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Neglected Children: What Does it Mean to be Not Noticed in School?

by

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ABSTRACT

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Sociometrically neglected children are not noticed by their peers in class. They have few nominations for being liked most or liked least by their classmates. Considerable research demonstrates the importance of peer relationships in child development and those who have abnormal relationships (such as not-noticed children) should be at risk for poorer adjustment. However, not-noticed children have not been identified as being at risk for maladaptation and show few differences in behaviour from average children. A systematic review of the literature since 1991 was conducted focusing on not-noticed children and their sociability with peers in school. Eighteen studies were identified that investigated their social interactions, social understanding and social characteristics. Findings indicated very few differences between not-noticed children and average children for all three areas of sociability. A mixed-methods study investigated 202 primary school children's social lives outside school and their social competence in school as well as not-noticed children's conceptualisation of friendship. There were no differences between not-noticed children and average children for social competence in school or loneliness and friendship outside school. Two case studies provided insight into not-noticed children's experiences and potential explanations for their lack of difficulties. Future areas for exploration with not-noticed children are their motivation to interact and their social lives outside school. Implications for educational psychology are discussed.

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DECLARATION OF AUTHORSHIP

I, JEREMY ROGER SELWYN BROWN declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research.

Neglected Children: What Does it Mean to be Not Noticed in School?

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed: .....

Date:.....

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Definitions and Abbreviations

ANOVA	Analysis of variance
β	Standardised beta value
B	Beta value
F	Test statistic for ANOVA
M	Mean
N	Number of participants
p	Probability value
r	Pearson correlation coefficient / effect size
R^2	Variance in outcome accounted for by predictor variables
SD	Standard deviation
SE B	Standardised error of beta value

Chapter 1: Neglected Children: A Systematic Literature Review

1.1 Introduction

"it has become trite to claim that peer experiences significantly shape development and the development of psychopathology"

(Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006, p419)

This systematic literature review concerns sociometrically neglected children. These are children who have few nominations for being either most liked or least liked by their peers and as a result are not noticed. Considerable research demonstrates the importance of peer relationships in child development and it would appear that those who have abnormal relationships (such as neglected children) would be at risk for poorer adjustment. Nevertheless, neglected children have not been identified thus far as being at risk for maladaptation. However, they have rarely been the focus of study and the literature does not appear to have adequately accounted for why neglected children, with fewer opportunities for interaction with their peers, do not represent a population for concern.

This review will demonstrate the importance of peer relationships to child development and present an overview of the methodology that identifies the sociometric characteristics of neglected children. Next there is a summary of Newcomb, Bukowski and Pattee's (1993) seminal meta-analysis of sociometric research with respect to neglected children. It then highlights why neglected children should in theory be at risk and continues with an assessment of the lack of research on neglected children before presenting and synthesising the main findings of this systematic literature review. It concludes with a critique of how the research since Newcomb and colleagues (1993) has accounted for the findings for neglected children and proposes some areas of future research.

The Importance of Peer Relationships

A wealth of studies involving both cross-sectional and longitudinal designs has documented the impact of peer relations on children's lives. Evidence points to clear correlational associations between poorer relationships with peers and psychopathology especially for externalising problems such as aggression, anti-social behaviour, and victimisation from bullying (Deater-Deckard, 2001; Rubin, Bukowski, & Parker, 2006). Although less research has focused on internalising problems associated with peer relationships, there is evidence linking poor peer relationships to depression, anxiety, withdrawal and somatic problems (Asher & McDonald, 2011; Dieter-Deckard, 2001; Hay, Payne, & Chadwick, 2004; Tani & Schneider, 1997).

Longitudinal studies have examined the predictive abilities of peer relations for later outcomes. In a school context, these have shown that those with poorer peer relations have lower subsequent academic achievement, poorer transition to their next school, higher absenteeism, and a greater chance of discontinuing school (Rubin et al., 2006). Similarly, early problems with peers predict later depression, association with deviant peers, and anti-social behaviour (Hay et al., 2004), as well as aggression and substance misuse (Prinstein, Rancourt, Guerry, & Browne, 2009).

The direction of effects between peer relations and developmental outcomes remains unresolved. Whether problems with peer relations cause maladaptive development and outcomes or whether peer problems are a result of them is still the subject of debate (see Bukowski & Adams, 2005; Hay et al., 2004; Parker et al., 2006 for reviews). Current thinking proposes that there is a highly dynamic transactional relationship between the two (Rubin et al., 2006). Children will bring their own dispositions and state of development into their peer experiences. These will influence how those interactions are experienced and in turn what the child gains from the experience. How the child develops and the subsequent quality of their peer relationships depends on the continual mutual influence between their relationship experiences and their own cognitive and affective attributes (Sameroff & MacKenzie, 2003).

Theoretical Perspectives On Peer Relationships

Children experience interactions with important others across different social contexts that involve parents and carers, siblings, other adults (such as teachers) and peers (Rubin, Coplan, Chen, Buskirk, & Wojslawowicz, 2005). Systems theory recognises that different social contexts exert different influences on a child but that they also act as interrelated systems where the experience in one environment will impact on how the child functions in another (Bronfenbrenner, 1979; Cicchetti, 1993; Woolfson, Whaling, Stewart, & Monsen, 2003). However, such overarching models are very difficult to operationalise and test in the complex world of peer relations. No unifying framework exists that accounts for how relations with one's peers may interact with the other social influences on a child to dictate development and outcomes (Parker et al., 2006). As a result, the unique contribution made by peer relationships to children's development is not easy to isolate.

However, one important feature of peer relationships is that they tend to be more egalitarian and less hierarchical than relationships with adults. Writers such as Piaget (1932), Hartup (1989) and Youniss (1980) have defined the world of peer relationships as one where interactions are essentially "horizontal" and on a reciprocal basis as opposed to the "vertical" interactions between children and adults. Unlike vertical interactions where the adult tends to have more power or dominance in the relationship, horizontal interactions between peers provide different opportunities for play, co-operation, negotiation and conflict resolution (Robertson et al., 2010). From such interactions (although not exclusively attributable to them) the child develops skills such as the ability to take the perspective of others (Piaget, 1932) and to forge friendships (Sullivan, 1953), as well as a sense of self and other (Mead, 1934).

Others have stressed the social learning opportunities available through observing others and via reciprocal instruction between peers (Bandura, 1977, 1989). Children's interactions enable them to form rules that associate behaviours with consequences. Thus a child will form a link between a given behaviour (e.g., a prosocial one) and a reward (e.g., sharing a toy). In this way they build up a tendency to carry out behaviours that their peers reward them for, and to avoid behaviours that their peers sanction them for. In addition, by observing other children a child will

see what consequences others' behaviour brings and may add to or refine their own rules for interacting with peers.

Such interactions between peers are considered to help develop skills in co-operation in collective goals, leading and following, behavioural inhibition (Fine, 1987), as well as social participation, emotional understanding and regulation, prosocial behaviour, communication, and social problem-solving that are linked with positive outcomes (Bierman, 2004; Deater-Deckard, 2001; Parker et al., 2006). What appears to be important from a theoretical perspective is that interactions with peers are a crucial element in a child's development as it is through such social encounters that skills are developed.

Peer Group Status

One way of considering the health of peer relationships is the status a child has within a group. As children spend more time with other children in settings such as playgroups and pre-schools there is a transition from "a group of peers to a peer group" (Rubin et al., 2005, p480) where a child's status can provide considerable information on which children are at risk for concurrent and future problems (Bukowski & Adams, 2005).

Sociometric status

A common way of assessing the peer group status of a child is using sociometric techniques. Moreno (1934) measured attraction and repulsion between peers resulting in a one-dimensional view of how a child is viewed by others with "accepted" and "rejected" at opposite ends of the scale. Peery (1979) added a dimension of how "noticed" a child was resulting in two orthogonal dimensions of peer group status: social preference (how liked a child was) and social impact (how visible the child was).

Sociometric methodologies typically ask children who they most like and least like. The raw "most liked" and "least liked" scores are standardised within the peer group to take account of different sizes of reference group (typically a classroom in primary schools). Subtracting the standardised dislike score from the standardised like score for each child gives a standardised social preference score and adding the two together gives a standardised social impact score.

By using these two dimensions Coie and colleagues (Coie & Dodge,1983; Coie, Dodge, & Coppotelli, 1982) developed five categories of status, which have been widely adopted: (a) popular, a high number of "like" and a low number of "dislike" nominations; (b) rejected, high in "dislike" and low in "like" nominations; (c) controversial, high in both "like" and "dislike" nominations; (d) neglected, few nominations for either "like" or "dislike" and (e) average, all the rest. Thus popular and rejected are at opposite ends of a social preference continuum whilst controversial and neglected are at opposite ends of a social impact continuum (see Figure 1). With particular relevance to this systematic literature review, neglected children can be considered to be "not noticed" by their peers due to their low social impact. As a result they will have different interactions from peers with other statuses.

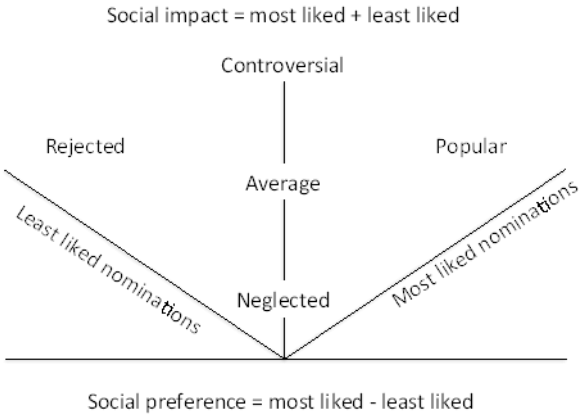


Figure 1. Sociometric categories located on the social preference and social impact dimensions (adapted from Maassen, van der Linden, Goossens, and Bokhorst, 2000).

The importance of peer status: research findings for neglected children

The effect of low social impact on children's development and outcomes was investigated by Newcomb and colleagues (1993) as part of a meta-analysis of the research on the five sociometric categories outlined above. The review focused on the links between sociometric status and three broad categories of behaviour: aggression, withdrawal, and sociability, in primary school-age children (roughly 5 to 12 years old). The three categories aligned with Horney's (1945) conceptual model that proposed that children interact with their environment by moving towards it (sociability), against it (aggression), or from it (withdrawal). Aggression covered disruptive behaviour, physical aggression and non-physical aggression; withdrawal covered the internalising problems of loneliness, anxiety and depression; and

sociability covered social interactions, conflict resolution, friendship, communication, pro-social behaviour, and traits helpful for positive social relations. The review included research up to and including 1990, though it also included three non-peer reviewed papers from 1991 in the meta-analysis calculations. The findings were reported in terms of comparisons with average children and showed that rejected children had higher levels of aggression and withdrawal but lower levels of sociability. Popular children showed a diametrically opposite profile, with lower levels of aggression and withdrawal and higher levels of sociability. The controversial and neglected children showed a more complex pattern of behaviours. The controversial children were higher in aggression and sociability but could not be differentiated from average on withdrawal. Finally, neglected children showed the fewest differences from average children of all the sociometric categories. They were somewhat less aggressive and less sociable (specifically with lower levels of social interaction, fewer positive interactions, and fewer positive social traits) but also could not be differentiated from the average on withdrawal. The overall conclusions were that rejected children were at greatest risk for psychopathology with popular ones having the lowest risk. Neglected children were identified as a valid and distinct sociometric group but were not seen to be at any greater risk than average children. This conclusion that the social preference dimension of sociometric status had the greatest influence on outcomes is supported by the research but does not explain why the social impact dimension has less influence.

