

Original Research

Assessing intercultural competence using videotapes: A comparison study of home students' performance

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How to assess intercultural competence is the key to exploring intercultural effectiveness. Although various methods have been developed for assessing intercultural competence (e.g., interviews, self-report questionnaire, critical analysis, etc.), this study assesses intercultural competence using videotapes to observe participants' performance in the multicultural interactions. A comparative study was conducted comparing home students who were interculturally trained and who did not. By examining their performance in group discussion, two specific aspects – eye gaze and amount of talk – were analysed by both quantitative and qualitative techniques. The results show that trained home students not only had more and longer eye gazes than the untrained students during group discussion, but they also used more other-oriented speech than the untrained. Such findings indicate that the trained home students were more interculturally competent than the untrained especially in the multicultural intra-group interaction setting. As there are many other variables to examine (e.g., non-verbal cues such as body gestures and facial expressions), this study demonstrates a way to assess intercultural competence using videotapes in both verbal and non-verbal cues for the future research.

KEYWORDS: *intercultural competence, home student, competence assessment, intercultural training, observation of behaviour, non-verbal behaviour*



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1. INTRODUCTION

How to assess intercultural competence is the key to exploring intercultural effectiveness. Deardorff (2006) suggests that intercultural competence is best assessed through a mixed method including interviews, observation, and judgment by self and others. Fantini (2009) also suggests that intercultural competence is best assessed by multiple measures on multiple dimensions using a mix of qualitative and quantitative methods. These multi-perspective approaches or multi-methods should be focused more on the process of intercultural competence development rather than on an end-result (Deardorff & Edwards, 2012; Gordon & Dear-

dorff, 2013). Deardorff (2016) lists some examples of how intercultural competence is currently assessed which include embedded course assessment, self-report instruments, reflection papers, critical incident analysis, interviews, observations of behaviour in specific contexts (by professors, internship supervisors, host families, group members, etc.), simulations and longitudinal studies. Furthermore, it is also implied that the assessment should go beyond verbal measures to determine whether students can think and act intercultural (Bok, 2006). For intercultural competence is not only about cultural awareness, but also the behavioural aspects of successful interaction (Deardorff, 2016).

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Currently, plenty of studies assess intercultural competence (ICC) using self-assessing tools such as Barnett’s IDI (Hammer et al., 2012) and self-reflection reports and interviews (Young & Schartner, 2014). However few studies provide practical techniques to assess ICC using the behaviour observation approach. The use of non-verbal measures is even less frequent. Another gap in the literature is that the development of native speaker’s ICC is often neglected (Yelenevskaya & Protsasova, 2021). Especially in the higher education setting, most of the attention has been given to the international students or sojourners (Bilá & Ivanova, 2020). Therefore, to fill in these gaps, this study aims to assess home students’ intercultural competence by analysing their performance in group discussion. Videotapes of their performance were analysed with both quantitative and qualitative methods in two aspects, verbal (amount of talk) and non-verbal (eye gaze). By doing so, it aims to specify the difference between trained and untrained home students in ICC. It also aims to provide valuable data in assessing intercultural competence for future research.

2. BACKGROUND

The research goal of assessing intercultural effectiveness using videotapes started from the *Transcultural Communication* intercultural training course running at the author’s affiliated university in the north of England. The training course has been practiced since the 2015 autumn term by the department of education. This term-long (normally 8 weeks) course intends to help the students raise awareness of cultural differences and bring about their cultural and identity shifts as well as changes in perceptions of culture and language.

What is valuable about this course is its assessment. By the end of the course, students were required to construct the criteria for the assessment of transcultural competence and evaluate a range of inter/cultural assessment systems. Then they needed to undertake three tasks:

- participate in a transcultural communicative task (e.g., group discussion mixed with non-transcultural students) and be assessed on their performance (e.g., the ability to engage sensitively with others and to contribute relevant ideas and knowledge);
- write an analytical report (1750 words) on the interactions in the above task based on the video recordings of the previous step;
- write a self-evaluation and reflection report (1750 words) showing what they had learned and discuss the changes in the attitudes and behaviours they may have noticed.

