Exploring the Impact of Nurture Groups on Children's Social Skills: A Mixed-Methods Approach.

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Abstract

Nurture Groups (NGs) are a short-term, psychotherapeutic intervention aiming to provide reparative attachment experiences for children within an educational setting (Boxall, 2002). The social skills of 16 children (aged between 6.0 and 9.75 years) were assessed through teacher ratings and children's self-report to hypothetical and challenging social situations. Thematic analysis was also used to explore six children's experiences and perceptions of NG intervention on their social skills. Over time, children attending NGs used significantly more socially appropriate responses. Teachers' ratings of children's social skills also improved, approaching statistical significance. In their interviews, children suggested that they enjoyed attending NGs and that this helped them improve their social skills. However, they reported challenges engaging with peers outside of the NG, particularly in the playground. Implications for practice include the need to identify how practitioners can help to facilitate the generalisation of children's developing social skills beyond the NG context.

Keywords

Nurture Group; attachment; social skills; children's voice; mixed-methods

Introduction

Nurture Groups (NGs) aim to teach children the basic social and emotional skills required for learning through providing increased opportunities for children to develop stable, trusting relationships with adults in school (Boxall, 2002; Cooke, Yeomans, & Parkes, 2008). They create a school-based caregiving environment which facilitates a revision of children's mental representations of themselves and others, supporting the development of more positive relationships with adults and peers (Colwell & O'Connor, 2003; Hughes & Schlösser, 2014). NGs, promote the development of children's social and emotional skills within the safety of the NG with the aim that they will transfer these skills to different contexts and relationships outside of the NG (Colwell & O'Connor, 2003; Cooper & Whitebread, 2007). According to recent data, over 1,500 schools across the UK run NGs (Nurture UK, 2018a).

Effectiveness of Nurture Groups

There is growing evidence for the positive impact of NGs on children's overall social, emotional and behavioural development (Hughes & Schlösser, 2014). Quantitative studies assessing children's progress pre- and post- NG intervention (e.g. O'Connor &Colwell, 2002; Gerrard, 2006; Binnie & Allen, 2008; Sanders, 2007; Cooper & Whitebread, 2007; Scott & Lee, 2009) have reported improved scores on the Boxall Profile (Bennathan & Boxall, 1998; 2000) and reductions in 'total difficulties scores' on the Strengths and Difficulties Questionnaire (SDQ: Goodman, 1997).

However, Seth-Smith, Levi, Pratt, Jaffey andFonagy (2010) argue that there is a need for studies to consider the specific features of children's social, emotional and behavioural development which NGs address, as previous research has only reported overall scores on the SDQ and Boxall Profile. Seth-Smith et al. (2010) evaluated the progress of 41 children attending classic 'Boxall' NGs and 36 control children (children's social and emotional needs were met within the mainstream classroom and they had involvement with either an Educational Psychologist (EP) or a behavioural support teacher) on the individual subscales of the SDQ over a period of 21 weeks.

Children attending NGs showed a significant improvement, relative to the control children, on the peer problems, pro-social behaviour and hyperactivity subscales. There was no significant improvement in their scores on the conduct or emotional difficulties subscales. The control children demonstrated increasing difficulties on these two subscales over time. These findings suggest that during the early stages of NG intervention, improvements may occur mainly in children's social development. Seth-Smith et al. (2010) proposed that the small group environment facilitates the development of interactive skills such as turn-taking and the sustained emphasis on considerate behaviour facilitates positive social interactions between children.

Findings from qualitative studies (Cooper, Arnold & Boyd, 2001; Cooper & Tiknaz, 2005; Sanders, 2007; Binnie & Allen, 2008) extend those of the quantitative studies. For example, during interviews, mainstream class teachers reported improvements for children attending NGs in a range of domains including their willingness to participate in classroom activities, self-esteem, confidence, their ability to initiate conversations with peers, self-management of anger and a reduction in 'acting out behaviour' (Cooper & Tiknaz, 2005). Similarly, Sanders (2007) reported that during staff interviews, teachers noted that children had established more positive friendships in the mainstream classroom and were better able to regulate their behaviour. However, they commented that the observed improvements in children's social skills were less evident in the playground.

