Verifying the Mediating Effect of the Expectations of Significant Others on the Academic Achievement and Self-Expectations of Indigenous Students

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Abstract: The aim of this study was to verify that the expectations of significant others play a mediating role in the relationship between academic achievement and self-expectation among indigenous Taiwanese students. We surveyed 1,300 indigenous high school students in Eastern Taiwan (selected through stratified cluster random sampling), and recovered 1,216 valid questionnaires. Data was processed using regression analysis. Results: The expectations of significant others have a partially mediating effect on academic achievement and self-expectation. We recommend that parents, teachers, and friends expect greater scholastic achievement from indigenous students, which would lead students to expect more of themselves and ultimately perform better academically through the self-fulfilling prophecy effect. This would effectively contribute to closing the higher education gap among indigenous groups.

1. Introduction

Only 14.12\% of indigenous people in Taiwan have a college degree or higher qualification, compared to 35.4\% of non-indigenous people, a gap that has recently been highlighted by advocates of equal opportunity in education. Education has a critical influence on career prospects, and lack of education puts indigenous people at a disadvantage for employment, which leads to social and economic hardship [1].

Education is highly valued in Taiwan, based on the belief that a good education leads to a good job. Students, with the support of their parents, do everything within their power to perform well academically and gain admission to top-ranked schools. A number of studies have shown that academic performance significantly influences access to education [2-4]. Although the 12 year compulsory education policy in Taiwan is touted as exam-free, schools that receive more applications than the mandated admission quota still take academic achievement into consideration, including performance in sports, arts, community service and other areas. Academic achievement always has and always will be the deciding factor in school admissions.

In their well-known Wisconsin model of socioeconomic attainment, Sewell et al. [4] found that academic achievement positively influences the expectations of significant others (such as parents, teachers, and friends). The greater the academic achievement, the higher their expectations [3]. Researchers in Taiwan have also found that academic achievement positively influences the expectations of parents [5]. Significant others expect more of high performing students [6].

Based on the psychological theory of the self-fulfilling prophecy, or the Pygmalion effect, higher expectations are reflected in behavioral outcomes [7]. The probability of this phenomenon occurring is even greater for adolescents, who are particularly susceptible to the influences of significant others. Adolescents may expect more of themselves if key people in their lives have high academic expectations of them, leading to greater achievement. In addition to the expectations of significant others, academic achievement also drives Asian American youth to expect more of themselves in educational performance [8]. Bui [9] also discovered a predictive relationship between academic achievement and educational expectations.

Our position is that the expectations of significant others act as a mediator in the relationship between high performance and self-expectations. We set out to test the mediating effect of this variable on
academic expectations and performance among indigenous high school students. We hope that the results of this study will provide insights that will contribute to closing the educational gap among indigenous groups.

2. Methodology

We distributed 1,300 questionnaires to indigenous high school students in the eastern region of Taiwan. A total of 1,251 questionnaires were recovered, 1,216 of which were valid. Cronbach’s α for the scale of the educational expectations of significant others was .856. We employed the verification method proposed by Baron and Kenny [10] along with regression analysis to verify how the expectations of significant others play a mediating effect in the relationship between academic performance and self-expectations among indigenous students.

3. Results and Discussions

3.1. Results

The regression analysis in Table 1 shows that academic achievement is a predictor of the expectations of significant others ($R^2=.02$, $<.001$). This demonstrates that academic achievement strongly influences the mediating variable. The greater the achievement ($β=.14$), the higher the expectations.

The table also shows that the expectations of significant others is predictive of self-expectations ($R^2=.11$, $p<.001$). This demonstrates that the mediator has a significant influence over the dependent variable. The higher the expectations of significant others ($β=.34$), the more students expect of themselves.

In order to prove our position, we needed to demonstrate a predictive relationship between academic achievement and self-expectation. This predictive power would then need to weaken or even become insignificant once we had factored in the mediating variable - expectations of significant others.

Model 1 (Table 1) shows that academic achievement is strongly predictive of self-expectation ($R^2=.05$, $p<.001$). In other words, the more students achieve ($β=.21$), the more they expect of themselves.

As seen in Model 2 (Table 1), once the mediator had been included in the regression analysis, both academic achievement and the expectations of significant others were predictive of self-expectations (explanatory power $R^2=.14$, $p < .001$). The greater the achievement ($β=.17$), the higher the expectations of significant others ($β=.31$), leading students to expect even more of themselves. The β value for academic achievement was reduced, indicating that the expectations of significant others have a partially mediating effect.

Table 1 Regression analysis of academic achievement, self-expectations, and the expectations of significant others

<table>
<thead>
<tr>
<th>I.V.</th>
<th>Expectations of significant others</th>
<th>Self-expectations (Model 1)</th>
<th>Self-expectations (Model 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$β$</td>
<td>$b$</td>
</tr>
<tr>
<td>(constant)</td>
<td>3.71*</td>
<td>10.71*</td>
<td></td>
</tr>
<tr>
<td>Academic achievement</td>
<td>0.08*</td>
<td>.14</td>
<td></td>
</tr>
</tbody>
</table>

N 1,120 1,170 1,151 1,115
R² F R² F R² F R² F
.02 < .11 * .05 * .14 *

I.V. Independent Variables, D.V. Dependent Variables, *p<.001

3.2. Discussion

This study found that the expectations of significant others act as a mediator in the relationship between academic performance and self-expectation among indigenous students. Their academic achievement also strongly influences the expectations of significant others. These findings are consistent with those of previous research [3-6]. In other words, the more students achieve academically, the more their parents, teachers and friends expect of them.

Academic achievement also has a significantly positive influence on the self-expectations of indigenous students, which is consistent with the findings of Bui [9] and Goyette and Xie [8]. Finally, self-expectations are positively influenced by the expectations of significant others, which supports the self-fulfilling prophecy theory. After factoring in the expectations of significant others, we found that the positive influence of academic achievement on self-expectation was slightly reduced. This demonstrates that the expectations of significant others have a partially mediating effect on academic performance and self-expectations.
4. Conclusion

We conclude that the expectations of significant others have a partially mediating effect on academic performance and self-expectations among indigenous students. Academic achievement also strongly influences the expectations of significant others, and both variables affect self-expectations. After factoring in the expectations of significant others, we found that the positive influence of academic achievement on self-expectation was slightly reduced. Therefore, the expectations of significant others are a mediator in the relationship between academic performance and self-expectations.

5. Recommendations

This study found that the expectations of significant others are a mediator in the relationship between academic performance and self-expectation among indigenous students in Taiwan. We therefore recommend that the parents, teachers, and friends of indigenous students raise their educational expectations, which will drive students to expect more of themselves and ultimately perform better academically through the self-fulfilling prophecy effect. This would effectively contribute to closing the higher education gap among indigenous students.

6. References


