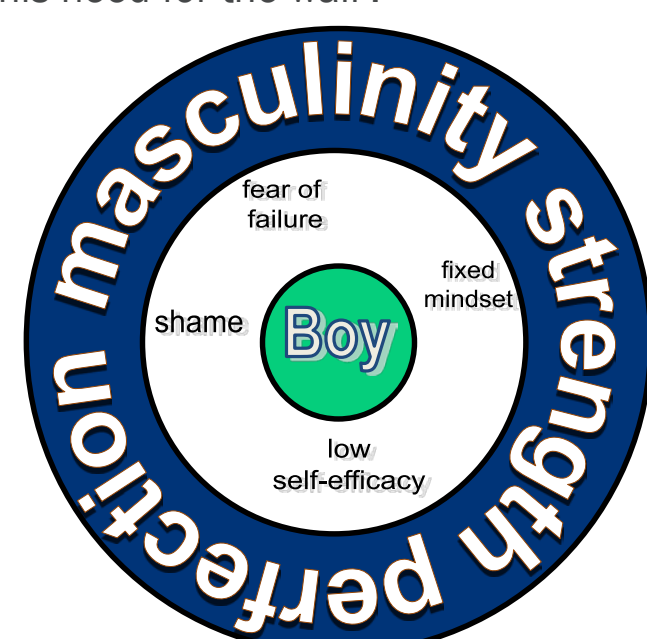


Introduction

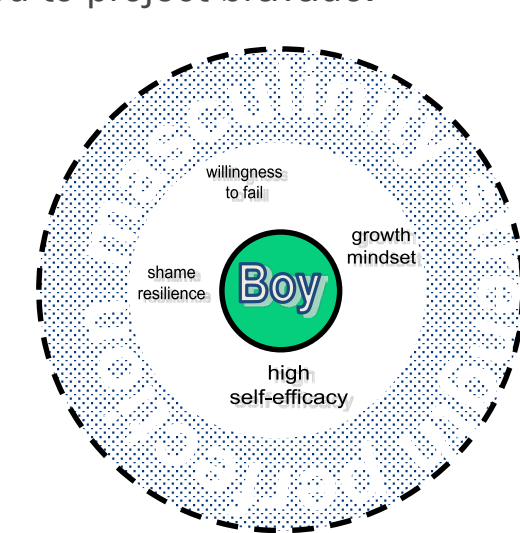
Over the 2016-2017 academic year, eight Year 10 boys completed a series of cooperative learning tasks exploring mindsets, resilience and neuroplasticity before collaborating on a small group project.

A review of literature on group learning, meta-cognitive theories and the development for masculinity led me to develop the following model, which I explored in my project.

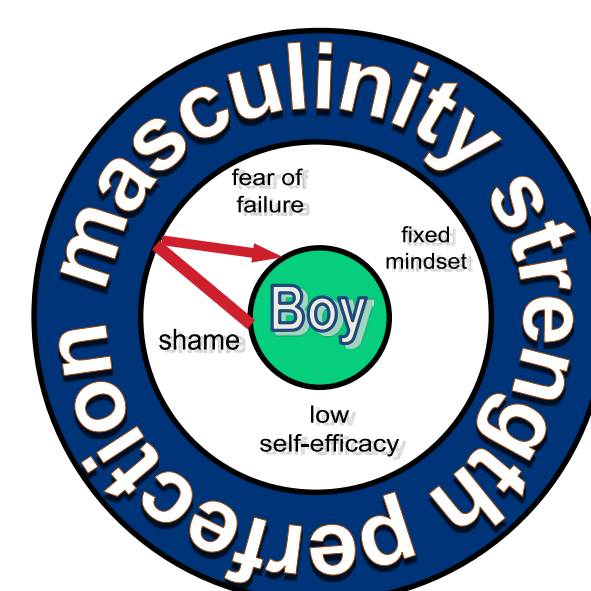
The boy is at the centre of the model, with the protective "wall" of masculinity, strength and perfection that he outwardly projects surrounding him. His fear of failure, fixed mindset, low self-efficacy and shame fuel his need for the wall.