Particular social skills relevant in the playground where interactions with peers are less structured include: peer group entry; managing provocation from peers; responding appropriately to successes and failures; and following social expectations (Dodge, McClaskey, & Feldman, 1985). Children need to encode and interpret social cues, which are highly context dependent, and then generate and evaluate appropriate responses (Crick & Dodge, 1994). One aim of the present study was to assess whether NG attendance improves such social skills.

A very small number of studies have attempted to elicit the views of children who attend NGs. Cooper et al. (2001) reported that a group of children attending NGs made positive references during interviews about opportunities for free play and more structured activities, their relationships with staff, the predictable routine and the calm nature of the environment. Syrnyk (2014) combined verbal interviews with asking boys (aged 6-9 years) to make drawings of their experiences of NGs. Over a period of five weeks, the boys had become attentive to how the NG operated, showed fondness towards staff and articulated what they valued about their new environment. These studies suggest that children perceive NGs as positive environments where they feel calm and connected to others.

Taken together, research suggests that NGs positively impact on children's social, emotional and behavioural development but the available evidence is limited. Methodological limitations include a lack of control groups, poor matching when control groups have been used, small sample sizes and a lack of longitudinal research. Furthermore, children's progress was generally measured using the Boxall Profile, which is typically administered by NG practitioners pre-intervention to inform children's developmental targets before being administered again post-intervention. Two issues with regards to the objectivity and potential bias in using the Boxall Profile as an evaluative measure of NG effectiveness are relevant here. Firstly, the NG practitioners are not blind to the intervention. Secondly, children receive targeted supported in the key areas of need identified through the Boxall Profile pre-intervention and teaching is tailored to specifically facilitate progress on these. As such, one would be expecting improved scores in these areas within the NG context post-intervention.

Furthermore, overall scores on the SDQ or Boxall Profile prevent consideration of specific features of children's social, emotional and behavioural development which NGs may support (Seth-Smith et al., 2010). Within the qualitative studies, limited detail and transparency in the reporting of the methods and analyses make it difficult to ascertain their reliability.

The Present Study

The present study had two aims. Firstly, it examined quantitatively the impact of NG intervention on children's social skills specifically as proposed by Seth-Smith et al. (2010). Secondly, in light of growing recognition within the educational literature (O'Kane, 2008) and government policy (e.g., the Special Educational Needs and Disability Code of Practice; Department for Education, 2015) on eliciting 'pupil voice', the present study sought children's perceptions and experiences of NG intervention, specifically in relation to the development of their social skills.

Accordingly, the present study aimed to answer the following research questions:

- 1. Does participating in a NG intervention improve children's social skills?
- 2. What are children's views and experiences of attending a NG?
 - What are children's views about attendance at a NG on improving their social skills?

Method

Design

A critical realist epistemology was adopted; an approach which seeks an objective reality whilst acknowledging the perspectives of participants and contextual factors impacting the research (Robson, 2002). This study utilised a mixed-methods design. The quantitative aspect utilised teacher and child report measures, employing a withinsubjects repeated measures design, and addressed research question one. The qualitative aspect addressed research question two and involved thematic analysis (TA) of semi-structured interviews conducted with children.

Participants

Participants were recruited from five primary schools in the South of England. All NGs met the Nurture Group Network quality mark award criteria (Nurture UK, 2018b). The NGs were delivered in accordance with the 'six principles of nurture' (Lucas, Insley & Buckland, 2006), although they differed in structure to 'classic' Boxall NGs as they ran on a part-time basis. Parental consent to take part in the study was received for 16 out of the 31 children due to start NGs in the participating schools. These 16 children (9 males, 7 females) were aged between 6.0 and 9.75 years (M = 7.35 years, SD = 1.14). 15 were White British and one was Asian. Three children were from military families. Alongside NG intervention, the majority of children were receiving additional support for phonics, numeracy or handwriting. Two children were receiving Occupational Therapy. None of the children had previously received NG intervention.

Measures

Children's social skills were assessed using the Child Role Play Measure (Dodge, McClaskey, & Feldman, 1985) and the associated Taxonomy of Problematic Social Situations (Dodge et al., 1985). Both measures were administered at two time points; the first at the beginning of term, prior to the children joining the NG (Time 1), and again at the end of term, 15 weeks later (Time 2).

