The Effectiveness of Using a Tracker Chart to Enhance Willingness to Communicate among ESL Learners in a Philosophical Inquiry Classroom Discussion

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ABSTRACT

There has been burgeoning interest among researchers in investigating Willingness to Communicate (WTC) as part of the instructional method in a Philosophical Inquiry (PI) Discussion. The present study investigated the effectiveness of using a tracker chart in a PI classroom discussion to promote WTC. The participants were 30 undergraduate students in a public university in Malaysia. A WTC questionnaire was administered before and after the intervention. A tracker chart was used to gauge the number of learner responses that occurred throughout the 8-week intervention. Interview sessions with seven randomly selected participants were then carried out to gauge the learners' perceptions of using the tracker chart in PI Discussions and its effects on their WTC. The data analysis showed that the tracker chart resulted in increments in the number of responses throughout the 8 weeks, and participants reported that the tracker chart had positive effects on their WTC as they were more conscious of their responses and contributions in the PI Discussions. The t-test result also showed a significant difference in the participants' levels of WTC which indicates that the use of the tracker chart in PI Discussions helped increase the participants' WTC. The results indicate that the use of a tracker chart could have positive effects in enhancing learners' WTC in PI Discussions.

Keywords: L2 learners, philosophical inquiry discussion, tracker chart, willingness to communicate

INTRODUCTION

In the past few decades, there has been an increasing amount of research on promoting Willingness to Communicate (WTC) among ESL and EFL learners (Cao, 2014; MacIntyre, 2007; Peng, 2014; Shen & Byfield, 2018). This is largely

due to the research findings that show a positive correlation between WTC and second language (L2) learning outcomes (Mahmoodi & Moazam, 2014). Moreover, the importance of WTC is compounded by the growing population and the importance of English use in various domains globally (Shen & Byfield, 2018). The goal of getting students to express themselves freely in the foreign language has come into prominence in recent years as a result of the growing emphasis on communicative abilities.

Research in WTC has employed various methods including the use of classroom observations (Buckingham & Alpaslan, 2017; Peng, 2012), stimulated recall interviews (Kang, 2005), reflective journals (Cao, 2011), videotaped conversations (Kang, 2005), and focused essays (Zarrinabadi, 2014). The current study attempted to contribute to the body of research by looking into the use of a tracker chart as a meta-cognitive monitoring strategy in Philosophical Inquiry (PI) classroom discussions to enhance WTC.

Research Questions

The study sought to answer the following research questions:

1. Is there a significant difference between the participants' level of WTC before and after using a tracker chart in Philosophical Inquiry Classroom Discussions?

2. What are the participants' perceptions of using a tracker chart in Philosophical Inquiry Classroom Discussions?

Willingness to Communicate (WTC)

WTC is defined as the readiness to enter into discourse at a particular time with a specific person or persons, using an L2 (MacIntyre et al., 1998). Moreover, it is viewed as a readiness to speak in the L2 at a particular time with a specific person, and as such, is the final psychological step to the initiation of L2 communication (MacIntyre & Doucette, 2010). WTC also refers to a person's motivation to use the target language to communicate (Dornyei, 2003).

Speaking is important for language development. Swain (1985) posited that quality language output and interaction between interlocutors have a direct impact on language learning achievement. Meanwhile, MacIntyre et al. (2003) asserted that one of the fundamental goals of language instruction was to trigger WTC which was psychologically driven. Skehan (1989) suggested that once initiated, the learner would "talk the language" and in the process, he would learn or acquire the language.

McCroskey and Baer (1985) advanced WTC as a somewhat novel construct, defining it as the intention to initiate communication at the earliest opportunity. Primary lines of research designated WTC to the native language and recognised it as a personality-based trait-like predisposition (McCroskey & McCroskey, 1988) that is relatively stable across contexts and receivers (McCroskey & Richmond, 1990). As such, the WTC construct plays an important role in L2 teaching and learning. Almost any L2 learner is likely to respond

to a direct question, but many will not continue or initiate communication (Reid & Trofimovich, 2018).

