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The Impact of Multilingualism on Grade Point Average among College Undergraduates

Alexandra Kovalik

ABSTRACT

Very little research is available regarding the effects that multilingualism has on academic success. This specific study looks at 305 students at a large public university in the northeast who were surveyed about their grade point average and the number of languages that they are fluent in. After administering a survey to various preselected classrooms, data was entered and collated using STATA. The data shows that within our findings, there is no significant relationship between multilingualism and grade point average. Only 12% of our respondents were multilingual. 71% of multilingual students had a grade point average between 2.67 and 3.66, and 28% of students who spoke one language had a grade point average between 3.76 and 4.0. With further research, this study could have important implications for understanding multilingual student populations.

INTRODUCTION

There is a lot to be said for the ability to speak more than one language, and as globalization spreads, that ability could become even more important. Within our society, fluency in multiple languages is a growing trend, but it is also one that is understudied. By gaining information about multilingualism, and its impact on grade point average, we will have an opportunity to track success based on the number of languages that an individual can speak. With this research it might become clear that early second language education in more than one language should be implemented in our school system. Or, it might also become clear that multilingualism has no direct impact on success and should therefore not be mandated.

Multilingualism cannot only help to bridge gaps in communication, but it can also lead to more respect among people of different backgrounds. This shared respect for others of different cultural and social backgrounds can create cohesion within the world that has the potential to result in a better society.

LITERATURE REVIEW

Despite the continuing discussion surrounding multilingualism and its impact on success, there is very little research on the topic. Lutz and Crist (2009) authored one of the few articles that looks directly at multilingualism and grade point average. The study looks at data collected from a survey and compared the results to when the survey was re-administered. The results
show that overall students who have some sort of ability to speak Spanish have a higher GPA than those who do not. While this data seems useful to determine bilingualism’s effect on GPA, the results may be less reliable. Another study, by Coombs and Cebula (2009), used a survey and looked at rewards for language skills among nurses. The study examined data gathered from the National Sample Survey of Registered Nurses. The data showed that there is really nothing to support the idea that bilingualism has an impact on earnings among nurses (Coombs and Cebula 2009). This data was examined from 2000 and 2004, however, and current research is warranted.

A third study by Martin (2010) uses case studies to examine the impact of multilingualism on a student’s identity. While this research doesn’t look at grade point average, which is a more tangible form of success, it uses personal experiences regarding schooling and multilingualism. All of the participants reported feelings of racism and exclusion due to the lack of space given to embrace their multilingualism; they felt a sense of segregation from these universities instead of unity. Rather than their multilingualism and culture having a positive impact on their experiences, these students felt that their cultural differences were ignored. Some of the participants actually reported attending complementary education programs to compensate for what was not being offered in regular classes. The study explores the importance but also lack of concern for and integration of those who are culturally different within their universities (Martin 2010). These case studies, while not directly connected to multilingualism and grade point average, are indicative of the negative impacts that can occur when multilingualism and different cultures are not addressed properly within the education system.

A final study by Milambiling (2011) looks at students’ personal assessments of their own multilingualism. This particular study investigates students who wish to learn English as another language. After analysis of various assessments, the author determined that students benefited from language appreciation that helped to “bring one language to another,” meaning that they used their language skills to help them when learning another language. While this study doesn’t look at grade point average, it is clear that multilingualism is present among students and that it needs to be addressed properly.

While much of the research that is present addresses multilingualism, almost none of the research focuses explicitly on grade point average. Previous studies all focus on various aspects of multilingualism yet none of them focus on a tangible form of academic success like the research question being answered in this study, which uses GPA. The previous research used a survey method which suffers from limitations like this current study. The data is self-reported and is also obtained conveniently, meaning we got the data in a way that was easy for us, but didn’t necessarily eliminate all biases. The research question being answered in this study will provide another form of evidence to measure the impact of multilingualism on grade point average. This is not an area that is researched and will hopefully provide a starting point for further research of this kind.
HYPOTHESES

Null: There is no difference in grade point averages between college students who speak one language and college students who are multilingual.

