

# Study of Communication Apprehension Among Students with Different Educational and Cultural background

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## Abstract

A 2020 study conducted by Research Psychologist Philips Jeffery on Social Anxiety Disorder (SAD) shows respondents with SAD in China is far greater than the number of respondents with SAD in the US. This data sparked the idea to explore further the topic of intercultural differences related to communication apprehension. This research is meant to answer the question - do students with stronger international background exhibit less communication apprehension when speaking with strangers? By answering this question, this research aims to give parents incite on how their choices make for their children's educations, might impact their communication abilities and life outcome. In addition, it is designed to provide businesses some insight on employees' communication ability from their cultural and educational background - giving communication ability a scale of measure. In answering this question, the experiment paired teenagers from different educational and cultural backgrounds to have a 10 minutes conversation about a pre-selected topic. Their heart rate before, during, and after the conversation were recorded and analyzed.

## Keywords

Communication Apprehension; International school; Semi-international school; Local school; Social Anxiety Disorder.

## 1. INTRODUCTION

Regardless of one's age, career, or personal interests, communicating with strangers is an inevitable fact of life. However, most people are dreadful communicators in contemporary society. In a study conducted by Research Psychologist at Naval Medical Research Unit-Dayton Philips Jeffery [1], in which he surveyed 6,825 randomly selected individuals from seven different countries, 36% of respondents met the criteria for diagnosis with Social Anxiety Disorder (SAD). This analysis, dove deeper into Jeffery's research, to realize that the portion of respondents with SAD within the China is far greater than the number of respondents with SAD in the US [1]. This data sparked the idea to explore further the topic of intercultural differences related to communication apprehension with when addressing strangers, trying to explain this phenomenon. Having spent time within both international curricula and Chinese curricula, the researchers of this study have observed a correlation between peer's skills at effectively communicating with strangers and the type the education system in which each individual studied. Anecdotal observations gave birth to this research question, are students who are educated within international school curricula better at communicating with strangers than students educated within a local Chinese curricula?

In a 2009 study published in Communication Quarterly by University of Wyoming Professor Chia-Fang (Sandy) Hsu [2] on the sources of difference in communication apprehension between Chinese in Taiwan and Americans, Hsu indicates that Chinese respondents

demonstrated statistically significant higher levels of communication apprehension compared with their American counterparts.

Another study conducted by Yanban Zhang, Jeff Butler, and Burt Pryor [3] compares the level of communication apprehension between Chinese university students and university students in the United States, indicates a similar phenomenon - Chinese students, defined as students born and raised within The People's Republic of China's Mainland, seem to exhibit more communication apprehension when conversing with strangers, compared with similarly aged students born and raised within the Continental United States. The data were compared with American norms established by James C. McCroskey [4] with the responses of 177 students at a large state university in Florida. The Chinese sample reported a significantly higher mean score on apprehension about communication than the Americans. The observations noted in these studies indicate that differences attributed to racial, cultural, or most importantly, educational systems differences contribute toward students' communication abilities. These ideas led to the formulation of this investigation which seeks to answer the question, "do international academic curricula cultivate students who are more apt at communicating with strangers relative to local Chinese academic programs?" Borrowing insight from the above-named investigations, along with the personal experience of the principal investigator of this study, this paper proposes the hypothesis that students with more years of international education exhibit less communication apprehension when speaking with strangers.

## 2. IMPORTANCE OF THIS RESEARCH

The perceived importance of interpersonal communication competence continues to rise; studies increasingly show that a greater percentage of the human population struggle with communication issues due to advancement in technology. According to Steingold Daniel Researchers from LivePerson found that the younger generation prefers digital channels, "with 7 out of 10 Millennials and Generation Z participants preferring to communicate that way. Millennials are currently the largest demographic in the US, making this information crucial for leaders and managers everywhere. Due to them preferring digital channels to communicate, it can be argued that these young professionals may be hurting their chances to develop their communication skills in the workplace." [5] This research has its importance because it might help us understand how the choices parents make for their children's educations, might impact their communication abilities and, by the transitive property, their life outcomes. In addition, communication abilities cannot be clearly reviewed through a resume. Therefore, this research also hopes to provide businesses some insight on employees' communication ability from their cultural and educational background. Beyond the commercial uses for this information, this research is crucial in bring awareness about a crucial aspect of different academic systems and programs and how those differences lead to specific outcomes from their students.

In Ronald Candy S. Lasaten and Christobal A. Jay-ar's investigation into 'Oral Communication Apprehensions and Academic Performance of Grade 7 students', the researchers point out that "Students' level of oral communication apprehension significantly influences their level of academic performance in English, Mathematics, and Science" [6]. Although the experiment is conducted with limited sample size and sample segment, it indicates a connection between students' level of communication apprehension and their academic performance.

