

Teacher Training in a Diverse Japan: Assessment Validation

Brett R. Walter

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Abstract: This study was developed to determine the psychometric properties of a 29 item instrument created to enable universities and instructors of pre-service elementary and secondary education students to evaluate three main ideas: student knowledge and exposure to different cultures, student perceptions of other cultures, and student perceptions of working in a multicultural environment. Specifically, the reliability and validity of the 20 Likert-type scale items was assessed through the use of coefficient alpha scores (reliability) and chi-square tests (validity). Coefficient alpha scores for the instrument showed reliability (at 0.98). The instrument also resulted in an acceptable fit with a chi-square of 1904.56, df of 740, and a $P < .001$. The relative chi-square was found to be at 2.57. As the findings demonstrate reliability and validity for the instrument, further uses of the questionnaire are then discussed.

Key words: Teacher Training, Instrument Validation, Multicultural Education

1. Introduction

The topic of the interactions between Japanese Teachers of English (JTE) or Japanese Home Room Teachers (HRT) and their native English speaking counterparts, the Assistant Language Teacher (ALT), has been discussed for years in Japan. Although much research has been done concerning the difficulties between JTEs and ALTs in the workplace (i.e. Leonard, 1999; Tsuido, Otani, & Davies, 2012; Ohtani, 2010) and many articles have been written about in-service HRT and ALT interactions (i.e. Muller, 2015; Amaki, 2008), little has been explored in terms of the preparation for pre-service JTEs and HRTs to work in an increasingly multicultural environment. In fact, it has been noted that until recently “most elementary school teachers [were] not trained to teach English, and so there [was] a need to bring ALTs into elementary classrooms” (Tsuido, Otani, & Davies, 2012, p. 50). Thankfully, possibly due to the mandatory inclusion of elementary English lessons in Japanese public schools, universities have begun training their elementary education students to create English lessons and take the lead during elementary English classes. However, this does not necessarily mean that these students are being prepared to work with an ALT. In an effort to avoid cultural conflicts, it would make sense to have HRTs who are aware of differences in cultures from their own.

How, then, do we know whether these pre-service JTEs and HRTs are aware of cultural differences outside of Japan?

What measure can be used to assess their preparedness to work with and ALT from a culture that is most likely very different from their own?

How can universities best prepare their students to overcome any difficulties or concerns they may

have about working in a multicultural environment without knowledge of these concerns themselves?

In this article, it is described how the researcher approached the problem of designing, administering, and evaluating a pilot instrument to assess pre-service JTEs' and HRTs' views in response to these questions. The primary aim of this report is to describe some psychometric properties of this 29-item measure. An analysis of the data collected during this pilot study has already been reported in Walter (2016), and this data along with the current assessment will be further adjusted and used in a study on an educational intervention for pre-service Japanese language teachers.

2. Method

Item Development and Measures

Considering the points mentioned above, the researchers needed to create an assessment which could help to answer the following questions: what kind of exposure do pre-service JTEs and HRTs have to cultures outside of their own, how do these individuals perceive the culture and role of the ALT in an elementary level English class, and what do these individuals see as potential difficulties for when they begin working with an ALT? In order to create such an assessment, the researcher reviewed the literature and began examining existing HRT and ALT assessment instruments. As the researcher was unable to find research pertaining specifically to pre-service HRTs, those studies focusing on in-service HRTs were instead used as the starting point for the development of the current assessment. Those instruments assessed included a survey conducted by Shibata (2010) which looked at JTE perceptions of non-native ALTs, a questionnaire distributed by Pritchard & Maki (2006) which explored Japanese learners of English and their perceptions of their English language abilities, and an attitudinal survey conducted by McMillan & Rivers (2011) which examined ALT beliefs about the use of Japanese in an English classroom. Although a few of the items from these surveys were adopted and adjusted for the current study's instrument, it was apparent that the researcher would have to build the new assessment instrument around only some of the competencies and measures used in these studies.

Translation

The final questionnaire version was designed to provide both qualitative and quantitative data for the measures mentioned above. The quantitative data was collected through the use of twenty 6-point Likert-type scale items in which 1 = "strongly agree," 2 = "agree," 3 = "slightly agree," 4 = "slightly disagree," 5 = "disagree," and 6 = "strongly disagree." The qualitative data was collected through the use of nine open ended questions. Of these 29 items, 7 were categorized as items pertaining to exposure to other cultures (Multicultural Understanding), 13 were categorized as items pertaining to perception of ALT culture and role in the classroom, and 6 were categorized as items pertaining to perceived difficulties of working with an ALT. Uncategorized items were included as possible distractors.