The Child Role Play Measure (CRPM: Dodge et al., 1985) was completed by the first author. It is an individually administered assessment of children's social skills in response to a variety of challenging social situations. Children are read 15 different social scenarios (Cronbach's alpha (α) = .72, Dodge et al., 1985) and are asked to explain what they would do in each situation. Children's responses are rated against one of five benchmark responses (scored between 0 and 8) with higher mean rating scores indicating better social skills. In this study the reliability of the CRPM was questionable at Time 1(α = .47) and acceptable at Time 2 (α = .79).

The Taxonomy of Problematic Social Situations (TOPSS: Dodge et al., 1985) was completed by the children's class teachers. It is a rating scale designed to identify the particular social situations or tasks a child finds difficult. The TOPSS consists of 44 items ($\alpha = .79$, Dodge et al., 1985) based on the same social situations as the CRPM. Each item is rated on a five-point scale with one representing 'never' and five representing 'almost always'. Lower mean rating scores indicate better social skills. Reliability was excellent at both Time 1 ($\alpha = .97$) and Time 2 ($\alpha = .98$).

Qualitative Interviews. The script and associated prompts for the semi-structured interviews were designed to enable exploration of children's views and perceptions of their social skills in different school contexts, including the NG, classroom and playground. To enable the triangulation of data, questions were developed in line with the skills assessed in the CPRM and the TOPPS. Visual materials (e.g. feelings cards, rating scales) were used to help facilitate the semi-structured interviews. Such aids were considered facilitative due to the young age of the participants and the potentially

high level of educational need among children attending NGs, including their language and communication skills. Further details of the interview method can be obtained from the authors upon request.

Procedure

Ethical approval was obtained from the Psychology Ethics Committee at the University of Southampton (Study ID 18658, 4 May 2016). Parental consent (opt-in) and child assent was obtained. Quantitative data was collected from participants at Time 1 and again at Time 2. Parental consent was received for six children to take part in the interviews at Time 2. Interviews took place individually on the school premises and lasted approximately 30 minutes. All interviews were audio-recorded. Upon completion of data collection, parents and children were debriefed and children received certificates.

Findings

Does participating in a NG intervention improve children's social skills?

Table 1 presents descriptive statistics for the outcomes measures at Time 1 and Time 2. Results showed lower mean rating scores on the TOPSS and higher mean rating scores on the CRPM at Time 2, both indicating an improvement in children's social skills over time. This change was approaching significance with a medium effect size for the TOPSS (t(15) = 2.08, p = .055, d = 0.52) and was statistically significant for the CRPM, with a large effect size (t(14) = -3.76, p = .002, d = 0.97).

[Insert Table 1 near here]

In light of the small sample size, and to help determine whether any change over time was meaningful, a Reliable Change Index (RCI: Jacobson & Truax, 1991) was also calculated for the TOPSS scores. This is a statistical indicator of change over time for individual pupils that sets a criterion (at p < .05) beyond which change attributable to pre-intervention differences and measurement error has been accounted for. The RCI criterion is calculated using the standard deviation of participants' scores and the reliability of the measure. Thus, if the reliability of a measure is poor, it is not possible to confidently detect reliable and meaningful change. A RCI was not calculated for the CRPM due to concerns about its reliability at Time 1 in this sample. As illustrated in Figure 1, nine children showed positive reliable change in teacher rated perceptions of their social skills. Four children showed no reliable change and three children showed negative reliable change (i.e. perceived regression in their social skills).

[Insert Figure 1 near here]

What are children's views and experiences of attending a NG?

The semi-structured interviews were transcribed and analysed using TA. To ensure a methodologically sound approach to conducting the TA, Braun and Clarke's (2006) six stage process was followed. A theoretical TA approach, which is more explicitly analytical, was taken as the analysis was driven by the researchers' topic of interest (Braun &Clarke, 2006). In line with a critical realist perspective, data were coded at the semantic level and codes were generated from the data, rather than being explicitly driven by previous literature. In this way, the analysis and interpretation did not go beyond what the children had said.