Following this perspective, the current research regarded WTC as the tendency of an individual to begin communication when free to do so. McCroskey and Richmond (1990) placed the emphasis on WTC for an individual's well-being, implying that individuals who were communicating more, were, by and large, better evaluated in different contexts (for instance school, organization, and social) and that disclosing low WTC signalled a communicational dysfunction that could reduce one's social and emotional happiness.

WTC is relevant in both L1 and L2 contexts. In the L1 context, WTC is perceived as containing two major antecedents which are communication apprehension and perceived communication competence (MacIntyre & Gardner, 1994). The development of WTC models in L1 usually begins with personality-related items and traits and then expanding towards variables concerning communications (MacIntyre et al., 1999). This shows that WTC is a developmental construct which originates from an individual's innate traits and personality and slowly progresses towards communication-based factors and variables such as communicative competence and communication skills.

In an L2 context, WTC models are largely derived from L1 models and concepts. McCroskey and Baer (1985) first saw WTC as a trait variable. Thus, they devised a model which was heavily influenced by the Socio-Educational Model as proposed by Gardner (1985). The model proposed by Gardner (1985) describes WTC as an individual's desire and attitudes towards learning and acquiring the L2. It displays an individual's tendency to have favourable or resentful attitudes and behaviours towards the L2, and the desire to engage with the L2 speaking community.

MacIntyre et al. (1998) proposed a pyramid model to explain WTC in the L2. The pyramid is divided into six separate layers with each layer representing various factors and contributors to WTC in the L2 (see Figure 1). The pyramid base begins with layers which represent individual characteristics such as individual personality and inter-group attitudes. As the pyramid goes up, the factors shifted from a fixed nature such as personality to more situational ones, such as self-confidence and the desire to speak to a particular person.

Measuring WTC could mean measuring a person's tendency to enter into the discourse in a particular language. In the systematic review by Zhang et al. (2018), to assess the antecedents of the WTC in L2, they provided a framework for researchers to describe people and WTC. Supported by past research, the model identified various antecedents connected with WTC. They include language difficulties, social background, behaviours, self-confidence, motivation, discussion skills and anxiety. As such, successful target language acquisition may be influenced by various variables. Many studies over the past few decades found that anxiety, attitudes and motivation
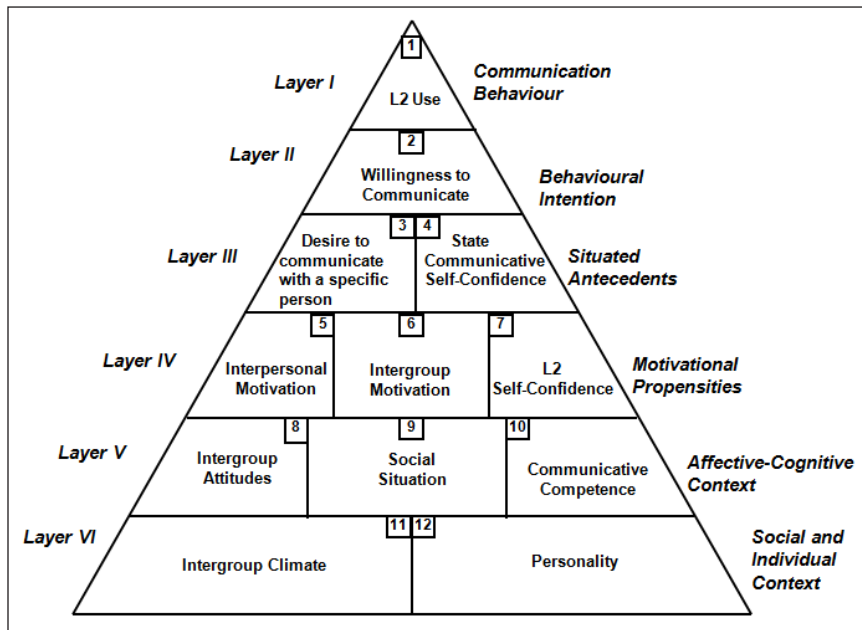
Figure 1. Willingness to Communicate Pyramid Model (MacIntyre et al., 1998)

have a large impact on L2 learning (Horwitz et al., 1991; Horwitz, 1986; MacIntyre & Gardner, 1991; MacIntyre & Gardner, 1989), and the factor most often identified is anxiety. Foreign language learning anxiety is found to be distinct from other anxieties as it includes communication apprehension, test anxiety and fear of negative evaluation (Horwitz, 1986).

