

# Level of Cultural Self-Efficacy of Academic Librarians and Associated Socio-demographic Factors at the Library of Universitas Negeri Padang

Jeihan Nabila<sup>1,\*</sup> Habiburrahman<sup>1</sup>

<sup>1</sup>Library and Information Science, Faculty of Language and Art, Universitas Negeri Padang, Indonesia

\*Corresponding author: Email: [jeihan@fbs.unp.ac.id](mailto:jeihan@fbs.unp.ac.id)

## ABSTRACT

This study aims to measure the cultural competence of Universitas Negeri Padang (UNP) librarians and determine the sociodemographic factors that influence their cultural competencies. We use the self-efficacy paradigm to find out cultural competence in this study and adopt Cultural Self-Efficacy Scale - Adolescents (CSES-A) as research instrument. Obtained data were processed using descriptive statistical analysis to determine the level of librarian's cultural self-efficacy. Then, a non-parametric analysis is performed to determine the association between gender and cultural self-efficacy, followed by regression analysis to determine the association of age, education level, and length of employment with cultural self-efficacy. The analysis showed that the mean score of cultural self-efficacy of UNP librarian's is 7.833 (standard deviation =  $\pm 1.673$ ) which male's cultural self-efficacy score is higher than female's. Further, we also found that age has a significant relationship with cultural self-efficacy, yet education level and length of employment do not have significant association with cultural self-efficacy. Based on interviews, UNP librarians try to provide the best service to foreign students despite language barriers, and they expect English language training facilities and internships at libraries that are active in foreign languages to improve their cultural competence.

**Keywords:** cultural competence, cultural self-efficacy, academic librarian

## 1. INTRODUCTION

Universitas Negeri Padang (UNP) has a mission to become a world-class university which requires UNP to be able to provide services to all cultural backgrounds, including library services. Currently, UNP has several students from abroad who are studying in 15 international class study programs. These foreign students come from several countries, such as Thailand, Myanmar, Malaysia, and the Philippines. They need library services to support their academic studies, and they certainly bring a variety of cultures with their interactions in the university. Cultural differences bring difficulties for people to communicate clearly [1]. Misunderstanding or misinterpreting verbal and nonverbal cues, which confuse, then leads to anxiety and tensions among librarians and clients [1]. Several studies show that librarians are often the weakest link in the chain of library anxiety, yet librarians can also change this condition with the right mindset [2]. Librarians who are culturally competent can help students from different backgrounds achieve academic goals by providing an environment that makes students feel welcome [3]. Therefore, we argue that it is necessary to measure the cultural competence of librarians. This argument is in line with Georgetown University's The National Center for Cultural Competence, which states that culturally competent organizations have the capacity to take personal measurements (self-assessments) of their organizational cultural competences [4]. We then conducted further literature studies to find out possible approaches to measure the cultural competence of librarians. Various studies have shown that cultural self-efficacy has a

particularly important role in cross-cultural interactions [5]. Therefore, we raise librarian cultural self-efficacy as a paradigm in this study. In summary, the objective of this study was to determine the level of cultural self-efficacy of UNP librarians and the influence of sociodemographic factors on their level of cultural self-efficacy.

### 1.2. Our Contribution

Based on our literature exploration, the measurement of librarian cultural competence has not been widely studied. Moreover, we could not find any research on librarian cultural competence conducted in Indonesia. We also failed to find a specific measurement tool that can be used to measure the level of cultural competence of librarians. Therefore, we use the self-efficacy paradigm, which in our opinion, is more general. We hope that this paper could make a contribute to the development of library science and information and as a scientific basis for UNP libraries to improve the cultural skills of their librarians.

### 1.3. Paper Structure

The rest of the paper is organized as follows. Section 2 contains literature review that specifically discusses cultural competence and cultural self-efficacy, which then produces a conceptual framework. Section 3 presents a research methodology that describes survey instruments, research samples and data

processing. The analysis and research findings are presented in Section 4. Discussions related to our research findings are presented in Section 5. Section 6 discusses the limitations of this study. Finally, Section 7 provides the conclusions and implications of our research.

