

# A study comparing Brazilian and Japanese high school students' understanding of Conversational Implicatures

Laura A.B. KUDO

## 英会話の含意に対する理解 —ブラジル人高校生と日本人高校生との比較—

工藤ローラ

**Abstract:** This study surveyed two groups of high school students from two different cultural backgrounds, one from Brazil and one from Japan. The study aimed at examining if there were differences in grasping conversational implicatures (CI) between two distinct cultural groups. The respondents in both groups, who had received English instruction for five years and had no experience living abroad, answered a questionnaire that had previously been conducted by Bouton (1988, 1994) and Murray (2011). The purpose of the research was to verify if the previously established results mentioned above would replicate, despite temporal changes and corresponding shifts in society. It is relatively easy now for people to have access to knowledge and exposure to foreign cultures. The results did not yield significant differences which could be attributed to the respondents' distinct cultural backgrounds. It was found though, that the need for instructions in understanding CI is present, which, in part, replicates the results obtained by Bouton and Murray.

**keywords:** *questionnaire, culture, cultural background conversational implicature*

### 1. Introduction

The importance of teaching cultural aspects of the target language in EFL classes has been evidenced by a great number of studies, among them Bouton (1994), Murray (2011), Pratama et al's study (2017), and Cignetti and Di Giuseppe (2015).

Considerable research has been carried out on the topics of pragmatic competence, pragmatic

failure and social pragmatic failure. Varied reasons have been given by researchers as to the causes of difficulties L2 learners have in understanding CI. The following three factors have been claimed in studies as being such causes: learners' different cultural background (Bouton 1988, 1994, 1999; Keenan 1976; and Murray 2011); lack of cultural knowledge of the target language and limited proficiency in the language (Taguchi, 2005; Roever, 2006).

Following, firstly, on Murrays' 2011 study, which was based on Bouton's 1988 and 1994 studies, this study aims to find out whether Bouton's 1994 results will be replicated or not. Bouton's (1994) results have been replicated over time by many other researchers. This study also references subsequent important studies that have been carried out based on Bouton's work. Are there still particular differences in the understanding of implicatures based on the learners' cultural backgrounds, or is it the lack of instruction regarding understanding conversational implicatures?

The present study focuses on two EFL groups of second-year high school students, one from Brazil and the other from Japan, constituting two very distinct cultural backgrounds. The groups in both countries consist of 63 respondents, with similar levels of proficiency in English. Due to time constraints, the students' proficiency level was not formally assessed. Since the participants in both groups had studied English for five years it was assumed that they should have enough knowledge of the language to understand the questions presented. The respondents answered the same questionnaire on interpreting the meanings of some utterances in English. There were no instructions issued to the respondents concerning CI. The short conversations and questions which constituted the aforementioned utterances were selected (and adapted to suit the students' estimated proficiency level) from the items Murray (2011) used in "Do Bears Fly? Revisiting Conversational Implicature in Instructional Pragmatics". The reason for using the same items is that, as Murray mentions, these examples have authenticity because "the preferred multiple choice responses had originally been developed on the basis of actual NS interpretations of speakers' meaning in a set of scenarios" (Murray 2011, p.4)

## **2. Literature Review**

### **2.1 Conversational Implicatures**

Paul Grice proposed the Cooperative Principle (CP) in 1975. According to the CP, interlocutors in a conversation exchange are expected to follow a set of rules, designated as the four maxims of Quantity, Quality, Relation and Manner. The maxim of quantity states that a contribution should be "as informative as is required" and "no more informative than is required". The maxim of quality requires that that contribution should be "true". The maxim of relations requires the speaker to "be relevant", and the maxim of manner requires the speaker to "be perspicuous". Grice further explains that a participant in a conversation "may fail to fulfill a maxim" (1975, p.49) in different ways, which generates a conversational

implicature. The following is one example of an implicature presented by Levinson (1983:103)<sup>1</sup>.

A: Where's Bill?

B: There's a yellow VW outside Sue's house.

B's answer may seem irrelevant, the listener however would probably not see it that way, but interpret it as meaning that Bill, who drives a yellow VW is at Sue's house.

According to Bouton (1988) for a conversational implicature to be effective, it is imperative for the interlocutors in an interaction to have a "common understanding of what constitutes cooperative speaker behavior" (p.183) so that they can know when an implicature is necessary to grasp the speaker's intended message.

Sedivy explains that Grice's work on implicatures stressing the difference between conventional and understood meanings has been very important. She adds that a crucial aspect of Grice's conversational implicatures is the concept that "they are calculable" (2007, p.475). She also claims that Grice never specifically linked his ideas to concepts of real-time language production and processing. The hearer is expected to infer the intended meaning of the utterance, which means that this has to be done in the midst of a very fast flow of information streaming in a real-time discourse.

