Does occupational therapy offer an effective solution to the mental health crisis in education? A systematic literature review

Parker L,[1] Aykroyd J,[1] Hills R,[1] Beaver S,[2] McDonald C,[3] Evans J.[2]

[1]Cambridge Academic Performance, Cambridge, UK, [2]Costello Medical, Cambridge, UK, [3]Costello Medical, London, UK.
Presenting author email: liz@camperformance.co.uk

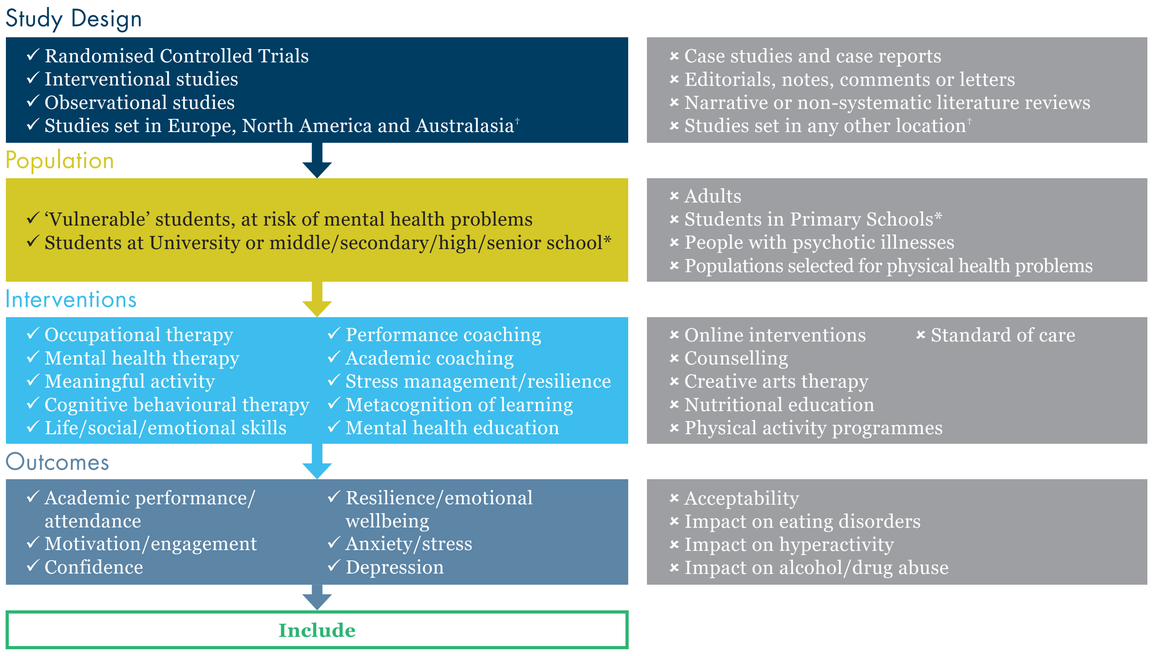
Background

- Early treatment of mental illness is essential. However, 70% of children/adolescents experiencing mental health problems do not receive appropriate interventions at a sufficiently early age suggesting a need to rethink the current approach to delivery of effective treatment to those most at risk.[1]
- Schools play a crucial role in young people's mental healthcare, however, inadequately trained staff can lead to negative experiences of care.[2]
- A recent Care Quality Commission report found that high-quality mental healthcare for young people requires input from varied professions, including occupational therapists (OTs).[2]
- Cambridge Academic Performance (CAP) fuses OT techniques with practical academic performance strategies, identifying vulnerable students through their deteriorating academic performance and delivering a clinical level of support within an educational setting.
- Currently, OTs are not widely represented as mental health practitioners in education, however, from CAP's experience, practical approaches (encompassing problem solving, social skills and cognitive behavioural therapy [CBT]) offered by OTs appear to quickly and effectively provide positive results.
- A systematic literature review (SLR) was conducted to identify published evidence for OT-based approaches in mental healthcare for vulnerable populations in the educational setting.

Methods

- Searches were conducted in MEDLINE, MEDLINE In-Process, MEDLINE Epub Ahead of Print and Embase simultaneously via the Ovid SP platform, the Cochrane Central Register of Controlled Trials (CENTRAL), Cochrane Database of Systematic Reviews (CDSR) and Database of Reviews of Effects (DARE) via the Wiley Online platform on 23/06/2017.
- Further targeted searches of the British Education Index (BEI) and Education Resources Information Center (ERIC) were conducted via the EBSCO platform on 08/02/2018.
- A publication date limit of 2007 onwards was applied to ensure only data reflecting current and recent practices were identified.
- Each record was assessed by two independent reviewers using a two-stage process. At stage 1, title and abstracts were reviewed against pre-specified eligibility criteria, full texts of any records deemed potentially relevant were reviewed against the same eligibility criteria at stage 2 **(Figure 1)**.
- Supplementary searches of three relevant congresses and manual searches of relevant SLR reference lists were conducted.
- Pre-specified characteristics including study design, participant characteristics and results were extracted. The quality of each randomised controlled trial (RCT) and non-RCT was assessed using validated checklists.[3,4]

Figure 1: Title/Abstract and Full Text Review Process



*Only assessed during the full text review. †Geographical location was limited to capture studies most-applicable to UK practice.

