

What are the benefits of Pyramid Clubs for children aged 7-9 years?

In response to practitioners' inquiry via our evidence request service, What Works for Children? has compiled a summary of available studies looking into the effectiveness of Pyramid Club schemes for children aged 7-9 years. What follows is a concise commentary on what we can draw from these.

Date of searches: February & March 2003

Searches conducted by: Alison Moore

Databases searched:

British Education Index	(subscription only)
CareData	(www.nelh.nhs.uk then through the social care link)
ChildData	www.ncb.org.uk/library/services/childdata
ERIC	www.askeric.org/Eric
Ovid	(subscription only)
Web of Science	(subscription only)

Keywords used: pyramid clubs, after school clubs, pyramid groups, National Pyramid Trust

Key messages:

- Three studies were identified as responding to our original question. Appraisal of these shows that methodological flaws prevent us from drawing conclusions on the effectiveness of the clubs in helping children's academic and social skills. But there were encouraging findings in terms of participants' enjoyment of taking part in the clubs. .
- The authors of the included studies raise concerns about teachers' involvement in both the screening of children to attend Pyramid Clubs, and progress assessment. If the assessors know which children have attended clubs and which have not, they may not be able to give an objective view of the children's progress. Using independent assessors might have produced more reliable results. A counter-argument is that teachers are best placed to assess children in their classes as they know their abilities and skills best and are familiar with conducting assessments.

- If you want to fund a project to implement a Pyramid Club it would be good to build a strong evaluation into this, preferably comparing children attending the club with a similar group of children not attending a club or attending another type of after-school activity.

Content:

Searches showed that there is almost no published research on this subject. The National Pyramid Trust was contacted, and provided four evaluations, a conference paper and a research summary sheet all describing the effects of Pyramid Clubs. The most relevant papers have been appraised below. Two of the evaluations were conducted as part of Masters degrees.

The National Pyramid Trust “works with local multi-agency partnerships of statutory and voluntary organisations and runs its programmes through local primary schools. Children’s emotional and social difficulties are recognised and responded to positively, usually through clubs that help children make friends and build their self-esteem” (National Pyramid Trust website <http://www.nptrust.org.uk/aboutus.html>, accessed 15/07/03 [1 screen]).

Wells, C. H. *An evaluation of the effectiveness of the National Pyramid Trust model of early intervention for socially withdrawn children, exploring its impact on their self-esteem, locus of control and academic development.* Unpublished MSc dissertation, University of London; 2000.

Evaluation

This evaluation studied thirty-two children attending two London primary schools. All students were screened using the National Pyramid Trust Health and Welfare Checklist tool. The sample included sixteen children who had attended a Pyramid Club scheme for ten weeks and sixteen children who did not attend although they were identified as having similar needs during the screening process. This was the control group. Allocation to either group was via a multidisciplinary body selecting the most vulnerable children. Wells aimed to compare the two groups to see whether children’s emotional and selected academic skills were improved by attending Pyramid Clubs.

Both groups were measured on a range of skills two weeks before the start of the project and fourteen weeks later (two weeks after the last Pyramid Club). The effectiveness of Pyramid Clubs was measured by interviewing teachers and children as well as tests of children’s self-esteem, locus of control, reading ability and mathematical ability. The author fails to specify whether these assessments were blinded.

The mean scores for self-esteem increased for both groups. Although more so for those children attending the Pyramid Club, this difference is not statistically significant. However, the author suggests that the increase in the self esteem of all children might have been due to a change in their class as a whole, and that the amount of time between the end of the Pyramid clubs and the second test should be extended to look for longer-term effects. An improvement was also suggested in reading accuracy and reading comprehension, and the mean score was higher for the Pyramid group than the control, although again the results were not statistically significant. The results of the reading tests were particularly inconclusive as the control group and Pyramid Club children did not have similar reading abilities. When scores were taken on locus of control (a measurement of how much the child felt they could alter things or how much what happened to them was out of their control) there was an improvement among Pyramid Club children. The author attributes this to the fact that the Pyramid Children had been able to choose where they went on their trip. The tests for mathematical ability showed a significant increase in average scores for the Pyramid Club children. When testing mathematical ability of the Pyramid Club children after they had attended the Pyramid Clubs, the author noted that the children had seemed more confident, more willing to try difficult problems and used more diverse problem solving methods.

The overall results and effects suggested by the quantitative analysis must, however, be approached with caution. School A changed the composition of its control group, replacing some children with “very proficient readers; and three exceptionally able readers replaced children known to be significantly underachieving.” (p 47) Changing children around like this affects the validity of the results obtained for reading accuracy and comprehension tests, and questions the study’s validity, as an equal comparison between control and Pyramid Club groups is undermined

When interviewed about their impressions of the Pyramid Clubs, the children said that they were enjoyable, the trip they all went on was the best part, that they would recommend the clubs to other children, they felt differently at school, expressing greater happiness and improved social relations, made more friends and thought other children would like school more if they went to the clubs. The teachers interviewed said they thought the children had enjoyed the clubs, that they joined in more in classroom discussion and that 11 of the 16 children who went to the Pyramid Clubs had improved confidence and self-esteem.

