

Examining Chen and Starosta's Model of Intercultural Sensitivity in the Taiwanese Cultural Context

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Abstract—The main purpose of this study was to empirically examine Chen and Starosta's Model of Intercultural Sensitivity and reproduce a valid scale in the Taiwanese cultural context, using both exploratory and confirmatory factor analyses. Results indicated that Chen and Starosta's five-factor model of intercultural sensitivity (IS) did not fit the Taiwanese cultural context. Instead, a four-factor model of IS was created using an exploratory factor analysis. The four factors were based on the 13 items of 24-item Intercultural Sensitivity Scale (ISS) formulated by Chen and Starosta. The reliability coefficient was .801, demonstrating high internal consistency. A confirmatory factor analysis was performed again to determine the construct validity of the alternative model of IS. Since cultural differences may influence the factor structure of a test, using both EFA and CFA can methodologically provide a meaningful explanation for replication studies. This study proposes an alternative model of the Intercultural Sensitivity Scale that is a better fit with Taiwanese culture by reinterpreting Chen and Starosta's ISS.

Index Terms—Intercultural Sensitivity (IS), confirmatory factor analysis (CFA), exploratory factor analysis (EFA), English Proficiency.

I. INTRODUCTION

Intercultural sensitivity is regarded as an important ability needed for those living in a pluralistic democratic society (Tamam, 2010). Nevertheless, few studies examining intercultural issues have been conducted in Asia, the contexts where English is seen as a foreign language (EFL) (Chao, 2014). It is likely because of the long-term domination of English-speaking countries in EFL education (Atay, 2005; Chao, 2014; Su, 2011; Yuen, 2011). Taiwan is gradually developing and being perceived as a multicultural society since 1980s (Damm, 2012) due to importation of foreign workers and transnational marriage migration. Using both qualitative and quantitative approaches, Bédanger and Wang (2012) reviewed results from various studies marriage migration in Vietnam and Taiwan between 2004 and 2010 and found marriage migration constitutes a significant vector of social change for both sending and

receiving areas of migrants. Evidence exemplifying the case is that Kaohsiung City had a population of 1.5 million, including 4,240 Vietnamese immigrant spouses as of December 2010. In pursuit of internationalization, the Ministry of Education (MOE) in Taiwan announced three programs, Scholarships for Excellent Students to Study Abroad, Hardships for Students to Study Abroad, and Pilot Overseas Internships to give recipients opportunities to attend an overseas institute or an overseas enterprise to extend their vision. In the meantime, International Student Recruiting Policies in Taiwan attract more international students overseas and expand campus diversity. Harmonic and effective communication between Taiwanese and those migrants becomes extremely important in such a multicultural society.

Since Intercultural sensitivity has been highly valued around the worlds, therefore, several researchers have proposed intercultural sensitivity as a prerequisite for achieving intercultural competence (Chen and Starosta, 2000; Hammer, Bennet and Wiseman, 2003). In Chen and Starosta's (2000) study, intercultural sensitivity was found not only to be crucial to enabling people to become successful global citizens, but also a predictor of intercultural communication competence. Therefore, a valid and reliable scale is necessary for measuring intercultural sensitivity in a pluralistic society.

Using American college student samples, Chen and Starosta (2000) formulated a five factor Intercultural Sensitivity Scale (ISS) with an overall Cronbach's alpha of 0.88. Developed with a largely white university student population, ISS needs to be tested with additional diverse samples to determine its usefulness and cross-cultural validity. The concurrent validity of the 24-item ISS was computed to be quite satisfactory (Chen and Starosta, 2000). A dozen studies examining aspects of intercultural sensitivity level using the ISS were identified in the literature since it was formulated in 2000. For instance, Graf's (2004) study assessed culture-specific versus culture-general intercultural training designs, using the ISS to determine whether the level of intercultural competencies differs between university students in the US and Germany. Peng (2006) measured intercultural sensitivity levels among college students and multinational Employees in China, using the ISS. West (2009) evaluated the ISS with professional counselors in

international schools and demonstrated the ISS was a valid measure of intercultural sensitivity. Del Villar's study (2010) determined Filipinos' intercultural sensitivity level and its possible association with various demographic variables, using ISS.