Blight (2002) conducted a one-time, 90-minute instruction lesson on the Cooperative Principle with a small number of high proficiency adult learners in Japan. He reported that a number of difficulties were encountered in teaching the complexity of the CP and he pointed out that "The underlying presumption that speakers interact according to a principle of mutual cooperation is generally limited in practice according to each person's self-interest in participating in a social interaction."(p.146). He also notes that attempts to render implicit meanings into explicit interpretations could cause concern in many classrooms. He suggests that when teaching, a sample conversation should be carefully selected in order to reduce exposure to multiple meanings, although it is important to emphasize that different meanings may be possible in any context.

In explaining how implicatures are possible Allot (2018) questions how the hearer can grasp the meaning of an utterance that intentionally implies something that is different from the linguistic meaning of what is said. He adds that determining what has been implied in a statement is a matter of inference and not of deduction. He claims that what has yet to be explained is the reason the speaker chose to use the words they did in the way and in the situations they did.

## 2.2 Empirical Studies

Many researchers claim that speakers from different cultural backgrounds may interpret implicatures

---

<sup>1</sup> Levinson, S. (1983) *Pragmatics*. Cambridge: Cambridge University Press. Cited in Bouton, L.F. (1988). A cross-cultural study of ability to interpret implicatures in English. *World Englishes*, 17 (2), 183-96

differently. Among them are Bouton (1988, 1994), Murray (2011), Keenan (1976) and Tannen (1986). On the other hand, there are also researchers who assert that difficulties in interpreting implicatures is the result of their language proficiency, two of which are Taguchi (2005) and Roever (2006).

Bouton (1988) carried out a survey in order to verify if the understanding of implicatures would indeed be different depending on people's cultural backgrounds. For his study he first gave a set of open-ended questions to 70 undergraduate American college students. According to him, the answers obtained in 1988 showed consensus in that this group of American native English speakers "tends to interpret a great many implicatures in the same way" (1999, p.50). He then created a multiple-choice version of the questions and checked it with a further 28 English native speakers. This proved to be successful. He subsequently administered the questionnaire to 36 international students who had just entered university and had TOEFL scores varying from 467 and 672. His results in this study clearly showed how a person's cultural background influenced their interpretation of the implicatures presented in the questions. Four and a half years later Bouton (1994) retested 30 of the original foreign students with the aim of finding out if the differences in understanding of implicatures had changed between native and non-native speakers after the non-native speakers had attained a higher level of proficiency in English. This second study yielded data that showed that, although considerable progress had been made, some differences still existed between the two groups in the interpretation of implicatures.

Bouton (1999), based on his previous studies mentioned above, claims that it is clear that "people from different backgrounds interpret at least some implicatures differently" (p.51) and he thus suggests that the more formulaic implicatures should be part of the ESL curriculum as much as possible.

Murray's (2011) study assessed a group of migrant teachers from India, Bangladesh, China, Korea, Japan and Cuba. The participants were all advanced learners of English who were preparing to sit for the Professional English Assessment for Teachers (PEAT), an English entry test, on which success would allow them to apply for positions in primary and secondary public education in New South Wales, Australia. His study reported on the evaluation of the effectiveness of explicit teaching of pragmatics to NNS (non-native speakers). Murray used the same multiple-choice inferencing task, sometimes in an adapted form, devised by Bouton (1988, 1994). Murray's results showed that despite his subjects having had extensive preparation for the activity, their responses were not consistent with the 'suggested' answers given by 'NS' (native speakers) in Bouton's studies and only reached a 56% success rate. Murray concluded that elementary knowledge of how to use and interpret a language is essential in order to reach pragmatic competence. However, even when speakers are linguistically proficient, differences in cultural backgrounds can still cause problems.

Yoshida's (2014) study surveyed two groups of participants, 40 NS of Japanese who were intermediate learners of English and 40 NS of American English. The participants answered a questionnaire which consisted of two sections: investigation of the receptions of scalar expressions, and the understanding of CI. The results revealed that the Japanese English learners' interpretation of some scalar expressions (*few, several, easy and difficult*) showed a significant difference from that of the NS of American English. The

author also says that their accuracy did not correlate to their proficiency, which means that even speakers who are relatively proficient in a target language may face a risk of misunderstanding intended messages. The ability to interpret CI was affected to some degree by the learners' proficiency, but the degree of correlations was moderate. Yoshida's study revealed that a lack of knowledge in cultural norms of the target language interfere with the learners' understanding of the intended meaning of messages.