As mentioned above, items were either adjusted from previous studies or were developed by the researcher, but all items were initially developed in English. As the researcher has a high level of fluency with Japanese, initial translations of the items were carried out by the researcher. These translated items were then given to a professional translator and native speaker of Japanese to check the accuracy of the translations and to make suggestions for improvement. Several minor adjustments were made to the questionnaire at this stage.

Ethics

All participants were provided with written information about the study, as well as contact information for the researcher in the case of further questions or the need for more verbal information. All participants further gave their informed consent before taking part in the study.

Pilot Phase

This article represents one stage of the pilot study which has been conducted to establish whether the newly designed questionnaire could be used as a reliable source of information on pre-service teachers' perceptions and knowledge of working under culturally diverse conditions. As mentioned above, the questionnaire was administered in the participants' native language of Japanese to avoid misunderstandings of the items due to any language barriers and to maximize the possible number of responses collected. Further, to avoid any influence on participant responses, the questionnaire was distributed by a Japanese instructor of the course who had no investment in the study itself and details about the nationality of the researcher were also not provided to the participants. Based on participant responses and the results of this pilot analysis of the assessment, items may need to be adjusted before further use in upcoming research.

Statistical Analysis

To characterize the study sample, the researcher used descriptive statistics. To assess the reliability of the instrument (the questionnaire) used by the study sample, the researcher calculated the coefficient alpha using the SPSS software. A confirmatory factor analysis was used to measure the construct validity of the instrument. Specifically, the goodness of fit statistic for the questionnaire was determined by the probability found in the chi-square results. Further, the relative chi-square test (chi-square value divided by the degrees of freedom [df]) with a value of <5 representing an acceptable goodness of fit (Schumacker & Lomax, 2004) was also calculated, as chi-square is sensitive to sample size.

3. Results

Participants

As the current version of the questionnaire was designed for a pilot study, it was only distributed to three classes of students majoring in elementary education at a university in Hiroshima prefecture. To elaborate on the characteristics of the study sample, the questionnaire was distributed to students by their Japanese instructor with directions to return completed questionnaires to a sealed box on campus. Student ID numbers and the names of respondents were not collected. The questionnaire was given to 120 students, but only 40 students returned the questionnaire (a total response rate of 33%). Of the 40 respondents, 20 were male and 20 were female. Around three quarters of respondents were in their second year of schooling ($n=31$), with considerably less third year ($n=6$) and fourth year ($n=3$) students. Respondents' ages ranged from 19 years to 24 years old. As part of the background information, respondents were asked to rate their own levels of English ability. The respondents rated their English ability levels as either a beginner ($n=17$), intermediate ($n=18$), at no English ability ($n=4$), advanced ($n=1$), or fluent ($n=0$).

Table 1 Coefficient Alpha

	mean	sd	Cronbach's α
scale	3.381	0.376	0.981

Note: Of the observations, 20 were used, 0 were excluded listwise, and 20 were provided.

Psychometric properties of the instrument

As is seen in Table 1, the coefficient alpha score for all 20 likert-type items of the instrument was calculated using SPSS at 0.98 with a standard deviation (sd) of 0.38. The hypothesized model with these 20 items resulted in an acceptable fit to the data: chi-square = 1904.56; df = 740; $P < .001$. Further, the calculated relative chi-square fell well below the required value of <5 at 2.57 (Table 2).

Table 2 Confirmatory Factor Analysis with Relative Chi-Square

	Value	df	Relative	P
Model	1904.56	740	2.57	$<.001$

4. Discussion

These findings support the use of the developed questionnaire in further studies involving the opinions and preparedness of pre-service HRTs in regards to working in a multicultural setting with an ALT. This was seen in both the data testing the reliability and validity of the items in question. In particular, the high reliability coefficient alpha which was greater than 0.90 supports further use of this instrument. It is the belief of the researcher that this instrument may be used to better guide universities in judging whether they need to include or improve multicultural training in their curriculum. Secondly it is believed that, with some further adjustments, it may be possible to use this instrument to benefit programs hiring ALTs as a measure for the opinions and preparedness of any incoming ALTs to a position in Japan as well.

The study had some limitations, including the small number of responses collected for the initial survey. Although the data collected shows a significant result, a higher response rate would result in more robust data. Secondly, there was an absence of correlation data with other measures of pre-service HRT data. This is largely due to the lack of research being done on the topic in the field, but the correlation data would still provide a stronger argument for the use of this instrument in future research. Another limitation was in the participant pool. This data was only collected from one university in Japan and only mostly from second year students in the program. Future testing may be advised at different locations across Japan and at different grade ranges provide additional information on the reliability and validity of the instrument.