Fritz, Möllenber, and Chen (2002) conducted a replication study in Germany to reproduce the five-factor structure in a different cultural context and found the ISS fairly satisfactory and valid. Although the ISS was validated with American and German college students (Chen and Starosta, 2000; Fritz, Graf, Hentze, Möllenber, and Chen, 2005; West, 2009), the results showed that the instrument could be further improved, and that it was not a culture-free scale for measuring intercultural sensitivity. Unfortunately, the replication study by Fritz, Graf, Hentze, Möllenber, and Chen (2005) did not produce satisfying results. They questioned the validity of Chen and Starosta's model of IS and suggested further studies to improve it. In other words, they argued that Chen and Starosta's five-factor model could no longer be considered a culture-free one. Despite this, the ISS has been used by several researchers in non-western countries, such as Malaysia, China, Taiwan, Philippine, and Korea (Tamam, 2010; Peng, 2006; Wu, 2009; Del Villar, 2010; Park, 2013).

1) *Chen and Starosta's Model of Intercultural Sensitivity*

Chen and Starosta (1996) criticized previous studies on intercultural sensitivity, arguing that they inappropriately mixed three related but separate concepts. They claimed that intercultural communication competence is constructed from three concepts: intercultural awareness (or intercultural effectiveness, cognitive aspect), intercultural adroitness (behavioral aspect), and intercultural sensitivity (affective aspect). In the light of literature reviewed, Chen and Starosta tested the initial six dimensions, namely self-esteem, self-monitoring, open-mindedness, empathy, interaction involvement, and suspending judgment in a study using a sample of American students. According to Chen and Starosta's research on the affective aspect of intercultural communicative competence, individuals who possess the six positive characteristics will possess greater levels of intercultural sensitivity. Twenty four items were extracted from the results of an exploratory factor analysis.

Chen and Starosta's model of IS includes five factors: 1. Intercultural Engagement: the degree of participation in the intercultural communication; 2. Respect for Cultural Differences: to realize, accept and respect for others' cultural diversities in the communication; 3. Interaction Confidence: how confident the interlocutors perform during intercultural communication; 4. Interaction Enjoyment: the level of delight interlocutors feel in the intercultural communication; and 5. Interaction Attentiveness: the ability of receiving and responding to the messages properly during the intercultural communication. The concurrent validity of the ISS was evaluated against several valid instruments and the results turned out to be satisfactory (Chen and Starosta, 2000).

2) *Validating Intercultural Sensitivity Scale in non-Western contexts*

Even though the results of Fritz, Graf, Hentze, Möllenber, and Chen (2005) (2005) and Taman (2010) cast doubt on Chen and Starosta's model of IS, the ISS has been broadly employed in Asia, in countries such as China, Thailand, Hong Kong, Korea, Iran and Taiwan. Many researchers have merely applied this instrument without assessing its validity, and most of them have claimed the ISS is quite reliable, based on its reliability coefficient (Peng, Rangsipahat, and Thaipakdee, 2005; Peng, 2006; Dong, Day, and Collaco, 2008; Rahimi, 2011). For instance, Rahimi (2011) conducted an empirical study to investigate the probable relationship between Iranian EFL learners' linguistic competence and intercultural sensitivity and the feasibility of enhancing their intercultural sensitivity through an experimental training course. Based upon the evidence supplied, the intercultural sensitivity level of the EFL learners had considerably increased after the training course. The Cronbach Alpha reliability was 0.84 in his study. Thus, Rahimi concluded that Chen and Starosta's (2000) Intercultural Sensitivity Scale could be considered applicable in an Asian setting as well. However, this conclusion is questionable without validation tests.

