Current Clinical and Medical Education

Received 29 Jun 2024 | Revised 16 Jul 2024 | Accepted 16 Aug 2024 | Published Online 5 Sep 2024

Published By: Vision Publisher

CCME 02 (9), 1-7

ISSN 2942-0792

SELECTING CRITERIA FOR EVALUATING SOCIAL SKILLS OF PRESCHOOLERS AGED 4-5 IN HO CHI MINH CITY

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Abstract:

Introduction: The assessment of social skills in preschool children aged 4-5 is crucial in the context of early childhood education, particularly in Ho Chi Minh City, where there is a growing focus on developing comprehensive social competencies. Despite the guidelines provided by the Early Childhood Education Program and the Developmental Standards for 5-Year-Old Children, the criteria for evaluating social skills remain primarily suggestive and lack specific measures for the 4-5 age group through play-based activities. *Problem Statement*: There is a need for well-defined and scientifically validated criteria to accurately assess the social skills development of preschool children aged 4-5 in Ho Chi Minh City. Such criteria would enable educators to systematically monitor and evaluate social competencies in educational settings. *Approach, Materials, and Methods*: This study employed several scientific research methods within the field of physical education and sports. Methods included literature analysis, sample selection, expert interviews through questionnaires, pedagogical observation, and statistical analysis. The study sample comprised 200 experts and preschool educators, and 400 preschool children aged 4-5 in Ho Chi Minh City. *Results*: The research identified five core skills and 25 observational variables for assessing the social skills of 4-5-year-old children. The study ensured the scientific validity and reliability of the selected criteria, providing a sound basis for preschool teachers to use in evaluating social skill development. *Discussion*: The criteria were evaluated for feasibility and reliability using expert interviews and statistical analyses. The research applied exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to ensure the robustness of the selected variables and components, further confirming the suitability of the assessment criteria. *Conclusions*: The research established a set of five core social skills and 25 related observational variables that are reliable and scientifically valid for assessing the social skills of preschool children aged 4-5 in Ho Chi Minh City. These criteria serve as a foundation for preschool educators to evaluate and enhance children's social skill development effectively.

Keywords: *Preschool Education, Social Competence Assessment, Observation Variables, Exploratory Factor Analysis (EFA), Reliability and Validity.*

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Introduction

In recent years, the Party and the State have demonstrated a significant commitment to preschool education, particularly developing children's skills through innovative preschool programs and social skills training. This study, focusing on 4-5-year-old children, is particularly relevant as it is at this age that they begin to form more complex relationships with others, acquiring skills such as cooperation, communication, sharing, and problem-solving through play activities. However, the existing Preschool Education Program and the 5-year-old Child Development Standards provide general indicators for assessing social skills. They do not explicitly measure the criteria needed to evaluate the social skills of preschool children aged 4-5 in Ho Chi Minh City through physical play activities. Our study's findings fill this gap, providing specific criteria for assessing social skills in this context.

Hence, having specific, reliable, science-based criteria for evaluating social skills will assist preschools and teachers in overseeing and assessing the level of social skill development in children during educational activities at preschool. The research findings, with their practical implications, have established a scientific foundation for choosing criteria to assess the social skills of 4-5-year-old preschoolers in Ho Chi Minh City, making the study highly relevant and applicable to the field of preschool education.

APPROACH & PARTICIPANTS

Our research utilized document analysis and synthesis, sampling, questionnaire interviews, pedagogical observations, and statistical methods.

The research subjects included 200 experts, preschool teachers, managers, and 400 preschool children aged 4-5 in Ho Chi Minh City.

RESULTS AND DISCUSSION

Examining the feasibility of evaluating the social skills of preschool children aged 4-5 in Ho Chi Minh City through expert interviews

In their research, authors Nguyen Thi Thu Hanh (2021) and Dam Thi Kim Thu (2021) referred to documents of the Preschool Education Program and the 5-year-old Child Development Standards to study how social skills are assessed in 4-5-year-old preschool children in Ho Chi Minh City. They developed a social skills scale with 5 component skills (social interaction, rule-following, communication, social behavior, response, and problem-solving) and 42 observed variables coded with symbols. The selected component skills meet the professional requirements for assessing the social skills of 4-5-year-old preschool children in Ho Chi Minh City.