Many studies have found a negative correlation between the level of anxiety and WTC in the L2 context. Results suggested that learners who experience a lower level of communication anxiety were more willing to use the L2 in communicative situations (Clément et al., 2003). Anxiety has also been found to be negatively correlated with several variables, such as student achievement and performance on a vocabulary learning task (Horwitz, 1986; MacIntyre & Gardener, 1989), language

production measures including a cloze test, a composition task, and an objective proficiency measure (Gardner & MacIntyre, 1993). As such, anxiety causes a person to be tense and anxious which is known as communication apprehension. This could result in students underestimating their ability when communicating with others (MacIntyre et al., 1997).

Several studies concluded that some causes of unwillingness to communicate are poor English proficiency, fear of speaking in front of others, shyness, lack of confidence and fear of making mistakes (Hamouda, 2013). Moreover, researchers found that affective, social-psychological, linguistic and communicative variables that are related to learner emotions could predict language learners' communicative behaviour (Goleman, 2001; Mehrpoor & Soleimani, 2018; Öz et al., 2015).

In summary, WTC has been found to be an important variable in language development. WTC is closely related to language learning anxiety and motivation. Lowering anxiety and enhancing motivation could help enhance WTC. WTC could also impact speaking goals, the confidence level in L2 skills, language proficiency, and fluency. Thus, it is important to ensure high levels of WTC by providing opportunities for communication in whole-class or small group discussions, and constantly being mindful of affective variables that could hinder WTC.

Philosophical Inquiry Classroom Discussion

The most natural and effective way for learners to practice talking freely in English is by discussing some problems or situations together through the verbal transaction of ideas. Discussion is known to promote the transfer of learning and deep learning among learners as it fosters critical thinking and content understanding (Zwiers & Crawford, 2011). The discussion could include anything from the simplest question to the most complex political and philosophical inquiry discussion. The current study subscribes to the principle that a discussion that works is one in which as many students as possible say as much as possible.

Thus, the technique used in the Philosophical Inquiry (PI) Discussion is using texts or stories and getting the students to question the ideas and decisions in the story, and deliberate on matters raised in the texts, initially through teacher-led discussion. The texts can help create a dialogue to allow students to forward their thoughts. In this method, the teacher will initially lead the discussion, and students are probed to think critically of the issues raised and the opinions expressed by their friends. Therefore, through PI Discussions, the process of deliberation is internalised and students gradually become reflective and critical thinkers. In the process, a community of inquiry is created and gradually a student-led discussion will take place.

As such, a tracker chart acts as a tool that enables teachers and students to gain a clear picture of the students' achievement in a PI Discussion. A series of bespoke trackers map out an assessment process that is simple and precise - it clearly highlights gaps in attainment so the teacher can see an individual student's progress at a glance. Therefore, teachers can monitor the students' progress throughout the semester, and individual students can take charge of their own learning, as the students' individual performances are at the centre of their own learning.

Shamsudin et al. (2017) studied the effects of debate and PI Discussion in enhancing WTC among ESL learners in a public university. The learners were randomly assigned into 2 groups with 16 participants in each group. The unpaired samples t-test showed that though debates were more effective in promoting WTC compared to PI Discussion, the former resulted in greater communication apprehension compared to the latter. The researchers argued that the nature of debates

that required each participant to take turns delivering their arguments probably resulted in a greater amount of speaking compared to PI Discussion. However, the high level of communication apprehension when engaging in debates could have adverse effects on L2 development. Meanwhile, in the PI Discussion, it was not compulsory for everyone to speak, thus some students chose not to participate in the discussions. However, the results showed that PI Discussions could still encourage speaking among learners. Therefore, the potential of using PI Discussion to promote WTC could be further explored and investigated. In the current study, the use of a tracker chart was incorporated so that the instructor and participants can keep track of the number of responses, opinions and arguments each participant articulated in the PI Discussion. Thus, this would allow for self-monitoring, and could potentially encourage the participants to speak more.

