

# How Cultural Capital Affects Student Academic Achievement

Ting Ge, Chenshuo Wu

Nanjing University, Nanjing 210046, China

**Abstract:** *In the context of calls for educational equity and competence-focused education, the relationship between cultural capital and student academic achievement and the mechanisms influencing the relationship are key issues in the understanding of educational stratification and institutional tensions. Based on the two-session data from the China Education Panel Survey, this article analyzes how cultural capital affects student academic performance using the covariate balancing generalized propensity score method and structural equation modeling. The findings reveal that the effect of cultural capital on student academic achievement can be mediated by self-efficacy, and that the school's preference for exam-focused education is negatively related to the positive effect of cultural capital, particularly objectified cultural capital.*

*Best Evidence in Chinese Education 2026; 22(2):2071-2076*

*DOI: 10.15354/bece.26.ar011*

---

*How to Cite: Ge, T., & Wu, C. (2026). How cultural capital affects student academic achievement. Best Evidence in Chinese Education, 2026, 22(2):2071-2076.*

---

**Keywords:** *Cultural Capital, Disparities in Academic Achievement, Educational Reform, Competence-Focused Education*

---

**About the Author:** Ting Ge, School of Social and Behavioral Sciences, Nanjing University, Nanjing 210046, China.

E-mail: [tge@nju.edu.cn](mailto:tge@nju.edu.cn)

Chenshuo Wu, Nanjing University, Nanjing 210046, China.

**Correspondence to:** Ting Ge at Nanjing University in China.

**Conflict of Interests:** None

**Funding:** No funding sources declared.

**AI Declaration:** The author affirms that artificial intelligence did not contribute to the process of preparing the work.

---

© 2026 Insights Publisher. All rights reserved.



Creative Commons NonCommercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License

(<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed by the Insights Publisher.

---

## **Introduction**

**S**INCE the 1990s, China's basic education has been characterized by concurrent emphases on competence-focused and exam-focused education. While the school progression mechanism remains dominated by standardized examinations, for which students need to spend extra time improving their test-taking skills, a portion of schools have incorporated holistic competence development into their evaluation systems. Due to the uneven distribution of educational resources and the general-vocational education streaming system in China, reform efforts to promote competence-focused education vary greatly among schools, leading to significant divides in the attitude towards exam- and competence-focused education.

Currently, examinations remain the primary device for selection in China. Yet, examination content is increasingly expanding to assess more comprehensive competences. Competence-focused education calls for all-round development of students, with an evaluation system consisting of multiple dimensions such as extracurricular knowledge, artistic talents, aesthetic literacy, expression ability, and learning motivation. This notion of education does not deny the role of examinations but instead integrates cultural literacy, among other competences, into the evaluation system to broaden the scope of examination content. Competence-focused education facilitates the institutional recognition of the significance of cultural capital in education, increasing the possibility of converting it into academic advantages.

This article revolves around two questions. First, at the individual level, how does cultural capital affect student academic achievement, and what role do non-cognitive skills play in this process? Second, at the school level, how does a school's educational focus affect the outcomes of cultural capital? By addressing these questions, it aims to provide new empirical evidence on the mechanism through which cultural capital impacts student academic achievement in the context of reform for promoting competence-focused education. The study proposes the following research hypotheses:

H1: Cultural capital has a direct positive effect on student academic achievement.

H2: Self-efficacy mediates the relationship between cultural capital and student academic achievement. Increasing cultural capital can, to some extent, enhance student academic achievement through improving their self-efficacy.

H3a: The effect of cultural capital in improving student academic achievement vary depending on the level of the school's preference for exam-focused education. The stronger the preference, the weaker the positive effect of cultural capital.

H3b: The indirect effect of cultural capital on academic achievement improvement mediated by self-efficacy varies among individuals, depending on the extent of the school's preference for exam-focused education. The positive effect of self-efficacy on student academic achievement weakens as the school's preference for exam-focused education intensifies.

## **Data, Variables, and Methods**

### ***Data***

The data for this study are derived from the China Education Panel Survey (CEPS). In the baseline survey in the 2013–2014 academic year, the CEPS interviewed a total of 10,279 seventh graders and 9,208 ninth graders. In the 2014–2015 academic year, a follow-up survey was conducted for the former seventh graders, resulting in a valid sample size of 9,449 for longitudinal research. The present study confines its analysis to data of students from urban schools, with a total of 4,996 students from 54 urban schools being included in the sample.