Cignetti and Di Giuseppe (2015) surveyed the degree of pragmatic awareness in learners of English as a second language and whether explicit instructions on implicatures helps students' understanding of implicatures. They investigated twenty-six learners of English as a foreign language at a language school in Argentina. The subjects' level according to the CEFR was Waystage (A2+). All of these students had received formal education in English for a few years, however none of them had stayed in an English speaking country for a period of over three months. The students were divided into two groups, an experimental group, which was given explicit instructions on implicatures, and a control group, who followed the standard syllabus and received no targeted instructions regarding implicatures. The subjects in both groups were given a pre-test and a post-test. The results showed that the students in the experimental group demonstrated a significant improvement in understanding implicatures while the control group did not perform as well in the post-test. Cignetti and Di Giuseppe concluded that explicit instructions on implicatures seem to have a positive effect on learners' ability to grasp their intended meaning, and that difficulty in the interpretation of implicatures may in fact limit cross-cultural communication.

After analyzing a number of studies concerning pragmatic competence in L2, Xiao (2015) revealed in his study "Proficiency effect on L2 pragmatic competence" that learners attain a certain degree of pragmatic competence as they develop their linguistic proficiency in L2. However, he concludes that, although a high proficiency level in the language can help increase the learner's "linguistic repertoire of pragmatic performance" (p. 572), having linguistic competence does not naturally lead to pragmatic performance, as high proficiency learners do not necessarily have "better knowledge of target social norms" (p.572).

Pratama et al. (2016) examined if length of study is related to pragmatic competence in their study "Length of Study and Students' Comprehension of English Conversational Implicature". They tested a total of 141 subjects, who were first, second, and third year university students in an English program in Indonesia. The students were given a test consisting of 70 questions containing different implicatures. Their results showed that there was a statistically significant difference in performance between the first and the third-year students. The difference in the one-year gap, between the first and the second-year students was not expressive. They concluded that even when explicit pragmatic instruction is not provided, pragmatic comprehension development still occurs and that this development was only significant after two years.

An additional study by Pratama et al. (2017) tested 110 students at one university in Indonesia in order to find answers to the questions: 'What are the most problematic implicatures for second language learners?' and 'What are the factors affecting learners' competence to comprehend implicatures?'. Their results

confirmed the findings by Bouton's 1994 study which showed that second language learners had difficulty interpreting formulaic implicatures. Students participating in the study showed particular difficulty in comprehending minimum requirement rules, indirect criticism and scalar implicatures. Pratama et al. explicitly mention indirect criticism as being the most difficult implicature for all the groups they had tested. They concluded that informal L2 exposure "has positive correlations with vocabulary and grammar" (p.64), while formal exposure "has proven to have effects on different level of implicatures comprehension" (p.64).

Abdelhafez (2016) surveyed 31 undergraduate TEFL students at a Faculty of Education in an Egyptian university. The subjects were tested twice, once before explicit instruction on conversational implicatures and again in a post-test after the instruction. The test of pragmatic competence was developed by Tuan (2012)<sup>2</sup> and was based on Bouton's work (1999). The results revealed that the participants performed significantly better in the post-test, confirming one of the hypotheses of the study. The results also showed a correlation between the participants' pragmatic competence and language proficiency, which was another hypothesis of the study.

Daskalovska et al. (2016) carried out a study on the use of request strategies by English language learners in the Republic of Macedonia. The writers propose that for a speaker to successfully be able to communicate in a target language, they need to know how to use their knowledge of grammar and vocabulary appropriately depending on the context and the people they are talking to. Their results showed that the Macedonian students, albeit having an intermediate level of proficiency, did not show significant differences in the expressions they used in informal and formal request contexts. Thus, according to the authors, these learners need more exposure to communicating in different situations in the target language in order for them to reach pragmatic competence.

In her study 'Language play in a second language: Social media as contexts for emerging Socio pragmatic competence' Lantz-Anderson (2018) used two Facebook groups in different English L2 classes that were part of an international project with secondary schools in Colombia, Finland, Sweden and Taiwan. The study analyzed the students' linguistic interactions in the social media groups. One group had the interactions for 9 months (October 2011 to June 2012) and the other for 7 months (November 2012 to May 2013). The results showed that the students used different linguistic repertoires to play with the language in the context provided by the media for casual communication. She concluded that "language play on social media can be seen as a valuable activity in developing sociopragmatic competence" (p.706) that can be used to prepare students for using L2 outside of the classroom.