The fact that low social impact has such little effect appears to be at odds with the peer relationship literature which stresses the importance of interactions with peers for healthy development. Neglected children had lower levels of social interaction than average but were less at risk for externalising and no different for internalising problems than average. Newcomb and colleagues speculate that the lack of interaction may be a choice for the neglected children and that they had a sufficient level of friendship to moderate any poorer internalising outcomes but do not address why lower levels of interaction appear to have little impact overall.

Despite the challenges that the neglected sociometric group posed for peer relationships theory, and the fact that engagement with peers appears to be distinct in both quality and quantity for this group, relatively little research has been

conducted over the ensuing 20 years and investigations into the consequences of a lack of social impact have been minimal.

Lack of Research on Neglected Children

The absence of investigation into neglected children, and by extension what influence differing levels of social impact may have on children, has a number of reasons. First, categorising children sociometrically has been criticised as an arbitrary statistical construct rather than one based on psychological theory (Hubbard, Smith, & Rubin, 2013). As a result many researchers have adopted continuous measures of peer status to reflect greater subtleties in children's relations with their peers that is missed by dividing them into categories of "liked" and "disliked", "noticed" and "not noticed". Continuous measures of acceptance, rejection, social preference, and social impact are therefore used for analysis thus abandoning the categorisation of children. Since the 1990s, the use of continuous measures has become more popular following the development of more powerful statistical tools that use them. Hence methodologies that employ them are favoured over methodologies that rely on categorisation (Jiang & Cillessen, 2005).

Secondly, the research evidence indicated that more distinct behavioural characteristics and outcomes were associated with the extreme ends of the social preference scale (Newcomb et al., 1993) rather than with the social impact scale, and that rejected children were most at risk for maladaptation. As a result the emphasis shifted to gaining a better understanding of rejected children (Maasen et al., 2000). This manifested itself in studies looking at different sub-types of rejected children (such as aggressive, withdrawn, aggressive-withdrawn, Ladd, 2006). Thirdly, the popular and rejected categories are considered the most stable over time (Cillessen, Bukowski & Haselager, 2000) and the neglected category may be relatively unstable even for short periods of up to three months (Rubin et al., 2006). Studying children who may only be temporarily neglected would not necessarily bring much benefit. Hence, a combination of factors led to a decrease in the study and analysis of sociometric categories in general, and the neglected category in particular. As a result the emphasis has been on outcomes related to differences in social preference rather than to differences in social impact.

Focus of This Systematic Literature Review

Since 1993 there has been no review examining the effects of sociometric categories on development. One review examined sociometric status but with a focus purely on pupils with learning disabilities (Ochoa & Olivarez, 1995) whilst another focused solely on continuous measures of acceptance and rejection only, thus ignoring the social impact dimension (Card & Little, 2006).

Although some have questioned the validity of the neglected sociometric category (Rubin, Hymel, Lemare, & Rowden, 1989) others are confident that it represents a separate and meaningful population (Nelson, Robinson, Hart, Albano, & Marshall , 2010; Newcomb et al., 1993). Given the importance of peer relationships to development and psychosocial adjustment, those who experience atypical peer relationships should be more at risk for maladaptive development (Rubin et al., 2005). Newcomb et al.'s (1993) findings that neglected children appear to experience less social interaction thereby limiting their opportunities to develop a repertoire of social skills (Deater-Deckard, 2001), and that they experience fewer positive social interactions which are an important predictor for adjustment (Malik & Furman, 1993) suggest that it is important to re-assess the situation of neglected children. A review of the literature since 1993 will help define a more precise profile of neglected children's sociability compared to average children and whether the prevailing view that they are not a cause for concern should be maintained.

The definition of what constitutes sociability and how it can be measured has caused much debate. At a broad level, some agreement exists that sociability involves how successfully individuals interact in a social context (Dodge, 1985; Rose-Krasnor, 1997) but there is considerable diversity in how sociability is defined, operationalized and measured. Some have concentrated on creating sets of skills that are deemed to index sociability (e.g., Gesten, 1976; Harter, 1982; Riggio & Reichard, 2008). Others have sought to group such skills into distinct domains, such as Raver and Zigler's (1997) model that defines sociability as how people feel, think and act in a social context. Newcomb et al. (1993) conceptualised sociability in line with Horney's (1945) view that children may interact with their environment by positively engaging with the people in it. Hence their definition of sociability included social interactions, friendships and positive social traits. Others have focused on transactional models emphasising sociability as the result of interactions between

people rather than "within person" attributes (Rose-Krasnor, 1997). Yet others have introduced the concept of social intelligence (Thorndike, 1920) analogous to other forms of intelligence but operating in social situations. Hence for the purposes of this systematic review a wide initial search was necessary that was not restricted by any one particular model of sociability.

1.2 Method

Search strategy

The systematic literature search was conducted using three searches in the PsychInfo database to identify research relevant to neglected children and sociability. The search terms used are included in Appendix A, and the global limitations were: published between 1991 and 2015 inclusive to capture all literature since Newcomb et al.'s (1993) review, English language only, dissertations were excluded, and children of primary school age only, where two search limiters were used to capture all potential records: childhood (birth - 12 years) and school age (6 - 12 years).

These searches returned a total of 458 records which were further filtered using the following criteria.

Inclusion and Exclusion Criteria

(a) Peer reviewed journal articles

Papers were only included if they were in peer-reviewed journals providing details of original research.

(b) Method of sociometric categorisation

Papers were only included if the studies categorised the participants into sociometric categories using peer nominations.

(c) Sociometric categories identified

Papers were only included if they identified a "neglected" and an "average" category against which to compare the "neglected" participants. An "average" category is required in order to be consistent with Newcomb et al.'s (1993) review

and also as a key research question is whether they differ from the majority (= average) of children.

(d) Dependent measures

The measures used had to relate to sociability in line with, but not limited to, Newcomb et al.'s (1993) categories and also to relate to behaviours or outcomes with peers.

Once duplicate records were removed, 18 papers were included in the systematic review. See Appendix A for the flow chart showing the identification of these papers and Appendix B for their details.

1.3 Results

Sociability for these studies

The 18 studies identified reflect a heterogeneous approach to how sociability is conceptualized in the research on peer relations. A number of studies conflated separate constructs into the same variable making it difficult to apply a framework where each variable measured would sit neatly in a single category. See, for example, Juvonen, Keogh, Ratekin, & Bernheimer's (1992) variable of "peer sociability" detailed later. For the purposes of structuring this review sociability is defined using elements of the previously mentioned models and separates the 18 studies on a pragmatic basis into (a) interactions and behaviours in the presence of others; (b) understanding of social situations; and (c) characteristics of the individual that are likely to be associated with social acceptance.

This narrative review begins with some comments regarding the studies as a whole, followed by a brief description of the salient points and findings for each study within the categories listed above. Finally, there is an overall discussion of the body of work and considerations for future research.

Characteristics of studies:

Location of studies

The most common location for the studies was the United States (15 studies, 83.3%), with one study taking place in the UK, Greece and Portugal respectively.

Participant characteristics

The age range of participants was limited to children in the equivalent of a UK primary school. Studies included older children where the prevailing education system included children in pre-secondary schools who spent their time in the same class.

Only two studies included children at the early childhood stage up to 6 years old (Banerjee & Watling, 2005; Harrist, Zaia, Bates, Dodge, & Pettit, 1997) and four studies included adolescent children up to 13 years but they were always within an overall set of participants that included children from ten years old (Bryant, 1992; Hatzichristou & Hopf, 1996; Lopes, Cruz, & Rutherford, 2002; Sandstrom & Cillessen, 2003). Thus the overwhelming majority of the studies (16) focused on children of middle childhood (from 6 to 11 years old).

Design

Two of the studies were longitudinal in nature (Kupersmidt & Patterson, 1991; Ollendick, Weist, Borden, & Greene, 1992) whilst all the others were cross-sectional in design. This meant that there was a strong emphasis on findings that reported concurrent associations between the neglected children and sociability thus few conclusions can be drawn about causality.

Review by Type of Sociability

Interactions and behaviours with others

Eleven studies explored the association between neglected children and their interactions with others. This included any behaviour that occurred in a social situation such as playing, behaviour towards others likely to create acceptance, spending time with others or participating in social activities.

Bryant (1992) assessed children's perceptions of their peers' conflict resolution strategies in 165 schoolchildren aged 10 to 13. Children nominated three classmates who fitted descriptions for three conflict resolution strategies: anger retaliation strategies ("exploding in anger in response to a classmate expressing anger"), calm strategies ("remaining calm and talking in response to a classmate's expression of anger until the problem is resolved and both people feel OK about each other"), or withdraw / avoid strategies ("withdrawing and avoiding a classmate as a response to a classmate's expression of anger"). Neglected children did not differ from average children in the nominated use of any of the three types of strategies.

Juvonen et al. (1992) studied social interactions in 102 children aged 10 and 11 years. Teachers and children completed the Health Resources Inventory (Gesten, 1976) which contains three subscales. One of these relates to peer sociability, which combines items indexing interaction ("solves problems with friends on own") with items indexing characteristics likely to promote acceptance ("has many friends"). The other two subscales are relevant to later sections of this review. According to both teacher and self-report, neglected children did not differ from average or popular children on peer sociability. In addition, there was no significant correlation between peer sociability and social impact scores, giving another indication that neglected children were not distinguishable by their scores for peer sociability.

Volling, MacKinnon-Lewis, Rabiner, & Baradaran's (1993) large-scale study of 1,221 7 to 10-year-old children measured social interactions in different situations. Teachers rated children using the Taxonomy of Problematic Situations questionnaire (Dodge, McClaskey, & Feldman, 1985) which has 4 subscales relating to different interactions: (i) peer group entry (e.g., joining in with a group already playing a game); (ii) response to provocation (e.g., when someone else takes their turn in a game); (iii) response to success (e.g., when they have won a game); (iv) response to failure (e.g., when they are laughed at for having difficulty doing something). On none of these four subscales did neglected children differ from average.

Vandell and Hembree (1994) investigated three measures of social functioning using teacher, parent and self-report in their study of 326 8 year olds. Two of these (mutual friendship and self-perception of competencies) are dealt with later in this review. The third was teachers' and parents' reports of children's socio-emotional adjustment. This was a composite measure combining the peer interactions scale

(indexing positive interactions, such as sharing toys and helping peers, and negative interactions, such as teasing peers and fighting with peers) and the emotional well-being scale (with items such as being open and honest, afraid and happy) from a questionnaire developed by Santrock & Warshak (1979). Neither being neglected nor average predicted a child's levels of either teacher-rated or parent-rated socio-emotional adjustment.

Morris, Messer, & Gross (1995) examined social interactions in the playground as part of an evaluation of a social skills intervention that paired popular and neglected children together. They established the sociometric status of 229 children aged 7 and 8 years. Twenty-four children were identified as neglected and were observed in the playground along with 24 gender-matched average and 24 popular children. Playground interactions were classified as positive (e.g., cooperation, holding hands), negative (e.g., rejecting or oppositional behaviour or utterances) and solitary (all activity on their own). The findings suggested that neglected children were no different from average or popular children for negative interactions but they did engage in fewer positive interactions and more solitary play than average children.