METHODS

This study employed a quasi-experimental research design with data collected using a tracker chart and pre-post WTC assessment. It is also supported by the use of interviews as a qualitative measure to triangulate the quantitative data obtained.

Participants and Procedures

The participants were 30 undergraduate students in an intact class at a university in Malaysia. Five of the participants were male and twenty-five were female. They were between 19 to 25 years old. The study used purposive sampling. The participants were selected as they were ESL learners taking a university course on aural-oral skills. At the beginning of the semester, a pre-measure on WTC was administered to the participants. Then, at the end of the weekly treatment lasting 8 weeks, a post-measure on WTC was administered. Additionally, a semi-structured interview protocol was designed to conduct one-on-one interviews with 7 participants who were chosen randomly. The interview sessions were conducted to support the results of the quantitative analysis and provide rich descriptions based on the participants' own words. Each interview session lasted approximately 20 to 30 minutes and was audio recorded. The interview transcripts were transcribed verbatim and coded. A thematic analysis of the interview data was then carried out based on emerging themes.

Instruments

The instruments used in the study were a WTC questionnaire, tracker chart, and a semi-structured interview. The content validity of the instruments was verified by two experts with PhDs in Education.

Pre and Post-Measure for WTC

The pre and post-measure for WTC used in this study was a questionnaire developed by McCroskey (1992) with a scale from 0 to 100, from *'never to always'*. The questionnaire consists of 12 items to assess students' Willingness to Communicate in

English to strangers, acquaintances and friends in different communicative contexts. Among the contexts are public speaking, talking in meetings, group discussions, and interpersonal conversations. Following McCroskey (1992), the overall level of WTC was measured based on the categories in Table 1.

Table 1
Mean range and interpretation of WTC

Mean range	Interpretation
M < 52%	Low level of WTC
M = 53-81%	Average level of WTC
M > 82%	High level of WTC

A mean score below 52% would indicate a low level of WTC, while a score ranging from 52 to 81% would indicate an average level of WTC and a score higher than 81% would indicate a high level of WTC.

PI Discussion and Tracker Chart

The study required the identification of participants' WTC in the philosophical inquiry classroom. In order to identify the participants' involvement, a tracker was introduced at the beginning of the semester. The tracker was a chart with the names of every participant on it. The tracker was displayed on the screen in front of the classroom every week.

The tracker was rated on a frequency-based system from the 1st tick to the 10th tick. Every time a participant gave an opinion or was engaged in the discussion, a tick was made in the appropriate box. Every week, there was a moderator who was chosen among the students. The moderator was not counted as one of the participants because he or she was responsible for the tracker. The participants took turns to act as moderator throughout the 8-week treatment period.

Interviews

Semi-structured interviews were carried out with seven participants who were randomly selected. The purpose of the interview was to gauge the participants' perceptions of using the tracker chart in a PI classroom discussion to encourage learner participation and WTC. The interview data were audio-recorded and transcribed verbatim. A thematic analysis of the data was then carried out. Words, phrases, clauses and sentences expressing opinions, perceptions and experiences in using the tracker chart were coded accordingly. Emerging themes across the codes were identified, and the codes were grouped under these themes. The themes identified were positive (for instance encouraged participation, motivating,), negative (for instance causing high anxiety, demotivating), and neutral comments (for instance no difference). 30% of the data was rated by a second-rater. The percentage of the number of agreement between the first and second-rater over the total number of agreement and disagreement (Miles & Huberman, 1994) was used to determine inter-rater reliability. There was an 87% agreement between the two raters which, according to Miles and Huberman (1994), indicates sufficient agreement for inter-rater reliability.

