

## Turning Achievement Around: Predictors of Academic Resilience of Academically At-risk Students in Singapore

Imelda S. Caleon, Nie Youyan, Jennifer Tan, Tan Chee Soon, Ronnel B. King and Kalthom Ahmad

### KEY IMPLICATIONS

- High amotivation and alienation, low emotional awareness and goal-setting skills, and low perceived teacher competence support are malleable risk factors that can serve as the foci of interventions targeting to pre-empt the onset of negative academic trajectories and mitigate the effects of risk factors linked to poor academic performance.
- Enhancing students' emotional regulation and goal-setting skills, and improving student-to-teacher communication and teacher competence support can help academically "high-risk" students to develop academic resilience.

### BACKGROUND

There is a dearth of research on the profiles of *academically at-risk* students (i.e., those who are likely to follow a trajectory of poor academic performance) in Singapore. In the context of this study, students with low numeracy or language proficiency on entry to secondary school, which is a critical transition phase in every student's life, was considered to be at "high risk" for continued low academic performance. *Academic resilience* was defined as the achievement of positive school outcomes despite experiencing significant difficulties or risk factors.

This three-wave longitudinal study drew on strength-based principles (Powell, Batsche, Ferro, Fox, & Dunlap, 1997) and self-determination theory (Deci & Ryan, 1985) to examine the protective factors that can facilitate the development of academically high-risk students' academic resilience.

### FOCUS OF STUDY

The study aimed to examine the potential protective factors that are related to the development of secondary students' academic resilience, to generate profiles of students facing different levels of academic risk, and to compare the profiles of academically high-risk students who developed low academic resilience (i.e., "less resilient" students) and academically high-risk students who developed substantial academic resilience (i.e., "resilient" students).

### KEY FINDINGS

1. Students facing high academic risk reported lower levels of socioemotional strengths and perceived teacher support, and higher levels of teacher alienation and amotivation as compared to their lower risk peers.
2. Emotional regulation, goal-setting skills, student-to-teacher communication, and teacher competence support were found to

be the most consistent factors that were positively associated with the development of the students' academic resilience.

3. Based on student interviews, it was found that the resilient students differed from their less resilient peers in the way they set and pursued their goals, how they viewed and tackled failure, their competence in dealing with others, and their perceived competence support received from key social partners, such as parents, peers and teachers.

## SIGNIFICANCE OF FINDINGS

The results of the study point to key factors on which teachers and programme developers may focus, specifically in supporting students with low baseline language and numeracy proficiency at the beginning of secondary schools. To pre-empt the onset of negative academic trajectories and mitigate the effects of risk factors linked to poor academic performance, reducing amotivation and teacher alienation, and enhancing students' emotional awareness and goal-setting skills are crucial protective factors. Interventions targeting to foster academic resilience of academically high-risk students need to focus on boosting students' emotional regulation and goal-setting skills, and increasing the quality of student-teacher communication and teacher competence support. Helping academically high-risk

students to form a positive mindset about failure, set and pursue goals effectively, and improve their sense of competence and social connectedness, particularly when facing academic challenges, are also salient areas that need attention.

## PARTICIPANTS

Secondary school students ( $N = 1035$ ) from 22 government schools participated in the study.

## RESEARCH DESIGN

This study utilized a mixed-methods research design. Quantitative data were collected in three waves using questionnaires and standardized achievement tests. Qualitative data were collected via open-ended questions and semi-structured interviews.

## REFERENCES

- Deci, E.L., & Ryan, R.M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109-134.
- Powell, D.S., Batsche, C.J., Ferro, J., Fox, L., & Dunlap, G. (1997). A strength-based approach in support of multi-risk families: Principles and issues. *Topics in Early Childhood Special Education, 17*(1), 1-26.

## About the authors

Imelda S. CALEON, Jennifer TAN, NIE Youyan and TAN Chee Soon are with the National Institute of Education, Singapore.

Ronnel B. KING is with the University of Hong Kong, China.

Kalthom AHMAD is with the Ministry of Education, Singapore.

Contact Imelda S. Caleon at [imelda.caleon@nie.edu.sg](mailto:imelda.caleon@nie.edu.sg) for more information about the project.

This brief was based on the project OER 42/12 ISC: Turning Achievement Around: Predictors of Academic Resilience of Academically At-risk Students in Singapore.

## How to cite this publication

Caleon, I.S., Nie, Y., Tan, J., Tan, C.S., King, R.B., and Ahmad, K. (2018). *Turning Achievement Around: Predictors of Academic Resilience of Academically At-risk Students in Singapore*. (NIE Research Brief Series No. 18-027). Singapore: National Institute of Education.

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