Alternative: College students who are multilingual have higher grade point averages than college students who only speak one language.

RESEARCH METHODS

Sample and Procedure

The research was gathered at a large, public university in the Northeast in large general education Sociology courses. Prior to the start of the term, professors in these classrooms had granted permission for a fifteen-minute survey consisting of 118 questions to be administered within their class during the Fall 2011 term. About mid-way through the term, the study personnel went into these classrooms and read a verbal statement before handing out the surveys. After completion, students dropped their anonymous surveys into a box at the front of the classroom. A total of 353 surveys were returned.

There was very little risk involved for participants taking this survey. There was potential for psychological discomfort because participants might find some of the questions embarrassing since they involve sensitive and private topics like drug and alcohol use, sexual activity, and political views. This data is anonymous, and therefore, we will not be able to match survey with their participants, which limits the amount of risk that there was for participants taking this survey. As far as benefits are concerned, participants will help other students studying sociology gain a better understanding of our undergraduate community. This might also have an impact on students who wish to pursue sociology. Students who take this survey will also gain experience in taking surveys of this format, which will become useful if they end up taking a course in research methods.

While we acknowledge that this is a convenience sample due to the close proximity and the lack of random selection for our sample, this method was beneficial. It was less time consuming and easier to conduct with the available resources. Due to this form of sampling, however, the data gathered does not give us a very good representation of the entire university undergraduate population.

Survey

The survey administered to participants was created based on various topics that the students in Methods of Social Research during the Fall 2011 term wished to gather information about. Each student was given the opportunity to have a total of two questions on the survey—one for their independent variable and one for their dependant variable. The survey had a total
of 118 questions encompassing topics such as drug use, political beliefs, socio-economic status, multilingualism, and grade point average.

Variables

In order to test the hypothesis that multilingual students have a higher grade point average than students who speak one language there were two questions on the survey that pertained to this. The first question asked students to indicate how many languages they are fluent in. Participants were given the option of 1, 2, 3, 4 or more. For the purpose of this research, fluency was defined as the ability to express oneself readily and effortlessly. The second question asked participants to disclose their overall grade point average (GPA). If students were first-year students they were asked to give their high-school GPA. Options for this question were broken into the following categories: 0.00-0.66 (F), 0.67-1.66 (D), 1.67-2.66 (C), 2.67-3.66 (B), 3.67-4.0 (A), Prefer not to answer, and don’t know.

RESULTS

Sample Characteristics

Table 1.1 What is your Gender?

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>225</td>
<td>72.12</td>
<td>72.12</td>
</tr>
<tr>
<td>Male</td>
<td>87</td>
<td>27.88</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>312</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.2 What is your current Grade Point Average?

<table>
<thead>
<tr>
<th>GPA</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.67-2.66</td>
<td>21</td>
<td>6.77</td>
<td>6.77</td>
</tr>
<tr>
<td>2.67-3.66</td>
<td>201</td>
<td>64.84</td>
<td>71.61</td>
</tr>
<tr>
<td>3.67-4.00</td>
<td>88</td>
<td>28.39</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>310</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.1 shows the distribution of respondents based on their gender. This table shows that of the 312 participants that answered this specific question on the survey, a majority of
them, 72%, were female while only 29% were male. This indicates that there is an unequal gender distribution among students who completed our survey.

Table 1.2 shows the distribution of respondents based on their current grade point average. About 65% of respondents reported having a GPA of somewhere between 2.67 and 3.66 which corresponds to a B. Only 6% of participants claimed to have a GPA between 1.67 and 2.66, which is the equivalent of a C. Of the respondents, 28% reported a GPA between 3.67 and 4.0, which translates into an A.

**Main Findings**

Table 1.3 How many languages are you fluent in?