Results

- A total of 2,413 records were identified, of which 2,197 were excluded after title/abstract review and 207 after full-text screening. With 5 publications identified through manual searches, a total of 14 publications, reporting 11 studies, were included **(Figure 2)**.
- Of the 11 studies, 10 used CBT-based treatment. The other treatment involved mindfulness-based stress management.
- There were 8 RCTs, all investigating the impact of CBT-based therapies. One non-comparative mixed methods study and two single arm trials were also identified.
- Treatment was delivered by trained clinicians in 5/11 studies, facilitators, with 4 hour to 2 days of training, in 3/11 studies, and teachers in 3/11 studies.

Figure 2: Flow of Information Through the SLR (PRISMA)

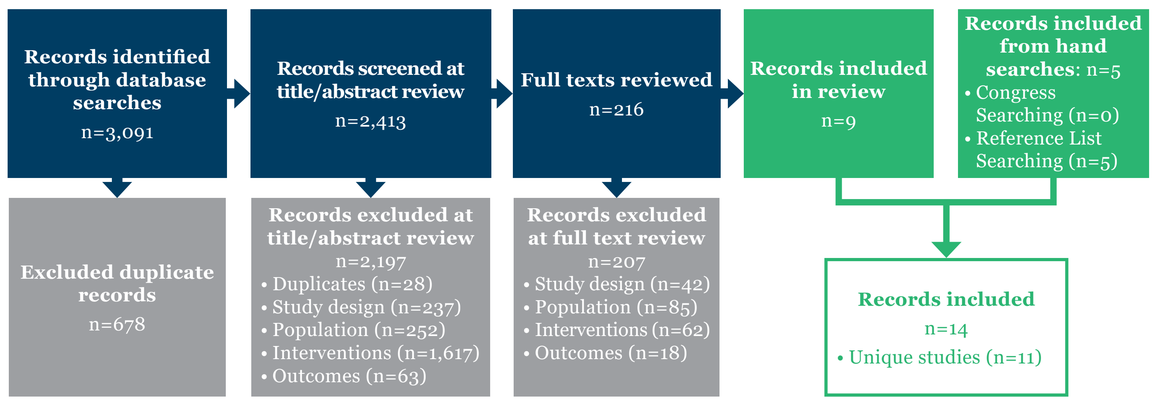


Table 1: Summary of Results

Study	Treatment	Comparator	Delivery of Treatment	Result
Comparative				
Bernhard-sdottir 2013	CBT	No treatment	Clinician	Significant reduction in depression and anxiety scores in CBT versus control
Duong 2016	CBT	Individual support program	Clinician	Numerically lower depression scale scores at 12 months in CBT versus control
Warner 2007	CBT	Educational Supportive Group Function (ESGF)	Clinician	Clinically and statistically significant reductions on social anxiety and clinical improvement scales in CBT versus ESGF
Wijnhoven 2013	CBT	No treatment	Clinician	Significant reduction on depression scales in CBT versus no treatment group at 6 months
Rhode 2014	CBT	CB bibliotherapy	Facilitator	No significant difference on depressive symptom and social adjustment scales between CBT and controls
		Educational brochure		
Stallard 2013 and 2013	CBT	Teacher and facilitator-led PSHE class	Facilitator	No significant difference on general anxiety and depression scales between CBT and controls
		Teacher-led PSHE class		
Stice 2008 and 2010	CBT	Supportive expressive therapy (SET)	Facilitator	Significant reduction in depressive symptoms in CBT and SET groups versus bibliotherapy and no treatment groups at 2 years
		CB bibliotherapy		
		No treatment		
Hunt 2009	CBT	Monitoring	Teacher	No significant difference in numbers of mental health visits between CBT and control up to 4 years post-treatment
Non-Comparative				
Eustis 2017	Mindfulness	None	Clinician	Numerical reduction in depression, anxiety and stress scales post-treatment
Eacott 2008 and 2009	CBT	None	Teacher	Significant reduction in distress level post-treatment
Iizuka 2015	CBT	None	Teacher	Significant reduction on the anxiety scale but not on psychological adjustment scale post-treatment

Abbreviations: CBT: Cognitive Behavioural Therapy; PSHE: Personal, Social and Health Education.

Significant benefit | Numerical benefit | Inconclusive or no benefit

- As shown in **Table 1**, treatments delivered by trained clinicians demonstrated improved outcomes for the treatment groups in 5/5 studies, while those delivered by facilitators showed significant improvements for the treatment group in just 1/3 studies. Of the treatments delivered by teachers, results were mixed. Of the two non-comparative studies, one showed a significant improvement post-treatment and the other showed some improvement in anxiety but not in psychological adjustment. However, the one comparative study using teachers showed no significant difference between the treatment and control groups.

Discussion

- This evidence suggests that CBT is the most commonly used treatment option using OT-principles in the educational sector, likely due to its strong clinical evidence base.
- Whilst treatment effect was variable, this evidence indicates that CBT delivered specifically by clinicians was more beneficial than when delivered by teachers or facilitators who had received brief training in the programs.
- Applying the CBT approach to meaningful activities for students is a core OT skill.

Implications for Practice

- This work highlights an evidence gap for occupational therapy delivered by trained clinicians within an educational setting.
- OTs could play a key role in education, identifying vulnerable students and preventing escalating mental health issues. We believe OTs working directly within education removes stigma, increasing access to vulnerable students and enabling early intervention.

References

1. Mental Health Foundation, (2015) Fundamental facts about mental health, Unpublished; **2.** Care Quality Commission (2017). Review of children and young people's mental health services: Phase one report; **3.** Centre for Reviews and Dissemination. Systematic Reviews: CRD's guidance for undertaking reviews in health care. York: Centre for Reviews and Dissemination, University of York, 2008; **4.** Downs SH, Black N. The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. J Epidemiol Community Health 1998;52:377–84. Note: References for the 14 included publications are available upon request from Parker, L.

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