Acknowledging the potential for subjectivity bias, particularly as the first author conducted the interviews and data analysis, a reflective log was kept and all authors

engaged in frequent discussions on the extraction of themes from the interviews. As per the recommendations in Elliott, Fischer andRennie (1999), credibility checks were made throughout, for example, thematic map decisions were checked amongst all authors and a Trainee Educational Psychologist.

The analysis of qualitative data with regards to understanding children's views and perceptions of NG intervention provided two overarching themes: 'child-related factors' and 'social and environmental factors'. From these two main themes, five subthemes and several subordinate subthemes were identified (see thematic maps, Figures 2 and 3). The present study focuses specifically on the subthemes and subordinate subthemes reflecting children's views about their experiences of NGs in relation to their social skills.

[Insert Figures 2 and 3 near here]

Theme 1: Child-related factors.

The theme 'child-related factors' concerned factors linked to the children personally which they discussed in relation to the NGs, including the perceived impact on their social skills. Within Theme 1 there are two subthemes: 'feelings and perceptions' and 'personal development'.

Subtheme 1: Feeling and perceptions.

Social environments. When engaging in discussions about the NGs, children chose feelings cards such as excited, comfortable, cheerful and happy. It seemed as though

they enjoyed coming to NG, they felt happy and that they had fun. On a scale of 1 - 10, most children rated their NG as a 10, indicating that they 'like it a lot'. One child also expressed sadness at having to leave the NG, again reflecting positive feelings towards the group ("Yeah. The only thing which is really annoying is that I'm leaving it. After Easter I'm not coming anymore" – participant 4). Some children chose more uncomfortable feelings (bored, left out, lonely and shy) when talking about contexts outside the NG such as the classroom or the playground. However, not all children expressed such a contrast in feelings. Some children selected more positive or comfortable feeling cards for the classroom and playground such as friendly, cheerful and comfortable. Perhaps this reflects differences between different NG provisions and how links are made between children's experiences in NGs and other aspects of the mainstream school.

Self-confidence. Children's responses, relative to their ability to cope or manage within the NGs, were more often placed at the upper end of the scale, indicating a high degree of self-confidence. Interestingly, when discussing the classroom and the playground, children's responses to their ability to cope or manage were more often placed at the lower end of the scaling with some children rating it less than a one ("Minus zero" – participant 6). Children were not asked, nor did they mention, whether they had always felt like this in the classroom or in the playground or whether things had changed in any way since joining the NGs.

Sense of belonging. Children talked about other children in the NG and how they perceived everyone to be quite similar ("Like people have the same feelings as you, like makes you feel comfortable knowing that other people know how I'm feeling" – participant 3). The majority of children talked about having friends in the NG and this

appeared really important to them. They seemed to view the NG as somewhere they could make friends and this made them feel happy and comfortable. In contrast, the children seemed to feel quite differently when outside of the NG, particularly in the playground, with the majority of children sharing that they felt lonely ("I don't really have anyone to play with. I just bounce my ball in the playground" – participant 6).

Subtheme 2: Personal development.

Socio-emotional skills. Two children commented that the NG helped them with expressing their emotions and with being kind and helpful towards others ("I can now share my feelings with other people and I can know what other people go through" – participant 3). Children talked about the improvements they felt they had made in the NG with regards to social skills such as sharing, turn-taking and talking to other children ("It helps me to like... I used to not share in Year Two and it gave me a lesson to share" – participant 5).

Theme 2: Social and environmental factors.

When children had commented that the NG had helped them in some way, this was followed up with a prompt question to explore what they felt had helped them in developing their social skills. This theme comprises of two subthemes: 'other people' and 'NG environment'.

Subtheme 1: Other people.

Inside the Nurture Group. Children talked about how other children within the NG helped them in developing their social skills. One child talked about how she felt she

can cope really well with talking to other children in the NG because there seemed to be a sense of trust ("Well, you know they're not going to tell anyone else" – participant 3). Children also talked about how the teachers helped them ("The teachers help me with being kind and friendly to other people" – participant 1). From the children's perspectives, they felt that staff and other children within the NG helped them to develop their social skills, through both teaching and the games they played. One child commented:

"Well, last week we got a board game, or like a game and then two other girls, we played this game where we had pillars and we made a tower with them, and we had to roll the dice and if it landed on a blue, we had to take a blue pillar out and put it on the top. And yeah, taught us to take turns" - participant 3.