## 3. HYPOTHESIS

Students who have spent more years in an international school exhibit less communication apprehension when speaking with strangers.

Student whose parent have greater years of international education exhibit less communication apprehension when speaking with strangers.

#### 4. LIMITATIONS

1. This experiment has a very limited sample size of 6 pairs.
2. All the subjects are either my friend or my friends' connections, aren't selected through random sampling. They may feel more comfortable talking since they have a shared connection.
3. There are no female samples in this experiment.
4. All the samples are teenagers between 16 and 18 years old, there aren't any adult samples.

#### 5. PROCEDURE

1. To test the hypothesis, an experiment is conducted with 6 pairs of teenagers (age 16 - 18). They are complete strangers with each other and they will be paired up to have a 10 minutes conversation with each other in Chinese, which is their native language. The conversation will take place in a quiet and closed space to minimize environmental influence.
2. All the sample conversations are purely Chinese.
3. The conversation will be on a general topic that both side should have enough common knowledge about. An example of such question can be "how is your summer so far?"
4. The two subjects in conversation will have different cultural and academic backgrounds based on their time spent in local, semi-international, and international schools (international schools are schools with a complete Western curriculum and teaching system, semi international schools are local schools that offer an international program).
5. Before the conversation, subjects' heart rate will be measured using Dido Medical Level Smart Watch for 3 minutes in a quiet room on his/her own. The average minute heart rate in this period of time will be taken as the subjects' resting heart rate.
6. During the experiment, subject's heart rate will be simultaneously monitored with the same device.
7. After the experiment, every test subject will be asked to fill out a survey about regarding their personal information as well as education and cultural backgrounds.
8. For every year they've attended an international school, they will earn 1 point. For every year they've attended a semi-international school, they will earn 0.5 points. For every year they've attended a local school, they will earn 0 points.

Participant	Years in international school	Years in semi-international	Years in local school
Norman	16	0	0
Simon	0	0	16
Jerry	0	0	20
Kevin	4	0	20
Daniel	2	0	16
Scott	4	0	12