The course involves the use of three methods to assess students’ intercultural competence: self-reflection report, evaluation report of other’s performance, and actual behaviour in the real intercultural interaction which was video-recorded. Since the first two reports were examined and marked by the course leader, this study used videotapes to analyse their intercultural behaviour in the group discussion. The two aspects in focus are eye gaze (which is non-verbal behaviour) and amount of talk (which is verbal behaviour).

3. GAZE IN NONVERBAL COMMUNICATION

In human interaction, nonverbal behaviour is an important symbol system. The importance of nonverbal communication has been asserted by Knapp and Hall (2002), who stated that *‘the list of all the situations where nonverbal communication plays an important role would be interminable’* (Knapp & Hall, 2002, p. 230). Although for most people nonverbal communication refers to *‘communication effected by means other than words’* (Knapp & Hall, 2002, p. 5), the definition of nonverbal communication (similar to that of culture) is more complicated.

For this research, the definition proposed by Samovar et al. (2009) is adopted: *‘nonverbal communication involves all those nonverbal stimuli in a communication setting that are generated by both the source and his or her environment and that have potential message value for the source or receiver’* (Samovar et al., 2009, p. 246).

From this definition, three primary units of nonverbal communication can be identified: the communication environment (e.g., physical environment and spatial environment), the communicators’ physical characteristics (e.g., person’s physical appearance), and body movement and position (e.g., gestures, posture, touching behaviour, facial expressions, eye behaviour, and vocal behaviour) (Knapp et al., 2013). While there is

much to discuss for each of the three units, for this study the focus is on one particular stimulus – that of gaze behaviour.

The eyes and the power of eye contact have been addressed extensively in scientific research. Generally, it is argued that the eyes are important to the communication process as they can send limitless messages (Samovar et al., 2009). As a matter of fact, when one looks, where one looks and how long one looks during interaction are generally studied in the field of gaze. According to Knapp and Hall (2002), gaze refers to *'an individual's looking behaviour, which may or may not be at the other person'*, while mutual gaze refers to *'a situation in which the two interactants are looking at each other, usually in the region of the face'* (Knapp & Hall, 2002, p. 371).

The term *'eye contact'* (looking specifically into each other's eyes) is just one feature in the study of gaze, which is not reliably distinguished by receivers or observers from gazing at the area surrounding the eyes (Cranach & Ellgring, 1973).

During human interaction, no matter what culture it is, people pay attention to gaze behaviour as sometimes it is an indicator of interest, attention, or involvement (Knapp et al., 2013). Kendon (1967) identified four functions of gaze: (1) regulatory, i.e. responses may be demanded or suppressed by looking; (2) monitoring, i.e. people may look at their partner to indicate the conclusion or thought units to check their partner's attentiveness and reactions; (3) cognitive, i.e. people tend to look away when having difficulty processing information or deciding what to say; and (4) expressive, i.e. the degree and nature of involvement or arousal may be signalled through looking. In short, people do not look at the other person during the entire time of talking. But when they do gaze, they are signalling that the communication channel is open, seeking feedback concerning the reaction of others, expressing their emotions/attitudes towards the partner. In terms of interpersonal relationships, back in the 1960s, studies (Exline & Eldbridge, 1967) indicated that the same verbal communication was decoded as being more favourable when it was associated with more eye gaze than when it was presented with less. Generally, people seem to gaze more at people they like (although longer and harder looking may indicate dislike), thus it makes sense to predict that *'we will look more at those who like us, if for no other reason than to observe signs of approval and friendliness'* (Knapp & Hall, 2002, p. 378).