RESULTS

PI Classroom Discussion and Use of Tracker Chart

Table 2 below shows the frequency and the percentage of the participants' participation in the classroom discussion according to week.

Based on Table 2, the first week of the semester recorded the lowest frequency with 25 ticks over 300. This is equivalent to 8.33% which is a very small percentage of participation. This is probably due to the fact that the tracker was still new to the participants and the participants needed time to get used to the PI classroom discussion. Some of the participants needed more time than the rest of their classmates to be reflective especially during the PI Discussion.

Pre and Post-Measure of WTC

Table 3 shows the mean scores for the pre and post-measure of WTC. The mean pre-measure score was 61.14% and the mean post-measure score was 69.50%. This

is a mean difference of 8.36. Both mean scores were considered average based on McCroskey's (1992) categorisation and interpretation of WTC scores.

The mean scores that showed the highest mean difference were "talk to a stranger while standing in line" (18.00) and "talk in a large meeting (20 people) of strangers" (15.67). The lowest mean difference was for "talk in a small group (4-7 people) of friends (0.67). The results could indicate the effectiveness of the use of tracker chart in PI Discussions in lowering anxiety, and enhancing motivation and confidence levels when speaking to strangers.

The pre and post-measure of WTC also showed a statistically significant mean difference before and after the use of a tracker chart in a PI classroom discussion, as shown by the results of the paired t-test on the pre and post-measure for WTC in Table 4.

The results indicate that the use of the tracker chart in PI classroom discussions was effective in increasing WTC among the participants.

Table 2
Distribution of participation according to week

Week	Number of participants	Frequency	Percentage
1st week	30/30	25/300	8.33%
2nd week	29/30	55/290	18.97%
3rd week	24/30	69/240	28.75%
4th week	29/30	83/290	28.62%
5th week	25/30	63/250	25.20%
6th week	16/30	57/160	35.63%
7th week	26/30	79/260	30.38%
8th week	22/30	80/220	36.36%

Table 3
The mean results of pre and post-measure for the level of WTC

No.	Items	Mean (Pre-measure)	Mean (Post-measure)	Mean difference
1	Present a talk to a group (40 people) of strangers	58.67	61.00	2.33
2	Talk with an acquaintance while standing in line	59.67	67.00	7.33
3	Talk in a large meeting (20 people) of friends	64.00	74.67	10.67
4	Talk in a small group (4-7 people) of strangers	62.33	73.00	10.67
5	Talk with a friend while standing in line	77.33	80.33	3.00
6	Talk in a large meeting (20 people) of acquaintances	64.33	69.33	5.00
7	Talk with a stranger while standing in line	46.00	64.00	18.00
8	Present a talk to a group (40 people) of friends	62.33	72.67	10.34
9	Talk in a small group (4-7 people) of acquaintances	62.00	69.33	7.33
10	Talk in a large meeting (20 people) of strangers	42.00	57.67	15.67
11	Talk in a small group (4-7 people) of friends	80.00	80.67	0.67
12	Present a talk to a group (40 people) of acquaintances	55.00	64.33	9.33
	Total	61.14	69.50	8.36

Table 4
Paired t-test on WTC

	N	M	SD	p
Pre-measure	30	61.14	10.79	0.00
Post-measure	30	69.50	7.18	0.00

Note: *p < 0.05

Interview

The themes that emerged from the coding of the interview data were positive, negative and neutral comments about the use of the tracker chart in the PI Discussions. One key positive feedback received was that the tracker chart and PI classroom discussion resulted in higher motivation. For example, one participant reported that "the *tracker has definitely pushed me to participate and contribute my thoughts in the discussion*". The participant also reported that the environment in the classroom also allowed "*students to reach a stage where they communicated in the class out of intrinsic* *motivation*". Another participant felt that "*Anxiety and lack of confidence really affected my willingness to communicate (before this). Previously, in my school, we will get mocked by the other students if we initiated a conversation in English. It is not the same here where everyone supports each other to the point you are not afraid to make mistakes. The classroom discussion has somehow lowered the students' affective filter in practising the second language, English".* Another participant disclosed that "*Before I learnt PI discussion (with tracker chart), I rarely participated in discussions. I do not have an English background and*