## **2. LITERATURE REVIEW**

### ***2.1 Cultural Competence***

In various literature, the term cultural competence is often interchanged with intercultural competence, multicultural competence, and cross-cultural competence. Cultural competence is a topic discussed in various scientific fields, such as psychology, anthropology, health and care, as well as social work. In general, cultural competence can be defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency, or those professionals to work effectively in cross-cultural situation [6].

In the scope of literature and information science, cultural competence can be interpreted as the ability to recognize the importance of culture in one's life; respect for diverse cultural backgrounds; and full integration of the cultures of the various groups into the library service [7]. Cultural competence can also be defined as the ability of individuals to carry out their functions properly in a global society with diverse cultures [3]. Culturally competent individuals will recognize and appreciate subtle differences in various communication styles from different cultures, and learn to embody these styles to enhance their interactions with other individuals [3].

### ***2.2 Cultural Self-Efficacy***

The term of self-efficacy can be defined as a person's belief in their ability to produce certain achievements [8]. Bandura [8] [9] emphasizes the importance of self-efficacy as a pivotal predictor of people's behaviors [5]. Self-efficacy affects people behavior not only directly, but by its impact on other determinants such as goals and aspirations, outcome expectations, affective proclivities, and perception of impediments and opportunities in the social environment [8].

Based on our literature exploration, we found a lot of research on cultural self-efficacy in the field of healthcare, yet we failed to find specific research related to cultural self-efficacy of librarians. However, Buck & Houze [10] stated that conditions and services in healthcare can be considered similar to libraries. In the nursing context, cultural self-efficacy can be defined as a professional's belief in their capacity to adapt care to their patient's culture [11]. Thus, in a library context, cultural self-efficacy can be expressed as the belief of librarians in their ability to adapt library services to the culture of their visitors.

A number of studies have reached general agreement that self-efficacy has an important role in cross-cultural interactions [5]. Numerous studies have shown that people with strong beliefs in their general or social abilities are more likely to feel prone and motivated to integrate into other cultural groups, whereas the

lower their level of self-efficacy in intergroup situations, the more they avoid contact with other cultural groups and prefer attitudes [5].

### ***2.3 Conceptual Framework***

Our study adopts the Briones, Tabernero, Tramontano, Caprara, & Arenas' [5] model which develops models and scales to measure cultural self-efficacy for adults. This model describes cultural self-efficacy consisting of factors processing information from other cultures (process), mixing satisfactorily with other cultures (mix), coping with loneliness (cope), understanding different ways of life (understanding), learning and understanding other languages (language). Referring to this model, we set the five factors above as the dependent variable.

We also add socio-demographic factors to know the relationship between gender, age, education level, and length of work with librarian's cultural self-efficacy. We set this sociodemographic factor as the independent variable.

## **3. METHOD**

### ***3.1 Survey Instrument***

In this study, the instrument consists of two parts. First part is a questionnaire to obtain demographic data, and the second part is the question to measure the cultural self-efficacy. To measure the cultural self-efficacy, we use Cultural Self-Efficacy Scale for Adolescents (CSES-A). The scale has proven to be a reliable and valid instrument. The original version of the questionnaire consisted of 25 question items in Spanish which also have English version. In the original version, the measurements used a Likert scale of 1 (can not do at all) to 5 (certain can do). We adapted the 25 questions into Indonesian language and measured the respondents' answers using a Likert scale of 0 (cannot do at all) - 10 (certain can do). The use of the Likert scale 0 - 10 refers to Bandura, which states that Scales that use only a few steps should be avoided because they are less sensitive and less reliable [2].

### ***3.2 Sample and Data Processing***

We created an online questionnaire to facilitate the distribution of the questionnaire. We then distributed the questionnaire hyperlink to the UNP librarians. We managed to get 13 respondents from a total of 15 librarians who work in the UNP library. We then conduct a descriptive analytical quantitative study using IBM SPSS Statistic 25. We also conducted interviews later with three librarians to intensify our analysis. The characteristics of respondents from the data that have been obtained are shown in Table 1.

