

The Pyramid project at the University of West London

Wednesday 18th November 2015

University of Portsmouth





What is Pyramid?

Pyramid is a manualised, school-based intervention that supports quiet, withdrawn, isolated children who find it difficult to make friends, and are between 5 to 14 years old, to develop their social and emotional competence and wellbeing.





How it operates

The Pyramid Model

Pyramid Clubs

Meeting to discuss needs, select children for clubs/alternative support

Universal screening of a year group of children



Origins of Pyramid

- Developed by an Educational Social Worker in London in 1970s
- Based on Schiffer's 1976 work on latency period children's need for peer group acceptance, and Kolvin's 1970s Newcastle work on playgroups
- National Pyramid Trust set up in 1992 to expand the work beyond Hillingdon, Bristol and Cardiff





Pyramid Timeline to 2008

- Expansion across England, Wales and Northern Ireland to around 60 local schemes
- Most schemes funded at Local Authority level via the Children's Fund, Healthy Schools, TaMHS etc – ring fenced government funding to support socialemotional wellbeing in schools
- Evidence base mostly unpublished or in the 'grey' literature





Pyramid Timeline 2008-2013

- Publication of data from both University of West London and the research team at Ulster University led by Dr Tony Cassidy in peer-reviewed journals
- 2010 coalition elected Children's Fund discontinued and increased devolution of education spending to the schools, with rise in academies/free schools outside local authority control





What happened next?







Pyramid: A school-based community intervention

http://www.uwl.ac.uk/pyramid/welcome

Pyramid



Context into which Pyramid currently fits

National agenda

- Future in Mind (DH/NHS England, 2015), Chief Medical Officer's
 Annual Report 2012 (Department of Health, 2013) etc.
- What works in enhancing social and emotional skills development during childhood and adolescence?, (Early Intervention Foundation, 2015)
- Mental Health and Behaviour in Schools (DfE, 2014)
- No health without mental health: a cross-governmental mental health outcomes strategy for people of all ages. (Department of Health, 2011)





How Pyramid benefits the University

- On-going applied community research programme
- Valuable experiential placements for students, improving employability
- Opportunity for community engagement
- Partnerships with local authorities and national and local voluntary sector organisations





What the University offers Pyramid

- A stable environment in which it can flourish
- A dedicated research team
- A steady supply of student volunteers
- A valuable association with a Higher Education Institution (HEI)
- Opportunity to network with other HEIs





External Validation

- Pyramid has recently been identified by the Early Intervention Foundation as a Standard 3 (Standard 4 being highest) targeted schoolbased socio-emotional intervention
- Registered with Project Oracle and preparing to submit to Standard 5



Practicalities of delivering Pyramid - 1

- From the start, has been delivered in partnership with schools/local partners rather than building a large, expensive infrastructure
- Allows for adaptation to meet local needs (geography, ethnicity, socio-economics etc.)
- Draws on and supplements existing local resources





Practicalities of delivering Pyramid - 2

- Depends on schools to do it properly!
- Risk of becoming a dumping ground through inappropriate referral
- Subject to fluctuations in funding
- Huge task to take it out to individual schools
- Difficulty of extracting research data from schools
- Fads and fashions at national level





Practicalities of delivering Pyramid - 3

- A non-stigmatising, non-clinical, fun intervention for children because of the delivery place and method
- When schools engage well, it works wonderfully
- We learn and improve all the time, based on feedback from local partners
- Now have a huge network of ambassadors who have volunteered for us in the past
- Schools 'own' it and so do the follow-up with children





Evidence Base Years 3 and 6

- Pyramid school data collected from 7 schools in London and Greater Manchester
- Children's socio-emotional status measured pre and post intervention and at 12 month follow-up using the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997)
- Significant reductions (P<.05) in SDQ Total Difficulties Scores and Emotional Symptoms and Peer Difficulties sub scales for the Pyramid attendees over time compared to the comparison group
- These improvements maintained at 12 month follow-up