I seldom speak in English with family or friends, outside of the classroom.... when I started to participate in discussions, my speaking skills are getting better... Probably because I have to use the language and discuss among our classmates, I am comfortable to use English now". Thus, it could be deduced that the use of PI Discussions and the tracker chart helped enhance motivation and encouraged participants to speak more freely.

Participants also found that the tracker chart created a healthy environment for speaking one's mind. One participant felt that the "*usage of the tracker did affect her performance because it created a healthy competition between herself and her classmates*". The tracker chart encouraged the participants to speak and respond more frequently. Moreover, the participants indicated that the tracker acted as a push factor to them to contribute more thoughts and views in the class as the learning process takes place. For example, one participant said that "*the tracker has somehow pushed me to participate more and it gave the idea that I was in competition with classmates when I was actually not*". Thus, the intended purpose of using the tracker chart was somewhat achieved. The participants were monitoring their individual contribution to the discussions, and they were taking charge of their own L2 development, through engaging in a speaking activity and contributing to the discussions.

The participants also identified some negative effects of the tracker chart. One participant indicated that the text used in the classroom should be of interest to the students. If not, they might not feel motivated to discuss the text or give their views about it. In the first PI Discussion, the focus was on a short story titled "Pixie". This story is about a growing child who was in search of her very own definition of freedom. The participant noted that she was not able to relate to the text, and did not know how to engage in the discussion that ensued. She said, "*when it comes to a topic that I am not familiar with, I do not know how to join the discussion. In this situation, the tracker can be really demotivating and discouraging. Besides, the tracker also made me feel bad with myself. It was because my classmates could see how I was not doing well. As time passed by, I started to lose interest to participate in the discussion for the week*". Perhaps, the use of more appropriate texts: ones that are more in line with learner interests will enhance motivation and WTC.

Another participant also noted that the tracker chart could have an adverse effect on some learners as the number of responses and feedback they gave were obvious and on display for everyone to see. The participant stated that "*the use of the tracker chart can be) de-motivating because it either helped to give the sense of accomplishment or de-motivated the students because the contribution chart was made obvious and noticeable to everyone in the classroom*". In other words, instead of motivating learners to speak, it could have negative psychological effects on learners, such as causing them to feel de-motivated, pressured or embarrassed.

Another participant felt that the tracker chart could induce high anxiety for certain students as some students might have "*very high anxiety level and the tracker sometimes made their condition to be even worse*". Another negative viewpoint is the "*tracker made some participants felt as if they were forced to speak up in the discussion*".

The interview data yielded some support for the quantitative results. It does show that the use of the tracker chart in PI classroom discussion can have positive effects on motivation, and thus enhancing WTC. However, there are possibly some negative effects that need to be taken into consideration if teachers decide to use the tracker chart in PI classroom discussions.

CONCLUSION

The findings of the study suggest that the use of a tracker chart in PI classroom discussions can have positive effects on WTC. The t-test results indicated that learners were motivated to speak more by giving opinions and responding to other people's opinions. The pre and post-measure of WTC also showed that the participants would be more willing to engage in conversations and discussions at the end of the 8-week intervention. The tracker chart also showed an increase in the frequency of learner responses throughout the 8-week intervention. The interview results also showed that participants felt motivated to speak as a result of the use of the tracker chart. However, they noted that the texts used should be interesting enough for the students to elicit responses, and the teacher

should be mindful of students who had high anxiety levels as the use of the tracker chart could make them feel more anxious, and this could have adverse effects on motivation and WTC. This is in line with the findings of studies (for instance Goleman, 2001; Hamouda, 2013; Mehrpoor & Soleimani, 2018) that showed that affective variables could affect WTC.

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