Hatzichristou and Hopf's (1996) research measured children's sociability across three variables using information from peers, teachers and self report in a study of 1,041 students, aged 10 to 12 years. First, a shortened version of Coie et al.'s (1982) popular/prosocial behaviour scale was used consisting of three items. Peers nominated their classmates for: liked by everybody and helps everybody, leader in school, tries to behave in a proper way to gain the teacher's approval. On this measure neglected children had significantly lower levels of popular / prosocial behaviour than average children. Examining the items individually, the neglected differed from average only on "liked by everybody and helps everybody". It should be noted that this variable merges the separate elements of interaction (helping others) and a positive social characteristic (liked by everybody). Secondly, children also rated themselves on a translated and modified version of the Self-Description Questionnaire I (Marsh, Parker, & Smith, 1983) from which a scale relating to relationships with peers was derived. Details on these items are lacking and appear to be only available in a Greek-language article. However, neglected children did not differ from average or popular children on this scale. Finally, teachers rated children's

interpersonal behaviour (a composite of 4 items: quarrels with others more often, dangerous behaviour, not obedient, immature / inappropriate responses) using the Pupil Behavior Rating Scale (Lambert & Bower, 1962). Here, neglected children did not differ from average or popular children on the overall measure or on any of the individual items.

Harrist et al.'s (1997) study of 554 children aged 6 years divided them into withdrawn and non-withdrawn groups based on observations of their playground behaviour. Withdrawn were those who scored 0.5 SD higher than the mean on solitary focused (playing purposefully on their own) and solitary unfocused (wandering aimlessly on their own) play. This cut-off, the authors concede, is fairly generous resulting in a "withdrawn" group that was not necessarily extremely withdrawn. They found that neglected children were equally likely to be in the non-withdrawn as the withdrawn group, as were average children. They then divided the withdrawn group into four sub-groups based on teacher's ratings of the children's social behaviour at school using the Achenbach Child Behaviour Checklist (Achenbach & Edelbrock, 1986) and the Teacher's Checklist of Peer Relationships (Dodge, 1986). The four clusters defined were unsociable (socially competent but with low levels of interaction with peers), passive-anxious (timid and anxious children), active-isolates (immature, lacking restraint, angry/defiant) and sad/depressed (sad and depressed, timid, immature, isolates self). The neglected withdrawn children were more likely than chance to be in the unsociable group and less likely than chance to be in the active-isolate group. Average withdrawn children were also less likely to be active-isolates, but more likely to be passive-anxious.

Greener's (2000) study developed a new measure of prosocial behaviour based on items previously generated by children (Greener & Crick, 1999). Using this instrument, 332 children aged 9 to 11 years nominated up to three of their classmates who met each of the ten behavioural descriptors. Items related to actions towards other children such as being friendly, asking others to play and including others in conversations. On this measure of prosocial behaviour neglected children were no different from average children.

Gest, Graham-Bermann, & Hartup (2001) investigated network centrality among 205 8 and 9 year old children. Children listed which classmates "hang around together a lot". Using the number of nominations each child was categorised as being

in a group with high network centrality (0.75 SD above the class mean number of nominations), low (0.75 SD below the mean) or medium (all others). Comparisons were not made directly between the different sociometric but by chi-squared analysis. Neglected children were found to be more likely than chance to be in the low network centrality group and less likely to be in the high network centrality group. Average children were equally likely to be in any of the groups.

Lopes et al. (2002) used peer nominations to identify popular / prosocial behaviour in their study of 173 pupils, aged 10 to 13 years. Children nominated two peers who were best described by each of 19 behavioural descriptors (from Coie et al., 1982). Seven were extracted for popular / prosocial behaviour (e.g., cooperates with peers, tries to be teacher's favourite). On this composite measure neglected children were no different from average children nor did they differ from average children on any of the seven individual items. Interestingly, there was one item (affiliates with peers) which was not included in the factor for popularity / prosocial behaviour but on which neglected children showed significantly lower levels of affiliation with peers than average children.

Using daily diaries, Sandstrom and Cillessen (2003) examined children's experience of social inclusion and exclusion in 118 10-13 year olds. Children completed a daily dairy over seven days recording the frequency of 32 given events. These events were grouped into exclusion (e.g., "a kid ignored me"), positive social interactions (e.g., "a kid said something nice to me") and participation in social activities (e.g., "I played at another kid's house"). Neglected children did not differ from any other sociometric category on positive interactions or participation in social activities. Neglected girls were similarly no different from any other sociometric group for being excluded but neglected boys actually experienced less exclusion than average boys.

The eleven studies which investigated interaction and behaviours with others provided few clear indicators of how neglected children differed from average children. One potential difference is that neglected children may physically interact less with their peers than average children, although the research is not definitive. Morris et al.'s (1995) observational study found that they spent more time on their own playing and Gest et al. (2001) that they were less likely to be involved in large social networks and more likely to have small networks. This is in line with Lopes et

al.'s (2002) finding that they affiliated with peers less. In contrast Harrist et al. (1997) found that they were equally likely to be playing on their own in the playground as playing with others and Sandstrom and Cillessen (2003) found that diary entries showed no difference between neglected children and all other children for taking part in social events. On balance, it would appear that neglected children may have a lower quantity of interactions with their peers.

However, when they did interact with their peers they showed few clear differences with average children. Direct comparisons across studies are difficult since there are a number of instances where a single variable was composed of items indexing different constructs. Where the research allows clarity it appears that neglected children have similar conflict resolution strategies to average children (Bryant, 1992) and respond in the same way as average children to provocation, success and failure, as well as entering peer groups (Volling et al., 1993). On prosocial behaviour (such as co-operation and including others), neglected children seem to have the same skills as average children (Greener, 2000; Lopes et al., 2002). For positive interactions the research was more equivocal with Morris et al. (1995) finding that they did engage in fewer such interactions on the playground (e.g., hugging, holding hands) than average children but Sandstrom and Cillessen (2003) finding no difference for their experience of positive social interactions (such as sharing something or receiving something nice). It would also appear that they cannot be differentiated from average children for negative interactions on the playground such as grabbing others' items (Morris et al., 1995) or that they experience more negative interactions in the form of social exclusion than average children (Sandstrom & Cillessen, 2003).

Where the research conflates different aspects of interactions the picture is more difficult to establish but seems to have a similar pattern with neglected children being little different from average. The variables of "peer sociability" (Juvonen et al., 1992), "socio-emotional adjustment" (Vandell & Hembree, 1994), and "interpersonal behaviour" (Hatzichristou & Hopf, 1996) all showed no differences between neglected and average children and lend support to a hypothesis that the quality of interactions neglected children have with their peers is very similar to that of average children.

Social understanding

Four studies investigated how neglected children's social understanding may differ from others'. This included attributing intentions to others, accuracy of perceptions about one's own sociability and recognising inadvertent insults.

Cirino & Beck (1991) investigated social information processing in 643 children aged 8 years and 11 years. Ten hypothetical scenarios were created based on Dodge et al.'s (1985) Taxonomy of Problematic Situations that involved the participating child and a known (named) peer where the participating child was the object of the known peer's behaviour. Five scenarios left the behaviour and intentions of the peer in the scenario ambiguous. The remaining five scenarios had non-ambiguous behaviour and intentions that were socially appropriate but that had a negative outcome for the participating child. Children were asked how they thought the known peer was behaving in the scenario (i.e., attributing intentions to the known peer). They were then asked how they would feel if the action in the scenario had actually happened (i.e., emotional response). Finally they were asked what they would do in the scenario if the known peer had behaved as per the scenario (i.e., behavioural response). The behavioural responses were scored for prosocial content. Higher scores were given for seeking to minimise conflict or cooperating. Across all three aspects of processing social information (attribution of intentions, emotional response, behavioural response) the sociometric category of the participating child made no difference. The authors did find however that neglected girls, but not boys, attributed more negative intentions to the known peer in the scenario than average girls.

Crick and Ladd (1993) examined attributions of causes for imaginary social scenarios with schoolchildren aged 9 and 11 years old. They created four scenarios involving a generic but unnamed peer ("a kid you know"). These were (a) positive-relational where the participant child had a positive experience (e.g., being liked) (b) positive-instrumental where the peer in the scenario would do something the participant child wanted (c) negative-relational and (d) negative instrumental. The children scored their likelihood of attributing three different reasons for the outcome in question: internal (it was something the child did or an attribute they possessed); external (it was something the peer in the story did or an attribute they possessed); mutual (it was an interaction between the peer in the story and the child themself).

Neglected children were no different from any other sociometric category in their attributions of causes for the outcomes in any of the different social scenarios.

Cillessen and Bellmore (1999) examined the accuracy of social self-perceptions of 644 nine year olds. Children rated themselves using items derived from the Child Rating Scale (Hightower et al., 1987) from which they extracted scales relating to disruptive conduct, anxiety / withdrawal, peer sociability, and school adjustment. The authors don't provide details on which items made up the scales and whether they differed from the similarly named scales identified by Hightower et al. (1987). The teachers also rated the children using a shortened version of the Teacher-Child Rating Scale (Hightower et al., 1986) and the same four scales were identified. Again, with the exception of peer sociability (one item: "well-liked by classmates") no details are given on which items comprise the scales. The differences between the children's own ratings and the teachers' ratings were then calculated to give a measure of how closely they agreed. For all four scales the level of agreement between neglected children's ratings and their teachers' ratings was no different to average or popular children. The study further examined how accurate children's perceptions of who most liked them and who least liked them were. They compared children's nominations with the actual nominations to give an accuracy proportion. Here neglected children had the same level of accuracy as average children when it came to saying who most liked them, but were less accurate than average children about who liked them least.

Banerjee and Watling (2005) studied children's theory of mind using a set of scenarios adapted from Baron-Cohen, O'Riordan, Stone, Jones, and Plaisted (1999) where one character inadvertently insults another (a "faux pas"). Their participants were 308 five and nine year olds who had to identify the faux pas in four short stories. On this measure of social understanding, they found no differences between neglected and average, or popular, children.

Neglected children, compared to average children, may process social information in subtly different ways. There was some evidence that they are not as accurate in knowing who likes them least (Cillessen & Bellmore, 1999) and that they attribute more negative intentions to peers although this finding was only true for girls (Cirino & Beck, 1991). However, neglected children did not differ from average children on a measure of theory of mind (a test of spotting a faux pas; Banerjee &

Watling, 2005) or in attributing causes to outcomes in social situations (Crick & Ladd, 1993).

Individual characteristics

Seven studies investigated characteristics of the individual child that are likely to be associated with social acceptance and more positive peer relations (Asher & McDonald, 2011). These were characteristics such as the quality and quantity of friendship, positive social traits such as likeability and emotional regulation, and the ability to follow social norms.

