Exploring the Relationship Between Self-Theories of Intelligence and Test Anxiety: The Impact of a Brief Intervention Aiming to Promote an Incremental View of Intelligence.

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Introduction

Test anxiety

- Many children are experiencing test anxiety due to the academic pressure arising from the rigorous testing culture in the United Kingdom (Putwain, 2008a).
- Elevated levels of test anxiety have been associated with lower test performance and mental health difficulties (Childline, 2016; Putwain, 2008b).
- Reduced cognitive distortions act as one of the greatest protective factors against the negative experiences of test anxiety (Robinson, Alexander & Gradisar, 2009).

Self-theories of intelligence (SToI)

- Entity theorists are significantly more anxious about schoolwork and doubt their intelligence when they do not achieve high marks (Henderson & Dweck, 1990).
- Reductions in anxiety and increases in test performance have been shown following interventions targeting SToI (Good, Aronson & Inzlicht, 2003).

Methodology

- Sixth-form pupils at three UK secondary schools were randomly allocated to either an intervention or a waiting list control group.
- The intervention group completed the Implicit Theories of Intelligence Scale (Dweck, 1999), the Test Anxiety Inventory (Spielberger, 1980) and vignettes prior to the intervention (time 1), immediately after the intervention (time 2) and three-months later (time 3).
- The intervention consisted of an hour session promoting an incremental SToI. The waiting list control group completed all three measures at times 1, 2 and 3.
- The waiting list control group completed all three measures at times 1, 2 and 3 without any intervention.
- Participants completed a session evaluation sheet following the intervention.

Findings

The intervention group showed statistically significant shifts towards a more incremental perspective immediately after the brief SToI intervention. However, changes in SToI were not sustained at a three-month follow-up.

Changes in self-theories of intelligence (SToI) scores over time

Promoting an incremental perspective does not seem to have a statistically significant impact on reducing pupils’ levels of test anxiety.

Participants found the session to be a valuable and interesting learning opportunity, providing them with information to encourage personal growth and embrace changes through appreciating the value of effort.

Conclusions

Pupils’ SToI can be shifted to a more incremental perspective, albeit temporarily, following a one-hour intervention.

Educational psychologists (EPs) need to explore other strategies to support pupils in managing test anxiety however, it might be that promoting SToI could form a useful part of wider interventions for targeted groups known to be at risk of test anxiety.

Given the benefits of holding an incremental perspective highlighted throughout the literature, the brief one-off session used in this research provides a practical intervention that EPs could realistically use within the time constraints often experienced within the profession (Farrell et al., 2006).

Future research is needed to explore whether the positive effects can be sustained through EPs working with schools to make systemic changes which encourage the promotion of an incremental view throughout schools’ daily practices.

References