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In terms of intercultural communication, different cultures have established a number of eye related norms. For example, in the dominant culture of the USA (which refers to the main culture in a society that is shared and accepted by most of a population), looking another person directly in the eye is not only very common but also highly valued (Triandis, 1994). In fact, it is suggested that gaze avoidance is usually associated with lack of interest, dishonesty, slyness and negative attitudes. Thus, eye contact is regarded as an important interpersonal skill offered by communication textbooks – *'you can improve your eye contact by becoming conscious of looking at people when you are talking to them'* (Verderber & Verderber, 2001, p. 140). While many cultures, such as the dominant US, French, German and British cultures, employ direct eye contact, some other cultures, such as Japanese and Korean, regard direct eye contact as taboo or an insult (Samovar et al., 2009). For example, in Japan prolonged eye contact is considered rude, threatening, disrespectful, and even a sign of belligerence (Nishiyama, 2000). In some parts of Africa, *'making eye contact when communicating with a person who is older or of higher status is considered a sign of disrespect or even aggression'* (Richmond & Gestrin, 1998, p. 88). In short, cultures such as Korean, Japanese, African and East Indians employ nominal eye contact (Samovar et al., 2009). Overall, Knapp et al. (2013) suggest that the differences in gaze patterns between cultures lie in contact and noncontact, the duration of gaze, and where and whom to gaze at. Although misunderstandings or problems may arise between cultures (e.g., an American doing business in Japan), this study is focused only on British students in a UK university. In this context, it is assumed that gaze is valued and important in interpersonal interaction.

Harrigan (2013) summarised several variables that could be measured in gaze behaviour: eye direction (left/right, up/down); eye contact or mutual gaze between interactants; one-sided gaze (one person looks at another who does not return the gaze); glancing (brief looks towards and away from another person or object);

'Thus, in terms of measurement, eye-to-eye contact may be less critical than the direction of one's head in relation to another person. Validity estimates for eye-directed gaze are considered worse than those for face-directed gaze (Exline & Fehr, 1982)'

staring (continual gaze at another); and gaze aversion (looking away from another person) (Kleinke 1986). It is pointed out that these variables are recorded as frequencies or durations, and the most studied are mutual gaze, glance frequency, gaze duration at partner, and proportion of looking during a specified activity (e.g., listening, speaking). Many of these are intercorrelated (Duncan & Fiske, 2015). Harrigan (2013) also pointed out one difficulty in precise measurement is that of face gaze (looking towards another's face) versus eye gaze (looking into another's eyes). It is argued that one moves the head when redirecting gaze, and interactants tend to look at each other or well away (Kendon, 1967). Also as discussed above, eye contact is not reliably distinguished by receivers or observers from gazing at the area surrounding in the eyes (Cranach & Ellgring, 1973). Thus, in terms of measurement, eye-to-eye contact may be less critical than the direction of one's head in relation to another person. Validity estimates for eye-directed gaze are considered worse than those for face-directed gaze (Exline & Fehr, 1982). Therefore, as suggested by Harrigan (2013), it may be more useful to record the extent to which interactants direct their face toward one another, rather than suffer cumbersome intrusions with eye tracking devices. In terms of reliability estimates for gaze variables, it is suggested that live interactions and videotaped records are often quite high because of their advantages of replay, slow motion viewing and resolution of measurement errors (Argyle & Cook, 1976; Exline & Fehr, 1982).

4. AMOUNT OF TALK

The focus on participants' amount of talk came from the feedback of the students who participated in the communicative tasks. In the group discussion, they noticed that some home students who volunteered themselves in the task (interculturally untrained) seemed dominated the discussion with a great amount of talk. To see whether the untrained home students were dominating the conversation and spoke more than the non-natives, measurements were made to analyse their amount of talk. Thus, the study shall assess inter-

cultural competence by comparing home students who took the *Transcultural Communication* course and those who did not. Both non-verbal and verbal cues were focused. Using videotapes of group discussion from the course assessment, eye gaze and amount of talk of both groups were analysed. As mentioned above, it is hypothesised that (1) nonverbally the trained home students had more eye gazes (in terms of frequency) than the untrained home students; and (2) verbally the untrained home students talked more than the trained home students.

5. METHOD

In total, sixteen home students (13 females and 3 males) were involved in the study. Eight of them (all females) were labelled as the trained group. The other eight participants (5 females and 3 males) were volunteers who signed up only for the communicative task of the course. They were labelled as the untrained group. All the participants were full-time students at the university.