Three studies examined friendship. Vandell and Hembree (1994) included in their study the number of mutual friendships in class. The number of mutual friendships was not significantly associated with being neglected or being in the average sociometric group. Ray, Cohen, & Secrist's (1995) study investigated the size of friendship networks in the classroom and playground. Their participants were 447 children aged 7 to 12. Children made unlimited nominations for who was their friend in class and in the playground (excluding classmates). Mutual nominations for friends in class and in the playground were noted. Neglected children were no different from average or popular children in terms of the total number of friends they reported in class or in the playground. For mutual friends neglected children had fewer mutual friends in class than average children but were no different from average in the number of mutual friends on the playground. Gest et al. (2001) also investigated mutual friendships in class. Neglected children were found to be less likely to have one or more mutual friends whereas average children were equally likely as not to have one or more mutual friends.

Four studies examined positive social traits in children. These were unpopularity, likeability, perceptions of one's own competence and emotional regulation.

Kupersmidt and Patterson (1991) established the sociometric status of 714 children aged from 8 to 10 years. Two years later they used the children's own reports of their behaviour via the Achenbach Youth Self-Report instrument (Achenbach & Edelbrock, 1987) to identify their levels of self-reported unpopularity along with other variables. They were unable to report on boys' unpopularity as the measure was combined with depression due to the significant overlap between the

two. For girls, however, they found that being neglected did not predict later unpopularity in the clinical range (above the 98th percentile) and neither did being in the average category.

Ollendick et al.'s (1992) longitudinal study examined likeability five years after establishing the sociometric status of their participants. Their study of 600 ten year olds measured likeability based on peer-nominations of those who matched the three highest factor loadings on behavioural descriptors contained in the Pupil Evaluation Inventory (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). These descriptors were: those who help others, those who are liked by everyone, those who are especially nice. On this composite measure of likeability, that conflated prosocial behaviour with characteristics, neglected children could not be differentiated from average children.

Vandell and Hembree (1994) also investigated children's self-ratings of their own social, cognitive, physical, and general competencies using Harter's (1982) Perceived Competence Scale for Children. The scores across all four scales were amalgamated into a score for overall self-concept and being neglected was significantly associated with lower levels of overall self-concept. The consolidation of the four scales makes it impossible to unpick whether social competencies were associated with neglected children's lower scores.

Juvonen et al.'s (1992) study included a second subscale for emotional and behavioural regulation (e.g., "accepts things not going their way") with self-ratings and ratings by teachers. Again, neglected children were no different from average children according to both sets of informants and there was no significant correlation between levels of regulation and social impact scores.

Two studies examined the ability of children to adhere to expected norms of behaviour. Juvonen et al.'s (1992) third subscale related to following social norms at school (e.g., "follows class rules") and was rated by the children and by teachers. On this factor for both types of rating the neglected children did not differ from average, and again there was no significant correlation between following social norms and social impact scores. Volling et al.'s (1993) study also asked teachers to rate the extent to which the children met norms for social behaviour (e.g., asking for help

when needed) and norms for classroom behaviour (e.g., waiting in line with peers for a long time). On neither of these variables did neglected children differ from average.

Overall, neglected children would appear to have very similar social characteristics to average children. Two longitudinal studies (Kupersmidt & Patterson, 1991; Ollendick et al., 1992), examined the social traits of likeability and being perceived as unpopular but found no differences with average children. The two studies that measured adherence to social norms indicated that they followed norms for social behaviour and the behaviour expected in the classroom (Juvonen et al., 1992; Volling et al., 1993) as well as average children. With respect to friendship, no clear pattern emerged in the reviewed findings that suggested neglected children differed meaningfully from average children. Two studies (Gest et al., 2001; Ray et al., 1995) reported that in the classroom neglected children had fewer mutual friends than average children, but Vandell & Hembree (1994) found no such difference. There appears to be no difference between neglected and average children in the number of friends that they report having in school (Ray et al., 1995). It may be that neglected children have fewer mutual friends relative to average children, but they are certainly not friendless, and the presence of a small number of supportive relationships may be a key factor in the view that they are not at risk for internalising problems (Davies, 1982; Hodges, Boivin, Vitaro, & Bukowski, 1999; Newcomb et al., 1993). Finally, neglected children do not show any differences from average children in how they manage their emotions and behaviour in social situations, as rated by both teachers and themselves (Juvonen et al., 1992).

Assessing the social characteristics as a whole it appears that neglected children do not possess characteristics that would cause active dislike and rejection from their peers. However, the presence of very similar characteristics to average children does not necessarily translate into numbers of friends for them.

1.4 Discussion

This review identified 18 studies that examined the sociability of sociometrically neglected children in comparison to average children. This section briefly reviews the findings highlighting any potential differences between neglected and average children. It looks at the methodological differences between studies that may be important in identifying differences. It then critiques how the research has

sought to explain the lack of difference between neglected children and average children, and finally proposes areas for future research.

Sociability was defined by a broad range of indicators that covered the quantity and quality of interactions between peers, the processing of social information, and individual characteristics deemed likely to influence acceptance from peers. Across the range of studies there was little evidence that neglected children differ from average children on any of these three broad categories of sociability. Where differences did emerge, the evidence was equivocal and so any conclusions about whether neglected children have a distinctive profile must be tentative.

One possible area of difference is that they have fewer interactions with their peers (Gest et al., 2001; Lopes et al., 2002; Morris et al., 1995). This would be consistent with anecdotal impressions that those who are not noticed tend to spend less time with others, but again, other research found this not to be the case (Harrist et al., 1997; Sandstrom & Cillessen, 2003). The quality of their interactions was very similar to average children. They may be observed to engage in fewer positive interactions (Morris et al., 1995) but seem not to report fewer positive interactions themselves (Sandstrom & Cillessen, 2003).

Differences in social understanding were found for being less accurate than average children in knowing who liked them least (Cillessen & Bellmore, 1999) and for neglected girls only in attributing negative intentions to peers (Cirino & Beck, 1991). Other social information processing studies (Banerjee & Watling, 2005; Crick & Ladd, 1993) found no differences. Given the small amount of research available few firm conclusions are possible.

Finally, for characteristics that are likely to influence social acceptance from peers a possible difference was found in the number of mutual friends in class. Two studies found that they had fewer mutual friends than average (Gest et al., 2001; Ray et al., 1995) but this was not supported by Vandell & Hembree's (1994) study.

Methodological differences between studies may provide some insight into where differences can be found. The studies covered a full range of sources of information: self-report, peer nominations, observation, teacher and parent. Those that reported differences between neglected and average children were based on self-report (Cillessen & Bellmore, 1999; Cirino & Beck 1991; Gest et al., 2001; Ray et al.,

1995; Sandstrom & Cillessen, 2003; Vandell & Hembree, 1994) or observation (Morris et al., 1995). Three studies using peer nominations (Gest et al., 2001; Hatzichristou & Hopf, 1996; Lopes et al., 2002) found some differences between the two sociometric groups but none of the studies using teacher or parent reports did so. This overall difference between sources of report and sensitivity to the characteristics of neglected children is in line with Newcomb et al.'s (1993) finding that differences in sociability were only apparent when observation, peer report or self-report were used and that adults are relatively insensitive to the differences. In the more recent literature reviewed here it is evident that adults find it difficult to identify neglected children's behaviour as distinctly different which may be because adults are not present when many of the encounters between peers occur. However, even peers, who may better placed to identify more subtle differences in behaviour and characteristics (Hubbard & Coie, 1994; Rubin et al., 2005), struggled to find any differences.

Based on the 18 studies it is difficult to attribute a definitive sociability profile to neglected children that distinguishes them from average children. On balance they may interact less with their peers but when they do interact they are equally competent as average children. Their social characteristics and the way they understand social situations are such that they are highly unlikely to be actively rejected by peers (which is reflected in their low level of "least liked" nominations). However, despite having equivalent social skills to average children their comparatively low levels of interaction limit the opportunity to display them potentially accounting for their low levels of "most liked" nominations.

It is important to discuss how researchers since 1991 have addressed the neglected group and how they have sought to account for the findings that neglected children show few differences from average children. As noted earlier, the peer development literature would predict that neglected children have a distinctive profile that would account for their status, yet their low profile does not clearly translate into measurable differences in the quality of their interactions, how they process social information or their social characteristics.

Of the 18 studies only four had neglected children specifically as an area of interest either by directly testing hypotheses regarding the group (Bryant, 1992) or by highlighting them as a group of interest to the research question (Crick & Ladd, 1993; Morris et al., 1995; Volling et al., 1993). This provides further support for the view that research into the neglected sociometric group appears to have had a very low priority over the past 20 years.

The lack of research on neglected children is matched by a lack of rigour in the explanation of findings for neglected children. Given the lack of centrality of neglected children to their research questions it is perhaps not surprising that two thirds of the studies reviewed do not discuss possible psychological mechanisms or propose any theoretical explanation for the many situations where neglected children are so little different from average children, or for the relatively few instances where they are distinctively different. Those who fail to engage with explanations either make no mention of neglected children at all in their discussions (Crick & Ladd, 1993; Gest et al., 2001; Kupersmidt & Patterson, 1991; Ray et al., 1995; Volling et al., 1993) or fall into one of two broad categories. First, some studies questioned the accuracy and validity of the classification of neglected children. It was attributed to the neglected children's low profile making their behaviours less visible to others thus casting doubt on the accuracy of the behaviours attached to neglected children (Hatzichristou & Hopf, 1996). Juvonen et al. (1992) seem to allude to large class sizes making it difficult for children to get well-acquainted with each other, thus artificially inflating the size of the neglected category. Ollendick et al. (1992) claim that the Asher and Dodge (1986) method they employed to identify sociometric categories is less accurate for neglected children than for other groups. Secondly, there are studies that simply provide descriptions of the findings for neglected children but no analysis of the rationale underlying them (Banerjee & Watling, 2005; Bryant, 1992; Greener, 2002; Lopes et al., 2002; Vandell & Hembree, 1994).

Where researchers have attempted to explain the findings relating to neglected children these fall into two categories: (a) differences in the interactions of neglected children that may account for different outcomes and (b) differences in motivation to interact that may provide reasons for why they interact differently. Cirino and Beck (1991) proposed that neglected girls were less interactive with their peers which resulted in a reduced number of problem-solving skills. This reduced set of skills may

lead them to attribute negative intentions to their peers when it comes to problematic social situations. A similar mechanism is proposed by Cillessen and Bellmore (1999) to explain neglected children's accuracy in their perceptions of who likes them least and most in class. Neglected children's lower level of interaction with peers may make the relatively rare feedback from positive interactions more salient for them (hence they would perform well on accuracy for "who likes you most" and not differ from average). However, this explanation does not hold for why neglected children were poorer than average children on accuracy for "who likes you least". Why relatively rare negative feedback is less salient than relatively rare positive feedback was not discussed further in Cillessen and Bellmore's study and remains to be explored in future research.

The argument that having fewer social interactions is a critical mechanism for explaining the differences between neglected children's and average children's sociability does not provide a compelling explanation, although the available evidence suggests that neglected children may interact less frequently with peers than average children. If mere quantity of interactions were critical, then neglected children would differ from average children across a wide variety of sociability measures but current evidence does not support this. Indeed, many studies also report that neglected children do not differ from popular children (who certainly have higher levels of interaction with other peers) on many measures of sociability (Banerjee & Watling, 2005; Cillessen & Bellmore, 1999; Cirino & Beck, 1991; Crick & Ladd, 1993; Hatzichristou & Hopf, 1996; Juvonen et al., 1992; Morris et al., 1995; Ray et al., 1995). Future research should focus on studying the quality of peer interactions rather than the quantity. Conversely, research may wish to validate whether there is a minimum quantity of interaction that is sufficient to develop social skills (Bowker & Raja, 2011), and that neglected children reach this level.