**Table 1** Demographic of Respondent

		<b>n</b>	<b>%</b>
<b>Gender</b>	Male	3	23%
	Female	10	77%
<b>Age</b>	Under 30	1	8%
	30 - 34	1	8%
	35 - 39	3	22%
	40 - 44	4	31%
	Over 44	4	31%
<b>Education</b>	High School	1	8%
	Diploma	1	8%
	Graduate	10	77%
	Postgraduate	1	8%
<b>Length of Employment (years)</b>	Under 5	1	8%
	5 - 9	2	15%
	10 - 14	2	15%
	15 - 19	5	40%
	Over 19	3	22%

## 4. ANALYSIS AND RESULT

### 4.1 Validity and Reliability Test

We tested the validity of each factor using the Pearson product moment. The results show that all items used in the CSE measurement factors have a significance value  $> 0.05$ , except for items number 4 (M4) and number 6 (M6) on the mixing satisfactorily with other cultures (Mix). The Pearson Correlation value for the M4 items is 0.315 with a significance (2-tailed) of 0.295. The Pearson Correlation value for the M6 item is 0.332 with a significance (2-tailed) of 0.268. By eliminating item M4 and M6, it can be concluded that the measurement of this instrument in this study is valid.

Then we continued the reliability test using Cronbach alpha. If the Cronbach alpha value  $> 0.6$ , the instrument is reliable. The results of the calculation show that all five factors have a Cronbach alpha value  $> 0.6$ . Therefore, it can be concluded that the instrument used in this study is reliable. The result of validity and reliability test are shown in Table 2 and Table 3 as follows.

**Table 2** Validity Test

PROCESS									
		P1	P2	P3	P4	P5			
Total_Process	Pearson Correlation	.970**	.961**	.971**	.965**	.921**			
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000			
	N	13	13	13	13	13			
MIXING									
		M1	M2	M3	M4	M5	M6	M7	M8
Total_Mixing	Pearson Correlation	.926**	.685**	.966**	.315	.876**	.332	.823**	.824**
	Sig. (2-tailed)	0.000	0.010	0.000	<b>0.295</b>	0.000	<b>0.268</b>	0.001	0.001
	N	13	13	13	13	13	13	13	13
COPE									
		C1	C2	C3	C4				
Total_Cope	Pearson Correlation	.946**	.969**	.946**	.838**				
	Sig. (2-tailed)	0.000	0.000	0.000	0.000				
	N	13	13	13	13				
UNDERSTANDING									
		U1	U2	U3	U4	U5			
Total_Understanding	Pearson Correlation	.802**	.847**	.932**	.915**	.738**			
	Sig. (2-tailed)	0.001	0.000	0.000	0.000	0.004			
	N	13	13	13	13	13			
LANGUAGE									
		L1	L2	L3					
Total_Language	Pearson Correlation	.917**	.768**	.973**					
	Sig. (2-tailed)	0.000	0.002	0.000					
	N	13	13	13					

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 3** Reliability Test

Factors	Cronbach's Alpha	N of Items
Process	0.966	5
Mixing	0.923	6
Cope	0.944	4
Undstanding	0.893	5
Language	0.855	3

**4.2 Cultural Self-Efficacy Level**

To obtain the cultural level of librarian self-efficacy, we conducted a descriptive analysis. The value of cultural self-efficacy is described in terms of the mean and standard deviation. We also classify the value of cultural self-efficacy into four levels, namely: 0 - 2 is low; 3 - 5 is low-medium; 6 - 8 is medium-high; and above 8 is high. Overall, the mean cultural self-efficacy of UNP librarians is 7,833 with a standard deviation of ± 1,673. From these scores, we can classified the cultural self-efficacy of UNP librarians is medium-high. In detail, mean of each factor

with the standard deviation is as follows: process is 7,00 (± 1,905), mixing is 7.910 (± 1,936), cope is 8.404 (± 1,471), understanding is 8.508 (± 1.054), and language is 7.179 (± 2,194).