Outside the Nurture Group. When children were talking about other social environments, in particular the playground, some children commented that other children do not play with them ("No-one wants to play with me" – participant 2). For one child it seemed as though her peers were even actively rejecting her:

"Well, they're trying to say that but soon I hear two other people join in when they say there were no more characters left, so what they're doing is saying they don't want me to play but in a different way" - participant 4.

Statements like this suggest that children's opportunities to practice their developing skills outside of the NG might be limited. Difficulties joining in with other children might in part be due to the perceptions, attributions and attitudes of the other children in the playground (de Boer, Pijl & Minnaert, 2012; Gasser, Malti & Buholzer, 2014; Hong; Kwon & Jeon, 2014). There are also some suggestions that children might have less positive attitudes towards children with behavioural difficulties compared to children with physical difficulties (Laws & Kelly, 2005).

Subtheme 2: Nurture group environment.

Activities. Most children commented upon different activities, including playing, which had been helpful, especially in terms of sharing and turn-taking. One child talked about how they act out scenarios of different situations that have already happened and think about how they can make them better next time ("Well, when we did the acting two weeks ago, it helped knowing how to cope if you've made a mistake" - participant 3). Through the different activities provided in NGs, children may have the opportunity to practice their social skills, both implicitly and explicitly. This may well allow children to 'rehearse' appropriate behaviours alongside enabling them to learn alternative ways to respond in different social situations.

Discussion

Findings from the present study of 16 children attending NGs suggest that based on the quantitative measures, children's social skills showed some improvement after their first term in NG. Specifically, children used significantly more appropriate responses to challenging and hypothetical social situations compared to when they started NG intervention. Teachers' ratings of children's social skills in problematic social situations also improved, with a moderate effect size, although this did not reach statistical significance. Importantly, children's own views and perceptions of NGs suggested that they enjoyed attending and that NGs helped them to improve their social skills. However, children also reported experiencing challenges engaging with peers outside of the NG (i.e. in the playground and classroom).

Does participating in a NG intervention improve children's social skills?

The present findings extend the research by Seth-Smith et al. (2010) who reported significant improvements for children on the peer problems and pro-social behaviour subscales of the SDQ following 21 weeks of NG intervention. This study explores more directly the impact of NG intervention on children's social skills as reflected in their responses to hypothetical social situations, such as responding to provocation or finding an effective way to join a peer group.

Teachers' perceptions of children's social skills also suggested improvement over time; this effect was approaching statistical significance. However, the RCI indicated meaningful change over time for nine of the 16 children. This finding is consistent with Cooper and Tiknaz (2005) who reported that following NG intervention, teachers noted improvements in children's ability to initiate conversations with peers. The improvements in teacher's perceptions of children's social skills are noteworthy, particularly as children had only been accessing NG intervention for 15 weeks. While it is acknowledged that expectancy effects could have impacted on teachers' responses, it is important to recognise that the TOPSS is a broad measure of children's social skills across various contexts and does not relate specifically to NG intervention.

What are children's views and experiences of attending a NG?

Consistent with previous research (e.g. Cooper et al., 2001; Syrnyk, 2014), children in the present study talked positively about the NGs; they shared that they were

a place where they felt happy and excited. They seemed to enjoy coming to NG and felt comfortable with the other children and staff in the group. Play, in particular, was an activity that children identified as being fun, something which made them feel excited and something that helped them learn how to manage in different situations. Indeed, Elias and Berk (2002) suggest that role play may be a valuable asset in the development of self-regulation skills. Children's accounts also indicated that they perceived positive change in their social skills, particularly in terms of sharing, turn-taking and talking to other children. They seemed to be growing in confidence in their developing skills, especially within the NG environment. Children valued that they were given the opportunity to experience making and having friends.

