consistency is then determined, by conducting the tests of reliability. Reliability is the reproducibility of the test values from the re-removal of the test values under the same conditions, and is operationally defined as the proportion of variance of the scores which is actually above the total variance of the scores examined (Crocker & Algina, as cited in Rios & Wells, 2014). According to Azwar (2012), a test of reliability is conducted using the assistance of the International Business Machines

Corporations (IBM) software Statistical Products and Service Solutions (SPSS), version 20. A measurement implement may be said to be reliable if it has a Cronbach's Alpha value of ≥ .70. A measurement implement which is not yet reliable may have its reliability improved by redacting the items whose Corrected Item-Total Correlation (CITC) values are < 0.30. If the CITC has negative values, then the items are included in the unfavorable category, so that this first needs to be reversed (Siaputra & Natalya, 2016).

Table 3
Blueprint of the Rathus Assertiveness Schedule (RAS)

Dimension	Favourable Items	Unfavourable Items	Total
Assertiveness	3, 6, 7, 8, 10, 18, 20, 21, 22, 25, 27, 28, 29	1, 2, 4, 5, 9, 11, 12, 13, 14, 15, 16, 17, 19, 23, 24, 26, 30	
	13	17	30

Table 4
Result of Testing of KMO-Bartlett's test of PRCA

Type of Test		
Kaiser – Meyer – Olkin Measure of Sampling Adequacy		0.923
Bartlett's Test of Sphercity	Approx. Chi Square	4969.547
	Df	0.276
	Sig.	0.000

Table 5
Total Variance Explained PRCA

Component	Initial *Eigenvalues*		
	Total	% of *Variance*	*Cumulative* %
1	10.053	41889	41.889
2	2.044	8.517	50.405
3	1.643	6.846	57.251
4	1.378	5.740	62.992
5	1.213	5.055	68.047
6	0.917	3.821	71.868
7	0.705	2.939	74.807
8	0.623	2.633	77.440
9	0.587	2.445	79.885
10	0.528	2.202	82.086
11	0.467	1.946	84.032
12	0.454	1.892	85.924
13	0.410	1.710	87.634
14	0.398	1.621	89.255
15	0.360	1.498	90.753
16	0.328	1.369	92.122
17	0.305	1.272	93.394
18	0.290	1.207	94.601
19	0.268	1.118	95.718
20	0.237	0.986	96.704
21	0.223	0.931	97.635
22	0.204	0.851	98.486
23	0.186	0.773	99.259
24	0.178	0.741	100.000

The next source of evidence is the relationship with another variable, i.e., the relationship with the value assertiveness. Assertiveness was selected as one of the sources of evidence of validity of the PRCA because the items which measure assertiveness illustrate the anxiety and the determination to choose something, as well as to do it (McCroskey et al., 1985). Levels of assertiveness were measured using the Rathus Assertiveness Schedule (RAS; Rathus, 1973) measurement implement, translated into Bahasa Indonesia by Prakoso (2013). Table 3 provides information about the specifications of the RAS measurement implement.

Table 3 shows that the RAS is a unidimensional measurement implement, with a total of 30 items. The participants were asked to give ratings on a scale of six points, beginning with "*very much like me*" through to "*very unlike me*". Some examples of RAS items are: "I have hesitated to make or accept dates because of shyness." (Bahasa Indonesia: "*Saya ragu untuk membuat atau menerima kencan karena saya merasa malu*.") and "I have avoided asking questions for fear of sounding stupid." (Bahasa Indonesia: "*Saya menghindari mengajukan pertanyaan karena takut terdengar bodoh*."). In general, the higher the score obtained in the RAS measurement implement, the higher also the assertiveness score (Jenerette & Dixon, 2010). However, the authors followed the methods undertaken in previous research, using the RAS as a measurement of predisposition to anxiety (McCroskey et al., 1985), so that the scoring process was reversed, and high RAS values indicated the participant evaluated him or herself as less than assertive. The statistical analysis used to determine the presence or otherwise of a relationship between CA (measured via the PRCA-24) and assertiveness (measured via the RAS) was that of the Pearson correlation.

Results

The results of the testing of requirements prior to conducting analysis of exploratory factors were that the KMO value was 0.923, and the significant Bartlett's value was 0.000 (see Table 4). That showed the data was ready for factor analysis, and the results of the grouping of items were believable, because it was not just accidental.

After the KMO conditions and Bartlett's sig. were fulfilled, suggestions for the number of factors and for the pattern of grouping of the best items were looked at, based upon the theories of their bases, i.e., what is called the a priori criterion. On the basis of this theory, it was stated by McCroskey (1984), that the PRCA-24 comprised four factors. The proposal for the grouping which followed was called the Latent Root Criterion, i.e., the number of components having total eigenvalues of ≥ 1. The results of analysis (Table 5) indicated that the best suggestion for the number of best values was five factors. Then, the Percentage of Variance Explained Criterion was the result of the processing of the data, which indicated which factor first had a cumulative percentage value of ≥ 50%. The results of this research (see Table 5) indicated that the size of the cumulative percentage values of the second component was 50.405%, so that the second component was the suggested number of best factors, based upon the percentage of variance explained criterion. The Scree Test Criterion was to determine the recommendation for the number of best factors, based upon the scree plot. Figure 1 shows that the number of points before the inclination point was five.

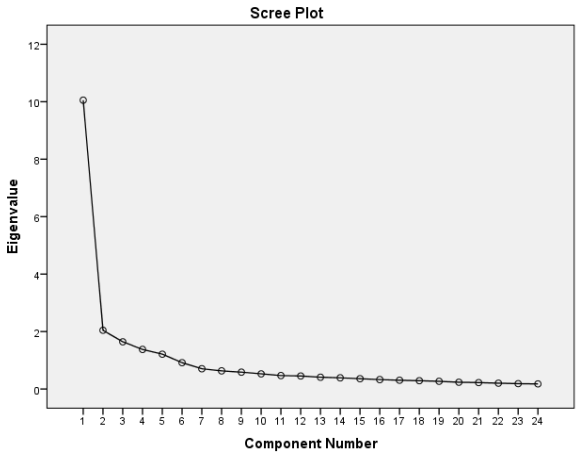

Figure 1. *Scree plot PRCA*.

The results of the latent root criteria and scree tests showed that the best grouping was to be found

Table 6
Results of factor analysis of the PRCA with five factors, in a Rotated Component Matrix

Items	Component				
	1	2	3	4	5
PRCA_PUBLICSPEAKING_21	0.791				
PRCA_PUBLICSPEAKING_19	0.790				
PRCA_PUBLICSPEAKING_23	0.712				
PRCA_PUBLICSPEAKING_22R	0.672	0.462			
PRCA_PUBLICSPEAKING_20R	0.650	0.459			
PRCA_PUBLICSPEAKING_24R	0.607	0.546			
PRCA_GROUP_03R		**0.649**			**0.420**
PRCA_GROUP_05R		**0.629**			
PRCA_DYADIC_15R		**0.573**		**0.545**	
PRCA_MEETING_10R		**0.534**	**0.511**		
PRCA_MEETING_08			0.784		
PRCA_MEETING_12			0.701		
PRCA_MEETING_09			0.700		
PRCA_MEETING_07R		0.509	0.652		
PRCA_MEETING_11R		0.550	0.580		
PRCA_DYADIC_17				0.741	
PRCA_DYADIC_16				0.703	
PRCA_DYADIC_13R		0.463		0.636	
PRCA_DYADIC_18R		0.453		0.569	
PRCA_DYADIC_14				0.550	
PRCA_GROUP_02					0.871
PRCA_GROUP_04					0.869
PRCA_GROUP_01R					0.662
PRCA_GROUP_06					0.531

Note: The items in bold were temporarily redacted, as well as the measurement implement being further analysed, because these items differ conceptually, however they grouped together into one.

with five factors, so that the researchers decided to use five factors. Table 6 is the Rotated Component Matrix table. The whole of the items on public speaking are grouped in Component 1. Component 2 has four mixed items, from Groups 3R, Groups 5R, Dyadic 15R, and Meetings 10R. The letter R indicates the items which have been reversed, i.e., the unfavorable items which were reversed to become favorable. The Meetings items, Nos. 8, 12, 9, 7 and 11 grouped together in Component 3. The Dyadic items, Nos. 17, 16, 13, 18 and 14, grouped together in Component 4. The items of Groups 2, 4, and, 6 grouped together in Component 5.

