



Content Validity and Interrater Reliability of the Assessment of Communication and Interaction Skills Thai version

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Introduction

Communication and interaction skills are crucial for occupational performance. Assessing verbal and nonverbal communication enhances occupational therapists' ability to improve clients' skills relevant to their roles. Thai occupational therapists (OTs) lack the assessment tools related to measuring these skills underlying their sociocultural context. The Assessment of Communication and Interaction Skills (ACIS) is an observational tool that assesses social behavior and subjective experience (Forsyth, Salamy, Simon, & Kielhofner, 1998). It was developed based on the Model of Human Occupation (MOHO). Communication and interaction skills vary based on environment and cultural influences. Translating ACIS would enhance understanding and ensure its appropriateness for assessing the skills in each context. Thus, the ACIS needs to be translated into the Thai version (ACIS-TH), and its reliability and validity must be examined before it can be used effectively in the Thai context.

Objectives

1. A primary objective is to translate the ACIS into the Thai version (ACIS-TH).
2. A secondary objective is to examine its content validity and interrater reliability.

Methods

1. Through a forward- and backward-translation process, content validity was assessed using the Index of Item Objective Congruence (IOC).

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Methods

2. Undergraduates (n = 103) who were aged 18–24 without physical disabilities or autism spectrum disorders participated in three 30-minute activities: natural settings, a simulated life role situation, and an unrelated life role situation, for a total of 90 minutes. Stratified random sampling was used (sample size based on Bujang, Omar, & Baharum, 2018).
3. Thai OTs (n=10) were selected using purposive sampling. Inclusion criteria included at least one year of clinical experience, knowledge of MOHO, and full participation in a three-hour ACIS-TH workshop via Zoom.
4. OTs independently scored the video recordings of 20–22 students during the performed activities.
5. The percentage agreement between the two raters was used for interrater reliability.

Results

The IOC of the ACIS-TH ranges from 0.86 to 1.00. The percentage agreement between the two raters is 86.05 (total scale score), 86.62 (physicality), 84.43 (information exchange), and 88.28 (relations). Results are shown in Table 1.

Discussion

ACIS-TH is a standardized, culturally responsive tool to evaluate communication and interaction skills in Thai university students. This tool is a reliable observational tool with consistent scoring among raters. For subdomain, “Information Exchange” is more easily observed and rated. “Physicality” and “Relations” are abstract and culturally nuanced in the nature of non-verbal and relational behaviors. Raters may interpret the same behavior differently according to their perspective. Thus, in using the ACIS-TH, raters should carefully study the manual, familiarize themselves with MOHO, and practice with case studies prior to the assessment to maintain scoring and interpretation standards.

Limitations

1. This study examined the content validity and interrater reliability. This attribute limits its use for long-term treatment outcome monitoring. Future study should examine more psychometric properties, such as test-retest reliability and concurrent validity.
2. Participants in this study were undergraduates. Examination of the ACIS-TH psychometric properties remains necessary in the diverse Thai population. Future study should examine its reliability and validity in specific groups, such as children with special needs, individuals with mental health conditions, individuals with physical disabilities, and the elderly, to expand its clinical applicability.

Conclusion

ACIS-TH shows strong content validity and a high percentage of agreements between two raters. Relations has the highest degree of agreement, followed by physicality and information exchange. The ACIS-TH is a valid and reliable tool for measuring communication and interaction skills in the Thai context. For effective use, OTs should familiarize themselves with the manual and consider the cultural influence.

Table 1 show the ACIS-TH content validity and interrater reliability

Sub-domain	Item	IOC	%
Physicality			86.62
	Contacts	1	95.15
	Gazes	0.86	82.52
	Gestures	1	81.88
	Maneuvers	1	82.52
	Orients	1	90.29
	Postures	0.86	87.38
Information Exchange			84.43
	Articulates	1	89.00
	Asserts	1	81.88
	Asks	1	85.11
	Engages	1	87.06
	Expresses	1	82.20
	Modulates	1	83.50
	Shares	0.86	80.26
	Speaks	1	89.32
	Sustains	0.86	81.55
Relations			88.28
	Collaborates	1	98.38
	Conforms	1	84.14
	Focuses	1	84.14
	Relates	1	78.96
	Respects	1	95.79
Total			86.05

Reference

- Bujang, M. A., Omar, E. D., & Baharum, N. A. (2018). A review on sample size determination for Cronbach’s alpha test: A simple guide for researchers. *Malaysian Journal of Medical Sciences*, 25(6), 85–99. <https://doi.org/10.21315/mjms2018.25.6.9>
- Forsyth, K., Salamy, M., Simon, S., & Kielhofner, G. (1998). *Assessment of Communication and Interaction Skills (ACIS)*. Model of Human Occupation Clearinghouse, Department of Occupational Therapy, College of Applied Health Sciences, University of Illinois at Chicago.

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