

## **The Positive Influence of Skype Exchanges on Japanese Elementary Students' Affect**

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### **ABSTRACT**

The pre-post survey results of a pilot / exploratory study of elementary school students in Japan, who engaged in three Skype exchanges with English speakers in Australia, are reported. There are statistically significant increases in Foreign Language Activities ( $p < .01$ ), International Posture ( $p < .01$ ), and Motivation toward studying EFL ( $p < .01$ ), and their Desire to Travel Overseas ( $p < .05$ ). In addition, the Glass' *delta* effect size (Cohen, 1992) measures are: for Foreign Language Activities = 0.83; International Posture = 1.06; Motivation to study EFL = 0.80; and Desire to Travel Overseas = 0.54. These results demonstrate the statistically significant increases are also meaningful. The results for statistical power show the level of the probability that the experiment would yield similar results if repeated (Soper, 2016). The Foreign Language Activities result is .77; International Posture is .95, the Motivation's level is .74, and Desire to Travel Overseas has a .65 level of statistical probability. The effect size results demonstrate the statistically significant increases are meaningful; statistical power results show the probability that the experiment would yield similar results if repeated. These results and the correlations are discussed regarding a future partial least squares regression and structural equation model analysis.

### **INTRODUCTION**

This paper adds to previously reported research (Ockert, 2017, 2016, 2015a, 2015b) on the use of Skype exchanges as an intervention to influence student affect toward EFL in the Japanese EFL (JEFL) learning context. Due to space limitations, a more comprehensive discussion is not included here. For an in-depth review of the literature, please see Ockert, 2015b. The current paper may benefit educators by demonstrating that these students report increases in affect after using Skype. The results and the implications for further analysis are discussed.

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## REVIEW OF THE LITERATURE

### The Six Variables examined in this Study

First, Foreign Language Activities: Nose (2006) reported that 'games' was the most interesting activity of the choices provided for three reasons: 1) an increase of interest as a result of talking with a native English speaker (NES); 2) listening to a foreign language; and 3) the increase of awareness towards communication (the necessity of English). Second, Foreign Language Learner Motivation: Researchers have reported on increased motivation as a result of CMC in several studies. Possible reasons, include the result of exposure to stimulating and authentic learning contexts, and of collaborative work in a less-threatening environment (Freiermouth & Jarrell, 2006). Third, International Posture: In the JEFL context, Yashima (2000) found that, amongst Japanese learners, English seems to represent something broader than people from the US or Britain. She refers to a generalized international posture (IP), an interest in international events, a willingness to go overseas, a desire to interact with intercultural others, and openness toward different cultures.

Fourth, L2 Self-confidence: Yashima (2002) found a positive, causal relationship between motivation (desire and intensity) and communication confidence (communication anxiety and perceived communication competence) in the L2. Furthermore, Yashima et al. (2004) found that "self-confidence in communication in an L2 is crucial for a person to be willing to communicate in that L2" (p. 141). Fifth, Willingness to Communicate (WTC): Yashima and her associates (Yashima et al., 2004; Yashima et al., 2009) have conducted research on WTC in relation to several affective variables, including, language learning orientations and motivations (Yashima, 2000), student WTC (Yashima, 2002) and the influence of attitudes and affect on WTC and second language communication (Yashima et al., 2004). Finally, Desire to Travel Overseas: Students' desire to spend time abroad is related to instrumental motives (e.g. future employment) and socio-cultural motives – such as a desire to make friends (Clément, Dörnyei, & Noels, 1994).

## THE STUDY

### Hypothesis

The use of the Skype video software to communicate with students in Australia will increase the affective variables of the experimental group toward English language learning. The use of a self-report survey instrument before and after the Skype exchanges allows for comparisons of the increase(s) or decrease(s) of the six variables.

## METHOD

### Participants

All participants in the study ( $N = 58$ ) were in the 5<sup>th</sup> grade of elementary school and 10-11 years old Japanese students. The experimental group ( $n = 29$ ) participated in three 30-

minute Skype exchanges with students in Tasmania, Australia.

## Materials

The survey instrument was in paper form and in Japanese. It used a six-point Likert-type scale from 1 (*Completely Disagree*) to 6 (*Completely Agree*). The Cronbach *alpha* reliability estimate is .88 for the instrument (Please see Appendix).