The authors later analyzed the data based upon both the 24 items and the 20 items (without the items of Group 3R, Group 5R, Dyadic 15R and Meetings 10R). These four items were redacted because they originated from three different dimensions, however grouped together to become one, so surely this grouping was not a good one. The authors later gave the code PRCA-24 to the original measurement implement, and the code PRCA-20 to the implement from which four items had been redacted.

After that, the authors were able to make a comparison of the findings of the sources of evidence of validity between the two measurement implements.

The next step was the conduct of an evaluation of the internal validity of the PRCA-24, and also of the PRCA-20. Table 7 and Table 8 provide information about the results of the analysis of the two measurement implements.

The results of the testing of the sources of evidence of the reliability of PRCA-24 and PRCA-20 indicated that all dimensions had a Cronbach's alpha value of > 0.7 and that all of the items had a CITC value of > 0.3.

After conducting evaluation of internal validity, further sources of evidence were also proven in this research to be sources of evidence, on the basis of their relationships with other variables. Table 9 provides information on the results of the PRCA-RAS correlation.

The connections of both the PRCA-24 and the PRCA-20, relating to the RAS were each shown possibly to be positive and significant. All correlations indicated a size of $r > .3$ and $p \leq .01$. The correlation between the PRCA-24 and the RAS was .638*** and between the PRCA-20 and the RAS was .629***. The sizes of these correlations indicated that the PRCA-24 and the PRCA-20 were both capable of making pre-dictions regarding more that 50% of the variants of the RAS, although there was not any item of the PRCA which directly measured assertiveness.

Table 7
Results of Reliability Testing of PRCA-24

Aspect	*Alpha Cronbach*	Range of CITC	Number of Items
Group	0.821	0.511 – 0.676	6
Meetings	0.883	0.650 – 0.734	6
Dyadic	0.852	0.541 – 0.709	6
Public Speaking	0.891	0.675 – 0.785	6

Table 8
Results of Reliability Testing of PRCA-20

Aspect	*Alpha Cronbach*	Range of CITC	Number of Items
Group	0.802	0.520 – 0.752	4
Meetings	0.870	0.656 – 0.759	5
Dyadic	0.823	0.533 – 0.703	5
Public Speaking	0.891	0.675 – 0.785	6

Table 9
Results of Correlation of PRCA and RAS, additionally to Correlation between Components of PRCA

	PRCA-24	PRCA-20
RAS - PRCA	0.638***	0.629***
Group – Meeting	0.558***	0.441***
Group – Dyadic	0.573***	0.441***
Group – Public Speaking	0.484***	0.378***
Meeting – Dyadic	0.673***	0.663***
Meeting – Public Speaking	0.629***	0.616***
Dyadic – Public Speaking	0.623***	0.615***

Note: *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.1$

Discussion

Hypothesis 1 stated that the results of exploratory factor analysis (EFA) would indicate the four organizational factors of the PRCA-24. However, the results of the analysis of the factors of the PRCA 24 elicited five factors as the best factoring things. However, when they were viewed in greater detail, it was obvious there was one factor which consisted of multidimensional items. The first hypothesis apparently is unsupported, resulting in the items of Factor 2 (see Table 6) being redacted. As the result of the redacting of the items of Factor 2, the items remaining in the PRCA number 20. To differentiate it from the early version, the authors gave the code PRCA-20 to this 20-item measurement implement, after the redaction of four items. As a further consideration regarding the items of this PRCA, useable in the measurement of CA, the authors then looked at the results of analysis, based upon the sources of evidence of internal consistency and the reliability of the measurement implement.

An analysis or investigation of the sources of evidence of internal consistency and reliability was conducted for the PRCA-24 and the PRCA 20. Table 7 and Table 8 show details of the results of the reliability analysis. All dimensions of the PRCA 24 and the PRCA-20 showed a Cronbach's alpha value of more than 0.8, and there were no items having a CITC value of less than 0.3. This showed that the items of the PRCA-24 and the PRCA-20 had good consistency.

Based upon the sources of evidence of connections to other variables, the PRCA-24 and the RAS had positive and significant correlations (r = .638 and $p \leq .01$). The PRCA-20 and the RAS also showed similar results (r = .629 and $p \leq .01$). Investigation of these sources of evidence supported Hypothesis 2 of the research, that there was a positive connection between the PRCA and the RAS. This result was in accord with the research by McCroskey et al. (1985), which indicated the size of the correlation between the PRCA and the RAS to be .700 ($p \leq .01$). Because of the similarity of the results of the correlation, as well as that the two versions of the measurement implement both have good reliability, the authors tended to continue to maintain these implements, in line with the content draft made by early researchers into the PRCA-24 (McCroskey et al., 1985). The effect of all of this analysis was, although the results of the EFA indicated the presence of organizational factors which differed from the early concept framework of the PRCA-24, the writers concluded that the PRCA-24, in the context of this research, would be arranged into 24 items, divided into four contexts of social communication (groups, meetings, dyadic, and public speaking).

The dependability of the internal consistency of the measurement implement PRCA-24, when translated and used in an Indonesian context, together with the support of the sources of evidence of the validity of the connections with the other variable (assertiveness) showed that the PRCA-24 might be used in the Indonesian context. For instance, CA is associated with feelings of loneliness, and is moderated by online social activity (Chen, 2019). The PRCA-24 can assist in the comprehension of the phenomenon of behavior, using apparatus connected to the Internet (e.g., smartphones, computers), because social interaction via the Internet reduces the anxiety of communicating directly, face to face.

The PRCA-24 may also be used to show the dynamics of changes or differences in CA throughout human life. Previous research used the PRCA-24 to look at levels of CA of participants in the age range of 20 to 72 years. The said research showed the existence of a reduction of CA amongst groups of more mature participants (Marcel, 2019). The sources of evidence in this study were based upon the age range of 19 to 20 years. Aside from showing differences in the level of CA in a uniform age group, the internal structure of the PRCA-24 may be tested upon other age groups, in order to strengthen the support of the use of this measurement implement.

The measurement implement PRCA-24 can also be an implement of assistance to examine intervention efforts dealing with CA. In the context of children, there is research which has attempted to use the Social Communication Comfort implement and the Selective Mutism Questionnaire as measurement implements of the effectiveness of therapy (Klein et al., 2017). The PRCA-24 may become an implement of assistance in the examination of the effectiveness of therapy, in the context of individuals who have reached maturity. This process could also be a source of evidence of validity, based upon the consequences of the measurement.