The study used questionnaires to interview 200 experts, managers, and Ho Chi Minh City teachers. A 5-level Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree). After collecting and analyzing the data, the Cronbach's Alpha reliability coefficient of the social skills scale for 4-5-year-old preschool children in Ho Chi Minh City was determined.

Table 1: Summary of Cronbach's Alpha reliability coefficients for the scale assessing social skills in 4-5-year-old children (n=200)

Social skills	Cronbach's Alpha		Observation variable		Removed
	1st time	2nd time	1st time	2nd time	
Social interaction skills	0.758	0.854	11	07	XH1, XH2, XH3, XH9
Rule-following skills	0.719	0.802	10	08	NQ1, NQ2
Communication skills	0.815	0.860	08	06	GT1, GT8
Social behavior and etiquette skills	0.788	0.788	08	08	
Problem-solving skills	0.748	0.748	05	05	
Total			**42**	**34**	**8**

The reliability of a scale is indicated by Cronbach's Alpha coefficient, which can range from 0 to 1. According to Nunnally (1978), a reliable scale should have a Cronbach's Alpha of 0.7 or higher. Similarly, Hair et al. (2010) suggest that a scale ensuring unidimensionality and reliability should also have a Cronbach's Alpha of 0.7 or higher. The first Cronbach's Alpha analysis yielded results ranging from 0.748 to 0.815, and the second analysis yielded results ranging from 0.748 to 0.860 after eliminating eight inappropriate observed variables, leaving 34 suitable observed variables, all meeting the reliability requirements.

Examining the reliability of social skills assessment criteria for preschool children aged 4-5 in Ho Chi Minh City

To evaluate the reliability of the KNXH scale, which includes 5 component skills with 34 observed variables, data was gathered from 400 preschool children aged 4-5 years old (205 boys, 195 girls) in 16 preschools located in Ho Chi Minh City (9 in inner-city areas and 7 in suburban areas).

After gathering data, the study assessed the reliability of the observed variables using Cronbach's Alpha coefficient. It retained the sufficiently reliable variables (Cronbach Alpha > 0.7 and Corrected Item-Total Correlation > 0.3) and eliminated those that were not. Here are the analysis results:

Table 2: Summary of the Cronbach's Alpha reliability coefficient for the social skills assessment scale for 4-5-year-old preschool children in Ho Chi Minh City

Social skills	Cronbach's Alpha			Observation variable			Removed
	1st time	2nd time	3rd time	1st time	2nd time	3rd time	
Social interaction skills	0.840	0.867	0.867	07	06	06	XH7
Rule-following skills	0.618	0.681	0.757	08	05	04	NQ1, NQ2, NQ3, NQ4
Communication skills	0.781	0.861	0.861	06	05	05	GT6
Social behavior and etiquette skills	0.783	0.866	0.866	08	06	06	
Problem-solving skills	0.837	0.837	0.837	05	05	05	
Total				**34**	**27**	**26**	**8**

In Table 2, the Cronbach's Alpha coefficient was calculated for 34 observed social skills assessment scale variables. After the tests, 08 variables (XH7, NQ1, NQ2, NQ3, NQ4, GT6, UX7, and UX8) contributed little to the social skills scale and were removed for further analysis. This left 26 observed variables for the next steps of the analysis.

Examining the assessment criteria for evaluating social skills of preschool children aged 4-5 in Ho Chi Minh City

The study performed an exploratory factor analysis (EFA), which is a quantitative technique used to condense a set of k observed variables into a minor set F (with F < k) of more meaningful factors. The study involved 400 children to assess reliability. The first EFA showed a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.862, which is greater than the recommended value of 0.5, and Bartlett's Test of Sphericity with a significance value of 0.000, indicating that the EFA is suitable (see Table 3). Five factors were extracted using the "eigenvalue" criterion greater than 1, explaining a total cumulative variance of 62.004%. A loading factor threshold of 0.5 was applied to select high-quality observed variables instead of choosing the loading factor based on sample size. Upon comparing this threshold with the results in the factor rotation matrix, it was found that one variable, XH5, had relatively high loading factors in Components 2 and 3. Still, the difference in loading factors was only 0.053, which is less than 0.2. As a result, this observed variable was removed from the analysis.