**4.3 Classic Assumption Test**

In this study, we make cultural self-efficacy as the dependent variable and sociodemographic factors as the

independent variable. Before analyzing the relationship between the cultural self-efficacy of UNP librarians with socio-demographic factors, we conducted a normality test, multicollinearity test, linearity test, and heteroscedasticity test. The normality test was performed using the Kolmogorov – Smirnov and Shapiro – Wilk tests with

significant limit  $> 0.05$ . The results of the normality test indicate that the data are normally distributed. We also performed normality test based on gender and the result also shows that the data is normally distributed.

**Table 4 Test of Normality based on Gender**

Gender		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CSE	Female	0.110	10	.200*	0.967	10	0.859
	Male	0.343	3		0.842	3	0.220

\*. This is a lower bound of the true significance.

The multicollinearity test was performed with tolerance limit  $> 0.1$  and value of Variance Inflation Factor (VIF)  $< 5.00$ . The result shows that there is no multicollinearity between gender, age, level of education, and length of employment. The linearity test was performed by using multiple linear regression analysis. We build the assumption that there is a linear relationship between the dependent variable and the independent variable if the value is sig. linearity  $> 0.05$ . We excluded

gender from linearity variable since gender is nominal. The result shows that length of employment, age, and education have a linear relationship with cultural self-efficacy. The heteroscedasticity test was performed by using Glesjer Test with significant level at  $> 0.05$ . The result shows that there is heteroscedasticity between gender, age, level of education, and length of employment.

**Table 5 Multicollinearity Test**

Independent Variable	Tolerance	VIF
Length of Employment	0.303	3.302
Age	0.229	4.369
Education	0.734	1.362
Gender	0.389	2.568

**Table 6 Linearity Test**

Independent Variable	Sig. Deviation from Linearity
Experience	0.07
Age	0.149
Education	0.103

**Table 7 Heteroscedasticity Test**

Independent Variable	t	Sig.
(Constant)	0.658	0.529
Age	-0.482	0.643
Gender	-1.704	0.127
Education	0.024	0.981
Length of Employment	1.448	0.186

**4.4 Association of Sociographic Variables and Correlation**

We used the Mann – Whitney U test to determine cultural self-efficacy scores based on gender. The hypothesis we use is that male’s cultural self-efficacy scores are smaller than female’s cultural self-efficacy scores. If the Assymp.Sig value < 0.05 then the hypothesis is accepted.

The results of the Mann – Whitney U test showed an Assymp.Sig value of 0.063. Based on the Assymp.Sig value, the above hypothesis is rejected. As follow up, we do descriptive analysis to know cultural self-efficacy mean score for each gender. The analysis shows that mean score for female’s cultural self-efficacy is 7.58, and mean score for male’s cultural self-efficacy is 8.83. This result emphasized our previous Mann – Whitney U test.

**Table 8 Mann-Whitney U Test for Gender**

	<b>CSE</b>
<b>Mann-Whitney U</b>	4.000
<b>Wilcoxon W</b>	59.000
<b>Z</b>	-1.862
<b>Asymp. Sig. (2-tailed)</b>	0.063
<b>Exact Sig. [2*(1-tailed Sig.)]</b>	.077 <sup>b</sup>

**Table 9 Result of Cultural Self-Efficacy Measurement Based on Gender**

<b>Gender</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Female	10	5.26	9.13	7.5348	1.15653
Male	3	7.96	9.35	8.8261	0.75807

Further, to determine the relationship between the dependent variable and the independent variable, we construct a hypothesis that the independent variable simultaneously has a significant effect on the dependent variable. The significance level we used was <0.05. The results of ANOVA analysis at SPSS show the number F = 5.071 and the value of sig. = 0.025. These results indicate that our hypothesis is accepted, and it can be concluded that the independent variable simultaneously has a significant effect on the dependent variable.

employment with cultural self-efficacy. We build a hypothesis which states that an increase in age, education level, and length of employment has a positive and significant relationship with an increase in the cultural self-efficacy of librarians. The significance level we used was <0.05. The hypothesis is then tested by multilinear regression analysis. The test results show that age has a positive and significant relationship with cultural self-efficacy (sig. = 0.04), education has no significant relationship with cultural self-efficacy (sig.0.053) and length of employment has no significant relationship with cultural self. -efficacy (sig. = 0.680).