Sources of evidence of validity, based upon the consequences of measurement, are usually applied to a measurement or educational assessment implement, such as a test of achievement in a learning process (Lane, 2014). CA and/or the PRCA-24 are associated with the field of education, for instance in the context of a student learning a foreign language (Guntzviller et al., 2016; Molnar & Crnjak, 2018). This means the PRCA-24 had the capability to indicate a consequence or a certain outcome, for instance by using the PRCA-24 as a placement test. A student having indications of communications anxiety, shown by measurement using the PRCA-24, would require a different learning experience.

Limitations and Suggestions

Shortcomings in this research were that the subjects comprised only tertiary students from one faculty of only one tertiary educational institution. Later research may consider the use of participants from a more diverse age group (Marcel, 2019), or diverse ethnic or national groups (Croucher et al., 2019). Other shortcomings were the use of only three sources of evidence, i.e., internal structure, using reliability and the analysis of factors, together with connections to another variable, i.e., assertiveness. Suggestions for subsequent research are to test the PRCA with other sources of evidence of the validity of the construct, such as response processes, impacts of measurement, and the validity of the content, in order to meet the full five sources of evidence to measure the validity of

the construct, based upon The Standards for Educational and Psychological Testing (AERA et al., 1999; Siaputra & Natalya, 2016).

Suggestions for future research would be to add a number of other variables, as supportive criteria, such as introversion, self-esteem & self-acceptance, verbal reticence, and general personality (McCroskey, 1978). Loneliness, as well as psychological welfare (Chen, 2019) could also become other variables, which might be examined as to their connections with CA. Further research could also conduct cross checking by the exploitation of non-questionnaire assessment implements, such as observation or interview (Molnar & Crnjak, 2018).

Conclusion

Based upon the sources of evidence explained above, and the results obtained, the PRCA is a good measurement implement for use in measuring CA, particularly in an Indonesian context. The PRCA-24 is the better one for use, because it was commonly used in previous research, so that there are many extant references, which might become points of reference, or be used for comparison. The reliability of the internal consistency of the PRCA-24, together with the significant correlation with the RAS, indicates that this measurement implement may be used to comprehend the phenomenon of, or behavior related to, CA. The value of the PRCA-24 can have further implications, such as in its application in an educational setting, as well as for the evaluation of intervention. For this reason, this examination of the PRCA-24 has opened the door for other research, which might have an impact for individuals experiencing difficulties in communicating, because of the CA they suffer.

Appendix

Research Implements of Measurement for Data Collection

In order to employ these measurement implements, there are a few terms which require prior comprehension:
1. A small-group discussion is one which occurs between 3 (three) and 10 (ten) people.
2. A meeting is a process which proceeds formally and in which there are people of differing status levels, from the chairperson of the meeting to others, who are participants.
3. A conversation or discussion is communication conducted between 2 (two) persons.

No	Statement	Response					
		Most Inapplicable	Inapplicable	Somewhat Inapplicable	Somewhat Applicable	Applicable	Very Applicable
1	I do not like to be involved in small-group discussions.						
2	Normally I feel comfortable when involved in a small-group discussion						
3	I feel stressed and nervous when involved in a small-group discussion						
4	I am happy to be involved in a small-group discussion						
5	Being involved in a small-group discussion with new people makes me tense and nervous.						
6	I am calm and relaxed, when involved in a small-group discussion.						
7	In general, I am nervous when I have to be involved in a meeting.						
8	Normally I feel calm and relaxed when involved in a meeting.						
9	I feel very calm and relaxed when expressing my opinion in a meeting.						
10	I am scared to express myself. (give my opinion) in a meeting.						

No	Statement	Response					
		Most Inapplicable	Inapplicable	Somewhat Inapplicable	Somewhat Applicable	Applicable	Very Applicable
11	Normally I feel uncomfortable when giving my opinion in a meeting.						
12	I feel very relaxed when answering questions in a meeting.						
13	When talking to somebody new I feel very nervous.						
14	I feel unafraid to speak in a discussion						
15	Normally I feel very tense and nervous in a discussion.						
16	Normally I am very calm and relaxed when speaking in a discussion.						
17	When talking to somebody new, I feel very relaxed.						
18	I am afraid to initiate a discussion.						
19	I am not afraid to give a speech.						
20	A number of the parts of my body feel stressed and stiff, when giving a speech.						
21	I feel relaxed when giving a speech.						
22	My thinking becomes confused and chaotic, when I am giving a speech.						
23	I give speeches with self-confidence.						
24	When giving a speech, I feel so nervous that I forget a number of facts which I well know.						

Kecemasan Komunikasi: Evaluasi Penggunaan *PRCA-24* Versi Bahasa Indonesia

Chelsea Tamara Aisyah and Lina Natalya
Fakultas Psikologi
Universitas Surabaya

Edwin Adrianta Surijah
Faculty of Health, School of Technology and Counselling
Queensland University of Technology

Fakultas Ilmu Kesehatan, Sains dan Teknologi
Universitas Dhyana Pura

Linda Lee McCroskey
Department of Communication Studies
California State University

Communication apprehension (CA) adalah kecemasan individu yang berasosiasi dengan komunikasi yang nyata atau yang sedang diantisipasi terhadap orang lain. *Personal Report of Communication Apprehension-24 items version (PRCA-24)* adalah alat ukur yang dikonstruksikan untuk mengukur tingkat *CA* individu. Penelitian ini bertujuan mengevaluasi penggunaan *PRCA-24* pada konteks penelitian di Indonesia. Partisipan penelitian adalah 336 mahasiswa program sarjana di suatu perguruan tinggi di Indonesia. Evaluasi alat ukur menggunakan sumber bukti validitas berdasarkan konsistensi internal (analisis faktor eksploratori dan pengujian reliabilitas), dan hubungan dengan variabel lain, yaitu asertivitas. Asertivitas dipilih sebagai variabel eksternal yang menjadi predisposisi perilaku *CA* dan diukur dengan menggunakan *Rathus Assertiveness Schedule (RAS)*. Hasil analisis faktor dan pengujian reliabilitas menunjukkan kehandalan *PRCA-24*. Alat ukur ini juga berkorelasi positif dan signifikan dengan variabel predisposisi. Penelitian ini membawa implikasi berupa penggunaan *PRCA-24* dalam berbagai konteks yang berbeda-beda yang akan dibahas lebih lanjut pada tulisan ini.

Kata kunci: communication apprehension, *PRCA*, *PRCA-24*, analisis faktor eksploratori, asertivitas

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Communication apprehension (CA) adalah sebuah fenomena yang sering dialami oleh banyak orang. Secara sempit, McCroskey (1977) mendefinisikan *CA* (dalam terjemahan Bahasa Indonesia, penulis menggunakan istilah 'kecemasan komunikasi') sebagai suatu level kecemasan atau kegelisahan yang dialami oleh seseorang yang berkaitan dengan hal yang sifatnya nyata atau merupakan bentuk antisipasi untuk berkomunikasi dengan orang lain dan/atau banyak orang. Bragg (2017) mengungkapkan bahwa 30-40 persen individu memiliki tingkat *CA* yang tinggi. McCroskey (1977) mengungkapkan bahwa seseorang dengan tingkat *CA* yang tinggi akan cenderung untuk melakukan banyak dan sering kali penolakan untuk berhubungan dengan orang lain. Bukan berarti orang-orang tersebut sama sekali tidak menjalin hubungan dengan orang lain, namun frekuensi hubungan mereka cenderung lebih rendah dibandingkan yang lainnya (McCroskey, 1977).