Table 3: Results of the initial EFA factor analysis of 26 criteria for evaluating social skills in 4-5-year-old children.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.862
Bartlett's Test of Sphericity	Approx. Chi-Square	4394.308
	df	325
	Sig.	.000

Rotated Component Matrix

	Component				
	1	2	3	4	5
UX2	.805				
UX4	.803				
UX3	.794				
UX6	.781				
UX1	.778				
UX5	.678				
XH7		.808			
XH4		.763			
XH5		.760			
XH6		.758			
XH10		.755			
XH8		.572	.519		
GQ4			.799		
GQ1			.785		
GQ3			.784		
GQ5			.779		
GQ2			.674		
GT5				.822	
GT3				.802	
GT4				.794	
GT6				.791	
GT2				.735	
NQ8					.770
NQ9					.766
NQ7					.752
NQ10					.748

The study utilized an exploratory factor analysis (EFA) method to eliminate incorrect variables. In the initial EFA analysis, 26 observed variables were examined, and one XH5 was excluded. The subsequent EFA analysis included the remaining 25 observed variables, as displayed in Table 4.

Table 4: Results from the second EFA factor analysis of the 26-item scale evaluating social skills in 4-5-year-old children.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.855
Bartlett's Test of Sphericity	Approx. Chi-Square	4108.921
	df	300
	Sig.	.000

Rotated Component Matrix

	Component				
	1	2	3	4	5
UX2	.806				
UX4	.803				
UX3	.794				
UX6	.781				
UX1	.779				
UX5	.678				
GT5		.821			
GT3		.802			
GT4		.795			
GT6		.790			
GT2		.735			
XH7			.815		
XH4			.777		
XH6			.760		
XH10			.760		
XH5			.751		
GQ4				.806	
GQ5				.789	
GQ1				.788	
GQ3				.782	
GQ2				.672	
NQ8					.771
NQ9					.766
NQ7					.752
NQ10					.748

The results of the second EFA analysis show that the Kaiser-Meyer-Olkin (KMO) measure is 0.855, which is greater than 0.5, and the significance level of Bartlett's Test is 0.000, indicating that it is less than 0.05. Therefore, the EFA exploratory factor analysis is considered appropriate. Five factors were extracted using the eigenvalue criterion, each with a value greater than 1. These five factors effectively summarize the information of the 25 observed variables entered into EFA, capturing a total variance of 62.330%, which exceeds the 50% threshold. Consequently, these five factors account for 62.330% of the data variation of the 25 observed variables involved in the EFA.

The factor rotation matrix results indicate that 25 observed variables are grouped into five factors, with all observed variables having factor loading coefficients higher than 0.5 and no poor variables present.

The exploratory factor analysis (EFA) for the variables was conducted twice. On the first attempt, 26 observed variables were studied. However, one observed variable did not meet the condition of XH5 and was therefore excluded for re-evaluation. In the final analysis, 25 observed variables converged and formed five factors listed in Table 5.

Table 5: Summary of the Exploratory Factor Analysis (EFA) results for the Social Skills Assessment Scale variables for 4-5-year-old preschool children.

Factor	Observation variable	Factor name
1	UX1, UX2, UX3, UX4, UX5, UX6	Social interaction skills
2	GT1, GT2, GT3, GT4, GT5	Rule-following skills
3	XH1, XH2, XH3, XH4, XH6	Communication skills
4	GQ1, GQ2, GQ3, GQ4, GQ5	Social behavior and etiquette skills
5	NQ5, NQ6, NQ7, NQ8	Problem-solving skills
KMO = 0.855 > 0.5		
Sig. Bartlett's Test of Sphericity= 0.000 < 0.05		
Total variance extracted = 62.330% > 50%		

Confirmatory factor analysis (CFA) of social skills assessment scale for 4-5-year-old children

In Figure 1, the model's overall fit was assessed using the Chi-square test, which resulted in a value of 368.570 with 265 degrees of freedom. The Chi-square/df ratio was calculated as 1.391, less than 5, with a P value 0.000, indicating statistical significance. The GFI, TLI, and CFI values were 0.931, 0.970, and 0.973, respectively, all meeting the criteria for a good to perfect fit. Additionally, the RMSEA value was 0.031, which is less than 0.06. These results demonstrate that the CFA model fits the observed data well.