## Procedures

There were three exchanges, which lasted about 30 minutes each. The survey was administered in class to students in April and again in December, after the final Skype exchange. During the intervening months, the students participated in Skype FLAs with students living in Tasmania. The November 1st exchange was for approximately 30 minutes. Activities included the "Hokey-Pokey" "Duck, Duck, Goose" and "Indian and Tipi". The November 2 exchange also lasted about 30 minutes. After an initial greeting by the entire class greeting of the students, the students introduced themselves individually. Then the students sang songs together. A final thirty-minute exchange took place on December 2<sup>nd</sup> for about 30 minutes.

## RESULTS AND DISCUSSION

The post-Skype survey item descriptive statistics and correlations are in Table 1 (Ockert, 2015a). The highest correlation (0.74) is between Motivation and FLAs. Also, the highest mean score (average) is for Desire to travel overseas (5.07).

**TABLE 1**  
**The Post-Skype Descriptive Statistics and Correlation Matrix (*n* = 29)**

<i>Instrument Items</i>	<i>M</i>	<i>SD</i>	FLAs	IP	Mot.	CC	WTC
FL Activities	4.10	1.16					
International Posture	4.48	1.10	0.45*				
Motivation	4.10	1.16	0.74*	0.34*			
Comm. Confidence	3.41	1.38	0.54*	0.37*	0.45*		
WTC	3.90	1.24	0.63*	0.57*	0.61*	0.47*	
Desire to Travel	5.07	1.14	0.49*	0.47*	0.60*	0.29	0.56*

Note. \**p* < .01

The results of the differences for the groups' *M* and *SD* before and after the intervention are provided in Table 2 (Ockert, 2016). The 'rules of thumb' for Glass' *delta* effect size measures (Cohen, 1992) are: 0.2 indicates a small effect; 0.4, a medium effect; 0.8 indicates a large effect size (p. 159). These effect sizes are very desirable and support the efficacy of the study. Furthermore, the statistical power results tell us the probability that the experiment would yield similar results if repeated (Soper, 2016).

**TABLE 2**  
**The *M*, *SD* Before and After the Intervention, Effect Sizes, and Statistical Power (*n* = 29)**

<i>Instrument Items</i>	<u>Before Skype</u>		<u>After Skype</u>		Mean Difference	Effect Size	Stat Power
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
FL Activities	3.14	1.70	4.10	1.16	0.96**	0.83	.77
International Posture	3.31	1.84	4.48	1.10	1.17**	1.06	.95
Motivation	3.17	1.70	4.10	1.16	0.93**	0.80	.74
Comm. Confidence	3.45	1.40	3.41	1.38	- 0.04	na	na
WTC	3.34	1.86	3.90	1.24	0.56	na	na
Desire to travel	4.45	1.77	5.07	1.14	0.62*	0.54	.65

Note. \*\* $p < .01$ ; \* $p < .05$

Overall, the Skype exchanges were effective, in that they resulted in a statistically significant increase of .96 ( $p < .01$ ) in the FLA results is similar to that found by previous researchers in the JEFL learning context. In addition, the notably large increase in IP after the intervention is possibly the most outstanding result. The increase of 1.17 points on a six point scale, and statistically significant at the  $p < .01$  level with an effect size of 1.06 and a power level of .95, clearly indicating a meaningful increase. Further analysis of the statistically significant correlations with a regression analysis to discover how the various variables influence each other will be informative.

## CONCLUSIONS

The use of Skype exchanges with NESs of a target language provided several positive outcomes for the JEFL students involved. They report an increase in interest in FLAs and foreign countries, a desire to study more in order to communicate in English, a desire to communicate with foreigners in English, and a greater desire to go overseas at some time.

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## APPENDIX

### The student survey

English translation of the questionnaire items using a six-point Likert-type scale from 1 (*Completely Disagree*) to 6 (*Completely Agree*).

1. I like foreign language (English) activities.
2. I want to know more about foreign countries (different cultures).
3. To communicate in English, I want to study more.
4. I have confidence to communicate using simple English.
5. For myself, I want to communicate with foreigners in English.
6. I want to go overseas at some time.