Selain itu, hasil penelitian Marinho et al. (2017) menunjukkan bahwa 63,9% dari 1.135 mahasiswa Strata-1 di Brazil merasa cemas ketika berbicara di depan umum. Penelitian Katz (sitat dalam Sugiarto & Kasturi, 2017) menunjukkan bahwa kecemasan berbicara di depan umum sering ditemukan, baik itu di kalangan siswa, mahasiswa dan masyarakat umum. Hasil penelitian ini menunjukkan bahwa 85% orang mengalami kecemasan ketika berbicara di depan umum. Kecemasan berbicara di depan umum ini menjadi sebuah permasalahan tersendiri yang pada akhirnya mengakibatkan banyak orang sampai menghindari mata pelajaran tertentu atau bahkan jurusan tertentu

Korespondensi sehubungan dengan artikel ini ditujukan pada Lina Natalya, Fakultas Psikologi, Universitas Surabaya, Jalan Raya Kalirungkut, Surabaya 60293. Email: lina.metabus@gmail.com

yang membutuhkan kemampuan komunikasi lisan seperti contohnya presentasi di depan kelas (Sugiarto & Kasturi, 2017).

McCroskey (1977) secara spesifik membatasi definisi *CA* sebagai salah satu *trait* dari individu tersebut yang memiliki banyak implikasi dalam kehidupan sehari-hari individu tersebut. "*Trait apprehension*" dan berbeda dengan "*state apprehension*" (Lamb, sitat dalam McCroskey, 1977). *State apprehension* adalah hal normal dan lazim untuk dialami oleh sebagian besar orang karena suatu kondisi tertentu dan sifatnya biasanya tidak menetap, namun berbeda dengan *trait apprenhension* yang bukan merupakan kondisi lazim dan keberadaannya mengganggu. Seseorang dengan tingkat *trait CA* yang tinggi biasanya memiliki kekhawatiran yang berlebihan pada hampir semua bentuk komunikasi lisan (McCroskey, 1977).

Laki-laki maupun perempuan sama-sama memiliki peluang untuk dapat mengalami *CA*, namun berdasarkan penelitian Bartholomay dan Houlihan (2016) diketahui bahwa perempuan cenderung memiliki kecemasan berkomunikasi lisan yang lebih tinggi (M = 53,30, SD = 14,97) dibandingkan laki-laki (M = 43,88, SD = 11,20). Diketahui bahwa terdapat perbedaan tingkat *CA* yang signifikan antara laki-laki dan perempuan (F = 23,87, p < 0,001).

Berdasarkan beberapa hasil penelitian terkait CA yang telah dijabarkan, penulis menemukan bahwa ada banyak orang yang mengalami hambatan berupa kecemasan dalam berkomunikasi secara lisan. Kecemasan berkomunikasi menimbulkan dampak negatif, salah satunya adalah individu akan sulit bersosialisasi dengan lingkungannya (McCroskey et al., 1975). Individu yang mengalami CA juga terasosiasi dengan perasaan kesepian (Chen, 2019). Oleh karena itu, penulis merasa sangatlah penting untuk melakukan pengukuran *CA* secara tepat dan akurat. Salah satu instrumen yang dapat digunakan untuk mengukur tingkat *CA* adalah *Personal Report of Communication Apprehension (PRCA)* yang mulai dikembangkan oleh McCroskey pada periode 1970 - 1980.

Sampai saat ini telah terdapat beberapa revisi dan versi dari alat ukur *PRCA*, namun penelitian ini berfokus pada *PRCA* dengan total butir sebanyak 24 butir atau yang sering disebut dengan *PRCA-24*. Sejak awal pembentukannya, *PRCA* memiliki beberapa versi antara lain *PRCA-20*, *PRCA-25*, *PRCA-10*, *PRCA-24A* dan *PRCA-24B*. Setelah dievaluasi secara lebih mendalam oleh Porter (1981), ditemukan bahwa *PRCA-20* dan *PRCA-25* lebih memfokuskan pengukuran pada kecemasan untuk melakukan *public speaking*. Tentu hal ini tidak menjawab kebutuhan pengukuran pada empat konteks komunikasi. *PRCA-25* juga memiliki properti psikometrik yang kurang baik, sehingga ketika dilakukan evaluasi secara lebih mendalam, hanya ditemukan 10 butir terbaik yang dapat mengukur *PRCA*. Berdasarkan kritik-kritik tersebut, McCroskey (2006) mengembangkan *PRCA-24A*. Perbedaan antara *PRCA-24A* dan *PRCA-24B* adalah adanya tiga tipe hubungan yang diukur pada *PRCA-24B* yaitu *stranger*, *acquaintance*, dan *friends*. Hal inilah yang menyebabkan peneliti memilih *PRCA-24A* atau biasa disebut *PRCA-24* untuk dievaluasi.

Tujuan penelitian ini adalah melakukan evaluasi terhadap alat ukur *CA PRCA-24*. *PRCA-24* dikembangkan untuk mengukur empat konteks komunikasi secara menyeluruh yaitu *dyadic*, *small group*, *meeting*, dan *public speaking*. Selain itu, *PRCA-24* juga didesain untuk membantu orang-orang yang mengalami kecemasan untuk mengetahui tingkat kecemasannya lalu secara sadar menciptakan strategi untuk menangani kecemasan tersebut (McCroskey, 2006). Oleh karena itu, penelitian ini ingin menemukan suatu sumber bukti validitas sebagai cara melakukan evaluasi terhadap *PRCA-24* dalam penerapannya di Indonesia. Sumber bukti validitas yang ditelusuri adalah sumber bukti konsistensi internal dan hubungan dengan variabel lain (American Educational Research Association [AERA] et al., 1999). Untuk sumber bukti konsistensi internal, penelitian ini melakukan analisis faktor eksploratori dengan Hipotesis 1.

Hipotesis 1. Hasil analisis faktor eksploratori membentuk empat faktor penyusun *PRCA-24*.

Sedangkan, untuk menguji hubungan dengan variabel lain, penelitian ini menggunakan suatu variabel eksternal yang menjadi predisposisi perilaku CA dengan Hipotesis 2.

Hipotesis 2. *PRCA-24* berkorelasi positif dan signifikan dengan variabel predisposisi CA.

Metode

Partisipan penelitian ini adalah mahasiswa dari salah satu program studi di universitas swasta di Surabaya. Jumlah seluruh partisipan adalah 336 orang mahasiswa Strata-1 yang terdiri dari 261 orang perempuan dan 75 orang laki-laki. Sebagian besar subjek dalam penelitian ini berada pada rentang usia 19 tahun (31,3%) dan 20 tahun (31,0%). Adapun metode *sampling* yang digunakan pada penelitian ini ada dua yaitu *purposive random sampling* dan juga *accidental random samp-*

ling, ketika setiap subjek diminta mengisi alat ukur secara daring melalui link daring (https://tinyurl.com/PRCA24Indonesia).

Dalam penelitian ini, *CA* diukur menggunakan *PRCA-24* yang dibuat oleh McCroskey (2006) dan diadaptasi ke dalam Bahasa Indonesia. Terdapat empat konteks komunikasi yang diukur dalam PRCA-24, yaitu: (1) kecemasan ketika berbicara dalam kelompok (*group*); (2) kecemasan ketika berbicara dalam suatu pertemuan (*meeting*); (3) kecemasan ketika berbicara bertatap muka berdua (*dyadic*); dan (4) kecemasan ketika berbicara di depan umum (*public speaking*). Tabel 1 menyediakan informasi mengenai spesifikasi alat ukur *PRCA-24*.