Chen and Starosta (2000) recommended reviewing the ISS with other populations. A recent study by Tamam (2010) among Malaysia participants indicated that Chen and Starosta's five-factor 24-item ISS did not produce an adequate model fit when the model was subjected to confirmatory factor analysis. For Taman's (2010) study, a three-factor structure (interaction attentiveness and respect, interaction openness, and interaction confidence) was retained from 21 items of Chen and Starosta's ISS through Exploratory Factor Analysis. In accordance with the cultural values in Malaysia, Taman suggested that intuitive respect for cultural differences, interaction engagement, interaction confidence, and interaction attentiveness were applicable in the Malaysian context, while interaction enjoyment was not seen as an important component. Taman finally concluded that Chen and Starosta's five-factor model was neither generic nor culture-free. He therefore recommended that researchers be wary of using this instrument in non-Western cultures.

Furthermore, Tsereteli's (2011) found Chen and Starosta's ISS extracted eight factors for Georgian students, instead of the five factors extracted by the studies carried out on American and German students. He continued to explain, "the diversity and confounding factors make it difficult to define the picture of intercultural sensitivity of Georgian youth population," but the fact that eight factors were extracted indicated "the specificity of intercultural sensitivity in Georgian culture." The results also proved that Chen and Starosta's ISS was neither adequate nor a so called "free of culture scale." Moreover, the factor structures of the ISS were only assessed in a single U.S. and lacked validation tests. Based on the replication and validation studies, the applicability of Chen and Starosta's model of

intercultural sensitivity remains unclear, so "the scale needs further validation tests" (Taman, 2010).

To summarize the salient features of these two studies, two findings are of interest. First of all, attributes may contribute to the determination of whether two concepts are the same and should be merged, or whether they should be separated as distinct factors. In Tamam's study, with a few changes in definition, two concepts, Respect for Cultural Differences and Interaction Attentiveness, were merged into one, Interaction Attentiveness and Respect, because these two concepts are recognized as equivalent by Malaysians. Cultural preferences also provided a meaningful rationale for excluding Interaction Enjoyment from the five factors. Nevertheless, eight factors for Georgian students were extracted in Tsereteli's study, with the five original concepts being separated into eight categories. Cultural preferences or specificities were possibly the reason on this occasion.

Second, these two studies failed to confirm the original factor structure, due to the lack of CFA. In many cross-cultural studies, differences between EFA and CFA solutions have been attributed to cultural differences between populations (e.g. Rao and Sachs, 1999). The problems associated with performing EFA, a data-driven technique, on the new data may result in the drawing of erroneous conclusions. CFA is a theory-driven rather than data-driven technique (e.g., Bollen, 1989), which can appropriately cross validate the factor number of a test yielded by EFA (VanProoijen and Van Derkloot, 2001). Therefore, it is necessary to carry out both EFA and CFA while conducting cross-cultural studies.

Considering Chen and Starosta's model of IS was formulated early in 2000, more validation studies for theoretical models of IS are necessary in order to address the void in theoretical understanding of intercultural sensitivity situated in different cultures. To be more specific, cultural diversity and specificity could also influence the application of the ISS in different cultural settings and populations. The items of the instrument may need to be revised or new items added to capture the concepts measured. Even though the ISS is broadly applied in research and replication studies, it has not been validated for measuring the constructs of sensitivity among Taiwanese citizens. As the Taiwanese cultural setting is becoming increasingly multicultural, intercultural sensitivity is highly valued in Taiwan. Therefore, the current study set out to fill the research gap as it introduced the ISS as a valid instrument for measuring the construct of intercultural sensitivity in Taiwanese citizens by examining Chen and Starosta's five-factor model of IS. It was hoped that the results of this study would form the basis of an alternative model of IS based on the present characteristics of the Taiwanese population.

II. METHODS

Taiwan has become an increasingly multicultural country in recent years, creating a need for greater emphasis on intercultural sensitivity in education. The

present study attempted to examine the validity of Chen and Starosta's five-factor model of IS in Taiwan to provide Taiwanese citizens with a more reliable and valid instrument for measuring their level of intercultural sensitivity.

1) Participants

One hundred participants took part in the preliminary study. In the formal study, a total of 292 participants from the northern, central, and southern regions of Taiwan, 97 males and 195 females, were voluntarily selected as the subjects. The average age was 22.77 years, with participants ranging from 17 to 49 years old. Most of them were college students (78%) and the rest were not students.

