Language Acquisition and Anxiety: Writing Anxiety Impedes Better Learning

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Abstract

With the gradual expansion of the bilingual/multilingual talent market, many people experience the pressure of learning multiple languages. This article mainly discusses two types of anxiety that learners may experience in the process of second language acquisition (SLA), which eventually will affect their final learning outcome. The researchers designed an experiment to test the possible correlations between writing anxiety and written language, speaking anxiety and spoken language, and conduct which one of them displays a greater impact on poorer performance of SLA by comparing their respective effects on written and spoken language. The study includes 278 participants aged from 18 to 25 years old, completely new to Chinese, whose first languages are English, Spanish, and Korean. They are required to learn how to speak and write numbers 1 to 10 in Chinese (Chinese has its own characters for numbers), and they will be quizzed on both sections. Specifically, it is hypothesized that writing anxiety reflects a higher negative correlation with SLA dependent on the final score; However, it is possible to have alternative answers: speaking anxiety is more negatively correlated with the outcome of SLA, or, the study suggests that there is no significant correlation. In fact, the results could vary based on participants’ learning abilities, types of language, and set time etc. Nonetheless, this design can help learners complete their learning goals more efficiently by studying and reducing the negative impact of writing or speaking anxiety on the results of second language acquisition.

Keywords

Second Language Acquisition (SLA); Language acquisition; Writing anxiety; Speaking anxiety.

1. Introduction

Nowadays, more and more people start to learn a second language because being bilingual is no longer an arduous task to complete. Therefore, it is essential to know the factors that influence the outcome of second language acquisition (SLA), which eventually will help make more effective study plans.

Previous studies and analyses have established language anxiety as a negative predictor of second language learning achievement [1] (Teimouri, Goetze, & Plonsky, 2019). Many of these studies have often been done to investigate the correlation between second language learning and language anxiety. However, these studies do not delve into investigating enough details of impact of writing and speaking anxiety individually; therefore, the primary objective of this paper is to evaluate the impact of speaking anxiety on spoken language as well as the impact of writing anxiety on written language, and then determine if one of them can have an overwhelming effect on language learning skill.

1.1. Background

Indeed, a notable number of previous studies have thoroughly scrutinized the relationship between language anxiety and SLA in many different languages by manipulating various
probable factors that can influence the outcome of SLA. For example, the study conducted by Cheng (2017) pondered the interrelationship between 4 types of anxiety (listening, speaking, reading, and writing) from three aspects: cognitively, physically, and behaviorally. The study included 523 college students who contributed data respectively by holding discussion groups reporting their anxiety levels according to these 4 types of anxiety. Because the study intended to develop a multidimensional measure of language anxiety, it mainly focused and concluded that participants exhibited severe anxiety in the dimensions of cognitive anxiety than in physical or behavioral. It is eventually concluded that all of them influence second language learning skills up to a certain extent individually and monitoring the effects of these four types of anxiety can be a helpful instrument to improve the skill [2].

Moreover, in spite of both speaking and writing anxiety have harmful effects on SLA, speaking anxiety is considered a separate component to writing anxiety according to Cheng et al. (1999). The study establishes speaking anxiety as a partial cause that results in anxiety within the classroom when learning a second language [3]. On the other hand, writing anxiety is regarded to be more definitive to language skills [3] (Cheng, Horwitz, & Schallert, 1999). However, Woodrow (2006) developed a scale for second language speaking anxiety and proved that speaking anxiety has a detrimental impact on the outcome of language speaking learning [4]. Although writing anxiety also leads to poor performance in language learning, the only thing that stood out was that its impact could vary dependent on the learner's personal writing skill [5] (Daud, Daud, & Kassim, 2016).

In short, even though the adverse correlations between speaking anxiety and SLA, writing anxiety and SLA are well-supported by studies, there is no absolute answer of either type of anxiety is considered more negatively associated with SLA.

1.2. Proposed Study

The proposed study mainly focuses on examining the influences of speaking anxiety and writing anxiety to the different extents on learners from the view of investigating their corresponding effects on spoken and written language, and determining which of them will have a more detrimental effect on second language acquisition.

According to reviewed studies, it is confirmed that both writing and speaking anxiety can result in a decline in second language learning. Yet, the existing evidence is not compelling enough to illustrate their separated impact on written and spoken language. While other studies uphold the finding that anxiety has actual interference with learning, which further influences achievement levels, little studies come from the perspective of analyzing the respective impact of specific type of anxiety on a particular language skill. As such, with the goal of the study attempted to investigate this examination, the objective lies in filling the gaps established from these previous studies. For this study, the participants will learn how to speak and write numbers 1 to 10 in Chinese (Chinese has its own characters for numbers), and later be tested on both speaking and writing skill. Their performance will be recorded to determine either speaking or writing anxiety will have more effects on SLA. Therefore, the hypotheses will be as follows:

The null hypothesis is that the impact of writing anxiety on written language has a greater negative correlation with the final outcome of SLA.