---

<sup>2</sup> Cited in Abdelhafez, A.M.M. (2016). The Effect of Conversational Implicature Instruction on Developing TEFL Students' Pragmatic Competence and Language Proficiency. *US-China Education Review A*, August 2016, Vol.6, No.8, 451-465.

Seyfi & Guven (2016) surveyed a total of 91 people, 9 through interviews and 82 via an online questionnaire. The study investigated the influence of social media usage in the intercultural adaptation process of Erasmus students who had come to Turkey to study. They concluded that due to globalization and developments in communication technology, cultures have converged and begun to affect each other like never before. They also claimed that the data they collected showed that “social media is quite an efficient instrument in the development of intercultural communication” (p.35).

Two online virtual exchanges (VE) using English as a lingua franca on a Moodle platform were carried out by Hagley (2020). In this project, students answered pre-and post-questionnaires evaluating their intercultural sensitivity and comprehension of their own culture in each 8-week exchange, done in 2016 and 2017 with 303 and 264 participants respectively. Hagley’s results showed that after participating in the simple VE, students had increased their interactive confidence, intercultural awareness, knowledge of their own culture, had showed motivation more to learn English, and were also more interested in other cultures.

### **3. The Procedure**

Two groups of high school students, one from Brazil and one from Japan took part in the study. Due to time constraints, no proficiency test was conducted, but it was decided to collect data from students who had studied English for the same length of time. Thus, respondents in both groups had taken formal English instruction as a foreign language for 5 years and had had enough contact with and knowledge of the English language to make them eligible to participate in the survey.

The students answered a questionnaire, which was taken from Murray’s 2011 study. The reason for using the same items (sometimes in adapted form) is that they have authenticity because “the preferred multiple-choice responses had originally been developed on the basis of actual NS interpretations of speakers’ meaning in a set of scenarios, while the distractors were adapted from the most common NNS ‘incorrect’ answers” (p.4).

#### **3.1 Participants**

The participants in the study consisted of two groups of second year high school students, one from Brazil and one from Japan. The Brazilian participants were students at a private high school in the city of Sao Paulo in Sao Paulo state. Their counterparts in Japan were also students at a private high school in the city of Sapporo in Hokkaido prefecture, northern Japan. Each group consisted of 63 subjects. None of the respondents in either group had lived in an English speaking country.

#### **3.2 Instruments**

The data collection method, which consisted of a ten-item questionnaire, were distributed and

collected via print form by the author accompanied by the English instructor in charge of each of the three classes participating in both schools. The application of the questionnaire was done in August, 2019 in Brazil, and in January, 2020 in Japan.

### **3.2.1 Implicature Questionnaire**

In order to evaluate students' understanding of implicatures, the questions used for this project were the same ten items Murray (2011) used in 'Do Bears Fly? Revisiting Conversational Implicature in Instructional Pragmatics'. Two minor changes were made to suit the change of times and the locations where the data were collected. The first was in question number 7. The Brazilian students' question had 'It's December' and the Japanese students' question had 'It's July' and 'a flat in Sydney' was replaced with 'a flat in Sapporo' to match the summer season in each corresponding country. The second change was in question number 10. The original phrasing 'Does a dog have fleas' was replaced with 'Can a duck swim?' due to the author's assumption that as dogs now usually live indoors with their owners, young people might not be aware that dogs having fleas was not uncommon in the past.

The explanation of the situation for each question was translated into each group's native language to make it easier for the subjects to understand the content of the interactions.

The questionnaire is in the Results section along with the answers given by the respondents. It is important to note here that the students in both groups received no instructions on implicatures.

## **4. Results**

The fact that the respondents belonged to very different cultural backgrounds seems not to have influenced their answers in a significant way. There were small differences in some items, but only one question yielded remarkable differences in the subjects' answers.

The following are the questions with their responses. The preferred answers, which were tested twice on English native speakers by Bouton (1988, 1994), are marked with an asterisk.

*1. Bill and Peter have been friends since they were children. They shared a house when they were students and travelled together after graduation. Now friends have told Bill that they saw Peter dancing with Bill's wife while Bill was away on business.*

*Bill: 'Peter knows how to be a really good friend, doesn't he?'*

Which of the following best says what Bill meant?

Table 1. Responses for question 1

<b>Possible responses</b>	<b>Brazil</b>	<b>Japan</b>
(a) Peter is not acting the way a good friend should. (*)	38	21
(b) Peter and Bill's wife are becoming really good friends while Bill is away.	6	6



(c) Peter is a good friend and so Bill can trust him.	13	25
(d) Nothing should be allowed to interfere with their friendship.	6	11

Bill's statement flouts the Gricean maxim of quality as it is an ironic comment. 38 Brazilian students chose (a) while 21 Japanese students did so. However, 25 Japanese students chose (c) and only 13 Brazilians made that choice. The difference, while not extremely big, in the choice of these answers, may indicate a cultural difference. The Brazilian students seemed to have grasped the irony in (a) better than the Japanese students. It could also be interpreted as the situation being seen as a problem in one culture and not in the other.