One of the main assessments of the course is participating in a communicative task such as a group discussion. In the task, the participants were given a topic to discuss and asked to try to come to an agreement within 20 minutes. Participants' performance was video recorded for later evaluation. In total, 12 videotapes were used for analysis. Participants gave their consent to be recorded. The videotapes were collected from the course leader. Each video comprised one group of participants' performances (usually 4 to 5 people) and lasted 20 to 30 minutes.

As the communicative task involved both international and home students in Stage 1 of the measurement, everyone who appeared in each video was measured individually. One glance was counted no matter whom they were looking at, or when. That is to say, as long as the participant was looking at the group member(s) while he/she was speaking and listening, it counted as one glance. Gaze duration – the length of time in seconds – was counted as long as the participant was looking at someone during discussion (here the short gap when he/she switched away from one to another was dismissed). After everyone's gaze duration and frequency of glances were counted in the group, the proportion of looking during discussion (gaze duration/length of conversation) and average length of glancing (gaze duration/total amount of glances) were calculated. An example of Stage 1 measurement on eye gaze is shown below (Table 1).

Table 1
Example of Stage 1 eye gazing measurement (data from one videotape)

PARTICIPANTS	DURATION (SECONDS)	PROPORTION (OF THE WHOLE CONVERSATION)	GLANCES	MEAN LENGTH OF GLANCES (SECONDS)
T1	824	93%	37	22.27
N1	701	79%	64	10.95
N2(HM)	426	48%	128	3.33
T2 (HM)	632	71%	94	6.72
N3	762	86%	49	15.55

Note: T=Transcultural student (international); T (HM)=Transcultural student (home); N=non-transcultural student; HM=home student

After everyone in all twelve videotapes was measured and listed in the above table, the data of the home students were picked out. Two new groups were generated – participants labelled as THM (where T stands for transcultural students, and HM stands for home students) were grouped as trained; participants labelled as NHM (where N stands for non-transcultural students) were grouped as untrained. The two groups of data were put into SPSS. A t-test was performed to compare the variables between two groups.

Similar to the procedure for eye gaze measurement, participants' amount of talk was analysed in two

stages. In Stage 1, everyone's talking duration and total amount of turns were counted individually within their group. The proportion of each person's talking during discussion (talking duration/length of conversation) and average length of turns (total amount of turns/talking duration) were calculated accordingly.

An example of Stage 1 measurement on the amount of talk is shown below (Table 2).

In Stage 2, home students' data have been allotted to the untrained group and the trained group.

A t-test was performed to compare the variables between the two groups.

Table 2
Example of Stage 1 amount of talk measurement (data from one videotape)

PARTICIPANTS	DURATION (SECONDS)	PROPORTION (OF THE WHOLE CONVERSATION)	TURNS	MEAN LENGTH OF TURNS (SECONDS)
T1 (HM)	244	25%	41	5.95
N1 (HM)	202	20%	52	3.88
T2	222	22%	27	8.23
N2	167	17%	38	4.39
N3	156	16%	31	5.03

Note: T=Transcultural student; N=non-transcultural student; HM=home student; Follow-up Analysis for Amount of Talk

To further examine the differences between the participants' speech, a follow-up analysis was performed using both qualitative and quantitative approaches. Firstly, a qualitative analysis was conducted after the videos had been transcribed. As the purpose of the follow-up analysis was to find out

whether there was any difference in the speech content of the two groups (there was no specific hypothesis), thematic analysis was conducted from an inductive perspective (Braun & Clarke, 2006). It appeared that instead of solely talking about themselves, the trained students often used expressions such as 'What do you

think?, *'Shall we move on?'*, *'That's a good idea'* to address other participants in the group discussion (which is termed as *other-oriented speech* in this study). To test this hypothesis, the contents of home students' talk were coded to look for repeated patterns. Repeated patterns were created as subcategories. For example, all the usages of *'That's a good idea'* and *'That's a good point'* were classified in the 'giving positive feedback' subcategory. Any comment that tried to bring the conversation back to the topic, such as *'Shall we move on to the next point'*, or summarising participants' suggestions were classified in the 'stick to the topic' subcategory. Lastly, one main theme was generated and named as 'other-oriented speech' as they all have the feature that focus or acknowledge other group members comparing to self-oriented which is solely self-expressive (e.g., *'I think we should do xxx'* or talking about their own story). The detailed category and subcategories with examples are presented in the results. After the preliminary coding theme was generated, a quantitative measure on that theme was

