



Supporting students in maths exams

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our awareness of mental health and stress is improving – however exam stress isn't.

Our survey results showed the damaging impact that exam stress can have on students' mental health, with 70% of respondents at school feeling pressure to re-sit their core GCSEs (this includes English and maths) if they failed first time. Additionally, over half of respondents (53%) who are currently doing their GCSEs said that this is the most stressful time of their teenage years.



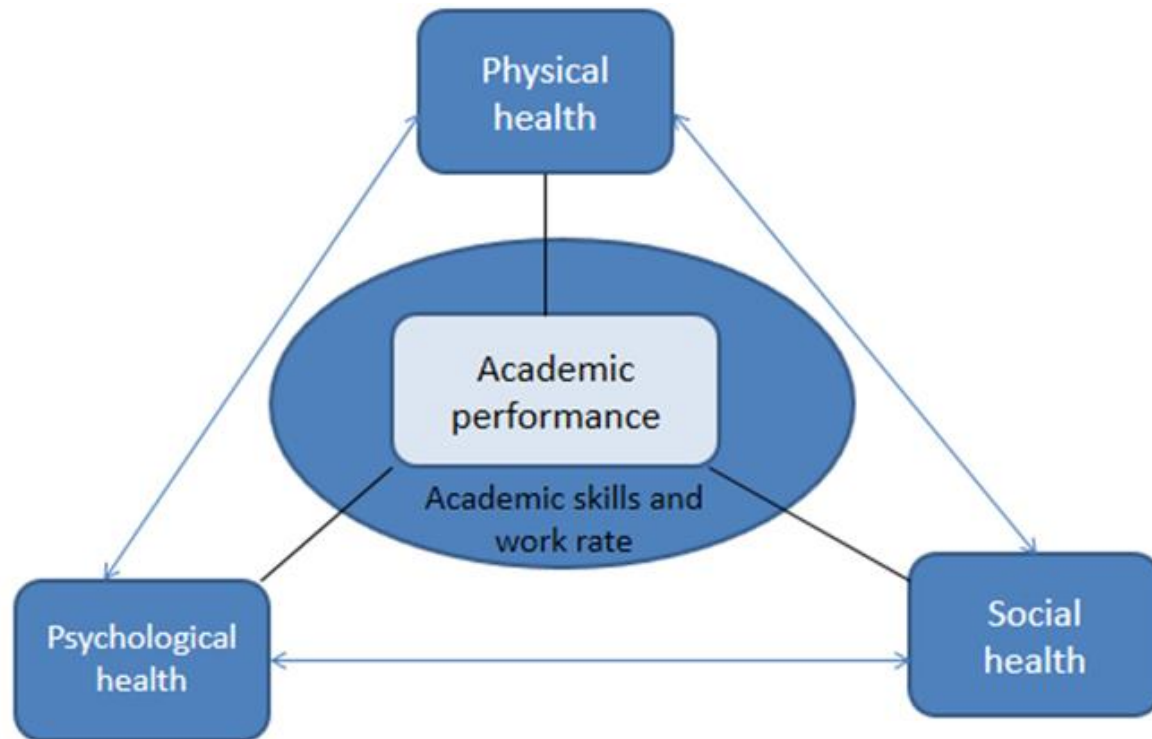
FE Week 2019

A recent large-scale study of 14-16-year-olds in England found that 16.4% of students reported themselves to be highly 'test anxious',

For some students worrying thoughts interfere with their attention, making them less able to efficiently 'process' the task in hand. This can lead to low attendance, poor revision, 'going blank' during the exam or being less able to recall, handle and organise content in their responses. .

A better understanding of test anxiety, and finding ways to reduce its effects, has the potential to benefit a significant number of students..

There are three main areas in which schools can support students to manage anxiety about exams. (Ofqual, 2020)
These are:



Teaching students specific examination and revision techniques to increase their sense of agency and competence

Helping students identify, share and challenge negative thoughts about their exams, which may otherwise become overwhelming

Providing support for managing the physical symptoms of exam stress before, during and after exams

Advice for teachers:

Addressing emotional and cognitive barriers

Choose motivation talk carefully – do ‘fear appeals’ work for everyone?