The second explanatory model points towards neglected children having a different motivation to interact with peers which provides an explanation of why there may be differences in interactions. Harrist et al. (1997) found that neglected children were more likely to be in a behavioural cluster they termed "unsociable" which was socially competent but simply may have a relatively low motivation to interact. Sandstrom and Cillessen (2003), whilst recommending caution due to small sample sizes, explain the fact that neglected boys had less experience of social

exclusion than average boys since they may actively choose to minimise social contact thus resulting in less exclusion. Morris et al. (1995) used motivation as part of their explanation of why the social skills intervention resulted in improved sociometric ratings, higher levels of positive interactions with peers and lower levels of solitary play for neglected children. They credit the engineering of positive interactions with popular children with increasing the motivation of neglected children to interact with the popular peer outside the intervention sessions. This in turn may have increased interactions with other peers. Thus they would have become more noticed by other children, which would provide opportunities for positive interactions resulting in more "most liked" nominations.

Recent findings exploring socially withdrawn children's motivation to interact may prove useful in understanding why neglected children may differ only from average children in the amount they interact with peers rather than in how they interact. The complexity of what motivates a child to interact with his or her peers cannot be underestimated (Asendorpf, 1990). Explanations for what underlies differences in motivation include cognitive and affective models as well as conscious and unconscious models (Forgas, Williams, & Laham, 2005), intrinsic and extrinsic motivational forces (Ryan & Deci, 2000), the desire to belong (Baumeister & Leary, 1995) as well as investigations into the neurological basis for reward circuits that would influence motivation (Berridge & Robinson, 2003).

The concept of "preference for solitude" (Wang, Rubin, Laursen, Booth-LaForce, & Rose-Krasnor, 2013) as a motivational force is proving instrumental in helping to explore the heterogeneity of those who are socially withdrawn. Socially withdrawn children have been categorised into three broad groups (Asendorpf, 1990, 1993): unsociable (low motivation to approach others but not high in motivation to avoid them), shy (conflicted and anxious about social interaction as they have both high motivations to approach and avoid others) and avoidant (low motivation to approach and high motivation to avoid others). The unsociable and avoidant, but not the shy, are considered to have high preference for solitude (Wang et al., 2013). For late primary school-age children a distinction emerges between the unsociable and the avoidant (Coplan et al., 2013). Both were found to be high in preference for solitude but the unsociable were significantly lower than the avoidant for social anxiety, negative affect, and depression, and they also had significantly higher levels of

positive affect. Of greatest note was the fact that on all these measures the unsociable were no different from a non-withdrawn comparison group. This view suggests that being unsociable is a relatively benign form of social withdrawal (Coplan, Ooi, Rose-Krasnor, & Nocita, 2014). The similarities between this group and the neglected children in their low social profile alongside how little different they are from average in terms of psychological well-being appears striking.

There is an opportunity to integrate the two types of research. To date, the sociometric research has told us a lot about the implications of social preference on children (Bukowski, Sippola, Hoza, & Newcomb, 2000). There is a substantial body of work focussing on those who are low in social preference (the rejected children) clearly showing that they are risk for poorer outcomes (Asher & Coie, 1990; Gifford-Smith & Brownell, 2003; Newcomb et al., 1993) but far less that investigates the role that social impact has (Cillessen, 2011). The motivation research may give greater insight into what makes those with low social impact distinct and why social impact is not a key factor in adjustment. As far as the author is aware only one study so far (Harrist et al., 1997) has done this and found a reasonable degree of overlap between unsociable and neglected children but they were not identical. Rubin, Le Mare, and Lollis (1990) criticise those who use the terms "neglected" and "withdrawn" interchangeably and conclude that sociometrically neglected and socially withdrawn are not equivalent populations. More recently a greater level of granularity has been applied to the broad category of "withdrawn" (see for example Gazelle, 2008; Wang et al., 2013; Coplan et al., 2014), which indicates that there is still value in exploring those who are neglected by their peers and how their particular type of "withdrawal" may be better understood.

One further route for future research would be a qualitative exploration of the lived experiences of neglected children and how they make sense of their experience (Willig, 2013). It may be that the group's view of the child ("neglected") is not the most salient for them or the aspect that exerts the most influence on a neglected child's life (Gest, 2001). There appears to have been no qualitative study done with this population and given the lack of a clear profile that has emerged from the decades of quantitative work, there is ample scope to bring the benefits of a qualitative approach to bear.

Limitations

One limitation of this review is that the studies were limited to the school context. There appear to be few studies that examine neglected children's interactions outside school (Baker, Barthelemy, & Kurdek, 1993; Harrist et al., 2014; Martín, 2011) but the interactions between environments (Bronfenbrenner, 1979) indicate that there is value in investigating whether children who are neglected in the school context are equally neglected outside it and whether their lack of social impact in the school setting is offset by higher social impact in another. A second limitation is the lack of a standard model for sociability meaning that direct comparisons of attributes between studies are difficult and must by necessity remain at a relatively high level.

1.5 Conclusion

This systematic literature review confirmed that as a general population neglected children differ very little from average children across a broad spectrum of sociability. Why social impact in school does not appear to be problematic for these children was not resolved by the literature. It is likely that they do engage less with their peers but the quality of their interactions is no different to average across a wide range of measures and as such it is unlikely, with respect to sociability, that they represent an at-risk population. It is, however, likely that they represent a highly heterogeneous population and establishing sub-groups that may be at heightened risk would be worthwhile, through qualitative research as well as quantitative. Promising areas for this are investigating their outside school lives to establish what social interactions they have in different contexts. Investigating their motivation to interact may also provide explanations for their comparatively low level of interaction and identify sub-groups of neglected children who may be dissatisfied with their situation. Finally, longitudinal studies of the outcomes for neglected children will map their sociometric status over time and whether the lack of concurrent problems they experience holds true over time.

Chapter 2: Not-Noticed Children: Evaluating their Social Competence in School and Social Lives Outside School

2.1 Introduction

The importance of peer relations to child development has been well established over several decades of research (Asher & Coie, 1990; Gifford-Smith & Brownell, 2003; Parker et al, 2006; Rubin et al., 2006). There are clear links showing that the poorer a child's relationships with his or her peers, the greater the accompanying levels of externalising problems such as aggression and delinquency, as well as victimisation from bullying (Deater-Deckard, 2001; Rubin et al., 2006). Internalising difficulties are also associated with peer relationships where those with poor peer relationships have been shown to have higher levels of depression, anxiety, withdrawal and loneliness (Asher & McDonald, 2011; Dieter-Deckard, 2001; Hay et al., 2004).

Longitudinal studies have also demonstrated that early peer problems can lead to poorer outcomes later in life such as association with deviant peers and anti-social behaviour (Hay et al., 2004), as well as substance misuse (Prinstein et al., 2009), loneliness and depression (Parker et al., 2006). School-related outcomes for those with problematic peer relationships include lower subsequent academic achievement, poorer transition to their next school, higher absenteeism, and a greater chance of dropping out of school (Rubin et al., 2006).

One way of investigating peer relationships is through sociometry. In this method peer nominations are used to categorise children into sociometric groups based on social preference (how "liked" a child is) and social impact (how "noticed" a child is) as selection criteria. The method developed by Coie and Dodge (Coie et al., 1982; Coie & Dodge, 1983) has become the standard for categorisation (McMullen, Veermans & Laine, 2014). These established categories are: (a) popular, those with a high number of "like" and a low number of "dislike" nominations; (b) rejected, high on

"dislike" and low on "like" nominations; (c) controversial, high on both "like" and "dislike" nominations; (d) not-noticed[1], few nominations for either "like" or "dislike" and (e) average, all the rest. Thus it is evident that popular and rejected are at opposite ends of a social preference continuum whilst controversial and not-noticed are better characterised as being at opposite ends of a social impact continuum (see Figure 2).

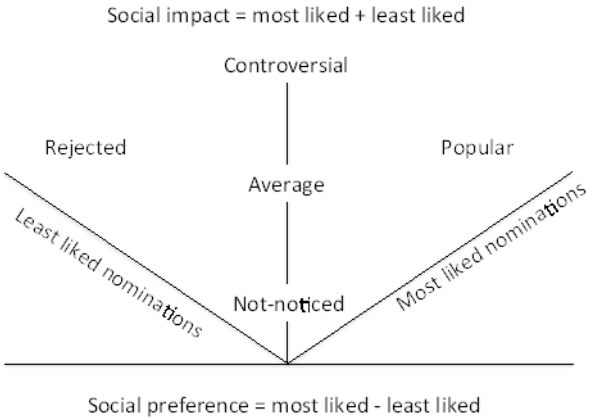


Figure 2 Sociometric categories located on the social preference and social impact dimensions (adapted from Maassen et al., 2000).

Research has established that a child's sociometric status provides a substantial amount of insight into which children are at risk for experiencing problems (Bukowski & Adams, 2005). A considerable weight of evidence indicates that it is rejected children who are at greatest risk for the poorest outcomes both concurrently and over time (Asher & Coie, 1990; Gifford-Smith & Brownell, 2003; Morris et al., 1995). In an effort to address the difficulties faced by this population there has been a focus on gaining a better understanding of rejected children (Maassen et al., 2000) and how different sub-groups of rejected children may be at differential risk, for example due to varying levels of aggression and withdrawal (Ladd, 2006). This focus on rejected children, and social preference rather than social impact as an influence on outcomes, meant that not-noticed children received far less attention.

Three additional factors contributed to this. First, sociometric categorisation was challenged on theoretical and epistemological grounds. Some considered the categories to be simply an arbitrary statistical construct rather than one based on

[1] Coie and Dodge (1982), as well as the vast majority of sociometric literature, refer to these children as "neglected". The term "not-noticed" is used in this study to remove any associations that the term "neglected" has with child maltreatment

psychological theory (Hubbard et al., 2013). Others maintained that since the reference peer group used for categorisation was almost exclusively the classroom, the statuses did not reflect anything about other social groups that the child may belong to (Cadwallader, 2001). It therefore excluded important contextual information relating to the child. Instead of categorising the status of children researchers used peer nominations to create continuous measures of acceptance, rejection, social preference and social impact. More sophisticated statistical tools that used continuous measures also facilitated this shift away from categorisation (Jiang & Cillessen, 2005). Despite these challenges to the validity of sociometric categorisation it continues to be used particularly in schools as a useful method for supporting peer relationships due to its ease of implementation and its robustness in identifying children at greatest risk of poorer social development (McMullen et al., 2014). Secondly, the popular and rejected sociometric categories were seen as the most stable over time (Cillessen et al., 2000) and the not-noticed category seen as relatively unstable even for periods of up to three months (Rubin et al., 2006). Hence the not-noticed category could be seen as children in a transition status that did not warrant attention. Thirdly, a meta-analysis by Newcomb et al. (1993) of the behavioural characteristics of sociometric categories across aggression, withdrawal and sociability concluded that not-noticed children were a distinct sociometric category, but there were few differences with average children and that not-noticed children did not represent a group at risk for serious developmental concern.