The author acknowledges that aspects of her research were inconclusive, including the fact that differing numbers of each group of children may have attended other reading projects run by the school (which may mean that it was not a fair comparison).

Conclusion

The comparison of the control and Pyramid Club children's scores for academic ability and self-esteem should be treated with caution. The allocation of children to either group was not random; the researcher was aware of which children had been in the group receiving the intervention, which may lead to bias in interpretation, and the sample sizes were extremely small, with only four children remaining in the control group in school B at the end of the project. As mentioned above, the change in the composition of the control group compromises the quantitative analysis. However, the interviews conducted with children who attended Pyramid Clubs and their teachers indicated that attending Pyramid Clubs had been a positive experience.

It is not possible to draw conclusions on the effect of Pyramid Clubs on the basis of the findings of this study.

Cooper, C. *A small scale evaluation of the long-term outcomes for primary school children attending National Pyramid Trust therapeutic play clubs.* Unpublished MSc dissertation, University of East London; 2001.

A group of students were screened, and one part of the group was allocated to a Pyramid Club for ten weeks. Five years later the author compared the teacher-rated progress of the Pyramid club and non-Pyramid clubs to see whether there were any long-term benefits arising from attending Pyramid Clubs.

The categories considered by the teachers were social and relationship skills, motivation and self-confidence of the children, using the National Pyramid Trust Health & Welfare screening checklist. Children from both groups were interviewed. The overall sample was very small with a total of nineteen children.

Of the children interviewed, some remembered their Pyramid Club day out, most said that they had enjoyed the clubs, that they liked the adults and found them approachable. Five out of eleven Pyramid Club children said that their attendance had changed them 'quite a bit'; compared to the control group, where two said that they had changed 'quite a bit' in the past five years. Pyramid club children also rated themselves more highly on their self-esteem than control children. Overall, the teachers' ratings were more positive for children who had attended Pyramid Clubs. Pyramid Club children were identified as being more confident and having good relationships with adults.

Conclusions

The sample size is too small to draw strong conclusions and the author recommends that the study be replicated with a larger sample. There are also problems with asking children to compare how they had changed over the past five years; this may be a very abstract question and they may be thinking about

specific events when they answer. It is not possible to draw firm conclusions on the effect of Pyramid Clubs on the basis of this study.

Davies, J. H. *Children's Writing Improvements following Participation in the Pyramid Scheme*. National Pyramid Trust; 1999.

This study was conducted in three schools and evaluated the pre and post Pyramid Club academic skills of two groups of children whose average age was seven and a half. The sample comprised ninety-three children at the beginning of the research and sixty-eight children at the end¹. Teachers responded to a questionnaire which determined which children would be placed in the Pyramid group, resulting in 21 children attending Pyramid Clubs and 47 control children; the ratios of attendants and non-attendants was kept constant across schools, so as "to ensure equal influence of any school factor on the two groups" (p7).

In spite of efforts by the researchers, the sample size restrictions mentioned above resulted in Pyramid Club Children's assessments being compared to children without similar needs. Nonetheless, the groups were matched in terms of their age, gender, year and class. Teachers also completed a Strengths and Difficulties questionnaire concerning the children's social and emotional difficulties.

To look at possible writing improvements, children were assessed on their written work when writing sentences, copying and writing stories. Pyramid Club children made improvements in most areas, and more improvement than the control group. Pyramid Club children displayed more improvements in the assessment of their emotional and social skills.

In the sentence generation task, Pyramid Club children made fewer errors than the control children. There were few differences between the control and Pyramid Club children in their performance during the copy task, and whilst the two groups' performances were similar for the free writing task, improvements in story content amongst Pyramid Club attendees was greater than for those who did not attend. Interestingly improvements in story content were highly correlated with improvements in assessed social and emotional skills.

Conclusions

This evaluation indicates that Pyramid Clubs contributed to a reduction in social skills problems and an improvement in some writing tasks. Unfortunately the

¹ The study was originally designed to compare 3 groups: Group1, those attending clubs; Group2, a control group identified as having difficulties but not attending, Group3, another control group comprising children not identified as having difficulties and therefore not considered for the programme. The Group2 sample was too small (n=5) for statistical purposes, and was therefore excluded. Further children were excluded from the analysis, to ensure the two remaining groups were as closely matched as possible, in terms of age, school, male/female ratios, and year group.

sample size was reduced during the evaluation, making the conclusions less reliable than they might have been. Some post-Pyramid Club assessments were not used for children because of incomplete data, and this also makes the findings less reliable.