Kemudian jumlah skor *group*, jumlah skor *meeting*, jumlah skor *dyadic*, dan jumlah skor *public speaking* dijumlahkan secara keseluruhan menjadi skor *CA*. Angka 18 merupakan rata-rata dari rentang skor maksimal dan skor minimal dari masing-masing konteks komunikasi. Skor *PRCA-24* berkisar antara 24 sampai 124 yang artinya semakin tinggi skor yang diperoleh menunjukkan tingkat kecemasan yang lebih tinggi. Tabel 2 menunjukkan cara skoring *PRCA-24* secara lebih detail.

Evaluasi validitas penelitian ini menggunakan dua sumber bukti yaitu analisis faktor eksploratori dan uji reliabilitas untuk menemukan dukungan sumber bukti konsistensi internal, dan sumber bukti hubungan dengan variabel lain yaitu asertivitas. Analisis faktor adalah metode untuk memeriksa bagaimana konstruk yang mendasari memengaruhi respon pada variabel yang diukur (DeCoster, sitat dalam Adeli, 2012). Analisis faktor eksploratori adalah salah satu metode analisis statistika yang digunakan untuk mereduksi data menjadi kelompok-kelompok yang lebih kecil berdasarkan hubungan antara masing-masing butir dengan respon subjek. Data dapat dianalisis lebih lanjut jika nilai *Kaiser-Meyer-Olkin (KMO)* lebih dari sama dengan 0,5 dan nilai signifikansi *Bartlett* kurang dari sama dengan 0,05. *KMO* merupakan suatu indeks yang digunakan untuk meneliti ketepatan analisis faktor dan untuk mengetahui apakah semua data yang telah diambil cukup untuk difaktorkan (Sutopo & Slamet, 2017). Selanjutnya *Bartlett's test of sphericity* digunakan untuk menguji hipotesis bahwa variabel tidak saling berkorelasi dalam populasi (Sutopo & Slamet, 2017).

Kemudian untuk menentukan jumlah faktor terbaik untuk mengelompokkan butir, ada beberapa usulan jumlah faktor yang dapat dipertimbangkan:

(1) *A Priori Criterion*, yaitu jumlah faktor yang telah ditentukan oleh penelitian terdahulu atau teori yang mendasarinya (Sutejo, sitat dalam Siaputra & Natalya, 2016);

(2) *Latent Root Criterion* yaitu jumlah komponen yang memiliki nilai total *eigenvalues* ≥ 1 karena jika faktor bernilai < 1 maka tidak lebih baik dari asli, hal ini dikarenakan variabel asli telah dibakukan, maka rata-ratanya adalah nol dan variannya satu (Sutopo & Slamet, 2017);

Tabel 1
Cetak Biru PRCA-24

Konteks Komunikasi	Butir *Favourable*	Butir *Unfavourable*	Total
Groups	2, 4, 6	1, 3, 5	6
Meetings	8, 9, 12	7, 10, 11	6
Dyadic	14, 16, 17	13, 15, 18	6
Public Speaking	19,21, 23	20, 22, 24	6
			24

Tabel 2
Metode Skor PRCA-24

Konteks Komunikasi	Cara Skor
Groups	18 – (1) + (2) – (3) + (4) – (5) + (6)
Meetings	18 – (7) + (8) + (9) - (10) – (11) + (12)
Dyadic	18 – (13) + (14) - (15) + (16) + (17) - (18)
Public Speaking	18 + (19) - (20) + (21) - (22) + (23) - (24)
Total	*groups + meetings + dyadic + public speaking*

(3) *Percentage of Variance Explained Criterion* yaitu banyaknya faktor yang diekstraksi hingga total persentase kumulatif varian mencapai suatu level tertentu yang memuaskan (Sutopo & Slamet, 2017). varian yang digunakan adalah faktor yang pertama kali mencapai nilai *cumulative %* ≥ 50% (Sutejo, sitat dalam Siaputra & Natalya, 2016);

(4) *Scree Test Criterion*. Bentuk scree plot digunakan untuk menentukan jumlah faktor yang diambil (Sutopo & Slamet, 2017). Saat grafik *scree plot* mulai melandai, maka penentuan banyaknya faktor dihentikan.

Sumber bukti konsistensi internal selanjutnya adalah dengan melakukan pengujian reliabilitas. Reliabilitas merupakan reproduktivitas nilai tes dari hasil pengambilan ulang nilai tes dengan kondisi yang sama dan secara operasional didefinisikan sebagai proporsi varians skor yang sebenarnya atas jumlah keseluruhan skor varians yang diamati (Crocker & Algina, sitat dalam Rios & Wells, 2014). Menurut Azwar (2012) uji reliabilitas dilakukan untuk mengetahui seberapa konsisten alat ukur yang digunakan dalam mengukur sebuah variabel. Uji reliabilitas dilakukan dengan menggunakan bantuan *software International Business Machines Corporation (IBM) Statistical Product and Service Solutions (SPSS)* versi 20. Alat ukur dapat dikatakan reliabel jika memiliki nilai *Alpha Cronbach* ≥ 0,70. Alat ukur yang belum reliabel dapat ditingkatkan

dengan cara menggugurkan butir yang nilai *Corrected Item-Total Correlation (CITC)* < 0,30. Jika *CITC* bernilai negatif, maka butir tersebut termasuk *unfavorable* sehingga perlu dibalik terlebih dahulu (Siaputra & Natalya, 2016).

Sumber bukti selanjutnya adalah hubungan dengan variabel lain, yaitu hubungannya dengan asertivitas. Asertivitas dipilih sebagai salah satu sumber bukti validitas dari *PRCA* karena butir-butir yang mengukur asertivitas menggambarkan tentang kecemasan dan ketegasan untuk memilih serta melakukannya (McCroskey et al., 1985). Tingkat asertivitas diukur dengan menggunakan alat ukur *Rathus Assertiveness Schedule* (*RAS*; Rathus, 1973) yang telah diterjemahkan ke Bahasa Indonesia oleh Prakoso (2013). Tabel 3 menyediakan informasi mengenai spesifikasi alat ukur *RAS*.

Tabel 3 menunjukkan bahwa *RAS* adalah alat ukur yang bersifat unidimensi dengan jumlah total 30 butir. Partisipan diminta untuk memberi rating pada suatu skala dengan enam poin mulai dari "*sangat banyak seperti saya*" hingga "*sangat tidak seperti saya*." Contoh butir *RAS* adalah: "*I have hesitated to make or accept dates because of shyness* ("Saya ragu untuk membuat atau menerima kencan karena saya merasa malu")" atau "*I have avoided asking questions for fear of sounding stupid* ("Saya menghindari mengajukan pertanyaan karena takut terdengar bodoh")". Pada umumnya, semakin tinggi skor yang diperoleh pada alat ukur *RAS* menunjukkan level asertivitas yang tinggi pula (Jenerette & Dixon, 2010). Akan tetapi, penulis mengikuti cara yang ditempuh penelitian terdahulu dengan menggunakan *RAS* sebagai suatu predisposisi kecemasan (McCroskey et al., 1985). Sehingga, proses skoring dibalik dan nilai *RAS* yang tinggi menunjukkan partisipan menilai dirinya kurang asertif. Analisis statistik yang digunakan untuk mengetahui ada tidaknya hubungan antara *CA* (*PRCA-24*) dan asertivitas (*RAS*) adalah dengan metode analisis *Pearson correlation*.