2. *At a recent party, there was a lot of singing and piano playing. At one point, Sue played the piano while Mary sang. When Tom asked a friend what Mary had sung, the friend said:*

*Friend: 'I'm not sure, but Sue was playing "My Irish Wild Rose".'*

Which of the following is the closest to what Tom's friend meant by this remark?

Table 2. Responses for question 2

Possible responses	Brazil	Japan
(a) He was only interested in Sue and did not listen to Mary.	18	18
(b) Mary sang very badly. (*)	7	4
(c) Mary and Sue were not doing the same song.	19	21
(d) The song that Mary sang was "My Wild Irish Rose".	17	20

Interestingly, choices (a), (c) and (d) had about the same number of answers, which shows the difficulty the respondents had in recognizing the implicature in the question here. That could be explained by the lack of information provided in the answer. However, this is one case that instruction on implicatures could have led to different choices of answers.

3. *Two friends are looking over the various kinds of food at an international supper and trying to decide which kinds to try.*

*Nida: 'There are so many different kinds of food here that I can't decide which to take first. Which do you recommend?'*

*Trixie: 'So far I've only had some of that one – the yellow one with the reddish sauce. Certainly is colorful, isn't it?'*

Is Trixie recommending the dish to Nida? How do you know?

Table 3. Responses for question 3

Possible responses	Brazil	Japan
(a) No, because Trixie talked about only how the dish looked, not about how it tasted. (*)	16	23
(b) Yes, because dishes that are colorful and attractive usually taste good.	26	19

(c) No, because Trixie hasn't tried any other dishes to compare the colorful one with.	14	11
(d) Yes, since Trixie mentioned the dish, we know she thinks it's good.	8	10

This question, as Murray (2011, p.7) states, seems to be a difficult one. The numbers of answers selected by the respondents for each reply were close for all the choices, with (a) and (b) being the most selected. The results here do not seem to show any relation to the different cultural backgrounds of the respondents, but might indicate the difficulty in grasping the meaning of the utterance proposed by Bouton.

4. *Benda and Sally have lunch every Tuesday. As they meet on this particular day, Brenda stops, twirls like a fashion model, and the following dialogue occurs:*

*Brenda: 'I just got a new dress. How do you like it?'*

*Sally: 'Well, there certainly are a lot of women wearing it this year. When did you get it?'*

How does Sally like Brenda's new dress?

Table 4. Responses for question 4

Possible responses	Brazil	Japan
(a) We can't tell from what she says.	14	5
(b) She thinks Brenda has good taste in clothes because she's right in fashion.	10	8
(c) She likes the dress, but too many women are wearing it.	37	40
(d) She doesn't like it. (*)	2	10

The choice that most students made in both groups can attest to the difficulty of this question. 64% of NS and 43% of NNS chose the expected reply in Bouton's study (1988, p.194). Murray states that in his study less than half of the group chose the expected answer, which "may be attributed to the phrasing of the question, which asks the respondents to identify Benda's real opinion, rather than what she is trying to convey" (2011, p. 7). This explanation could somehow justify the high number of students selecting choice (c).

5. *Two roommates are talking. One has just been talking on the telephone to a woman he was going to take to see a play.*

*David: 'Darn it! Mandy just broke our date for the play. Now I've got two tickets for Saturday night and no one to go with.'*

*Mark: 'Hey, David. Have you met my sister? She's coming down to see me this weekend.'*

*David: 'No, I don't think so. Why?'*

What was Mark's reason for mentioning that his sister was coming?

Table 5. Responses for question 5

Possible responses	Brazil	Japan
(a) Mark is just thinking ahead to the weekend and can't remember whether David has met his sister or not.	6	4
(b) There is nothing Mark can do to help his friend, so he is mentioning a problem of his own.	4	10
(c) Mark is suggesting that David take Mark's sister to the play. (*)	45	42
(d) Mark wants to be sure that David knows that the woman he is with this weekend is his sister and not a new girlfriend.	8	7

Most students in both groups selected Bouton's preferred choice. The implicature in this case was seemingly not difficult to grasp. The situation itself can be seen as a matter of fact, if David has an extra ticket and Mark's sister is coming to town, the sister would help David out by going to see the play with him.