There remains an unanswered question as to why not-noticed children do not seem to suffer as a result of their low social impact. Researchers evidently see them as a problematic population referred to variously as having "problematic peer relations" (Underwood, Kupersmidt, & Coie, 1996, p203), "poorer sociometric status" (Palacios, Moreno, & Román, 2013, p362) and a "somewhat undesirable social status" (Harrist, et al., 2014, p217). There is also evidence that teachers and parents are concerned about children who they see as shy, withdrawn, or otherwise not interacting with their peers in what they would perceive as usual ways (Arbeau & Coplan, 2007; Harrist et al., 1997; Thijs, Koomen, & van der Leij, 2006). However, it must be stressed that children who are sociometrically not-noticed are by no means always withdrawn or shy (Rubin et al., 1990) although the popular perception may be that they are synonymous (Rubin, Wojslawowicz-Bowker, & Gazelle, 2010).

The concerns expressed by researchers, parents and teachers around such children appear well-founded given the role that peer relationships and peer interactions in particular play in the development of children. Whilst it is difficult to isolate the unique contribution of peer relationships from those of parents, siblings, and significant others, it appears that interactions with peers offer distinct opportunities for development as they are essentially "horizontal" and more reciprocal than the "vertical" and more hierarchical relationships with adults (Hartup, 1989; Piaget, 1932; Youniss, 1980). These provide the opportunities to play, negotiate, co-operate and co-create their patterns of social behaviour (Robertson et al., 2010). Such situations may teach co-operation in collective goals and behavioural inhibition (Fine, 1987), as well as social participation, emotional understanding and regulation, pro-social behaviour, and social problem-solving that promote positive relationships between peers and enhance acceptance by one's peers (Bierman, 2004; Deater-Deckard, 2001; Parker et al., 2006).

It appears that not-noticed children are likely to interact less with their peers than average children (Gest et al., 2001; Lopes et al., 2002; Morris et al., 1995; Newcomb et al., 1993) which would reduce their opportunities for skills development, although not all studies find this difference (Harrist et al., 1997; Sandstrom & Cillessen, 2003). However, when they do interact with their peers, there appears to be little difference between their social skills and those of average children. Across varied dimensions of social competence such as conflict resolution strategies (Bryant, 1992), peer group entry, responses to different social situations like provocation, success and failure (Volling et al., 1993), prosocial behaviour (Greener, 2000; Lopes et al., 2002) and social understanding in terms of theory of mind (Banerjee & Watling, 2005) or in attributing causes to outcomes in social situations (Crick & Ladd, 1993) they show no difference to average children. With low social impact and lower levels of interaction not-noticed children seem to experience no difficulties with their social competence. Thus they appear to be an exception to a widely held view that "without the experience of normal peer relationships, maladaptive development is likely to follow" (Rubin et al., 2005, p470). There is scope to explore why this may be the case particularly given the lack of attention paid to social impact (Bukowski et al., 2000; Cillessen, 2011).

The Current Study

This study intends to explore the anomalous case of not-noticed children in two new ways. It looks at the social lives of children outside school to explore if there are aspects of their non-school experience that may help explain why they are as socially competent as average children in school. It also explores the lives of not-noticed children through a qualitative investigation to gain richer insight into their social interactions.

The non-school context

Given the long-standing nature and extent of research into peer relationships it is somewhat surprising that there has been so little research conducted outside the school context (Asher & McDonald, 2011; Parker et al., 2006; Cillessen, 2011). Systems theory stresses the influences on children of different environments and consequently how children can function differently in different contexts (e.g., Bronfenbrenner, 1979; Cicchetti, 1993; Woolfson et al., 2003). There is also a growing body of evidence that experiences in one environment can be moderated by experiences in another. For example, much research emphasises the impact of environmental and family factors on children's resilience (Luthar, Cicchetti, & Becker, 2000; Masten & Coatsworth, 1998). Evidence similarly exists for the benefits of social support and friendship provided within the school context (Hartup, 1996; Parker et al., 2006). For example, pre-schoolers with a harsh family environment (higher levels of conflict, stress, and hostility) were more likely to be victimised at elementary school but only if they had a low numbers of friends (Schwartz, Dodge, Pettit, Bates, & The Conduct Problems Prevention Research Group, 2000). Similarly, for elementary school children who were victimised those with a best friend did not show increased internalising and externalising problems, as opposed to those without a best friend (Hodges et al., 1999).

A few studies have looked at classroom sociometric status and links to non-classroom variables such as neighbourhood friends (Baker et al., 1993; Ray et al., 1995), interactions with siblings (Harrist et al., 2014), or verbal exchanges with parents (Franz & Gross, 1996, 2001) whilst others have looked at whether sociometric status is consistent between class and leisure contexts (Martín, 2011), but such non-school investigations remain rare. It would appear that there is

considerable justification for exploring the worlds of not-noticed children outside the school context to see if their experiences in their non-school environments influence their functioning in school.

Loneliness

A suitable area for exploration would be their experience of loneliness and friendship outside school. Loneliness is a well-established area of research for adolescents and adults, but it is only relatively recently become a topic for investigation with children following research establishing that children do indeed experience loneliness (Asher, Parkhurst, Hymel & Williams, 1990). Investigating loneliness and friendship would give an understanding of the quality and quantity of interactions in their social lives outside school. Research on not-noticed children shows that overall they experience no greater levels of loneliness than average children (Boivin, Poulin, & Vitaro, 1994; Cassidy & Asher, 1992; Crick & Ladd, 1993) but these studies referenced loneliness specifically in the school context.

Social competence in school

An important area for children is how well they cope in school. This depends on a multitude of factors (Blair, 2002) but how well equipped they are to deal with the social aspects of school life is extremely important (Ladd, 2005; Juvonen et al., 1992). This may be termed their social competence in a school context. Whilst definitions of what constitutes social competence differ widely (Dodge, 1985; Rose-Krasnor, 1997; Vaughn et al., 2009) there are clusters of abilities and behaviours that are likely to play a key part in a child's success in coping in a school community. These have been studied to a large degree in research looking at school readiness (Denham, 2006) but the attributes linked to successful coping at the start of a school career show continued relevance throughout schooling and beyond (Moffitt et al., 2011). Some of these abilities and behaviours have been combined into a single model of social competence developed by the Conduct Problems Prevention Research group (Corrigan, 2003; CPPRG, 1995) covering prosocial behaviour, emotional regulation and what the authors refer to as academic skills but may be better described as skills necessary for learning.

What constitutes prosocial behaviours varies across the research but generally is agreed to consist of behaviours likely to promote acceptance by peers (Greener,

2000), thus sharing, co-operating, taking turns, and helping others would all fall into this category. The benefits of prosocial behaviour in developing positive relationships with peers and greater levels of coping in a school environment have been demonstrated (Denham, 2006). Certainly children with higher levels of social preference tend to have higher levels of prosocial behaviour than other children (Greener, 2000; Lopes et al., 2002; Newcomb et al., 1993), indicating a robust link between prosocial behaviour and being socially accepted in school.

The ability to regulate emotion has also been linked to successful functioning in school. Children who were more able to regulate their emotions had higher levels of social competencies as indexed by teacher-ratings for lower levels of oppositional behaviour, being less isolated and more sensitive and cooperative. They also had higher peer ratings for likability (Denham et al., 2003). Similarly, emotional dysregulation in kindergarten led to peer rejection and peer victimisation in early elementary school, above and beyond that associated with aggression (Bierman, Kalvin, & Heinrichs, 2015).

In terms of skills necessary for learning Pagani, Fitzpatrick, and Parent (2012) found that higher levels of attention skills in kindergarten predicted greater engagement in the classroom (such as independent learning, working co-operatively with others) throughout elementary school. Learning-related skills such as following instructions and working independently in five year olds were found to predict reading and maths ability through to age ten (McClelland, Acock, & Morrison, 2006). Thus a range of behaviours appears to be linked to coping well in the classroom.

Not-noticed children as a whole show few problems in social competence in school. Juvonen et al. (1992) found that not-noticed children's ability to follow social norms at school (e.g., "follows class rules") as rated by both the children and by teachers was no different from average children. The same study, again for both self- and teacher-ratings, found no differences between not-noticed and average children for emotional and behavioural regulation (e.g., "accepts things not going their way"). Volling et al. (1993) used teacher-ratings to measure meeting norms for social behaviour (e.g., asking for help when needed) and norms for classroom behaviour (e.g., waiting in line with peers for a long time). On both these measures not-noticed children were no different from average.

Although the research evidence consolidated by Newcomb et al. (1993) and produced subsequently has demonstrated that considered as a single population not-noticed children differ very little from average children in their overall social competence in school this overall picture may mask differences within the not-noticed cohort. DeRosier and Thomas (2003) looked at classification strength within sociometric categories and found that the more extreme not-noticed were at greater risk for withdrawal than the less extreme not-noticed. Similarly, Crick and Ladd (1993) found that for not-noticed children as their levels of loneliness and social avoidance rose they became less likely to take credit for positive outcomes and more likely to blame peers for negative outcomes. Hence there is value in examining the potential heterogeneity of not-noticed children. There is also benefit in exploring whether differences in their outside school experiences are reflected in their social competence in school.

Across the decades of sociometric research there has been a singular inability to identify a distinctive profile for not-noticed children that enables us to differentiate them from average children using quantitative measures. The author has been unable to find a qualitative study that investigates the experiences of sociometrically not-noticed children in order to attempt to establish what may be distinctive about them. Thus there would appear to be ample scope for a qualitative investigation.

Research questions

This study examines the social competencies in school of not-noticed children and their social lives outside school. Further it will explore the lived experience of not-noticed children via case studies to find out more about their distinctive qualities. The research questions are (a) what are the contributions of social preference and social impact to children's social competence in school and social lives outside school? (b) do not-noticed children differ from average children on social competence in school? (c) do not-noticed children differ from average children on their social lives outside school? (d) do differences in their social lives outside school influence not-noticed children's levels of social competence inside school; and (e) what is the nature of social interactions (particularly friendship) inside and outside school for not-noticed children?

Given the lack of research regarding outside school experiences and social impact no hypotheses are made for (a), (c), (d) or (e). No difference between not-noticed children and average children was expected for social competence in school (b).

2.2 Method

Design Overview

The original design for the study was a sequential explanatory design (Bishop & Holmes, 2013; Fetters, Curry, & Creswell, 2013). The quantitative element would identify the sociometric categories of children, and obtain measures of their social competence in school and social lives outside school. Then a nested qualitative study using interpretative phenomenological analysis (IPA; Langdridge, 2007; Smith & Osborn, 2003) would investigate the subjective experiences of some of the not-noticed children through semi-structured interviews. A mixed methods approach was planned to bring together the benefits of quantitative analysis (e.g., association, generalisability and magnitude of effect) and qualitative investigation (e.g., to explore the nature of a phenomenon) (Fetters et al., 2013). However, only two participants gave their consent for interviews so an abbreviated case study approach using thematic analysis and contributions from the quantitative data already gathered was adopted. It was felt that case studies could contribute an ideographic perspective from the not-noticed children as well as suggest explanations that may apply to other not-noticed children (Willig, 2013). The study maintained a pragmatic approach (Bishop & Holmes, 2013; Carr, 2008) as a means of reconciling the differing philosophical positions of qualitative and quantitative methodologies by aiming to produce insights that will be useful for those who are concerned with the reasons children are not-noticed by their peers and how this feels for them. Further details on the case study part of the research can be found in the Results section.