In contrast, children's interviews suggested that other social contexts, including the classroom and playground, were more challenging. Many children shared that they felt lonely in the playground, are often left-out of games and can never find anyone to play with. Similarly, Sanders (2007) reported that following NG intervention, staff commented that children had established more positive friendships in their mainstream classrooms but observed improvements in children's social skills were less evident in the playground. To some extent, this finding is perhaps not surprising, given that NGs tend to be small, safe and predictable; potentially quite a different environment to the playground (i.e. more children, less adult supervision and scaffolding and less structured). Moreover, NGs often take place in a separate room with different teachers and different children. While this context may be particularly facilitative for both social skill development and children's confidence (Seth-Smith et al., 2010), it may also make it more difficult for children to generalise their skills more widely. Furthermore, NGs do not address factors in children's social environments (e.g. peer perceptions) which may be impacting on children's ability to use their skills. It is also noteworthy that presently, there is a strong focus within schools on raising academic achievement and, therefore, the classroom environment may not be conducive to providing children with as many opportunities for non-work related social interactions. Finally, it is possible that regular withdrawal for NG could negatively impact on children's continuity and playground inclusion with peers who do not attend. However, whilst this contrast between the NG and the playground is an interesting finding, it is not clear from the present study whether children's experiences in the playground have always been negative, whether they have become worse or improved after joining the NG, or whether there has been no change. This indicates a gap in the knowledge base to inform future research directions.

Children talked about specific aspects of NG intervention which they felt had helped them. For example, children talked about developing relationships with other children in the NG. They commented that they had enjoyed playing with the other children, suggesting they had formed positive peer relationships. Children alluded to feelings of connectedness and mutual trust with the other NG children, indicating that they may have developed a sense of belonging within the NG; an important factor for children's social and emotional development. Children also noted how staff had helped them learn to be kind and friendly. These findings are reflective of the principles underlying NG intervention (Lucas et al., 2006), namely, the importance of social interactions with both adults and peers in facilitating children's social and emotional development. One of the key elements of NGs is that two staff members facilitate the group. Thus, the high adult-child ratio may enable staff to model and scaffold children's social interactions with peers at a developmentally appropriate level. Indeed, longitudinal research (e.g. Blatchford, Bassett, Goldstein & Martin, 2003) has found that in smaller classes, there are more teacher-pupil interactions, both individually or in small groups.

Limitations and Directions for Future Research

The present study explored the impact of NG intervention using a more direct measure of children's social skills. It also elicited the children's voices, gaining valuable insight into their perceptions and experiences of NG intervention. Nevertheless, there were some important limitations.

Firstly, the reliability of the CRPM at Time 1 in this sample was questionable. It may be that before starting NG, children's responses to a range of challenging social situations were more varied and inconsistent, perhaps reflecting less clear and organised mental representations of how to manage complex social situations. It should also be acknowledged that the CRPM is based on hypothetical situations and thus, children's responses may not be wholly reflective of how they would respond in reality. Direct observation of children's actual skills by independent raters across different contexts and at several time points would provide more robust data to clarify whether their skills had actually improved.

Secondly, this study is limited in terms of its generalisability, due to both the small sample size and the subjective nature of qualitative research. Importantly, out of a possible sample of 31 children, consent was obtained for only 16. It is possible that the parents who gave consent were more engaged with school and supportive of NG work, thus the present findings may be positively skewed. Moreover, this study lacked an appropriately matched comparison group. This was partly due to the ethical

implications of identifying children with similar needs who were not then able to be supported through NG intervention. Practical issues were also influential, including difficulties in matching participants. For example, children in schools without NG provision were likely to be receiving alternative interventions to support their social, emotional and behavioural development (e.g. ELSA). However, as NG intervention is unique in terms of delivery and length, it is difficult to find alternative interventions which provide a fair and robust comparison. Children also attended part-time NGs, thus a significant proportion of their day was spent in different social contexts outside of the NG which may have contributed to the development of their social skills over time.

Thirdly, although the measures used in this study were more specific in terms of assessing children's social skills than either the Boxall Profile or the SDQ, the authors acknowledge that they were still subjective and context dependent (i.e. based on teacher judgments in the classroom). Finally, whilst some level of consistency between NGs existed, as they all met the NG quality mark criteria (Nurture UK, 2018b), there was still variation across the children from different NGs. For example, children differed in age and likely in their presenting areas of need (i.e. social, emotional and behavioural). It is also possible that there were differences across NGs in the content and delivery of the intervention and in the experience of staff, alongside differences in their emphasis and approach, specifically to supporting children's social development. As such, it is not possible to conclude with any certainty that the present findings were a direct result of NG intervention.