2) Measurement

To solicit data, the Chinese version of the Intercultural Sensitivity Scale formulated by Chen and Starosta (2000) was employed. To increase reliability, it is strongly recommended that this survey be conducted in the participants' native language (Penbeck, Yurdakul, and Cerit, 2009). The Chinese version of the ISS in this study was adapted from Wu's (2009b) Chinese version, which was translated by an English professor and also verified by another English professor. These two professors were highly proficient in both English and Mandarin Chinese. The respondents in the preliminary study were asked to complete the 24 items of the ISS in Chinese by indicating their degree of agreement on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The 13-item adjusted ISS in Chinese was administered to 292 respondents in the formal study. Higher scores on each measure are suggestive of greater sensitivity to intercultural differences. The respondents were also asked to write their demographic information, such as age, gender, major, etc.

3) Procedures for data analysis

Three phases of analysis were carried out. First, for the preliminary study, a confirmatory factor analysis (CFA) was conducted to determine the "Goodness of Fit" of Chen and Starosta's model of IS with a sample of 100 Taiwanese adults. However, this study could not reproduce Chen and Starosta's five-factor model. An exploratory factor analysis (EFA) was then performed to find an alternative model based on the present data using principal components analysis, using the principal component analysis with Varimax rotation. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) were computed to measure sampling adequacy and appropriateness for factor analysis. The number of reasonable factors emerging from the data was determined by the screen plot, and eigenvalues greater than 1.0 or above were taken as the cut-off. Finally, a CFA was performed again with the 292 participants to reexamine the construct validity of scores on the new version of the ISS.

III. RESULTS

1) *Confirmatory Factor Analysis I*

The results of the first confirmatory factor analysis showed that the basic structure of Chen and Starosta’s five-factor model was not reproduced, using AMOS 20.0 (Arbuckle, 2007). Although some indices met the criteria ($\chi^2/df= 2.824 (<3)$; RMSEA= 0.079, PCFI= 0.659 > 0.5, and PNFI= .585 >0.5, suggesting the model was acceptable), most indices of measure of fit did not meet the criteria ($\chi^2=683.323, p= .000$; CFI= 0.751; NFI=.667; IFI=.756), suggesting the model poorly fitted the data.

2) *Exploratory Factor Analysis*

As shown in Table 1, the results of the principal component analysis with Varimax rotation using the orthogonal option reinterpret Chen and Starosta’s 24 items and create an alternative model. Results of the Kaiser-Meyer-Olkin Measure (KMO) and Bartlett’s Test indicated that the collected data was suitable for factor analysis (KMO = .819, $p = .00$). The Kaiser-Meyer-Olkin value was .819, exceeding 0.6, the recommended value (Field, 2005), and Bartlett’s Test of Sphericity reached statistical significance at the level of .000. The correlation matrix showed that multi-collinearity was not a problem.

Table 1. Four-Factor Model Of Intercultural Sensitivity

		Factor Loading				
		Alpha value	Interaction Confidence	Interaction Engagement and Attentiveness	Respect for Cultural Differences	Interaction Enjoyment
q10	I feel confident when interacting with people from different cultures.	.850	.790	.056	.031	.081
q5	I always know what to say when interacting with people from different cultures.		.778	-.013	.016	-.003
q6	I can be as sociable as I want to be when interacting with people from different cultures.		.765	.256	.028	.056
q3	I am pretty sure of myself in interacting with people from different cultures.		.730	.170	.018	.046
q14	I am very observant when interacting with people from different cultures.	.796	-.014	.786	.072	.173
q1	I enjoy interacting with people from different cultures.		.335	.716	.159	.026
q24	I have a feeling of enjoyment towards difference between my culturally-distinct counterpart and me.		.225	.645	.362	.114
q8	I respect the values of people from different cultures.	.760	-.042	.147	.819	.155
q16	I respect the ways people from different cultures behave.		.017	.096	.813	.170
q13	I am open-minded to people from different cultures.		.151	.447	.586	.133
q15	I often feel useless when interacting with people from different cultures.	.788	.118	-.070	.162	.823
q12	I often get discouraged when I am with people from different cultures.		.127	.156	.076	.727
q9	I get upset easily when interacting with people from different cultures.		-.115	.261	.207	.703
Percentage of variance explained		.801	19.833	15.174	14.726	14.049