6. *When Abe got home, he found that his wife had to use a walking stick to walk.*

*Abe: 'What happened to your leg?'*

*Wife: 'I went jogging.'*

Another way Abe's wife could have said the same thing is .....

Table 6. Responses for question 6

Possible responses	Brazil	Japan
(a) Today I finally got some exercise jogging.	12	3
(b) I hurt it jogging. (*)	41	39
(c) It's nothing serious. Don't worry about it.	6	15
(d) I hurt it doing something silly.	4	6

The situation and the corresponding choices of answers are seemingly quite clear in this question. This may have led most of the students to the expected answer in both groups. Still, the small differences in the selection of (a) and (c) could show some difference in cultural background, as some of the Brazilians chose the answer that justifies the injury, while some of their Japanese counterparts selected the answer demonstrating stoicism by downplaying the injury.

7. *Susan and Mei-ling are students sharing a flat in Sydney, (Australia) and are getting ready to go class together.*

*Mei-ling: 'Is it very cold out this morning?'*

*Susan: 'It's December.'*

What is Susan saying?

Table 7. Responses for question 7

Possible responses	Brazil	Japan
--------------------	--------	-------

(a) It'll be nice and warm today. Don't worry. (*)	10	33
(b) Yes, even though it's December, it's very cold out.	36	2
(c) It's so warm for this time of year that it seems like December.	15	22
(d) Yes, we're sure having crazy weather, aren't we?	1	6

Note: The words 'Sydney (Australia)' and 'December' were replaced with Sapporo (Hokkaido) and July, respectively in the questionnaire given to Japanese students in order to make it easier for them to relate to the season.

The Japanese students' choice of the expected answer can be explained by the fact that Japan, especially Hokkaido, does have the four distinct seasons, unlike Brazil. In Japan, one would never expect to have a cold/cool day in August. However, in Brazil, especially Sao Paulo where the data were collected, the weather is unpredictable, and cool days do occasionally occur in December. The unpredictability of the weather in Sao Paulo might explain choice (b) by such a large number of respondents. Choice (c) does seem to have gotten a relative number of students in both countries confused, which shows difficulty in grasping the implicated meaning.

8. *Jack is talking to his housemate Sarah about another housemate, Frank.*

*Jack: 'Do you know where Frank is, Sarah?'*

*Sarah: 'Well. I heard music from is room earlier.'*

What does Sarah probably mean?

Table 8. Responses for question 8

<b>Possible responses</b>	<b>Brazil</b>	<b>Japan</b>
(a) Frank forgot to turn the music off.	4	2
(b) Frank's loud music bothers Sarah.	11	2
(c) Frank is probably in his room. (*)	39	50
(d) Sarah doesn't know where Frank is.	9	9

Although there was a slight difference in the number of respondents choosing the expected reply to this question, most of them seemed to have grasped the intended meaning of the implicature. The 11 choices of (b) indicate that the Brazilian students inferred that the music may have been too loud for Sarah. It could also be inferred that whenever music comes from Frank's room it means he is home.

9. *Frank wanted to know what time it was, but he didn't have a watch.*

*Frank: 'What time is it, Helen?'*

*Helen: 'The postman has been here.'*

*Frank: 'Okay. Thanks.'*

What message does Frank probably get from what Helen says?

Table 9. Responses for question 9

Possible responses	Brazil	Japan
(a) She is telling him approximately what time it is by telling him that the postman has been there. (*)	49	40
(b) By changing the subject, Helen is telling Frank that she doesn't know what time it is.	7	10
(c) She thinks that Frank should stop what he is doing and read his mail.	4	2
(d) Frank will not be able to interpret any message from what Helen says, since she did not answer his question.	3	13

This question posed here is similar to question number 8 in the sense that it was apparently not difficult for the respondents to infer the intended meaning, somewhat obvious, of the utterance. It can be inferred from the utterance the mail carrier brings the mail at about the same time every day, which, in this case, seems to have worked as a time marker.

10. *Two roommates are talking about what they are going to do during the summer.*

*Fran: 'My mother wants me to stay home and entertain the relatives when they come to visit us at the beach.'*

*Joan: 'Do you have a lot of relatives?'*

*Fran: 'Can a duck swim?'*

How can we best interpret Fran's comment?

Table 10. Responses for question 10

Possible responses	Brazil	Japan
(a) Fran thinks her relatives are boring.	12	20
(b) Fran doesn't have very many relatives.	14	7
(c) Fran does have a lot of relatives. (*)	45	30
(d) Fran is asking Joan if a dog usually has fleas.	4	6

Note: The sentence 'Does a dog have fleas?' was replaced by 'Can a duck swim?' taking into consideration that young people these days may think of dogs as pets who live indoors with their owners and not animals that have fleas.