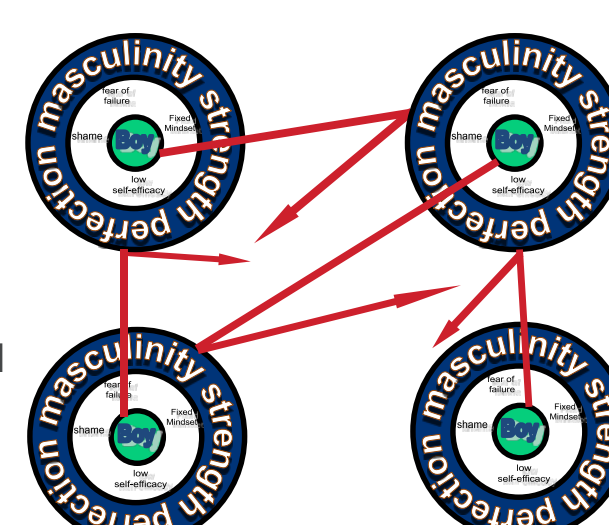
Through developing a growth mindset, increasing self-efficacy and helping the boy to view both shame and failure as a growth opportunity, he will have less need to project bravado.



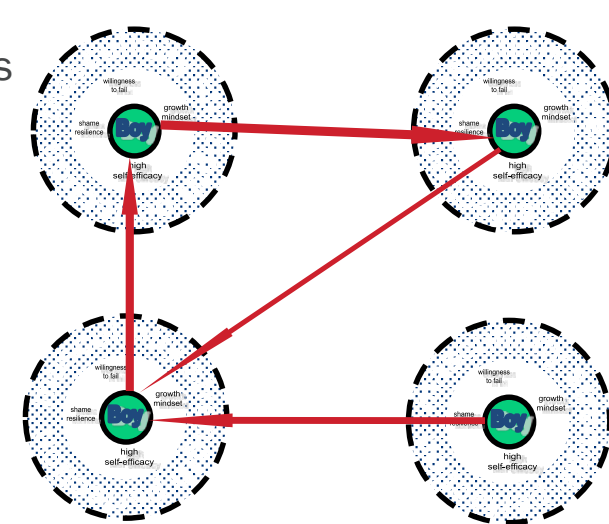
Meaningful interactions are reduced for the boy in two major ways. Firstly, he mediates his own quests for connections because he does not want to appear vulnerable, as demonstrated by the red arrow being reflected inwards.



Secondly, many attempts to connect meaningfully with peers will be reflected by their walls, again demonstrated by the red arrows. This makes collaboration challenging.



Meaningful interactions can happen more frequently, making collaboration a more achievable goal.



The Research Question

How might participation in a group learning project encourage risk-taking in year 10 boys?

Research Context and Participants

Warwick School:

- 1100 year old boys' school
- Located in middle of England
- Moderately selective intake
- Approximately 1200 boys on roll, aged 7-18

My research participants were Year 10 boys. I selected this group as regression analysis revealed that the progress made from Year 7 to Year 9 is the most significant predictor of attainment at GCSE (p-value 3×10^{-12}). I invited the 20 boys who had made the most negative progress from Year 7 to Year 9 to participate in the project. Eight boys completed the project and their work and views were included in the research.

The Research Action

I met with the boys on a weekly basis for 20 sessions, each lasting 20 minutes. During the sessions, we explored ideas about neuroplasticity, mindsets, resilience, failure, shame, intimacy and school through a variety of media and tasks. The tasks were short but usually involved a short clip of a TED talk, then a small group activity. The boys also had a longer seminar with professor Daniel Levitin discussing neuroplasticity and genetics. As a final project, the research participants worked collaboratively in small groups to deliver 20 minute presentations to younger students.

My project was particularly well suited to the methodology of action research owing to the small number of participants and my role as teacher and observer. Furthermore, my ongoing interest in the topic will provide the basis for further research cycles.



Seminar with Professor Levitin



Final project presentation



Final project presentation



One of the small groups working collaboratively to prepare their final project presentation

Data Collection and Analysis

I collected many data sources as triangulation is an important technique when ensuring rigour with qualitative analysis. Combining qualitative and quantitative sources enabled me to support qualitative findings with quantitative data and also explain quantitative phenomena through qualitative analysis.