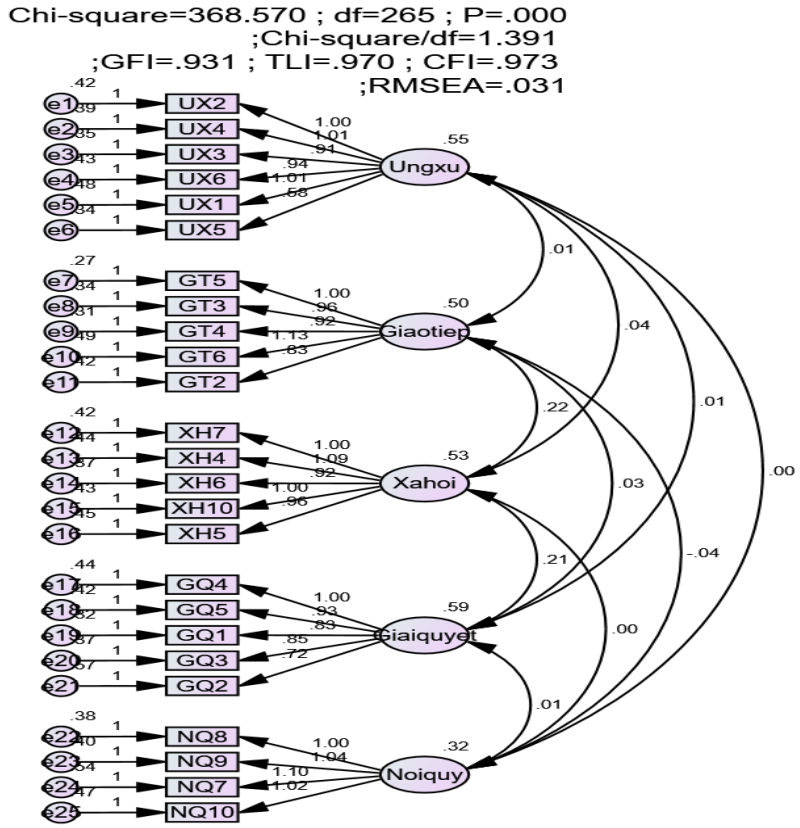

Figure 1: CFA model of social skills assessment scale for 4-5 year-old children

The regression coefficient results display that the p-values of all observed variables are 0.000, which is less than 0.05. This indicates that all observed variables are significant in the model. In AMOS, this is denoted by the symbol ***. When all observed variables have p-values less than 0.05 in the regression coefficient table, their significance in the model is confirmed.

For the standardized regression coefficient results, all observed variables have standardized regression coefficients greater than 0.5 and even more significant than 0.7. Thus, all observed variables demonstrate a high level of suitability.

CONCLUSION

A comprehensive research process has established criteria for evaluating social skills in 4-5-year-old preschool children in Ho Chi Minh City. The assessment encompasses five component skills with 25 observation variables to assess social skills. These include six observation variables for the Social Behaviour and Responsiveness Skills scale, five observation variables for the Communication Skills scale, six observation variables for the Social Interaction Skills scale, five observation variables for the Problem-Solving Skills scale, and four observation variables for the Rules Compliance Skills scale. This framework serves as a basis for preschool teachers to assess the social skills development of 4-5-year-old preschool children during preschool educational activities.

REFERENCES

1. Ministry of Education and Training (2021), *Consolidated Document No. 01/VBHN-BGDĐT issued on April 13, 2021, on the Circular promulgating the Preschool Education Program*.

2. Ministry of Education and Training (2009), *Instructions for using the 5-year-old Child Development Standards*.

3. Hair et al. (2010), "*Multivariate Data Analysis*" New Jersey: Prentice Hall.

4. Nguyen Thi Thu Hanh (2021), "*Social skills education for 5-6-year-old preschool children through experience*" Doctoral thesis in Educational Sciences, Vietnam Institute of Educational Sciences.

5. Hu & Bentler (1999), "*Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria new alternatives*" Structural Equation Modeling.

6. Dam Thi Kim Thu (2021), "*Developing social skills for 5 to 6-year-old children with autism spectrum disorder*," Doctoral thesis in Education, Hanoi National University of Education.

Article source: *Excerpted from the scientific research topic: "Research on the application of movement games to develop some skills for 4-5-year-old preschool children in Ho Chi Minh City" - Doctoral thesis in Education, Ho Chi Minh City University of Physical Education and Sports. The thesis topic has been completed in the final stage according to the research plan, and it is expected to be defended before the Basic Thesis Evaluation Council at the end of 2024.be defended before the Basic Thesis Evaluation Council at the end of 2024.*