The largest number of students in both groups chose the expected answer. However, there was a notable difference between them, which could be attributed to how the students view what constitutes 'a lot of relatives' in their respective cultures.

## 5. Discussion

The choice of replies by the respondents failed to show significant differences between the two distinct cultural groups, which could be attributed to these teenagers living in a time of advanced communication technology that enables them to access information around the world. The biggest

divergence was in the choice of answers to question number 7 with the Japanese students scoring better than their Brazilian counterparts. As mentioned above, the reason for the Japanese students' success here can possibly be explained by their familiarity with four distinct seasons and no big variation in temperatures during summer as opposed to the Brazilian students. Still, the second most popular answer in both groups was choice C, which shows some lack of grasping the implicature. In question number 2 the smallest number (6% and 11%) in both groups chose the expected answer. The other answers being evenly spread among the three unexpected choices show the difficulty the students had in grasping the implicature. This confirms Pratama et al.'s (2017) results showing students' difficulty in understanding indirect criticism. Question number 4 had a similar result, with few students choosing the expected answer.

Question number 1 shows some differences that could be explained as a reflection of the subjects' different cultures. The Brazilians seemed better at understanding the irony posed in this question, which could be related to their culture, whereas the Japanese students' choice varied between grasping the irony and not. This question also poses the problem of shifts in society over time. Someone being seen with someone else's spouse could have been a problem when the questions were first created but may not be the case anymore.

Question 3 and 4, which proved to be difficult for the subjects in Bouton's (1988, 1994) and Murray's (2011) studies, were also challenging for the respondents in this study.

Question number 10 showed some differences, with the Brazilian students performing slightly better than the Japanese. This is another situation where the Brazilians seem better at understanding sarcasm and irony as discussed in question number 1, which may seem to show some cultural difference.

In general, the results of this survey partly replicate the results of earlier studies by Murray and Bouton. The need for instructions on the understanding of implicatures was apparent in the two groups surveyed. As the respondents frequently overlapped in their selection of answers to many of the questions, it can be suggested that technology, which has made contact with the world easier, may have helped the students' understanding of implicatures to a limited extent.

The three studies on the use of technology aforementioned has shed some light on how technology can assist students in gaining intercultural communication and competence. It should be noted though that the two studies had social media and the other one had and the virtual exchange as part of their classes.

## **6. Conclusion**

Cultural differences did not seem to play a big role in the responses chosen by the respondents from both groups. However, the respondents in both groups similarly failed to grasp the intended meaning of the implicature in two of the items, questions 2 and 4. That shows that there is an ongoing need for instructions on CI, as has been suggested by many researchers.

It has been ten years since Murray's (2011) study and thirty-three years since Bouton's (1988) study. During this time the world has become more globalized and accompanying that process there have been changes in societies along with advances in technology, which now allows people to have access to knowledge of other cultures in relatively easy ways. Could these two factors have played a role in many of the students in both groups, despite being from very different cultural backgrounds, having selected the suggested answer to most of the questions?

A future study including respondents from different age groups with fewer, more specific and more up to date questions would probably achieve more accurate results. Such study would also benefit by researching if the participants' access to the use of technology, e.g. social media, outside the classroom would influence their pragmatic competence. Would the virtual contact with other cultures have a possible positive effect on the understanding of CI? This would be a beneficial step in extending our knowledge within the area of how learners can be better instructed in the understanding of conversational implicatures.

## References

- Abdelhafez, A.M.M. (2016). The Effect of Conversational Implicature Instruction on Developing TEFL Students' Pragmatic Competence and Language Proficiency. *US-China Education Review A*, August 2016, Vol.6, No.8, 451-465.
- Allott, N. (2018). Conversational Implicature – *Oxford Research Encyclopedia of Linguistics*. Oxford University Press – editor: Aronof, M. January 2018
- Blight, R. (2002). Classroom procedure for explicit instruction in conversational implicature. Paper presented at The JALT Conference Proceedings. Retrieved from <http://jalt-publications.org/archive/proceedings/2002/142.pdf>
- Bouton, L.F. (1988). A cross-cultural study of ability to interpret implicatures in English. *World Englishes*, 17 (2), 183-96.
- Bouton, L.F. (1994). Conversational Implicature in the second language: Learned slowly when not deliberately taught. *Journal of Pragmatics*, 22, 157-167.
- Bouton, L.F. (1999). Developing non-native speaker skills in interpreting conversational implicatures in English: Explicit teaching can ease the process. In E. Hinkel (Ed.): *Culture in second language teaching and learning* (pp. 47-70). New York, NY: Cambridge University Press.
- Cignetti, L.M. y Di Giuseppe, M.S. (2015). Pragmatic awareness of conversational implicatures and the usefulness of explicit instruction. *Revista Nebrija de Linguística Aplicada* (2015) 19.
- Daskalovska, N., Ivanovska, B., Kusevska, M. & Ulanska, T. (2016). The Use of Request Strategies by EFL Learners – *International Conference on Teaching and Learning English as an Additional Language, GlobELT 2016, 14-17 April 2016, Antalya, Turkey*.
- Dorcheh, H.H. and Baharlooie, R. (2016). Development of Pragmatic Competence – *Journal of Language Teaching and Research*, Vol. 7, No.1, pp. 152-157, January 2016.