<table>
<thead>
<tr>
<th>Fluency</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 language</td>
<td>268</td>
<td>87.58</td>
<td>87.58</td>
</tr>
<tr>
<td>2 or more languages</td>
<td>38</td>
<td>12.42</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>306</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.4 Fluency and Grade Point Average

<table>
<thead>
<tr>
<th>GPA</th>
<th>1 Language</th>
<th>2 or more Languages</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.67-2.66</td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>7.12</td>
<td>2</td>
</tr>
<tr>
<td>2.67-3.66</td>
<td>172</td>
<td>64.42</td>
<td>27</td>
</tr>
<tr>
<td>3.67-4.0</td>
<td>76</td>
<td>28.46</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>100.00</td>
<td>38</td>
</tr>
</tbody>
</table>

Pearson chi2 (2) = .6630 Pr = .0718

The results for the question concerning whether or not multilingualism has an impact on grade point average among university college students were different than expected. Table 1.3 shows the distribution of students based on their language fluency. Of the 306 students who answered this question, only 38 or 12% of them identified themselves as multilingual; an overwhelming 88% of students surveyed only spoke one language.

Grade point average is not significantly correlated with multilingualism. When measuring this against grade point average, which is visible in Table 1.4, the data are more transparent. A majority of the sample, 65%, indicated that they had a GPA between 2.67 and
3.66 while another 28% of respondents reported a GPA of 3.67 to 4.0, however, only 9 of those respondents spoke two or more languages. A small percentage of respondents, 7%, reported having a GPA between 1.67 and 2.66. Of the 21 students who reported a GPA of 1.67-2.66, only 2 of them spoke two or more languages.

When using an alpha level of \( p > .05 \), the null hypothesis, that there is no difference in grade point average between college students who speak one language and college students who are multilingual, cannot be rejected. The results from Table 1.4 show that the level of significance is .07, which suggests that there might be a correlation between multilingualism and grade point average, but in the opposite direction than expected. That is, multilingualism might be negatively correlated with GPA.

CONCLUSION

This study investigated the relationship between multilingualism and grade point average among undergraduate students at a large, public university in the Northeast. The main findings suggest that there is no significant relationship between multilingualism and grade point average, or if there is one, that the relationship is negative. While the majority of respondents only spoke one language, the participants who reported being multilingual had similar GPAs as students who spoke one language. If anything, the participants who spoke more than one language had slightly lower GPAs.

The findings are interesting because they contradict much of the increasing value that is being put on learning multiple languages. While this particular study doesn’t seem to suggest that multilingualism leads to a better grade point average, part of this could be the relatively small sample size for our study. Interestingly enough, only 9 of the 305 respondents spoke more than one language and had a reported GPA between 3.66 and 4.0. Another aspect that could contribute to the results that GPA is not affected by multilingualism might be related to the way the data was obtained. While a survey is affordable and easy to administer, it also relies on self-reporting, which might skew the data. Another limitation of this study is that data was only gathered within one department at one school in one Northeastern state. Not only is this non-representative, but the state is not a very diverse state and does not represent the entirety of the United States.

If this study were to be completed again, it would be beneficial and probably more accurate to use another form of sampling, such as cluster sampling, which would give us data from various sampling frames. Another aspect that could be added to this study would be to look at respondents whose first language is not English and compare it to those whose first language is English. Results might show that students who do not speak English as their first language struggle to keep up in a predominantly English speaking school system. Although the findings in this study do not suggest that there is a positive relationship between multilingualism and grade point average, there are many limitations to this survey that if changed, might provide different results. Given the current findings, it does not seem that
initiating early language education in multiple languages in our school system would have much of an impact. Yet, with further research it might become clear that early second language education fluency could significantly improve grade point average.

Multilingualism and its impact on grade point average are not widely researched and yet there is a significant amount of discussion surrounding this topic. Although this research question doesn’t confirm that multilingualism positively impacts grade point average, it cannot be concluded that it doesn’t impact other aspects of one’s life.

REFERENCES


Martin, Peter, 2010. “‘They have lost their identity but not gained a British one’: non-traditional multilingual students in higher education in the United Kingdom.” Language and Education. 24:1, 9-20.