Tabel 3
Cetak Biru Rathus Assertiveness Schedule (RAS)

Dimensi	Butir *Favourable*	Butir *Unfavourable*	Total
Asertivitas	3, 6, 7, 8, 10, 18, 20, 21, 22, 25, 27, 28, 29	1, 2, 4, 5, 9, 11, 12, 13, 14, 15, 16, 17, 19, 23, 24, 26, 30	
	13	17	30

Tabel 4
Hasil Uji KMO-Bartlett's tes PRCA

Jenis Uji		
Kaiser – Meyer – Olkin Measure of Sampling Adequacy		0,923
Bartlett's Test of Sphercity	Approx. Chi Square	4969,547
	Df	0,276
	Sig.	0,000

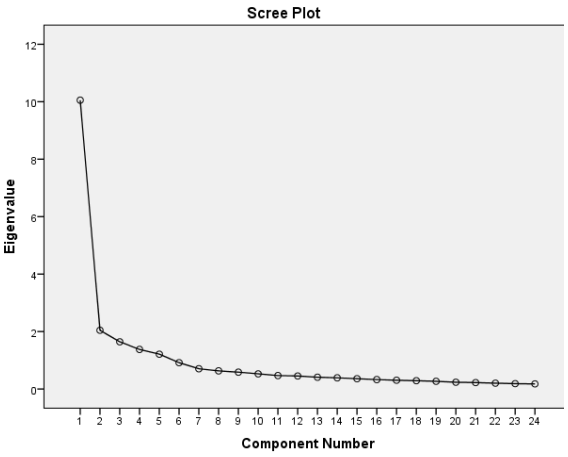
Tabel 5
Total Variance Explained PRCA

Komponen	*Initial Eigenvalues*		
	Total	% of *Variance*	*Cumulative* %
1	10,053	41,889	41,889
2	2,044	8,517	50,405
3	1,643	6,846	57,251
4	1,378	5,740	62,992
5	1,213	5,055	68,047
6	0,917	3,821	71,868
7	0,705	2,939	74,807
8	0,623	2,633	77,440
9	0,587	2,445	79,885
10	0,528	2,202	82,086
11	0,467	1,946	84,032
12	0,454	1,892	85,924
13	0,410	1,710	87,634
14	0,398	1,621	89,255
15	0,360	1,498	90,753
16	0,328	1,369	92,122
17	0,305	1,272	93,394
18	0,290	1,207	94,601
19	0,268	1,118	95,718
20	0,237	0,986	96,704
21	0,223	0,931	97,635
22	0,204	0,851	98,486
23	0,186	0,773	99,259
24	0,178	0,741	100,000

Hasil

Hasil uji persyaratan sebelum melakukan analisis faktor eksploratori adalah nilai *KMO* sebesar 0,923, dan nilai signifikansi *Bartlett's* sebesar 0,000. (lihat Tabel 4). Data siap untuk dianalisis faktor dan hasil pengelompokkan butir dapat dipercaya karena bukan hanya sebuah kebetulan.

Setelah syarat *KMO* dan *sig. Bartlett's* terpenuhi, usulan jumlah faktor dan usulan pola pengelompokan butir yang terbaik dapat dilihat berdasarkan teori yang mendasari yang disebut dengan *a priori criterion*. Berdasarkan teori yang diungkapkan oleh McCroskey (1984), *PRCA-24* terdiri atas empat faktor. Usulan pengelompokan berikutnya disebut dengan *Latent Root Criterion* yaitu jumlah komponen yang memiliki nilai total eigenvalues ≥ 1. Hasil analisis (Tabel 5)



Gambar 1. *Scree plot PRCA*.

menunjukkan bahwa usulan jumlah faktor terbaik adalah lima faktor. Selanjutnya, *Percentage of Variance Explained Criterion* adalah hasil olah data yang menunjukkan pada faktor keberapakah yang pertama kali memiliki nilai *cumulative percentage* ≥ 50%. Hasil penelitian ini (lihat Tabel 5) menunjukkan besaran nilai *cumulative percentage* pada komponen kedua adalah sebesar 50,405%, sehingga komponen kedua adalah usulan jumlah faktor terbaik berdasarkan *percentage of variance explained criterion*. *Scree Test Criterion* adalah mengetahui usulan jumlah faktor terbaik berdasarkan berdasarkan *scree plot*, Gambar 1 menunjukkan bahwa jumlah titik sebelum titik landai adalah lima.

Hasil *latent root criterion* dan *scree test* menunjukkan bahwa pengelompokkan terbaik terdapat pada lima faktor, maka peneliti memutuskan menggunakan lima faktor. Tabel 6 adalah tabel *Rotated Component Matrix*, seluruh butir *public speaking* mengelompok pada komponen 1. Komponen 2 memiliki empat butir campuran yaitu butir Group 3R, Group 5R, Dyadic 15R dan Meeting 10R. Huruf R menandakan butir yang telah di-*reverse*, yaitu butir *unfavorable* yang telah dibalik menjadi *favorable*. Butir-butir *meeting* 8, 12, 9, 7, 11 mengelompok di Komponen 3. Butir-butir *dyadic* 17, 16, 13, 18, 14 mengelompok di Komponen 4. Butir-butir *group* 2, 4, 1, 6 mengelompok di Komponen 5.

Tabel 6
Hasil Analisis Faktor PRCA dan Lima Faktor Pada Rotated Component Matrix

Butir	Komponen				
	1	2	3	4	5
PRCA_PUBLICSPEAKING_21	0,791				
PRCA_PUBLICSPEAKING_19	0,790				
PRCA_PUBLICSPEAKING_23	0,712				
PRCA_PUBLICSPEAKING_22R	0,672	0,462			
PRCA_PUBLICSPEAKING_20R	0,650	0,459			
PRCA_PUBLICSPEAKING_24R	0,607	0,546			
PRCA_GROUP_03R		**0,649**			**0,420**
PRCA_GROUP_05R		**0,629**			
PRCA_DYADIC_15R		**0,573**		**0,545**	
PRCA_MEETING_10R		**0,534**	**0,511**		
PRCA_MEETING_08			0,784		
PRCA_MEETING_12			0,701		
PRCA_MEETING_09			0,700		
PRCA_MEETING_07R		0,509	0,652		
PRCA_MEETING_11R		0,550	0,580		
PRCA_DYADIC_17				0,741	
PRCA_DYADIC_16				0,703	
PRCA_DYADIC_13R		0,463		0,636	
PRCA_DYADIC_18R		0,453		0,569	
PRCA_DYADIC_14				0,550	
PRCA_GROUP_02					0,871
PRCA_GROUP_04					0,869
PRCA_GROUP_01R					0,662
PRCA_GROUP_06					0,531

Catatan: butir yang dicetak tebal digugurkan sementara serta alat ukur dianalisis lebih lanjut karena butir tersebut secara konseptual berbeda namun mengelompok menjadi satu

Peneliti kemudian menganalisis data berdasarkan 24 butir dan 20 butir (yaitu tanpa butir Group 3R, Group 5R, Dyadic 15R dan Meeting 10R). Empat butir tersebut digugurkan karena empat butir tersebut berasal dari tiga dimensi yang berbeda namun mengelompok menjadi satu, tentu pengelompokan tersebut bukan pengelompokan yang baik. Penulis kemudian memberi kode yaitu *PRCA-24* untuk alat ukur semula, serta *PRCA-20* untuk alat ukur yang empat butirnya digugurkan. Setelah itu, penulis dapat melakukan perbandingan temuan pada sumber bukti validitas yang lain di antara kedua alat ukur tersebut.