Qualitative data sources:

- Work produced by research participants during tasks
- questionnaires
- Semi-structured interviews
- Videos of final project presentations
- Audio recording of seminar with Professor Levitin

Quantitative data sources:

- Mindset questionnaire completed by all research participants before and after the project
- Academic progress data

First, I reviewed all of the data to make connections between the sources. I noticed three themes permeated and I coded the data according to these categories. I transcribed the interviews and separated the relevant comments into the categories, also including data from the questionnaires and tasks.

Key Findings and Discussion

Normalising collaboration as a way of working in the classroom

Throughout the project, the boys worked on co-operative tasks before collaborating on a small group project. The boys confirmed my hypothesis that learning to work co-operatively enabled them to collaborate on a project:

"It was easy to work together on the presentation because we had done so much stuff together already"

When designing their perfect school, all groups made references to the role of peer to peer interactions:

"my perfect school would include more grouped activities"

"lots of clubs so people can meet others with similar interests while still learning"

Building supportive relationships

Boys wanted fewer incidences of competition and more opportunities for collaboration. Additionally, boys wanted a productive relationship with teachers and suggested they:

"should be allowed to choose to their form tutors, or pick from a list"

Boys were also reflective on their relationships with each other and considered relationships where they were

"being supported and inspired by friends".

Treating mistakes and failures as learning experiences

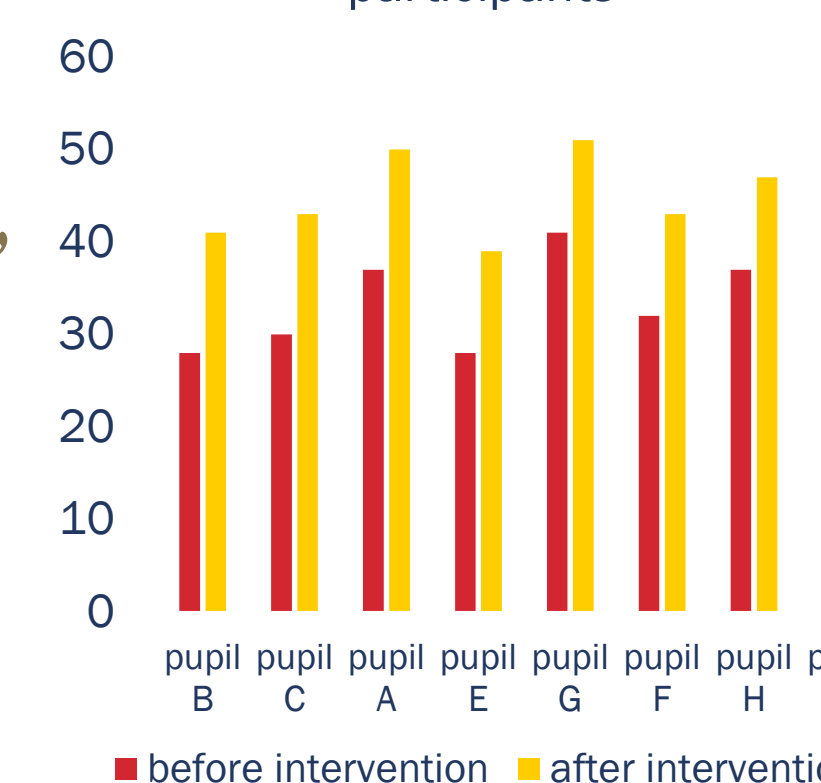
A further impact of the project was a shift in how boys perceived failures and mistakes. The change in mindset scores supported views expressed by the boys:

"I guess any failure can be positive as long as you learn from it"

"you should always be open to improve yourself and to not just do what is 'good enough'"

"when I get something wrong, I think, how can I not get it wrong next time?"

mindset score of research participants



Conclusions

The findings suggest that when structured appropriately, participation in a group learning project may promote risk-taking in Year 10 boys.

Implications for future practice

Although tempting to consider scaling the project up to a whole school context, the more immediate implications are for my own practice. I have included more group learning tasks in my lessons.

Implications for future research

I would be interested in researching both the academic progress of the boys as a quantitative project and also further exploring the validity of the model I proposed, ideally in collaboration with an IBSC school.

Key Readings

- Lotan, R. A. (2003, March). Group-Worthy Tasks. *Creating Caring Schools*, 60(6), 72-75.
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- Pollack, W. S. (2006). The "War" For Boys: Hearing "Real Boys' Voices, Healing Their Pain. *Professional Psychology: Research and Practice*, 37(2), 190-195.