5. Acknowledgments

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References

- Amaki, Y. (2008). Perspectives on English education in the Japanese public school system: The views of foreign assistant language teachers (ALTs). *Educational Studies in Japan: International Yearbook*, 3, 53-63.
- Leonard, T. J. (1999). *East meets west: Problems and solutions understanding misunderstandings between JTEs and ALTs*. Tokyo, Japan: Taishukan.
- McMillan, B. A. & Rivers, D. J. (2011). The practice of policy: Teacher attitudes toward "English only." *System*, 39, 251-263.
- Muller, S. E. (2015). The Japanese elementary school foreign languages program from an ALT's perspective. In G. Brooks, M. Grogan, & M. Porter (Eds.), *The 2014 PanSIG Conference Proceedings* (pp. 122-133). Miyazaki, Japan: JALT.
- Ohtani, C. (2010). Problems in the assistant language teacher system and English activity at Japanese public elementary schools. *Educational Perspectives*, 43(1&2), 38-45.
- Pritchard, R. M. O. & Maki, H. (2006). The changing self-perceptions of Japanese university students of English. *Journal of Studies in International Education*, 10(2), 141-156.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Shibata, M. (2010). How Japanese teachers of English perceive non-native assistant English teachers. *System*, 38, 124-133.
- Tsuido, K., Otani, M., & Davies, W. (2012). An analysis of assistant language teachers' perceptions of their working relationships with Japanese teachers of English. *Hiroshima Studies in Language and Language Education*, 15, 49-64.
- Walter, B. R. (2017). Elementary teacher education in Japan: How can we help? In G. Brooks (Eds.), *The 2016 PanSIG Journal* (pp. 342-350). Okinawa, Japan: JALT.

Appendix

(English version of the survey)

Please fill out the following information about yourself.

Gender:_____ Age:_____ Year in University:_____

English Ability (None, Beginner, Intermediate, Advanced, Fluent)_____

For the following items, please read the statements below and rate whether or not you agree with the statement (1= Strongly Agree, 2= Agree, 3= Slightly Agree, 4= Slightly Disagree, 5= Disagree, 6= Strongly Disagree).

1. Elementary English lessons need to give students more opportunities to read and write English in the classroom.

1 2 3 4 5 6

2. Elementary English lessons need to give students more opportunities to speak and listen to English in the classroom.

1 2 3 4 5 6

3. There should be no Japanese spoken in an Elementary English class.

1 2 3 4 5 6

4. ALTs are only useful in helping with classroom English lessons.

1 2 3 4 5 6

5. Lessons with ALTs are important for English learning.

1 2 3 4 5 6

6. I really enjoyed lessons with ALTs when I was in school.

1 2 3 4 5 6

7. The main role for ALTs in the classroom is to provide models of native pronunciation.

1 2 3 4 5 6

8. The main role for ALTs in the classroom is to teach native-level grammar.

1 2 3 4 5 6

9. Teaching native pronunciation is more important than teaching native-level grammar.

1 2 3 4 5 6

10. Teaching native-level grammar is more important than teaching native pronunciation.

1 2 3 4 5 6

11. Only native speakers of English should be allowed to be ALTs.

1 2 3 4 5 6

12. American English should be the model for pronunciation in Elementary English classes.

1 2 3 4 5 6

13. British English should be the model for pronunciation in Elementary English classes.

1 2 3 4 5 6

14. Only American English and British English are acceptable as models for English pronunciation.

1 2 3 4 5 6

15. The use of Japanese during English lessons can be helpful for the students.

1 2 3 4 5 6

16. It is okay for students to use Japanese in an English lesson, but not the teachers.

1 2 3 4 5 6

17. I would prefer a Japanese English assistant over a foreign Assistant Language Teacher (ALT).

1 2 3 4 5 6

18. I feel confident that I can teach elementary level English.

1 2 3 4 5 6

19. I feel confident that I can have a conversation in English with my future ALT.

1 2 3 4 5 6

20. I feel it is important to learn about other cultures in order to teach English with an ALT.

1 2 3 4 5 6

For the following items, please answer the questions to the best of your ability. There are no wrong answers, and no word requirements.

1. Please describe in as much detail as possible what your image of an ALT is.

2. How do you feel about working with an ALT?

3. Do you have any concerns about working with an ALT? If so, what are some of your concerns about working with an ALT?

4. What role do you perceive your ALT taking when working with them?

5. Did you have an ALT when you were a student? If so, at what grade level (i.e. elementary, junior high, senior high)?

6. Have you spent any time outside of Japan? If so, why and for how long?

7. Do you have any friends from other nationalities, or have you spent time with someone from another country? Please provide details if possible.

8. Do you think that including Japanese in an English lesson is helpful for the students? Why or why not?

9. How do you feel about your level of English ability? How do you think this will affect your ability to teach English in Elementary School?