Tahap selanjutnya, evaluasi validitas internal dilakukan pada *PRCA-24* dan juga pada *PRCA-20*. Tabel 7 dan Tabel 8 menyediakan informasi mengenai hasil analisis kedua alat ukur tersebut.

Hasil uji sumber bukti reliabilitas *PRCA-24* dan *PRCA-20* menunjukkan bahwa semua dimensi memiliki nilai *Cronbach's alpha* > 0,7 dan semua butirnya memiliki nilai *CITC* > 0,3.

Setelah melakukan evaluasi validitas internal, sehingga sumber bukti selanjutnya yang juga turut dibuktikan dalam penelitian ini adalah sumber bukti berdasarkan hubungan dengan variabel lain. Tabel 9 menyediakan informasi mengenai hasil korelasi *PRCA-RAS*.

Hubungan antara *PRCA-24* dan *PRCA-20* dengan *RAS* masing-masing menunjukkan hubungan yang positif dan signifikan. Semua korelasi menunjukkan besaran $r > 0,3$ dan $p \leq 0,01$. Korelasi antara *PRCA-24* dengan *RAS* sebesar 0,638*** dan *PRCA-20* dengan *RAS* sebesar 0,629***. Besaran korelasi tersebut menunjukkan bahwa *PRCA-24* dan *PRCA-20* mampu melakukan prediksi terhadap lebih dari 50% varian dari *RAS* sekalipun tidak ada butir *PRCA* yang mengukur asertivitas secara langsung.

Tabel 7
Hasil Uji Reliabilitas PRCA-24

Aspek	*Alpha Cronbach*	Rentang CITC	Jumlah Butir
Group	0,821	0,511 – 0,676	6
Meetings	0,883	0,650 – 0,734	6
Dyadic	0,852	0,541 – 0,709	6
Public Speaking	0,891	0,675 – 0,785	6

Tabel 8
Hasil Uji Reliabilitas PRCA-20

Aspek	*Alpha Cronbach*	Rentang CITC	Jumlah Butir
Group	0,802	0,520 – 0,752	4
Meetings	0,870	0,656 – 0,759	5
Dyadic	0,823	0,533 – 0,703	5
Public Speaking	0,891	0,675 – 0,785	6

Tabel 9
Hasil Korelasi PRCA dan RAS serta Korelasi Antar Komponen PRCA

	PRCA-24	PRCA-20
RAS - PRCA	0,638***	0,629***
Group – Meeting	0,558***	0,441***
Group – Dyadic	0,573***	0,441***
Group – Public Speaking	0,484***	0,378***
Meeting – Dyadic	0,673***	0,663***
Meeting – Public Speaking	0,629***	0,616***
Dyadic – Public Speaking	0,623***	0,615***

Catatan: *** $p \leq 0,01$; ** $p \leq 0,05$; * $p \leq 0,1$

Bahasan

Hipotesis pertama penelitian ini adalah hasil analisis faktor eksploratori (*Exploratory Factor Analysis [EFA]*) akan menunjukkan empat faktor penyusun *PRCA-24*. Akan tetapi, hasil analisis faktor dari *PRCA-24* memunculkan lima faktor sebagai pemfaktoran terbaik, namun ketika dilihat secara lebih detail ternyata terdapat satu faktor yang terdiri dari butir-butir multidimensi. Hipotesis pertama tampak tidak terdukung serta mengakibatkan butir-butir pada Faktor 2 (lihat Tabel 6) digugurkan. Akibat pengguguran butir dari faktor dua tersebut,sisa butir *PRCA* adalah 20 buah. Untuk membedakan dengan versi awal dari alat ukur ini, penulis memberi kode *PRCA-20* untuk alat ukur dengan empat butir yang telah digugurkan. Sebagai pertimbangan lebih lanjut terkait butir-butir *PRCA* yang dapat digunakan dalam pengukuran *CA* ini, penulis kemudian melihat hasil analisis berdasarkan sumber bukti konsistensi internal dan reliabilitas alat ukur.

Analisis atau penelusuran sumber bukti konsistensi internal dan reliabilitas dilakukan untuk *PRCA-24* dan *PRCA-20*. Tabel 7 dan Tabel 8 menunjukkan rincian hasil analisis reliabilitas. Semua dimensi dari *PRCA-24* dan *PRCA-20* menunjukkan besaran *Cronbach's alpha* lebih dari 0,8 dan tidak ada butir yang memiliki *CITC* kurang dari 0,3. Hal ini menandakan butir-butir dari *PRCA-24* dan *PRCA-20* memiliki konsistensi yang baik.

Berdasarkan sumber bukti hubungan dengan variabel lain, *PRCA-24* dan *RAS* memiliki korelasi positif dan signifikan ($r = 0,638$ dan $p \leq 0,01$). *PRCA-20* dan *RAS* juga menunjukkan hasil yang serupa ($r = 0,629$ dan $p \leq 0,01$). Penelusuran sumber bukti ini mendukung hipotesis kedua penelitian bahwa ada hubungan positif antara *PRCA* dan *RAS*. Hasil ini sejalan dengan penelitian McCroskey et al. (1985) yang menunjukkan

besaran korelasi antara *PRCA* dan *RAS* adalah 0,700 ($p \leq 0{,}01$). Oleh karena kemiripan hasil korelasi serta kedua versi dari alat ukur ini memiliki reliabilitas yang baik, penulis cenderung untuk tetap mempertahankan alat ukur ini sesuai dengan rancangan isi yang dilakukan oleh peneliti awal *PRCA-24* (McCroskey et al., 1985). Dampak dari keseluruhan analisis ini adalah, walaupun hasil *EFA* menunjukkan adanya faktor penyusun yang berbeda dengan kerangka konsep awal *PRCA-24*, penulis menyimpulkan bahwa *PRCA-24* pada konteks penelitian ini tersusun atas 24 butir yang terbagi dalam empat konteks komunikasi sosial (*group*, *meeting*, *dyadic*, dan *public speaking*).

Kehandalan konsistensi internal alat ukur *PRCA-24* ketika diterjemahkan dan digunakan pada konteks Indonesia beserta dukungan sumber bukti validitas hubungan dengan variabel lain (asertivitas) menunjukkan bahwa *PRCA-24* dapat digunakan pada konteks Indonesia. Misalnya, CA terasosiasi dengan perasaan kesepian dan dimoderasi oleh perilaku interaksi sosial secara daring (Chen, 2019). *PRCA-24* dapat membantu memahami fenomena perilaku menggunakan perangkat yang terkoneksi ke *Internet* (e.g., *smartphone*, komputer) karena interaksi sosial lewat *Internet* menurunkan kecemasan berkomunikasi secara tatap muka langsung.