Future research could include active (i.e. children receiving an alternative intervention such as social skills groups or adult-led lunchtime groups) and wait-list

matched comparison groups to more robustly assess the benefits of NG intervention. Additionally, future research would benefit from using methods that limit reporter bias, such as using observational data from raters blind to the intervention. Future studies could also collect follow-up data to determine the impact of NG intervention on children's social skills longer-term. Furthermore, the TOPPS measure could be completed by various individuals, for example the NG staff, lunchtime supervisors and teachers to gain a more detailed and meaningful understanding of children's social skills.

Regarding the qualitative aspect of this research, it is possible that children's responses might have been influenced by the researcher and the context (i.e. the NG) where the interviews were conducted, despite efforts to keep the interviews as objective as possible. Moreover, the interviews were only conducted at Time 2. Whilst the current data suggests children experienced some positive change over time, particularly with regards to their social skills and friendships, interviewing children prior to NG entry would have increased the robustness of these findings and enabled a better understanding of their perception of progress over time. Future research could also seek to elicit children's views about other social contexts (such as the playground) before they joined the NG. This would help to determine whether there are any potential drawbacks associated with NG intervention. It is noted that NG intervention is a significant withdrawal of children away from their peers and ethically, there is a duty of care to clarify that the benefits of NG intervention for children are not at the expense of stigma or marginalisation from their usual community of learners (i.e. a potential negative impact of intervention). In addition, future research could seek to engage the

potentially 'harder to reach' parents so as to ensure the widest possible representation of children's views.

It is important to acknowledge the subjectivity of the qualitative findings (even though appropriate steps were taken to ensure transparency), especially as the first author conducted and analysed the interviews. Further research to extend and replicate these findings would be welcomed . Interviews could be conducted with parents and staff to triangulate the children's views with those of the various individuals who work with them across different social contexts. The views of other children in school who do not attend NGs (e.g. their perceptions of NGs and of children who attend them) could also be explored. If other children hold any negative views towards NGs, it is possible that this may be a contributory factor to the feelings of loneliness described by the children in this study.

Implications for Practice

Findings from this study suggest that NG intervention had a positive impact for most children in terms of their confidence, social skill development and the opportunity to make friends. It is noteworthy that teachers (not involved in the NGs) reported an improvement in children's social skills, which may suggest that after one term of NG intervention, children were starting to generalise their skills. As such, school staff could capitalise upon this and consider how to further support children in generalising their developing skills to other social contexts, in particular the playground, whilst they are still receiving NG intervention. For example, after a term of intervention, staff could run a NG lunchtime club, involving other children in the school, so that children in NGs have adult-facilitated opportunities to practice using their skills in different social contexts before their time in NG ends.

Three children showed negative reliable change in their TOPSS scores and four showed no change. Whilst it is acknowledged that individual or contextual factors on the day of data collection may have influenced children's scores, the fact that some children showed perceived regression in their social skills is an important reminder that interventions do not necessarily benefit all children. EPs could support staff to be reflective, to have appropriate systems in place to monitor children's response to intervention and to make careful decisions accordingly. Given the feelings of loneliness that the children described on the playground, schools may wish to give consideration to the role of mid-day supervisors and how they could be facilitators of more structured play opportunities for children at lunchtime. EPs would be well-placed to deliver training to staff, particularly about the importance of belonging and of peer relationships for children in school. Furthermore, NG intervention often means that children are apart from their class peers for a substantial part of the school day. EPs could raise awareness that withdrawing children from the classroom for NG intervention may inadvertently impact on their sense of class belonging. More consideration could be given as to how children can best maintain a connection with their peers in the classroom whilst attending the NG.

Lastly, this study highlighted the importance of eliciting the child's voice, particularly in contributing to understanding the effectiveness of an intervention. The qualitative methodology used in this research was effective in collecting rich information from the children and may be a useful approach for teachers and EPs to employ when assessing the effectiveness of interventions more generally.

Conclusion

In summary, NG intervention appeared to have some positive impact on children's social skills over the duration of their first term. In particular, most children showed increased self-confidence and skills in their responses to challenging social situations. This improvement was also noticed by teachers. Findings from the children's interviews indicated that the NGs seemed to be providing them with the opportunity to experience making and having friends which did not appear to be the case in other social environments, especially the playground, and maybe even happened at the expense of this. However, due to the methodological limitations of the study, it is not possible to conclude with any certainty that these positive effects were as a direct result of NG intervention. Further research with larger sample sizes and comparison groups is needed.

