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**NEWSLETTER**

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## **The Relationship between Mathematics Anxiety and Mathematics Performance in Chinese Basic Education Students: A Meta-Analysis Based on 68 Papers in Chinese**

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**M**ATHEMATICS anxiety includes a variety of negative emotions, such as fear, tense, and worry, induced by the student's math learning experiences. According to existing literature, there is a stable negative correlation between student mathematics anxiety and mathematics performance, and the incidence of anxiety experience is the highest among all negative emotions in student math learning. Existing meta-analytical studies mainly draw on samples from Western countries with most research results inapplicable to the Chinese context. This study is an analysis based on 22 journal articles and 46 theses in Chinese using the meta-analytic technique. It aims to examine the correlation between mathematics anxiety and mathematics performance in Chinese basic education students as well as the potential moderating factors.

### Research Findings:

- There is a moderately negative correlation between mathematics anxiety and mathematics performance in Chinese basic education students at all levels, including primary, junior secondary, and senior secondary students.
- There are regional differences in the correlation between student mathematics anxiety and mathematics performance with the correlation in students in western regions being much stronger than that in students in eastern and central regions.
- The type of the mathematics anxiety rating scale does not exhibit moderating effects on the relationship between student mathematics anxiety and mathematics performance.
- The negative correlation between student mathematics anxiety and mathematics performance is stronger in high-stakes tests than in non-high-stakes ones.

### Research Implications:

- The Chinese mathematics education community should pay more attention to the pervasive issue of mathematics anxiety among basic education students as a high level of mathematics anxiety

and poor mathematics performance are both unfavorable for their long-term development.

- The Double Reduction policy provides that the number of examinations at the compulsory education level should be substantially reduced to alleviate the students' academic anxiety. The provision deserves more serious consideration; its legitimacy is evidenced by the research results of this study.

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