Research in Secondary Schools

- Pyramid clubs in primary schools have demonstrated improvements in SE well-being by equipping attendees with coping and resilience skills (Ohl et al, 2008; 2012; Lyons et el 2013; McKenna et al, 2014)
- A "critical age" for intervention effectiveness? (Barrett et al, 2005)
- Does SE well-being impact on other domains, e.g. school performance? (Zins et al, 2004; Durlak et al, 2011)
- Developmentally appropriate theoretical model to inform intervention practice and guide policy





Addressing the research questions

- How effective is Pyramid on the emotional health of pupils in early secondary education?
- Does Pyramid impact on school performance?
- What are the elements involved in Pyramid that might bring about change?
- Is there a 'critical age' for Pyramid to be an effective intervention?



Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997; 1998); The Well-being Questionnaire (WBQ); (NPC, 2010); academic ability self-concepts; academic levels

Focus groups:
Pyramid
attendees;
club leaders

Evidence base to reliably inform future implementation decision making and applied practice

"Programmes designed to promote emotional health and well-being need to be rigorously evaluated." (NICE, 2008)





Research in progress

Data collection: September 2013 (autumn term) – July 2015 (summer term)

- Wide geographical spread of participating schools
- Research considerations:
 - Ethical issues
 - Practical constraints (e.g. school year; access; intervention cycle)
 - Attrition: a challenge

- 1. Wrexham
- 2. LB Ealing
- 3. LB Ealing
- 4. Colwyn Bay
- 5. Llandudno
- 6. Bracknell
- 7. LB Ealing
- 8. LB Ealing





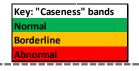
Pilot study results

Table 1: Pyramid group SDQ mean scores (teacher-rated) T1 and T2 (N=6)

	1		
	Base-	Post-	
	line	Club	Difference:
	Mean	Mean	Baseline to
Scale	(SD)	(SD)	post
	7.67	4.17	
Emotional difficulties	(1.5)	(.98)	-3.5
	5.67	2.83	
Peer difficulties	(3.78)	(2.48)	-2.84
	6.5	6.83	
Pro-social (strength)	(1.87)	(1.94)	0.33
	.67	.67	
Conduct difficulties	(.82)	(.82)	0
	3.83	3.67	
Hyperactivity difficulties	(2.04)	(2.58)	-0.16
	17.83	11.33	
Total Difficulties	(4.79)	(5.28)	-6.5

Table 2: Pyramid and Comparison TD scores (teacher-rated) T1, T2 and T3 (N=12)

	Mean	Standard
		Deviation
Pyramid group (T1)	17.83	(4.79)
Comparison group (T1)	5.67	(3.98)
Between groups	12.16	
difference		
Pyramid group (T2)	11.33	(5.28)
Comparison group (T2)	6.67	(4.13)
Between groups	4.66	
difference		
Pyramid group (T3)	13.17	(7.73)
Comparison group (T3)	10.67	(8.47)
Between groups	2.50	
difference		







Pilot study results

"Understanding how and why programs work, not simply whether they work, is crucial." (Dixon-Woods et al, 2011)

Pyramid attendees' responses post-club to how they think Pyramid has changed them as a person:

- "I find it easier to talk to people,"
- "I'm more likely to get involved in activities,"
- "I'm more confident now."

Deductive thematic analysis: club users; group leaders

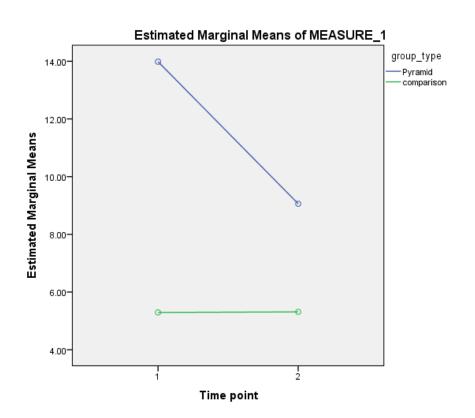
Theme: Delivering outcomes. Subtheme: acquiring new socio-emotional skills. "It helped me with my confidence, for making new friends and stuff like that." (Jessica, L221)