Normalise emotions – model by talking openly about a range of emotions, show empathy

Challenge negative thoughts

Teach self-compassion

Teach students relaxation and deep breathing techniques

Advice for teachers:

Addressing study and revision skills

Give specific revision guidance – demonstrate and practise independent revision in class

Help students become familiar with exam format

Provide examples and non-examples of question answers

Provide targeted revision for core maths skills – FDP, ratio, area, angles, line graphs, averages, probability, algebra - quality over quantity. Do we believe in teaching more and faster?

Address literacy, language of maths and worded problems in every lesson

Advice for students:

Challenging Negative thinking (a guide for students – [Coping with exam pressure](#))

Practise the Calming Techniques (see attachments)

Know your errors – make a list of typical errors

Know exam questions and exam structure

Maths study and revision skills – visualising problems, checking work

Know your 8 core skills – FDP, ratio, area, angles, line graphs, averages, probability, algebra

Yes to Study Buddies; No to ‘Maths Downers’

Attachments

1. Challenging Negative Thoughts (Negative to positive self-statement shifts) for students
2. Positive Statements for Academic Success for Teachers
3. Procrastination – Super Action self-task for students
4. Relaxation techniques for students
5. Mindfulness – helps dealing with exam stress article from Pearson’s
6. Test Anxiety Inventory – assessment questionnaire
7. Revision Padlet https://padlet.com/masha_apostolidu/5jmxdzqffcyypdgp
8. Well-being and support for physical symptoms of stress-Ofqual

All resources can be found in word and pdf formats on <https://www.missmashamaths.com/resources>

References

<https://feweek.co.uk/wp-content/uploads/2019/06/ME-19-Supp-Digi.pdf>

<https://ofqual.blog.gov.uk/2019/03/15/what-can-schools-do-about-examination-and-test-anxiety/>
What can schools do about test anxiety

<https://ofqual.blog.gov.uk/2022/02/10/what-sorts-of-things-might-help-you-prepare-for-exams/>
What can you do to manage exams

<https://www.gov.uk/government/publications/coping-with-exam-pressure-a-guide-for-students/coping-with-exam-pressure-a-guide-for-students>

<https://www.gov.uk/government/news/ofsted-publishes-research-review-on-mathematics-education>

<https://blog.pearsoninternationalschools.com/Using-mindfulness-to-deal-with-exam-stress/>

https://padlet.com/masha_apostolidu/5jmxdzqffcyypdgp Revision padlet for teachers and students

<https://www.missmashamaths.com/resources> Attachments and other links

Recent projects:

Buck, R. (2018). An investigation of attentional bias in test anxiety. Manchester Institute of Education, The University of Manchester

Flitcroft & Woods (2014). The language Key Stage 4 teachers use prior to high stake exams and how this can be adapted to suit their students. DfE ITEP-funded through The University of Manchester.

Hipkiss, A. (2014). Management of GCSE access arrangements: utilizing student feedback and observational data. ESRC-funded CASE project through the North West Doctoral Training Partnership (NWDTP).

McCaldin, T. (2015). GCSE student experience across Key Stage 4. ESRC-funded through the North West Doctoral Training Partnership.

Some recent publications:

Atkinson, C., Thomas, G., Goodhall, N., Barker, L. Healey, I., Wilkinson, L. & Ogunmyiwa, J. (2019) Developing a student-led school mental health strategy. *Pastoral Care in Education*. doi: 10.1080/02643944.2019.1570545

Flitcroft, D., & Woods, K. (2018). What does research tell high school teachers about student motivation for test performance? *Pastoral Care in Education*, 36(2), 112-125.
<https://doi.org/10.1080/02643944.2018.1453858>

Flitcroft, D., Woods, K., & Putwain (2017). Developing practice in preparing students for high-stakes examinations in English and Mathematics. *Educational and Child Psychology*, 34(3), 7-19.

Woods, K., James, A., & Hipkiss, A. (2018). Best practice in access arrangements made for England's General Certificates of Secondary Education (GCSEs): Where are we 10 years on? *British Journal of Special Education*, 45(3), 236-255. <https://doi.org/10.1111/1467-8578.12221>