Findings from this study have highlighted several implications for practice for both teachers and EPs, including the need to think about how to facilitate the generalisation of children's developing skills beyond the NG context. Eliciting children's views on their perceptions and experiences of NG intervention also offered important insights into the effectiveness of NGs which may help practitioners to better support children's social development. However, not all children may benefit equally from NG intervention. As such, when recommending NG interventions, it is important that EPs draw upon and make careful use of both research-based and practice-based evidence (Fox, 2011). Consideration should also be given to the contextual and cultural understanding and any relevant advice and frameworks from implementation science (e.g. how a NG intervention can be successfully developed and run on a practical level within the local school context) (Kelly & Perkins, 2012), ensuring that the individual needs, preferences and circumstances of the children, young people and their families are reflected.

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Table 1. Descriptive Statistics for all Outcome Measures at Time 1 and Time 2.

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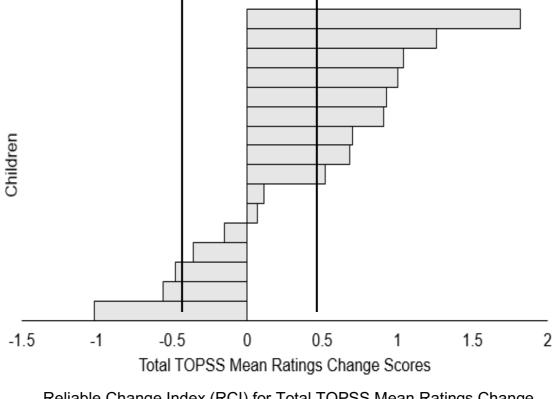
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- Figure 2. Thematic map (Theme 1).
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Table 1. Descriptive Statistics for all Outcome Measures at Time 1 and Time 2.

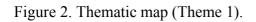
Measure (no. of items)	Time 1				Time 2			
	M (SD)	95% CI	Mdnª	Range	M (SD)	95% CI	Mdnª	Range
TOPSS Total (44)	2.66 (0.69)	[2.33, 3.01]	2.66	1.50 - 4.00	2.26 (0.72)	[1.92, 2.60]	2.22	1.00 - 3.36
CRPM Total (15)	4.70 (0.95)	[4.17, 5.23]	4.80	2.53 – 6.00	5.59 (0.81)	[5.14, 6.04]	5.60	4.53 – 7.20

Note. CI = confidence interval; TOPSS = Taxonomy of Problematic Social Situations (Dodge et al., 1985); CRPM = Child Role Play Measure (Dodge et al., 1985).

Figure 1. Reliable Change Index for TOPSS Change Scores.



Reliable Change Index (RCI) for Total TOPSS Mean Ratings Change Scores. RCI criterion value = +/- 0.47, as indicated by the black line. Positive change is indicative of an improvement in social skills.



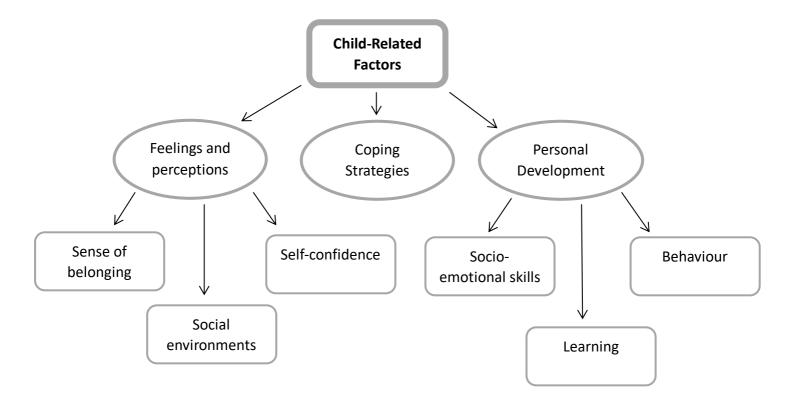


Figure 3. Thematic map (Theme 2).