The alternative hypothesis is that the impact of speaking anxiety on spoken language has a greater negative correlation with the final outcome of SLA.
2. Method

2.1. Participants
This study will be experiment-based and will involve 278 participants aged between 18 to 25 years old with normal language skills and are completely new to Chinese. The sample size is calculated with an estimated population of 1000 college students, with a 95% confidence level and a 5% margin of error. The first languages of them are English, Korean, and Spanish. The participants will be divided into three groups, dependent on their mother tongue. And the location of the experiment is in the lab room.

2.2. Materials
An examination paper to test participants' writing skill to write 1 to 10 in Chinese letters; a general recorder that will record the pronunciations of participants speaking. As a way to achieve a different result from previous research studies, this study will involve heart rate monitoring for the measurement of the heart rate of participants during the test. And finally, a designed anxiety questionnaire to fill out to test participants' anxiety level in different sections:

<table>
<thead>
<tr>
<th>Writing Section</th>
<th>Speaking Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel upset when I can't produce any ideas on how</td>
<td>I feel upset when I can't speak fluently</td>
</tr>
<tr>
<td>to write the character</td>
<td></td>
</tr>
<tr>
<td>I feel anxious when I see other learners complete</td>
<td>I feel ashamed when I have an accent</td>
</tr>
<tr>
<td>the written test faster than me</td>
<td></td>
</tr>
<tr>
<td>I can't focus on writing if the submission time is</td>
<td>I don't want to speak out loud when native speakers are there</td>
</tr>
<tr>
<td>close</td>
<td></td>
</tr>
<tr>
<td>I feel pessimistic when I think of getting bad</td>
<td>I feel afraid if I was going to make a mistake</td>
</tr>
<tr>
<td>feedback for a written test</td>
<td></td>
</tr>
<tr>
<td>I feel afraid if I was going to make a mistake</td>
<td>I can't relax when I am asked to speak</td>
</tr>
</tbody>
</table>

2.3. Procedures
Each group will learn numbers 1 to 10 in Chinese, both speaking and writing, in the same time period and take the test after everyone is finished learning. The speaking quiz is to pronounce 1 to 10 in Chinese individually, and this process will be recorded. Because Chinese has its own letters for 1 to 10 instead of roman numerals, as the following shows:

<table>
<thead>
<tr>
<th>Writing Section</th>
<th>Speaking Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
</tr>
</tbody>
</table>

The participants will be checked on writing these characters. During the test, every subject will be put on a heart rate monitor to record their heart rate in both sections. After the test, they will be asked to fill out the questionnaire to report their anxiety level in each section.

3. Results and Discussion
The data generated from this experiment will be obtained by calculating the mean within each associated score and then average them all together: testing score, heart rate, and self-reported
anxiety score, which are all regarded as critical determinants in this test. Besides, the testing score will have a negative correlation with heart rate and self-reported anxiety score. For this study, the resultant figures should be adequate to measure the relationship between writing and speaking anxiety and SLA. It is expected that the score of writing anxiety and SLA would result in a stronger negative correlation, which is consistent with the hypothesis of this study. However, this could be due to the complexity of Chinese characters that are somehow difficult to write down and memorize, but this may not apply to the group of Korean participants because of the similarities between written forms of Korean and Chinese. Moreover, there are also alternative results considered. If the opposite result is found, then this might suggest a higher relevance between speaking anxiety and SLA. However, if the scores do not vary a lot, there may be no significant correlation between the two variables, so that even though both types of anxiety can be negative predictors of language learning, their influences are not comparable.

4. Conclusion

4.1. Limitations of the Present Study

One of the major limitations of the present study is that both writing and speaking anxiety could vary depending on the complexity of different languages. For instance, in this study, Chinese characters can be challenging for English and Spanish groups to produce, but not that difficult for the Korean group. If the planned language changes to Hindi or Thai, the anxiety and results may also alter. Accordingly, it is possible that the difficulty of producing written languages can increase learners’ anxiety level, thus affecting the final language acquisition results. Furthermore, the final data is not completely precise because testing score mainly lies on subjects’ outcome that is completed within a short time of period, which cannot fully reflect the individual learning ability because some people need to take longer to accomplish the study goal. As well as the heart rate index, there are many other ways that can cause the rise of heartbeats such as excitement and nervousness, etc.

4.2. Directions for Future Research

Nonetheless, there are further considerations when illustrating the results of previous works and projecting for future studies of these research studies. It is feasible to conduct more experiments studying if there is a more prominent correlation between all other types of language anxiety, not just limited to speaking and writing anxiety. Likewise, future studies could also focus on what are possible causes and factors that lead to the declining relationship between language anxiety and achievement. It should help figure out whether language anxiety is established as the dominant factor for poor academic achievement on SLA or whether other relevant reasons should be taken into considerations. Additional studies can be conducted to investigate factor-analytic techniques to verify whether the correlation between language anxiety and second language acquisition is affected by language classes as a factor.

References