PRCA-24 juga dapat digunakan untuk menunjukkan dinamika perubahan atau perbedaan CA sepanjang hayat manusia. Penelitian terdahulu menggunakan *PRCA-24* untuk melihat tingkat CA pada partisipan dengan rentang usia 20 hingga 72 tahun. Penelitian tersebut menunjukkan adanya penurunan tingkat CA pada kelompok partisipan yang lebih dewasa (Marcel, 2019). Sumber bukti pada studi kali ini didasarkan pada kelompok usia 19-20 tahun. Selain untuk menunjukkan perbedaan tingkat CA pada kelompok usia yang beragam, konsistensi struktur internal *PRCA-24* dapat diujicobakan pada kelompok usia lain untuk semakin memperkuat dukungan terhadap penggunaan alat ukur ini.

Alat ukur *PRCA-24* juga dapat menjadi alat bantu dalam mengkaji upaya intervensi terhadap CA. Pada konteks anak-anak, ada penelitian yang berupaya menurunkan tingkat CA sosial dengan menggunakan *Social Communication Comfort and Selective Mutism Questionnaire* sebagai alat ukur efektivitas terapi (Klein et al., 2017). *PRCA-24* dapat menjadi alat bantu pengkajian efektivitas terapi bagi konteks individu yang telah memasuki usia dewasa. Proses ini juga dapat menjadi sumber bukti validitas berdasarkan konsekuensi pengukuran.

Sumber bukti validitas berdasarkan konsekuensi pengukuran biasanya diterapkan pada alat ukur atau asesmen pendidikan seperti tes capaian pembelajaran (Lane, 2014). CA dan/atau *PRCA-24* terasosiasi dalam ranah pendidikan misalnya pada konteks pelajar yang mempelajari bahasa asing (Guntzviller et al., 2016; Molnar & Crnjak, 2018). Hal ini berarti *PRCA-24* memiliki kemampuan untuk menunjukkan suatu konsekuensi atau luaran tertentu misalnya dengan menggunakan *PRCA-24* sebagai *placement test*. Pelajar yang memiliki indikasi CA dari pengukuran menggunakan *PRCA-24* membutuhkan kebutuhan pengalaman belajar yang berbeda.

Keterbatasan dan Saran

Kelemahan dari penelitian ini adalah subjek hanya mencakup mahasiswa dari satu fakultas dan dari satu institusi perguruan tinggi. Penelitian selanjutnya dapat mempertimbangkan penggunaan partisipan yang lebih beragam dari kelompok usia (Marcel, 2019) atau kelompok etnis/kebangsaan yang beragam (Croucher et al., 2019). Kelemahan lainnya adalah hanya menggunakan tiga sumber bukti yaitu struktur internal dengan menggunakan reliabilitas dan analisis faktor, serta hubungan dengan variabel lain yaitu asertivitas. Saran untuk penelitian selanjutnya adalah menguji *PRCA* dengan sumber bukti validitas yang lainnya, seperti proses respon, dampak pengukuran, dan validitas isi agar memenuhi lima sumber bukti pengukuran validitas konstruk berdasarkan *The Standards for Educational and Psychological Testing* (AERA et al., 1999; Siaputra & Natalya, 2016).

Saran untuk penelitian selanjutnya adalah menambahkan beberapa variabel lain sebagai *criterion* pendukung, seperti *introversion*, *self-esteem and self-acceptance*, *verbal reticence*, dan *general personality* (McCroskey, 1978). *Loneliness* maupun kesejahteraan psikologik (Chen, 2019) juga dapat menjadi variabel lain yang dapat dikaji kaitannya dengan CA. Penelitian selanjutnya juga dapat melakukan pengecekan silang dengan memanfaatkan alat asesmen non-kuesioner seperti observasi atau wawancara (Molnar & Crnjak, 2018).

Simpulan

Berdasarkan sumber-sumber bukti yang telah dijabarkan dan hasil yang diperoleh, *PRCA* merupakan alat ukur yang baik digunakan untuk mengukur *CA* khususnya pada konteks Indonesia. *PRCA-24* lebih baik untuk digunakan karena umum digunakan di penelitian-penelitian sebelumnya sehingga banyak referensi yang bisa dijadikan pendukung dan/atau pembanding. Kehandalan konsistensi internal *PRCA-24*

serta korelasi signifikan dengan *RAS* menunjukkan bahwa alat ukur ini dapat digunakan untuk memahami fenomena atau perilaku *CA*. *PRCA-24* dapat membawa implikasi lanjutan seperti penerapannya dalam setting pendidikan maupun evaluasi intervensi. Oleh karena itu, kajian terhadap alat ukur *PRCA-24* ini membuka pintu bagi penelitian lain yang dapat berdampak bagi individu yang mengalami kesulitan dalam berkomunikasi karena kecemasan yang dialaminya.

Lampiran

Alat Ukur Penelitian untuk Pengumpulan Data

Untuk mengerjakan alat ukur ini, ada beberapa istilah yang harus Anda pahami terlebih dahulu, yaitu:
1. Diskusi kelompok kecil adalah diskusi yang terjadi antara 3 (tiga) sampai 10 (sepuluh) orang.
2. Rapat adalah suatu proses yang berjalan secara formal dan terdapat perbedaan tingkat status yang terdiri dari pimpinan rapat dan yang lain sebagai partisipan rapat.
3. Percakapan adalah komunikasi yang terjalin antara 2 (dua) orang.

No	Pernyataan	Jawaban					
		Sangat Tidak Sesuai	Tidak Sesuai	Agak Tidak Sesuai	Agak Sesuai	Sesuai	Sangat Sesuai
1	Saya tidak suka terlibat dalam diskusi kelompok kecil						
2	Biasanya, saya merasa nyaman ketika terlibat dalam diskusi kelompok kecil						
3	Saya merasa tegang dan gugup ketika terlibat dalam diskusi kelompok kecil						
4	Saya senang terlibat dalam diskusi kelompok kecil						
5	Terlibat dalam diskusi kelompok kecil dengan orang-orang baru membuat saya tegang dan gugup						
6	Saya tenang dan santai ketika terlibat dalam diskusi kelompok kecil						
7	Secara umum, saya gugup ketika saya harus terlibat dalam suatu rapat						
8	Biasanya saya merasa tenang dan santai saat terlibat dalam suatu rapat						
9	Saya merasa sangat tenang dan santai ketika mengungkapkan pendapat dalam suatu rapat						
10	Saya takut untuk mengekspresikan diri (menyampaikan pendapat) dalam suatu rapat						
11	Biasanya saya merasa tidak nyaman pada saat menyampaikan pendapat dalam suatu rapat						
12	Saya merasa sangat santai ketika menjawab pertanyaan dalam suatu rapat						
13	Ketika berbicara dengan orang baru, saya merasa sangat gugup						
14	Saya merasa tidak takut untuk berbicara dalam percakapan						
15	Biasanya saya merasa sangat tegang dan gugup dalam sebuah percakapan						
16	Biasanya saya sangat tenang dan santai ketika berbicara dalam sebuah percakapan						
17	Ketika berbicara dengan orang baru, saya merasa sangat santai						
18	Saya takut untuk memulai pembicaraan						
19	Saya tidak takut untuk memberikan ceramah						
20	Beberapa bagian tubuh saya terasa tegang dan kaku ketika memberikan ceramah						
21	Saya merasa santai ketika memberikan ceramah						
22	Pikiran saya menjadi bingung dan kacau ketika sedang memberikan ceramah						
23	Saya memberikan ceramah dengan percaya diri						
24	Ketika sedang memberikan ceramah, saya merasa begitu gugup sehingga lupa dengan sejumlah fakta-fakta yang saya ketahui dengan pasti						

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