We also conducted partial tests for each independent variable, namely: age, education level, and length of

**Table 10 Parsial Test**

	<b>t-Test</b>	<b>t-Value</b>	<b>sig.</b>
Age	2.401	2.2622	.040
Education	2.225	2.2622	.053
Length of Employment	-.426	2.2622	.680

We then performed a comparison of regression analysis and multivariate analysis to determine the significance of sociodemographic variables as a predictor of cultural self-efficacy. The regression analysis shows that age is a significant predictor of cultural self-efficacy (sig. = 0.04), while education level (sig. = 0.053) and length of employment (sig. = 0.680) are not significant predictors of

cultural self-efficacy. Multivariate analysis also showed the same results as regression analysis. Based on the results of multivariate analysis, it is known that age is a significant predictor of cultural self-efficacy (sig. = 0.028), while education level (sig. = 0.247) and length of employment (sig. = 0.225) are not significant predictors of cultural self- efficacy.

## 5. DISCUSSION

We studied cultural self-efficacy of academic librarian of Universitas Negeri Padang (UNP) using validated version of Cultural Self-Efficacy Scale for Adolescents (SCES-A). We found that mean score of cultural self-efficacy of UNP librarian is 7,833 with a standard deviation of  $\pm 1.673$ . We classified this score as medium-high.

We could not find any studies on librarian cultural self-efficacy measurements conducted in Indonesia to compare our findings. Although we managed to find a lot of literature on the concept of cultural competence for librarians, we also could not find quantitative studies on the measurement of librarian cultural competence in scientific journals via internet. Therefore, we make a comparison with the findings in health care journals which discuss a lot about cultural self-efficacy and cultural competence.

Our research shows that male's cultural self-efficacy score is higher than female's and age has a significant relationship with cultural self-efficacy. These findings are in line with [12] and [13]. We argue that a person's age is directly proportionate to his or her life experiences, including experiences of interacting with foreign cultures. This then affects their cultural self-efficacy. This argument is in line with cultural competency theories and cultural competency research which in general states that the higher a person's exposure to a foreign culture, the higher their cultural self-efficacy or cultural competence [7] [8] [14] [15] [16].

Further, our findings show that education level and length of employment also have no significance for cultural self-efficacy. This is in line with the findings [13] [17] and [14]. These studies also concluded that education and work experience are not significant predictors of cultural competence.

We also conducted interviews with 3 librarians to find out more about their cultural competences, their cross-cultural services, and their needs regarding cultural competencies. Based on the interview results, two librarians stated that their English skills were quite good, and one person stated that their English skills were medium. In general, they can still serve foreign students, but if they encounter problems, they will call colleagues who are more fluent in English. They expect English language training for librarians to improve their communication skills in serving foreign students. They also expect that there will be an apprenticeship program at the library which caters to foreign visitors so that it can increase their exposure to foreigners while increasing their experience in providing services to visitors with different cultural backgrounds.

## 6. LIMITATION

Several limitations may have impacted the results of this study. In this study, the measurement of cultural self-efficacy uses self-reported instruments. This affects the answer because there are social desirability factors from

the respondents that must be taken into consideration. Besides, although the sample size reached 86.6% of the population, the population in this study was limited to 15 people. Therefore, the results of this study cannot be used to describe the cultural competence of librarians in a broader geographic scope.

## 7. CONCLUSION

The concept of cultural competence is a topic that has been raised for a long time, however the measurement of librarian's cultural competence has not been widely studied. This study is expected to provide valuable information regarding the measurement of librarian cultural competence using the self-efficacy paradigm and the association of sociodemographic factors with cultural self-efficacy. The results of the study show that the cultural self-efficacy of UNP librarians is classified as medium-high, where male's scores are higher than female's scores. Age is one of the predictors for self-efficacy, while education level and length of employment do not have a significant relationship with cultural self-efficacy.

The UNP library can improve its services for foreign students by accommodating English training for librarians who work there. Moreover, an internship program for librarians to work in libraries that serve many foreign visitors can increase their exposure regarding services to people with different cultures which in turn increases the librarian's cultural competence.

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