- Grice, H.P. (1975). Logic and Conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and semantics* (pp.41-58). New York, N.Y.: Academic Press.
- Hagley, E. (2020). Effects of Virtual Exchange in the EFL classroom on Students' Cultural and Intercultural Sensitivity, *Computer-Assisted Language Learning Electronic Journal*, 21(3), 74-87. <http://callej.org/journal/21-3/Hagley2020.pdf>
- Keenan, E. (1976). The universality of Conversational Postulates. *Language in Society*, 5, 67-80.
- Lantz-Andersson, Annika. (2018). Language play in a second language: Social media as contexts for emerging Sociopragmatic competence. *Education and Information Technologies*. Doi 23. 10.1007/s10639-017-9631-0.
- Levinson, S. (1983) *Pragmatics*. Cambridge: Cambridge University Press. Cited in Bouton, L.F. (1988). A cross-cultural study of ability to interpret implicatures in English. *World Englishes*, 17 (2), 183-96
- Murray, J.C. (2011). Do Bears Fly? Revisiting Conversational Implicature in Instructional Pragmatics. *TESL-EJ – The Electronic Journal for English as a Second Language – Vol. 15, No. 2, Sep. 2011*
- Pratama, H., Nurkamto, J., Rustono, Marmanto. S. (2016, November). *Length of study and students' comprehension of English conversational implicature*. Paper presented at International Conference Prasasti III. Surakarta, Indonesia. <http://dx.doi.org/10.20961/pras.v0i0.1540>.
- Pratama, H., Nurkamto, J., Rustono, Marmanto. S. (2017) Second Language Learners' Comprehension of Conversational Implicatures in English – *3L: The Southeast Asian Journal of English Language Studies – Vol. 23(3): 59-66 – <http://doi.org/10.17576/3L-2017-2303-04>*
- Roever, C. (2006). Validation of a Web-based Test of ESL pragmalinguistics. *Language Testing*, 23, 229-256.
- Sedivy, J.C. (2007) Implicature During Real Time Conversation: A View from Language Processing Research – Philosophy. *Philosophy Compass* 2/3 (2007): 475-496. <https://10.1111/j.1747-9991.2007.00082.x>
- Tuan, J. (2012). Does fish swim? Teaching conversational implicatures in the EFL. *Online Journal of Shu-te Social Science*, 7(2), 77-100. Cited in Abdelhafez, A.M.M. (2016). The Effect of Conversational Implicature Instruction on Developing TEFL Students' Pragmatic Competence and Language Proficiency. *US-China Education Review A*, August 2016, Vol.6, No.8, 451-465.
- Taguchi, N. (2005), Comprehending Implied Meaning in English as a Foreign Language. *The Modern Language Journal*, 89, 543-56
- Tannen, D. (1986). *That's not what I meant: How conversational style makes or breaks relationships*. New York: Ballantine Books.
- Tuan, J. (2012). Does fish swim? Teaching conversational implicatures in the EFL classroom. *Online Journal of Shu-te Social Science*, 7(2), 77-100. Cited in Tuan, J. (2012). Does fish swim? Teaching conversational implicatures in the EFL classroom. *Online Journal of Shu-te Social*



Science, 7(2), 77-100.

Yoshida, M. (2014), Why Do Second-Language Learners Misunderstand Conversational Implicatures? *The Japanese Journal of Language in Society*, Vol. 15, No. 2, 50-56.

Xiao, F. Proficiency effect on L2 pragmatic competence. *Studies in Second Language Learning and Teaching*, 5(4), 557. <https://doi.org/10.14746/SLLT.2015.5.4.3>

Author's information

Name : Laura A. B. Kudo

Muroran Institute of Technology

Email : kudolau@mmm.muroran-it.ac.jp