performed for both groups. Specifically, the amount of other-oriented speech that appeared in each home students' speech was counted. Then the proportion of other-oriented speech during discussion (turns of other-oriented speech/the total amount of turns) was calculated. These data were then put into SPSS. A t-test was performed to compare the variables between the two groups. Inter-rater reliability analysis (IRR) was performed to assess the degree that coders consistently assigned categorical other-oriented speech rating to subjects in the study. A third-year undergraduate student (observer 2) in psychology department was trained for 20 minutes on the category of other-oriented speech. Four transcripts which was 25% of the entire data (N=16) were selected and coded by observer 2. Then a summary table was drawn up in which all categories used by both observers appear in the same order in both lists. A sample of the table is shown below (Table 3). After filling all the data from both coders in the summary table, Cohen's kappa ($K=.796$) was calculated accordingly (Hallgren, 2012).

Table 3
 Example of IRR analysis

	OBSERVER 2		
	Self-oriented	Other-oriented	Total
OBSERVER 2			
Self-oriented			
Other-oriented			
Total			

6. RESULTS

6.1. Eye gaze

Four variables (duration, proportion, glancing and average length of glancing) in eye gaze were compared between the trained group (N=8) and the untrained group (N=8). There was no difference between two groups in duration (untrained mean = 451.8, $SD = 299.5$, trained mean = 718.0, $SD = 219.8$; $t(14) = -2.027$, $p = .062$) or the frequency of glancing (untrained mean = 99.5, $SD = 38.6$, trained mean = 80.6, $SD = 34.6$; $t(14) = 1.03$, $p = .321$).

However, the mean of proportion of looking during discussion was significantly different ($t(14) = -2.182$, $p = .047$). For the trained group, they looked at the other participant(s) 67% of the entire discussion time (mean = 67.0%, $SD = 19.0$). That was significantly

larger than the untrained group (mean = 43.0%, $SD = 24.5$). Also, the mean of average length of glancing was significantly different ($t(14) = -2.323$, $p = .036$). The trained group shows longer average length of glances than the untrained group: the mean length of each glancing of the trained group was up to 10.48 seconds ($SD = 6.01$), whereas the untrained group was just 4.91 seconds ($SD = 3.2$) (Table 4).

6.2. Amount of talk

6.2.1. T-test on overall amount of talk

Four variables were compared in the amount of talk (duration, proportion, turns and average length of turns). Surprisingly, there was no difference between the untrained and trained groups for any of these variables (Table 5).

Table 4
Means and standard deviation (untrained and trained) of eye gaze for various measure

	MEAN (SD)		t	Sig.
	Untrained (N=8)	Trained (N=8)		
Duration	451.8 (299.5)	718.0 (219.8)	-2.027	.062
Proportion	43.0% (24.5)	67.0% (19.0)	-2.182	.047
Glancing	99.5 (38.6)	80.6 (34.6)	1.030	.321
Average length of glancing	4.91 (3.2)	0.48 (6.01)	-2.323	.036

Table 5
Means and standard deviation (untrained and trained) of amount of talk for various measure

	MEAN (SD)		t	Sig.
	Untrained (N=8)	Trained (N=8)		
Duration	286.4 (145)	316.1 (110)	-.460	.653
Proportion	28.3% (13.8)	30.8% (13.7)	-.367	.719
Turns	46 (23)	48 (13)	-.213	.835
Average length of turns	7.20 (4.95)	7.14 (3.39)	.029	.977

6.2.2. Qualitative results

As the above results obtained via the t-tests suggest that the untrained home students spoke no more than the trained home students, further analysis was conducted on the quality of their speech. Following the thematic analysis (Clarke et al., 2015), we conclude that the trained home students used a lot of other-oriented speech during group discussion. Here the theme 'other oriented speech' contains five subcategories: (1) stick to the topic (of group discussion); (2) acknowledging other person; (3) paraphrasing/asking for clarification; (4) giving positive feedback to other person; and (5) showing interest to another person. A detailed description of the theme and examples of each of the five subcategories are reported below (Table 6).