With the extraction methods of principal component analysis and Varimax with Kaiser Normalization rotation, four proposed factors extracted 13 items through the administration of EFA. Principal component analysis yielded a four-factor structure with eigenvalues greater

than one and above. Eleven items were excluded. Four items loaded on Factor 1, Interaction Confidence, with eigenvalues of 2.587 (the percentage of variance explained by this factor was 19.833%), three items loaded on Factor 2, Interaction Engagement and Attentiveness,

with eigenvalues of 1.973 (the percentage of variance explained by this factor was 15.174%), three items loaded on Factor 3, Respect for Cultural Differences, with eigenvalues of 1.914 (the percentage of variance explained by this factor was 14.726%), and three items loaded on Factor 4 Interaction Enjoyment with eigenvalues of 1.826 (the percentage of variance explained by this factor was 14.049%). The percentage of total variance explained by the four factors was 63.782. Cronbach's alpha for the 13-item scale was .801; Cronbach's alpha for Factors 1, 2, 3, and 4 were 0.850, 0.796, 0.760, and 0.788 respectively, suggesting the subscales were reliable. Reliability analyses of the 13 items indicated evidence of internal consistency in the respective factors. These 13 items forming a composite of four constructs and a hypothetical model were proposed for a structural equation model. The hypothesized model was tested to see how well the collected data fitted the model. All items loaded strongly on the four respective factors as featured in Table 1.

3) Confirmatory Factor Analysis 2

The present study employed a second confirmatory factor analysis to determine the plausibility of the four-factor structure proposed by the researcher. An SEM estimation was undertaken to investigate the interrelations among latent variables (Brown, 2006); the four-factor model with 13 items revealed a good fit with the data analyzed using AMOS 20.0. As presented in Figure 1, the Goodness-of-fit of the proposed model was quite strong, and the correlations between latent variables did not exceed .85 which rejected the possibility of collinearity. Maximum likelihood was selected because the collected data were normally distributed. Details of the CEA of the four factors are as follows:

(1) Construct of Interaction Confidence

There were four items included in the construct of Interaction Confidence. Results showed three of their standardized factor loadings were acceptable. Both Composite Reliability (CR) and Average Variance Extracted (AVE) were above the threshold (CR= .850 and AVE= 0.587). The model fit indices were good.

(2) Construct of Interaction Engagement and Attentiveness

There were three items included in the construct of Interaction Engagement and Attentiveness. Results showed two of their standardized factor loadings were acceptable. Both Composite Reliability (CR) and Average Variance Extracted (AVE) were above the threshold (CR= .760 and AVE= 0.515). The model fit indices were good.

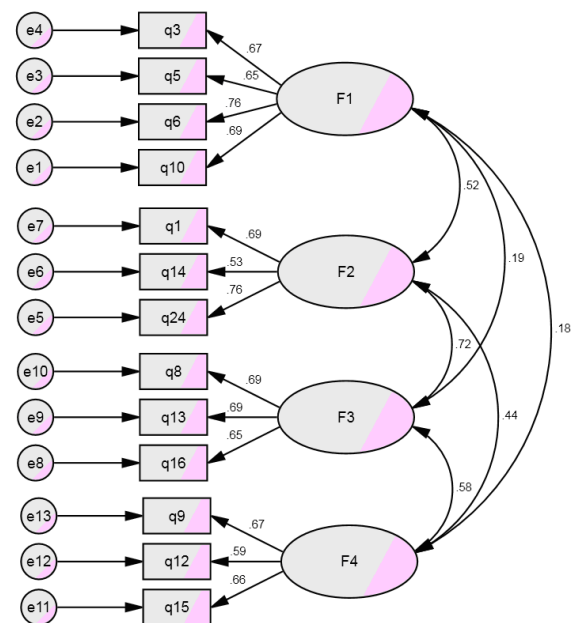


Fig. 1. Estimation of Structural Equation Model.

