

The structural model of educational aspirations: Mediation effects of college adjustment and academic self-concept on educational aspirations

1. Research overview

In the Chinese education context with an increasing opportunity for accessing university, the execution of educational aspirations plays a key process in early adolescent status attainment. This study found that, the relation between cultural capital and educational aspirations were mediated by college adjustment and academic self-concept.

2. Purpose

This study examined the educational aspirations of working-class students in elite universities in China. First, it investigated aspirations as a core construct linked to students' university experiences and graduate outcomes. Second, it explored the complex interactions between family, institutional and personal influences on aspirations. Third, it distinguished between idealistic and realistic educational aspirations to provide a more nuanced understanding of student success. By analyzing the relationships between family cultural capital, students' college adjustment, academic self-concept, and their academic attainment, this research aims to uncover how expanded university access paradoxically intensified class inequalities within the higher education landscape.

3. Methods

3.1 Measurement

Family cultural capital, college adjustment, academic self-concept were latent variables. First, family cultural capital was measured by 10 items. They were adopted from PISA surveys and questionnaires and loaded on one factor. Second, college adjustment was measured by 31 items, being loaded on two factors (academic and social adjustment). Items were adopted from Student Adaptation to College Questionnaire (SACQ) developed by Baker and Siryk (1986, 1999). Third, Reynolds' (1988) academic self-concept scale (ASCS) was used to measure university students' academic self-concept with 39 items loaded on one factor. Fourth, both idealistic and realistic educational aspirations were included in the structural model. Fifth, participants' current cumulative Grade Point Average (GPA) at university was used to indicate their academic attainment.

3.2 Participants and Data collection

The participants of this study are working-class students in elite universities included in Double First-Class Initiative in China, which refers to universities with outstanding research strengths and teaching qualities recognized by the Ministry of Education (Liu et al., 2019), receiving remarkable financial support from the central government in China (Hu & Wu, 2021). There were 558 working-class students from elite universities in mainland China completed a self-administered survey. Of these students, the percentage for female students were 47.3% (N =264), for male students was 52.7% (N =294).

3.3 Data analytical strategy

Considering a hypothesized model with complex relationships between latent constructs and observable variables in the present study, structural equation modeling (SEM) will be used to answer research questions. Before SEM, CFA was used to determine whether the observable variables measure the corresponding latent variables. To be able to test the significance of mediation effects, bootstrap confidence intervals (95%) with 1000 bootstrap draws were used (Preacher & Hayes, 2008; Shrout & Bolger, 2002). The mediation effect can be considered to be statistically significant if the confidence interval excludes zero.

4. Results and discussions

Confirmatory factor analysis (CFA) test results showed that each latent construct (family cultural capital, college adjustment, academic self-concept, cultural capital) obtained the adequate reliability and validity. Students' ethnicity, gender, grade level, and the number of sibling(s) were controlled in the structural model. The structural model achieved an acceptable model fit.

Results for structural models demonstrated positive mediation effects linking cultural capital and educational aspirations, via college adjustment (for idealistic aspirations, $\beta=6.76$, 95%CI [1.80, 19.11]; for realistic aspirations, $\beta=4.96$, 95%CI [1.61, 13.13]), and via academic self-concept (for idealistic aspirations, $\beta=0.77$, 95%CI [0.17, 2.33]; for realistic aspirations, $\beta=0.62$, 95%CI [0.10, 1.82]). These results suggested that working-class students' well-adjusted college experiences and well-developed academic self-concept help them mitigate limitations posed by lower level of family cultural capital in shaping their educational aspirations.

The present study contributes to the literature through, first, introducing cultural perspective based on Bourdieu's cultural capital conceptualization to explain educational aspirations. Second, framing educational aspirations as a contextual variable. Instead of regarding aspirations as a relative private concern for students

themselves, family contextual influences were shown of importance to raise aspirations. The results also point to the needs to embrace national initiatives on raising aspirations should be emphasized. The ambition of government to increase the aspirations of students, especially those from low SES backgrounds should not be in doubt. This is expected to be stronger with more effective measures. Universities should develop programs to improve students' college adjustment academically and socially, and cultivate positive academic self-concept to overcome potential limitations posed by lower level of family cultural capital among working-class students.