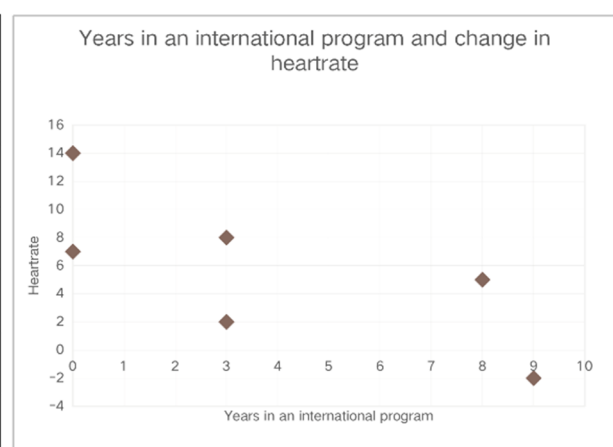


Figure 1. Participants' profile

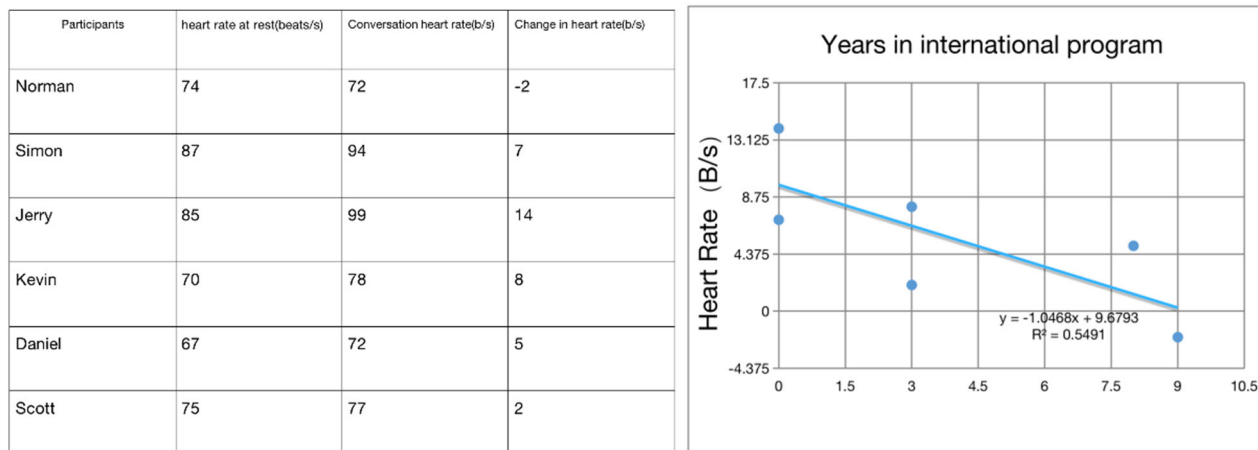


Figure 2. First experiment result

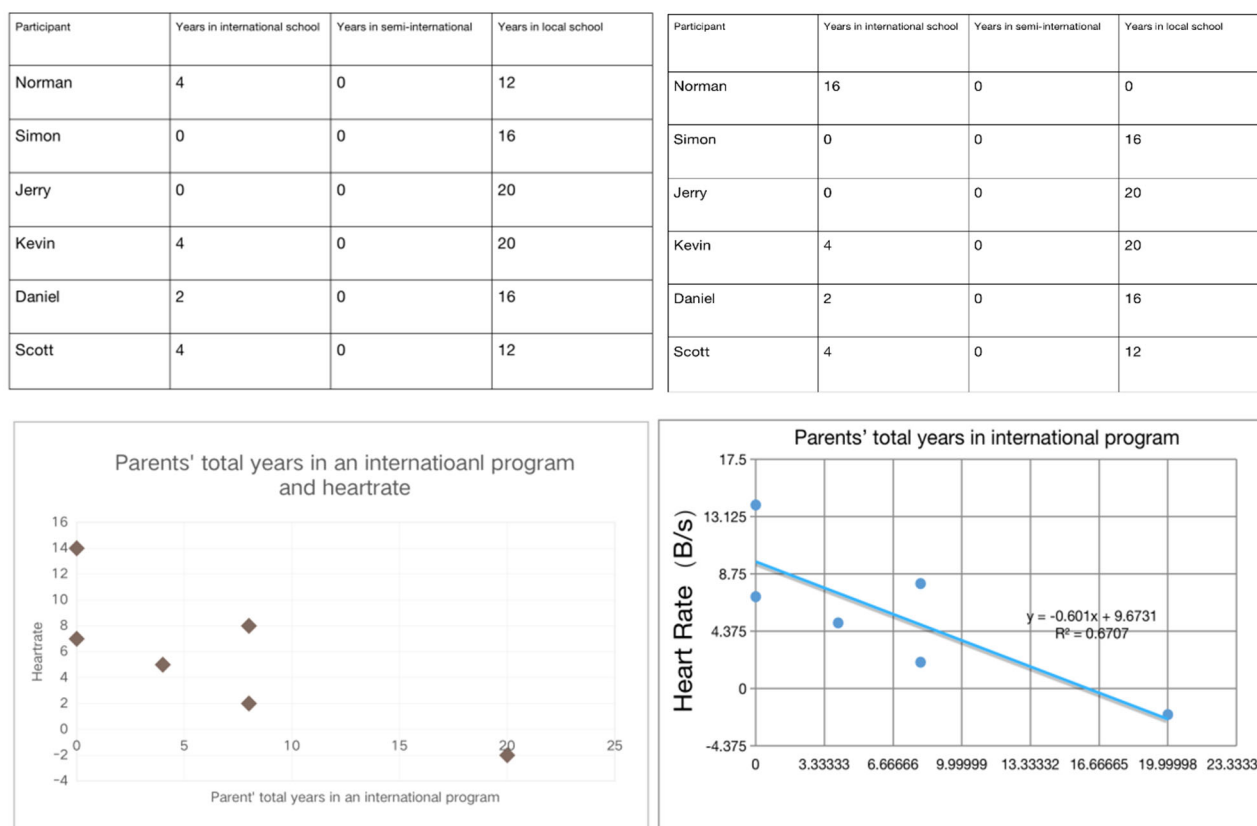


Figure 3. Participants' father and mother's profile

## 6. CONCLUSION

By creating a scatter plot on change in heart rate(b/m) and participants' total years in international school, we can conclude that for this particular sample, there is a negative relationship between the two variables. As shown from the best fit line generated from regression analysis, the slope of -1.0468 and this negative slope is an indication of the negative correlation between the two variables; hence, a smaller change in heart rate correlates with longer years of education in international school.

From the scatter plot on change in heart rate(b/m) and participants' parents' total years in international program, it is also reasonable to conclude that there is a negative relationship between the two variables as the linear regression curve gives a slope of -0.601. This also

indicates that the relationship between change in heart rate and participants' parents' total years in international program is weaker than the relationship between change in heart rate and participants' total years in international school since the magnitudes of its slope is smaller - a decrease in  $y$  causes a smaller increase in  $x$ .

To summarize, from the result of this experiment, out of the respondents who participated in this study, those with international family background and longer years of international education tends to have less communication apprehension when speaking with strangers.

## 7. INACCURACY

Though this experiment's result indicates a potential phenomenon, the sample size is too small to make a near definite conclusion. However, I do hope to continue this research on interpersonal communication as in the future with larger sample size.

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