Note: F1: Interaction Confidence; F2: Interaction Engagement and Attentiveness; F3: Respect for Cultural Differences; F4: Interaction Enjoyment

Table 2. Composite Reliability and Average Variance Extracted of Four Factors

Factors	Composite Reliability (CR)	Average Variance Extracted (AVE)
Interaction Confidence	0.850	0.587
Interaction Engagement and Attentiveness	0.760	0.515
Respect for Cultural Differences	0.788	0.558
Interaction Enjoyment	0.796	0.567

Table 3. Goodness-of-fit Indices of the 13-item ISS Model

Measure of Fit	Requirement	13-item ISS Model
χ^2/df	>3	2.022(acceptable)
RMSEA	<.080	0.059(acceptable)
SRMR	<.080	0.0581(acceptable)
CFI	>0.9	0.940 (acceptable)
IFI	>0.9	0.952 (acceptable)
AIC	min	209.271(acceptable)

(3) Construct of Respect for Cultural Differences

There were three items included in the construct of Respect for Cultural Differences. Results showed all of their standardized factor loadings were acceptable. Both Composite Reliability (CR) and Average Variance Extracted (AVE) were above the threshold (CR= .788 and AVE= 0.558). The model fit indices were good.

(4) Construct of Interaction Enjoyment

There were three items included in the construct of Interaction Enjoyment. Results showed all of their standardized factor loadings were acceptable. Both Composite Reliability (CR) and Average Variance Extracted (AVE) were above the threshold (CR= .796 and AVE= 0.567). The model fit indices were good.

A more detailed understanding of this four-factor ISS model can also be gained from Table 2 and Table 3. The Goodness-of-fit of the data on this adjusted model are summarized in Table 3. Normed Chi-Square (2.022) was below the threshold (<3) of acceptance. Both the root mean square error of approximation (RMSEA=0.059) and standardized root mean square residual (SRMR = .0581) indicated the data was a good fit for the model (Hu and Bentler, 1999). The Incremental Fit Index (IFI) and the Comparative Fit Index (CFI) were both above the benchmark of .90, which also supported the goodness of fit.

Based on the above information, it is appropriate to state that this adjusted ISS model has sound discriminant and convergent validity. After the discriminant and convergent validities of the four constructs were examined, the one-step CFA was performed to examine the alternative model, and its goodness-of-fit indices for the ISS model based on the second CFA successfully fitted the data.

IV. DISCUSSIONS

The ISS designed by Chen and Starosta has been widely used in Taiwan, yet its validity has not been empirically detected. The goal of this study was to examine Chen and Starosta's Model of Intercultural Sensitivity and reproduce a valid scale in the Taiwanese cultural context. The results rejected the five-factor model in the Taiwanese cultural context, due to the failure to reproduce Chen and Starosta's theoretical model using confirmatory factor analysis, which typically has more restrictions than EFA and is thus by nature more conservative (Bollen, 1989). Chen and Starosta's original (2000) five-factor model was found to be a poor fit for the Taiwan cultural context in this study.

A four-factor model of IS produced using the data from this study is proposed as an alternative model. The 4-factor model with 13 items displayed a good fit with the data for the ISS. Although some indices did not meet the criteria, for example, $\chi^2=119.271$, $df=59$, $p=.000$, the other indices met the criteria, for example, Normed $\chi^2 = 2.022$ (<3), RMSEA= 0.059, CFI= 0.940, suggesting the model successfully fitted the data. As Van Prooijen and VanDer Kloot (2001) state, researchers of cross-cultural studies usually attribute any discrepancy between EFA and CFA solutions to cultural differences between populations. This finding echoes Fritz et al.'s (2002, 2005), Tamam's (2010), and Tsereteli's reservations about the applicability of Chen and Starosta's theoretical factor structure in diverse cultural contexts.

Comparing with the five-factor model formulated by Chen and Starosta (2000), this four-factor model remains the three factors: Interaction Confidence, Respect for

Cultural Differences, and Interaction Enjoyment. Interaction Engagement and Interaction Attentiveness were merged into one factor. Based on the 13 items of Chen and Starosta's ISS, the four factors of the alternative model that fits the Taiwan cultural context are: (1) Interaction Confidence: how confident the interlocutors perform during intercultural communication; (2) Interaction Engagement and Attentiveness: the degree of participation and sensitivity for culturally-distinct counterparts ;(3) Respect for Cultural Differences: to realize, accept and respect for others' cultural diversities in the communication; (4) Interaction Enjoyment: the level of delight interlocutors feel in the intercultural communication. According to Wallenberg-Lerner's study (2013), Interaction confidence, Interaction Engagement and Attentiveness, Respect for cultural differences, and Interaction Enjoyment, were affective components perceived to be important in today's global society.