6.2.3. T-test on other-oriented speech

The results indicate a significant difference in the proportion of other-oriented speech ($t(14) = -4.205$, $p = .001$). Trained home students had a larger proportion

of other-oriented speech (mean = 46.2%, SD = 14.6) than the untrained home students (mean = 18.8%, SD = 11.3) (Table 7).

6.2.4. IRR analysis

An inter-rater reliability analysis using the Kappa statistic was performed to determine consistency among coders. Inter-rater reliability was determined using 25% of the data acquired by the two coders (4 trials). The inter-rater reliability for the two coders was found to be Kappa = .796, indicating that coders had satisfactory or even substantial agreement (as the result was closed to $K = .80$).

7. DISCUSSION

Although there are numerous aspects to look at through videos in terms of nonverbal behaviour, this study only focused on eye gaze. The results confirmed the prediction proposed previously that the trained home students had more eye gaze towards other person(s) during the group discussion than the

Table 6
Subcategories and examples for other-oriented speech

PRELIMINARY CODING THEMES	SUBCATEGORIES	EXAMPLES
Other-oriented speech	Stick to the topic	'Shall we start with introducing ourselves?' Summarising the topic and participant's suggestions 'Shall we move on to the next facilities?'
	Acknowledging another person	'Jiayu, do you have any suggestions on food?' 'Do you think we should have xxx?' 'What do you suggest Josh?'
	Paraphrasing/asking for clarification	'Do you mean like colourful walls and pictures?' 'Sorry, what were you going to say?'
	Giving positive feedback	'That's really good idea!' 'That's a good point.'
	Showing interest to other participants (personal)	'Where are you from?' 'Have you been there?'

Table 7
Means and standard deviation (untrained and trained) of other-oriented speech

	MEAN (SD)		t	Sig.
	Untrained (N=8)	Trained (N=8)		
Proportion	18.8% (11.3)	46.2% (14.6)	-4.205	.001

untrained group. Not only so, their average length of each glance was also much longer than with the untrained home students. As suggested by the literature above, greater gazes give signs of approval and friendliness (especially in the British culture). With more and longer eye gaze, the trained home students might give the impression of more involvement and friendliness than the untrained home students towards other group members. A more frequent and longer eye gaze could also indicate that the trained home students were more confident or comfortable in communicating during the group discussion. As being friendly and confident are important factors in motivation, such results suggest trained home students had higher motivation than the untrained ones. Furthermore, the results also suggested that the trained home students performed better in terms of skill. The results of eye gaze measurement provide good support for the effectiveness of intercultural training, indicating that trained home students were more interculturally

competent than the untrained home students, especially in terms of motivation and skill in the multicultural interaction setting.

In terms of the amount of talk, it was predicted that the untrained home students might talk more than the trained home students. This prediction was drawn from the testimonies from the feedback of the participants commenting on some untrained home students' performance in the group discussion. There was one untrained home student who spoke 52% of the whole conversation and each turn was up to 18.6 sec on average. This participant was just an extreme case. As matter of fact, the results suggest that the untrained home students talked no more than the trained home students during group discussion. However, after further analysis the results did show a significant difference in the amount of other-oriented speech between the two groups. This result showed that although the trained and untrained groups produced similar amounts of talk, their content was different. For

the trained home students, the focus was more on the other group members rather than just talking about their own opinion. For example, they showed interest in other participants by asking 'Where are you from?', acknowledged them by explicitly asking their opinion, gave positive feedback when they tried to contribute to the discussion, and paraphrased whenever needed. Besides, the trained home students also demonstrated good management skills: they opened the discussion by introducing each other, structured the discussion by summarising group member's suggestions, and tried to bring back the conversation to the topic when needed. This other-oriented speech suggested that the trained home students were more skilled in intra-group communication. As proposed by Hargie (2021), the key skills in small group leadership are 'preparing, opening the discussion, structuring and guiding discussion, naming conflict, regulating participation and closing' (Hargie, 2021, p. 472). As a result, although there is no difference in the total duration of the talk in both groups, it is the content of the talk that makes it different. By the ear of the listener, the self-centred speech may psychotically bore the listener and give the impression of the speaking being too long.