Participants and Recruitment

Three schools in a unitary local authority took part. The author was a trainee educational psychologist in the same local authority and already had contacts with

the schools, as the allocated EP for one school and as part of the EP team supporting a cluster of schools to which the two other schools belonged. Two schools were all-through primary schools and one school was a junior school (Years 3 to 6).

The three schools were in comparable areas of deprivation (Department for Communities and Local Government, 2010) although the schools varied from 19.4% to 36.2% for free school meals. No data were collected on the socioeconomic status of the participants and they were assumed to be generally representative of the area in which the school was located.

Participants were recruited from the late primary school years (Years 5 and 6) as middle childhood appears to be a particularly important time in the development of peer relationships in general (Rubin et al., 2006) and more specifically that peer relationships developed at this age have consequences (both positive and negative) for later in life (Bellmore, 2011; Bierman et al., 2015, Nelson & Dishion, 2004). Furthermore, children of this age have generally developed a more sophisticated concept of friendship (Parker et al., 2006) sufficient to enable them to explore such ideas in an interview.

In total eight classes took part: school A both Year 5 classes, school B both Year 5 and both Year 6 classes, school C the Year 5 and Year 6 classes. Schools had a free choice as to which classes to include in the study and School A decided that it would prefer not to include their two Year 6 classes due to potential disruption to their Standard Assessment Tests (SATS) preparation. Parents of all children in participating classes were sent a letter on behalf of the school outlining the study and the fact that the school had agreed to take part (see Appendix C). Parents were given the opportunity to opt-out and of the 219 children in the participating classes 16 opted-out and one left the school (92.2 % participation).

In total there were 202 participants, 100 girls (49.5%) and 102 boys; 120 of whom were in Year 5 (59.4%) and 82 in Year 6. The average age was 122.0 months (*SD* = 6.8 months), with a range from 110 to 134 months.

Procedure

Ethical approval was obtained from the University of Southampton before starting the study (see Appendix C).

The two questionnaires completed by the children were administered one after the other on a whole class basis. The author explained the purpose of the study, and re-emphasised that anyone could decline to take part if they wished. No children declined. Those who opted-out had a word search and a questionnaire about their favourite TV programmes and least favourite foods as a replacement activity. Non-participants had their names on the class lists that others used to make their sociometric nominations in order to ensure a full range of options for the participants[2]. The author also emphasised that all answers were confidential (and checked that the participants understood what this meant), that answers were not to be shared with others and that the children should not look at anyone else's answers. The author did not notice any examples of overt sharing of answers during the administration of the questionnaires.

The sociometric questionnaire was administered before the Social Life Outside School questionnaire in all classes. To maintain confidentiality the children ripped off a slip of paper with their name on it from each questionnaire so that only their participation code was on the questionnaires. At the end of the session the participants were reminded of the purpose of the study and thanked for their participation. The author checked that no-one had become upset by answering the questions, and made sure that the children were aware of in-school sources of support should they subsequently become distressed.

The Social Competence Scale was left for the teachers to complete in their own time and was collected within three weeks. Every participating child had a Social Competence Scale completed for them. The teachers were aware that the study involved the sociometric status of their pupils but were not told which child was in which sociometric category.

Two schools were paid £50 per class for participation and one school opted for a day of supply teaching to cover whilst teachers filled out their questionnaires. Each school received a sociometric map for each participating class showing the

[2] The 16 who opted out were included in the nomination process but did not make any nominations themselves hence it was possible to allocate a sociometric status to them. They are not included in the 202. Chi-square analysis indicated that there was no significant difference between the sociometric statuses of those who opted out and those who participated.

anonymous sociometric status of each child (a code was used instead of the name) and the most-liked nominations between children (see Appendix D for an example).

Measures

Sociometric nominations

Children were given a list of their classmates in alphabetical order of first name. They were asked to put a tick against up to three names they liked most (ML) and three they liked least (LL). They could nominate as few as they liked (including no nominations) but no more than three for ML or LL.

The children were allocated into sociometric groups according to the process outlined by Coie and Dodge (1983). The number of ML nominations and LL nominations were totalled for each child and standardised by class. A social preference score (SP = standardised ML minus standardised LL) and a social impact score (SI = standardised ML plus standardised LL) was calculated for each child. These SP and SI scores were then standardised by class. Each child was allocated to a sociometric category as follows: (1) popular (standardised SP > 1 and also standardised ML > 0 and standardised LL < 0); (2) rejected (standardised SP < -1 and also standardised ML < 0 and standardised LL > 0); (3) controversial (standardised SI > 1 and also standardised ML and LL > 0); (4) not-noticed (standardised SI < -1 and also standardised ML and LL < 0); and (5) average, all remaining children.[3]

In this way the participants were allocated statuses as follows: rejected 25 (12.4%), controversial 13 (6.4%), popular 32 (15.8%), average 100 (49.5%), not-noticed 32 (15.8%). These percentages are consistent with studies that have used the Coie and Dodge (1983) method for identifying sociometric status (e.g., Bukowski & Newcomb, 1985; Cillessen, 2011; Frederickson & Furnham, 1998; McMullen et al., 2014).

[3] The sociometric tools on Robin Banerjee's website (http://users.sussex.ac.uk/~robinb/socio.html) were used to enter the children's ML and LL nominations and to identify which sociometric status each child had. The methods and statistical processing by which this is achieved is the same as Coie and Dodge (1983) and was confirmed by Robin Banerjee (personal communication, 15 December 2014)

Social Competence Scale

The Social Competence Scale – Teacher Version (Corrigan, 2003) has 25 items and was developed by the Conduct Problems Prevention Research Group to assess a child's functioning in a school context. Teachers rate each item on a scale ranging from 0 (not at all) to 4 (very well) in terms of how well the item describes the child. The individual scores are summed to give an overall social competence score; higher scores indicate greater social competence. Three subscales can also be created that measure (i) prosocial/communication skills, (ii) emotional regulation skills and (iii) academic skills. Sample items for the prosocial / communication scale are "resolves peer problems on his / her own" and "shares materials with others"; for the emotional regulation scale "expresses needs and feelings appropriately" and "controls temper when there is a disagreement"; for the academic skills scale "functions well even with distractions" and "pays attention". Items for each subscale are summed to create the subscale totals where higher scores indicate higher levels of skill. The ranges of possible scores for the questionnaire are as follows: total scale 0 to 100, prosocial / communication 0 to 32, emotional regulation 0 to 40 and academic skills 0 to 28. The questionnaire has shown good reliability for the overall scale and the individual subscales in previous research (e.g., Bierman et al., 2015; Hawes et al., 2014; Howell, Miller, Lilly, & Graham-Berman, 2013). The full questionnaire is in Appendix E.

The Cronbach's alpha for the overall social competence scale in the current study was .98 indicating very good reliability. All 25 items had a corrected item – total correlation greater than or equal to .77. The subscales for prosocial / communication, emotional regulation and academic skills all had satisfactory reliability (Cronbach's alpha = .96, .97 and .96 respectively).

Social Life Outside School Questionnaire

This study modified the Loneliness and Social Dissatisfaction questionnaire (Asher & Wheeler, 1985; Cassidy & Asher 1992) to assess satisfaction with social life with other children and friends specific to non-school contexts. A total of 16 questions assess feelings of loneliness, social adequacy, perceptions of peer status and social support. A further eight questions are added as filler questions (e.g., "do you like to read?"). Questions are scored on a 5-point Likert scale (1 = never, 5 =

always). Five of the questions are reverse scored. A total social life outside school score is created by summing the scores for all 16 items. Lower scores indicate lower satisfaction with social life outside school. Total scores can range from 16 to 80. The questionnaire is in Appendix E. Previous use of the questionnaire has shown good reliability in a school context (Crick & Ladd, 1993; Boivin et al., 1994; Demir & Tarhan, 2001; Kjøbli & Ogden, 2014).

The adapted version showed good internal consistency with Cronbach's alpha = .91. All 16 items had a corrected item – total correlation ≥ .36. The reverse scored items had slightly lower correlations with the overall scale (range .36 to .60) than the remaining items (range .46 to .77).

Following a principal component analysis using orthogonal rotation (varimax) on the 16 items two factors were extracted and accounted for 46.03% of the variance: (i) friends outside school and (ii) loneliness outside school. Nine items loaded on the friends outside school subscale with a Cronbach's alpha of .90. All nine items had a corrected item – total correlation ≥ .50. These items were questions 1, 3, 4, 6, 8, 10, 14, 18, and 24 (see Appendix E) and related to interactions with friends and other children. The loneliness outside school subscale consisted of 4 items with a Cronbach's alpha of .77 indicating acceptable reliability. All four items had a corrected item – total correlation ≥.48. These items were questions 9, 12, 17, and 21 (see Appendix E) and related to subjective feelings of loneliness.

2.3 Results

Overview

The results section is organised in the following way; first, preliminary analyses explore the properties of the data (nature of distribution, outliers, etc.). Secondly, the contributions of social preference and social impact to children's social competence in school and social lives outside school is assessed, followed by analysis of not-noticed children's social competence in school and perceptions of their social lives outside school. Thirdly, the influence of not-noticed children's experiences outside school on their levels of social competence inside school is examined. Finally, the two abbreviated case studies are presented to address the nature of friendship inside and outside school for not-noticed children.

Preliminary Analyses

The data were assessed for normal distribution of the variables for each of the sociometric categories through visual inspection of histograms and Kolmogorov-Smirnov tests. Some of the data were not normally distributed ($p < .05$ for the Kolmogorov-Smirnov test). These were for the rejected group (academic skills subscale), for the popular group (total social competence in school, prosocial / communication subscale, emotional regulation subscale, academic skills subscale, total social life outside school), for the average group (all variables), and for the not-noticed group (total social competence in school). Visual inspection of the data showed that the lack of normality for the popular group and the average group was caused by scores being skewed towards the higher end of each scale.

Although not all the data were normally distributed, ANOVAs were run in the interests of parsimony and as they are generally robust to violations of normality and homogeneity of variance (Field, 2009). Although the sociometric group sizes were adequate they were unequal which may compromise the accuracy of the parametric tests. Hence where data were not normally distributed non-parametric tests (Mann-Whitney) were run in addition. In every case they confirmed the parametric test finding, and so only the parametric test results are presented. Post-hoc tests used were Hochberg's GT2 due to different sample sizes. In addition, to reduce the complexity of data presented, the values for the dependent variables are shown as means and standard deviations rather than as a mix of means and medians.

Outliers were examined to check for data entry errors. Further investigation showed that 5.5% of z-scores for total social competence in school and 4.5% of z-scores for social life outside school lay outside 1.96 which is in line with expected proportions. In addition none of the outliers was reported to have medical or special educational needs that indicated that they were unrepresentative of the target population of the study. As a result all outliers were retained.

The gender, mean age and national curriculum year for each sociometric category is shown in Table 1.

Table 1

Gender, Mean Age and National Curriculum Year by Sociometric Category

	Average *n* = 100	Not-noticed *n* = 32	Controversial *n* = 13	Popular *n* = 32	Rejected *n* = 25
Mean age in months (SD)	121.9 (6.70)	123.5 (6.20)	121.8 (7.17)	122.3 (7.28)	119.8 (7.18)
Boys / girls	49 / 51	14 / 18	9 / 4	14 / 18	16 / 9
Year 5 / Year 6	58 / 42	18 / 14	8 / 5	21 / 11	15 / 10

Chi-squared analysis showed that there was no significant association between gender or national curriculum year and sociometric category. This would indicate that gender and national curriculum year would not have a significant effect on the dependent measures for the sociometric categories and so they were not taken into account for subsequent analysis.