Interaction confidence explained most of the variance in intercultural sensitivity in this study. Four items loaded strongly on the confidence factors, as indicated in Table 1. This implies that Taiwanese believe that confidence is the most important element for intercultural communication. Without self-confidence, one might not actively get involved with other cultures. In Tamam's (2010) three-factor structure, Interaction attentiveness and respect explained the most variance in intercultural sensitivity, 27.325%, whereas Interaction confidence only explained 14.854% of variance. This makes sense because "respect, harmony, tolerance, politeness, non-confrontation, and face-saving are salient cultural values" in Malaysia a collectivistic country (Tamam, 2010, p.177). Interestingly, in contrast with Malaysian culture (Taman, 2010), enjoyment is seen as an important value in Taiwan culture. This means an enjoyable and delightful communicative style is practiced and preferred by Taiwanese. For example, it is quite often to see Taiwanese help foreigners when they ask for directions in the street. Although being helpful is a traditional virtue in Taiwan; however, that is even more important for Taiwanese to feel useful while interacting with people from different cultures.

Furthermore, the second factor combines items from two domains: Interaction Engagement and Interaction Attentiveness, in Chen and Starosta's ISS. The rationale for this concept combination may be, as Tamam has stated, conceptual overlaps of the five factors when utilized in different cultures. The finding that Interaction Engagement and Interaction Attentiveness should be merged into one echoes previous studies and underscores the importance of cultural differences and preferences in different populations. For Taiwanese, interaction attentiveness is essential while participating in an intercultural event. To communicate successfully, one should be observant and sensitive to subtle messages from people of different cultures. They may recognize these two concepts as equivalent, inseparable elements.

IV. CONCLUSIONS AND RECOMMENDATIONS

The present study enhances the previous studies' findings by providing a much more detailed examination of ISS. Using CFA can confirm whether or not the factor structure of the scale can be successfully replicated with new data. Also, the results of CFA may validate the factor number in tests performed by EFA. Given the dearth of empirical research on intercultural sensitivity, this study aims to add to the body of theoretical and methodological knowledge of intercultural sensitivity situated in a Taiwan cultural context. However, most of the sample derived from college students, thus, the generalization of this modified model will be limited. The result gathered from the participants in this study would not lead to general conclusions and might not apply to all Taiwanese.

In conclusion, this study has proposed an alternative model of intercultural sensitivity – a four-factor structure model. Drawn from Chen and Starosta's instrument, this 13-item ISS is promising, with a high reliability coefficient of 0.801. Thus, it is proposed that this representative model of IS will be a more reliable and applicable one for the Taiwanese cultural context, and will provide better understating of the practice of intercultural sensitivity in this setting. College teachers are highly recommended to assess their students with this model to understand their level of intercultural sensitivity. The results of intercultural sensitivity survey will provide teachers with a portrait of their students and suggestions for designing intercultural curriculum or activities.

Further research is needed using a more detailed design to explore the scope of the model. First of all, replication studies could be conducted using a sample drawn from people engaged in international trade. It is important to clarify the extent to which this four-factor structure model of IS can be reproduced accurately in other populations with different educational backgrounds or degrees of intercultural experience. The conceptual overlaps of the five factors could also be found in different population. Second, concurrent validity tests should be conducted against some valid instruments to confirm the accuracy and effect of this alternative model of intercultural sensitivity. Last, conceptual overlaps of the five factors of the ISS were identified from previous studies when utilized in different cultural contexts. It is also recommended that future research examines if there are factor combinations in the diverse populations. A comparative study could be conducted to discover the commonality and differences among those cultural contexts and see how cultural preferences influence individual's affective aspects of intercultural communication competence.

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