Theme: Making a difference. Sub-theme: individual success stories "...he was the one, right at the front who introduced the whole assembly. To think, would he have done that before? Probably not." (GL1, L13-14)



SDQ results (8 schools)

Figure 1: Teacher-rated mean TD scores T1 and T2 for Pyramid and comparison group



- The interaction between the two conditions and the change over time was significant:
 F (1, 115) = 28.08, p< .001
- The mean TD score from T1 (M = 13.38, SD = 4.88) to T2 (M = 9.06, SD = (5.37) was significantly different for the Pyramid group: t (65) = 7.62, p< .001 but not for the comparison group: t (50) = -.03, p> .05



SDQ sub-scales pre- to post-test

Table 3: Pyramid group SDQ mean scores (teacher-rated) T1 and T2 (N=66)

Scale	Base- line Mean (SD)	Post- Club Mean (SD)	Difference: Baseline to post
Emotional difficulties	5.03 (2.58)	3.09 (2.35)	-1.94
Peer difficulties	4.67 (2.33)	2.73 (2.40)	-1.94
Pro-social (strength)	6.12 (2.38)	7.24 (2.28)	1.12
Conduct difficulties	0.88 (1.26)	0.64 (1.03)	-0.24
Hyperactivity difficulties	3.42 (2.52)	2.80 (2.0)	-0.62
Total Difficulties	13.98 (4.88)	9.06 (5.37)	-4.92

Key: "Caseness" bands
Normal
Borderline
Abnormal

Results from a repeated measures t-test:

 Significant difference in Total Difficulties scores at baseline and post-club: t(65) = 7.62, p<.001

Subscale analysis:

- Significant difference in emotional difficulties scores at baseline and postclub: t(65) = 6.35, p<.001
- Significant difference in peer difficulties scores at baseline and post-club: t(65) = 4.07, p<.001

 (ASL = .0125)





Focus group data analysis

One of the key main themes elicited from a deductive thematic analysis (club members and group leaders):

Theme: Pyramid legacy. Sub-themes: sense of achievement¹; increased engagement²; impact on performance³; impact on group leaders¹

- "I've achieved what I hoped for which is confidence in lessons." (School 3, CR7, L199)
- "Usually like, I don't participate but now I join in more stuff." (School 2, Hermionie, L332)
- "[Before] in class you wouldn't usually talk, you'd be shy to talk and say it in front of everyone and stuff but now when you go to class you usually put your hand up."³ (School 8, Ariana, L315-7)
- "I think it helped my confidence as well as the children's." (School 3, GL5, L314)
- "I've definitely gained something from it." (School 2, GL1, L143)





Summary of key findings

- Both quantitative and qualitative measures indicate an improvement in the socioemotional well being of vulnerable young people who attended Pyramid club.
- Success of Pyramid club facilitated by: a supportive group environment; structure and consistency within a flexible programme; small pupil to adult ratio and well-trained group leaders.
- Barriers to optimum programme delivery: practical issues; lack of robust procedures to ensure the most suitable pupils are selected and/or attend; attrition across the duration of the programme.
- An impact on academic performance in Maths and English was not evidenced at shortterm follow-up but an impact on ability self concepts was; qualitative analysis identifies an impact on school engagement and performance.





Implications and future direction

- Shifting focus to early detection and prevention of MH concerns.
- More evidence-based interventions delivered in educational settings.
- Explicit links between emotional well-being, school performance and outcomes.
- Developmentally appropriate theoretical models; real-world implications.
- Enabling emotionally healthy children and young people achieve their potential.

"I used to get bullied and stuff which basically put me inside of a shell but Pyramid helped to break that shell."

(Year 7 Pyramid club member, 2015).





References

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Questions?