### ***Variables***

Student academic achievement is the dependent variable in this study, measured by the student's average score of mid-term examinations for three core subjects (Chinese, Mathematics, and English) in the eighth grade. Cultural capital is the independent variable, operationalized by four indicators measured in the student's seventh grade: (i) the number of extracurricular enrichment classes attended (e.g., painting, calligraphy, music, dancing, chess, and sports); (ii) the frequency of participation in after-school cultural activities (such as parent-child co-reading, visiting museums, and watching performances); (iii) the number of books owned by the family (measured on a 1–5 scale, with higher scores indicating more books); and (iv) the number of cultural facilities at home (including desks, computers, and internet access). The first two indicators are related to embodied cultural capital, while the latter two concern objectified cultural capital.

Student self-efficacy is the mediating variable. A short-form version of the General Self-Efficacy Scale is included in the CEPS questionnaire. The study employs principal component analysis to extract common factors to measure the respondent's self-efficacy. The school's preference for exam-focused education is the moderating variable, reflecting whether it prioritizes student exam results as the core basis for educational evaluation and resource allocation. Two indicators are used as proxy variables to operationalize this preference: (i) the proportion of students participating in off-campus subject-based training; and (ii) the school streaming classes

based on student exam results or not (no = 0, yes = 1). These two indicators represent the general climate and institutional mechanism of exam-focused education, respectively.

To adjust for potential confounding effects, a set of control variables were also included in the analysis, such as demographic variables (gender, registered residence, the number of siblings, self-reported health state, the number of private tutoring courses attended, and teachers' appraisal), home-related variables (family SES, living with parents or not, parental educational expectation), and school-related variables (school ranking in the district or county, the number of facilities in the school, and budgetary allocation for each student).

## ***Analytical Methods***

The empirical analysis of this study comprises three steps. First, the Covariate Balancing Generalized Propensity Score (CBGPS) method was employed to mitigate selection bias in cultural capital investment. Second, to examine the mediating effect of self-efficacy on the relationship between cultural capital and student academic achievement, a structural equation model with school-level fixed effects was created to control for unobserved school-level variations. After the model fit indices met the corresponding standards (CFI > 0.95, TLI > 0.95, RMSEA < 0.05), the 500-time Bootstrap method for confidence interval estimation was applied to determine the direct effect of cultural capital on student academic achievement and the indirect effect of cultural capital on academic achievement through self-efficacy. Third, to investigate the moderating effect of the school's preference for exam-focused education, the study further extended the structural equation model by incorporating this variable, as well as the interaction terms between cultural capital and the school's preference for exam-focused education, and between self-efficacy and the school's preference for exam-focused education, in order to examine the moderating effect of this preference on the direct path and the mediating path.

## **Research Findings**

The results show that the direct effect of cultural capital on student academic achievement was negative, though not statistically significant ( $\beta = -0.015$ ,  $p > 0.1$ ). On the other hand, its indirect effect through self-efficacy was significantly positive ( $\beta = 0.007$ ,  $p < 0.001$ ), indicating that cultural capital improves students' academic achievement by enhancing their self-efficacy. This finding supports H2, while H1 is not verified. To compare the effects of different types of cultural capital, the study divided cultural capital relevant to this research into embodied and objectified cultural capital for further

analysis. The results show that neither category had a statistically significant direct, positive effect on student academic achievement. The path coefficient for embodied cultural capital was negative and marginally significant ( $\beta = -0.020$ ,  $p < 0.1$ ), while that for objectified cultural capital was slightly positive but not significant ( $\beta = 0.001$ ,  $p > 0.1$ ). Nevertheless, both categories positively affected students' academic achievement indirectly by enhancing their self-efficacy, with the indirect effects being statistically significant.

The school's preference for exam-focused education, operationalized by "the proportion of students participating in off-campus subject-based training" and "the school streaming classes based on student exam results or not" as two proxy variables, had a significantly negative moderating effect on the path of "cultural capital  $\rightarrow$  student academic achievement" ( $\beta = -0.074$ ,  $p < 0.01$ ), but with an insignificant moderating effect on the path of "self-efficacy  $\rightarrow$  academic achievement" ( $\beta = 0.006$ ,  $p > 0.1$ ). Hence, H3a is corroborated, whereas H3b is not.

*The Chinese version of this article has been published in Youth Studies, 2025; (05):20-38+193-194. The English version has been authorized for being publication in BECE by the author(s) and the Chinese journal.*

葛霆, 吴晨硕. (2025). 文化资本如何生效——学业成就分化的内在机制与学校教育倾向差异. 青年研究, (05): 20-38+193-194.

*Received: December 19, 2025*

*Revised: February 06, 2026*

*Accepted: March 02, 2026*