The results for other-oriented speech also indicate the role that trained home students played in the multicultural interaction. Having mastered the use of English, the trained home students are more in the role of a medium or mediator who tried to lead the conversation without dominating it. That could not be done without a level of self-awareness. This supports Håkansson and Montgomery's (2005) argument suggesting that '*being other-oriented involves a conscious effort to consider the world from the point of view of those with whom you interact*' (Håkansson & Montgomery, 2005, p. 267). Being other-oriented is not a single skill but a rather a set thereof, including essential communication skills, self-awareness, awareness of others, using and interpreting verbal and nonverbal messages, and listening and responding to others (Argyle, 1994).

In all, as suggested by Beebe et al. (2015), being other-oriented means '*focusing on the interests, needs and goals of others while being true to your own principles and ethical credo*' (Beebe et al., 2015, p. 26). The results for the amount of talk, especially other-oriented speech, provide good support for the value of intercultural training, as trained home students were more skilful and mindful in multicultural communication.

Finally, this study provides valid and approachable techniques in assessing intercultural competence. According to Deardorff (2011), one's intercultural performance is the direct evidence of their intercultural competence. Just as the second task of the course (writing an evaluation report of others and their own performance), the observation of students' performance in intercultural situation is becoming a way to assess their intercultural appropriateness. Although such assessment is an opportunity for students to apply their intercultural knowledge and skills in relevant contexts, they are still based on a subjective evaluation. This study, on the other hand, provides a new direction to assess intercultural behaviour via the relatively objective measures. Although the evaluation reports from the students were not focused on in this study, it will be worth comparing the differences between their reports and the findings of this study.

This study also provides important data on the assessing of non-verbal behaviour in intercultural interactions. Although only one non-verbal cue – eye gaze – is analysed in this study, there are numerous other cues to look at for the future research, such as facial expressions, postures and gesture, physical distance, sitting positions, and seating arrangements. It will also be worthwhile examining any sex difference in these variables.

In terms of the limitations of this study, one concern is the possible existence of the 'demand characteristics' phenomenon (Orne, 1962). The students of the course knew that their performance in group discussion contributed to their course assessment and to their study. They had also been exposed to theories of intercultural communication in the course and may have wished to reflect these in their performance. Comparing to the volunteers for the group discussion, they might have had greater incentives to perform as well as they could. Without being told the real purpose of the group discussion as well as the pressure to earn course credit, volunteers might not be motivated as well as the students actually taking the course. Thus, their performance might be under evaluated. It would be less biased if they could receive the same information as the course students. That requires an improvement of the assessment design for the course leader.

Another issue of this study is the sample size. The quantitative portions of the comparison study were limited due to the low participation of home students. It was also impossible to control the sample type and

gender differences in this study. However, there were more female students participating in the communicative tasks. Especially for the home students who signed up for the course, they were all females. Further studies are needed to enrich our understanding of whether females and males perform differently in intercultural interaction. For example, due to the lack of trained male home students, it is still unclear which gender uses more other-oriented speech during interaction.

8. CONCLUSION

The study aimed to fill in the gap of current intercultural competence assessment especially on the home students. Home students' performance in the real

intercultural interaction was analysed using videotapes. Eye gaze and amount of talk were measured and compared between the groups of trained and untrained home students. The results showed that trained home students not only employed more and longer eye gazes than the untrained students during group discussion, but also used more other-oriented speech.

Such findings indicate that the trained home students were more interculturally competent than the untrained ones, especially in the multicultural intra-group interaction setting. The quantitative and qualitative techniques used in this study provide a new direction for further intercultural competence assessment.

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