Social preference and social impact contribution to social competence in school and social lives outside school

The correlation between social preference and social impact was moderate (r = -.415, p = <.001) indicating that they were indexing different constructs. Multiple regression was carried out using social preference and social impact as predictor variables and the four dependent variables relating to social competence as outcome variables (see Table 2). For all four dependent variables social preference was the stronger predictor and indicated that those with higher social preference had higher levels of social competence. Social impact was a significant predictor for all but one of the variables (academic skills) and indicated that those with lower social impact had higher levels of social competence. The two predictors accounted for between 23% and 25% of the variance in the dependent variable. Social preference and social impact did not predict levels of satisfaction with social lives outside school, or the subscales of friends outside school and loneliness outside school and all models were non-significant.

Table 2

Predictors of Social Competence in School

	B	*SE B*	β	
Total social competence				
Constant	73.31	1.30		
Social preference	9.31	1.48	.43**	
Social impact	-3.04	1.45	-.14*	
R^2				.25
Prosocial / communication				
Constant	24.82	0.41		
Social preference	2.74	0.46	.40**	
Social impact	-0.96	0.45	-.15*	
R^2				.23
Emotional regulation				
Constant	29.71	0.55		
Social preference	3.75	0.62	.41**	
Social impact	-1.20	0.60	-.14*	
R^2				.24
Academic skills				
Constant	19.18	0.42		
Social preference	2.82	0.47	.41**	
Social impact	-0.88	0.46	-.13	
R^2				.23

Note. * $p < .05$ ** $p < .001$

Social competence and social life outside school for sociometric categories

The descriptive statistics for social competence and social life outside school for each sociometric group are shown in Table 3. One-way ANOVAs were conducted to investigate differences in means for the dependent variables between sociometric groups.

Social competence

For total social competence there was a significant difference between sociometric groups, F (4, 197) = 8.48, p = <.001, r = .38. Post-hoc tests showed that rejected children had lower social competence than popular, average and not-noticed children (all ps < .01).

In addition, for all three subscales there was a significant difference between sociometric groups: prosocial / communication, F (4, 197) = 7.32, p = <.001, r = .36; emotional regulation, F (4, 197) = 8.07, p = <.001, r = .38; and academic skills F (4, 197) = 7.81, p = <.001, r = .37. For all three subscales post-hoc tests showed that rejected children had lower social competence than popular, average and not-noticed children (all ps < .01).

Social life outside school

For the overall social life outside school scale, and the two subscales of friends outside school and loneliness outside school there were no significant differences between sociometric groups (all ps > .10).

Social life outside school and social competence for not-noticed children

For the not-noticed children there was no correlation between their scores for total social competence or any of the three subscales and their scores for social life outside school or either of the two subscales (all ps > .30).

Table 3

Social Competence and Social Life Outside School by Sociometric Status

Variable	Average *n* = 100 Mean (*SD*)	Not-noticed *n* = 32 Mean (*SD*)	Controversial *n* = 13 Mean (*SD*)	Popular *n* = 32 Mean (*SD*)	Rejected *n* = 25 Mean (*SD*)
Total social competence	74.41 (19.43) [bc]	75.50 (20.46) [bc]	69.62 (22.70) [ac]	84.88 (16.72) [bc]	54.68 (23.00) [a]
Prosocial / communication	24.91 (6.07) [bc]	25.56 (5.86) [bc]	23.85 (6.89) [ac]	28.08 (5.30) [bc]	19.28 (7.90) [a]
Emotional regulation	30.19 (7.80) [bc]	30.20 (9.32) [bc]	27.81 (9.71) [ac]	34.06 (6.25) [bc]	21.92 (9.93) [a]
Academic skills	19.32 (6.50) [bc]	19.73 (6.06) [bc]	17.96 (6.61) [ac]	22.73 (5.85) [bc]	13.48 (6.30) [a]
Social life outside school	59.06 (12.65)	55.78 (13.39)	58.23 (10.02)	59.19 (11.85)	53.08 (12.14)
Friends outside school	33.12 (8.47)	31.59 (8.47)	32.92 (8.09)	32.97 (8.45)	38.20 (7.32)
Loneliness outside school	14.51 (3.59)	13.47 (3.87)	14.77 (3.00)	14.47 (3.19)	12.64 (4.07)

Note. Values with different superscripts have means that differ at the $p < .05$ level

Case studies – presentation

The two abbreviated case studies presented are instrumental and pragmatic, in that only not-noticed children were invited for interview and there were clear research questions that were addressed. The two cases presented here represent the only two children who agreed to take part.

Methodology, data collection and analysis

The data for the case studies came from the questionnaires that the children had completed on their social lives outside school and their most liked and least liked classmates; the teachers' ratings of their social competence; and transcripts of interviews.

Not-noticed children were identified by the sociometric nomination process. Thirty-two met the criteria for being classified as not-noticed and all of them were invited to take part in an interview to explore their views on their social lives with particular reference to friendship both inside and outside the school. For the two who agreed to take part opt-in consent was obtained from parents (see Appendix C). Interviews were held in the child's home and in both cases other family members were present and contributed from time to time. Verbal assent was obtained from both children before the interviews. Given the age of the children and the potentially sensitive nature of the subject matter I felt that the ethical considerations in ensuring that the child felt safe and secure in the interview environment outweighed any concerns that external contributions from family members would influence the interviewees' responses to my questions.

The interviews were semi-structured and centred around the child's friendships in school and outside school. The specific question being explored was "what is the nature of friendship inside and outside school for not-noticed children?" The interview protocol is in Appendix F.

The interviews were transcribed, anonymised to remove any information that would enable identification of the child or school, and analysed using deductive thematic analysis (Braun & Clarke, 2006). Only themes that related directly to the research question were coded and analysed. The data were coded at the semantic level and initial thematic maps with main and sub-themes developed. These initial

codes, themes and sub-themes were refined, merged and some were deleted based on reading and re-reading the data. The final thematic map is shown below.

Table 4

Final Thematic Map

Theme	**Description**	**Example quote**	**Exclusion (where ambiguity is possible in the data)**
Different at home and school	Differences in how someone functions at home compared with at school. Can also include differences in how they think about themselves in the different environments as well as behaviour, or how they are treated by others. "Home" is defined broadly to cover non-school environments rather than just the residence or immediate family environment.	I'm confident at home but I'm not confident at school.	No examples of ambiguity noted in the data – environments are mutually exclusive
Content with current school friendships	Indications that someone is happy with either the number or quality of existing friendships in school.	Maybe because, like... like, I didn't have anyone to play with and then they're like... they let me.	Only covers school friends, not those outside the school.
More friends would be welcome	Expressions of interest in gaining more friends, motivation to increase the number of friends.	Well, I think I'll have more friends in [school name] because Anthony, he said he got loads more friends.	Quantity of friends rather than quality of friends is to be increased.

Theme	Description	Example quote	Exclusion (where ambiguity is possible in the data)
Role of others in friendship	Others have a role to play in facilitating friendship. Can be others helping the participant or the participant helping others to form friendships.	Well like if I was feeling lonely she would play with me and then she like, and then she got other people to play with me. And then I kind of made friends that way. Basically we got her to like we introduced her to like people like that are your friends.	Needs to be an active role played by someone rather than just being present at the same time as friendships forming or introductions being made.
Friendship crosses boundaries	Boundaries for friendship are permeable. The same person can be friends in different contexts; you can have friends in different contexts (e.g., from different schools, same school but different class or even school year).	Because some people… like 'cause even if they don't go to the same school as you you could still be friends with them	Has to be mention of friendship or playing or some other aspect that indicates more than just an acquaintance.

Names in the interview extracts below have been changed from the original names.

Case study 1

Child 1 was an 11 year old boy in Year 6. He lived with his parents and older sister and brother. In the sociometric nominations he had received one most liked and one least liked nomination but the most liked was not a mutual nomination. His social life outside school questionnaire data showed a lower score (40.0) than the mean for all participants (57.7) indicating a greater level of dissatisfaction with his

life outside school. In particular he rated himself as “never” finding it easy to make new friends outside school and “never” being able to find a friend outside school, but equally “never” feeling alone outside school and “never” feeling left out of things. This contrast between not having friends but not feeling lonely was reflected in his scores for the subscale friends outside school (14.0 compared to the overall mean of 32.5) and the subscale loneliness outside school (20.0 compared to the overall mean of 14.1). The teacher rated his social competence as somewhat lower than the average child (56.5 compared to the overall mean of 73.5) but this was largely accounted for by a lower score on the academic skills subscale (e.g., remaining on task, following instructions) than for prosocial skills or emotional regulation.

There were three themes that appeared to me to be meaningful for Child 1 in terms of his sociometric status that covered how different his home and school environments were, how satisfied he seemed with his existing friendships, and the fact that he would appreciate having more friends.

Different at home and school

This theme related to how differently he felt and behaved at home as compared to school. In particular he was more confident at home:

> I'm confident at home but I'm not confident at school.
>
> **Okay. Tell me about that**.
>
> Like, at school you have to, like, have to do it, can't do nothing. When you're at home you can do whatever you want.
>
> …..
>
> **What other things are you confident about outside school?**
>
> Hmm. Like, going out.

This confidence appeared to be reflected in his dress sense where he was happy to have an individual style and in his use of social media where he enjoyed making and sharing videos online:

> **What other kind of things do you like doing?**
>
> Like going on social media.

Uh huh. Such as?

Facebook. Instagram. Vine.

Oh, lots?

Yeah.

He also enjoyed making unusual dishes:

So that thing about confidence outside school, tell me a bit more about that. So we've got clothes, we've got going out, we've got social media. What else about outside school?

Eating?

Eating.

(Sister) You like to eat.

You love to eat? Do you go out to eat? Do you eat in? Do you make your own food?

Em well only in the summer I made curry salad.

Content with current school friendships

The second theme concerned his level of contentment with his current friendships in school. He talked about two friends in school that he'd known for quite some time. Even though neither of these had nominated him as one of their three most-liked classmates (Child 1 was not aware of this), this level of friendship seemed satisfactory to him.

So tell me about the two in the class. Is that Kathy?

Aye. Yeah, I sometimes play with them two.

Okay. And sometimes in... is it after-school clubs or lunchtime clubs?

Lunchtime.

Lunchtime clubs. And what do you do in the lunchtime clubs?

Like, draw and play games.

……

So I've known them since...

You've known them for ages?

Yeah.

An interesting element of these friendships seemed to be that they were based less on being actively included in what others were doing and more on not being rejected:

Okay. So can you remember how you made friends with those and why? Why these two rather than (I don't know) other people?

Maybe because, like... like, I didn't have anyone to play with and then they're like... they let me.

Okay. That's fair enough.

Like, they're nice. They're not just like "No, go away!" But, like, most of the people in the class say "Go away!"

More friends would be welcome

Finally, there was a theme relating to his desire to have more friends but that this would be more achievable in a different school environment. For Child 1, it seemed that he was looking forward to his next school where he would have opportunities to make more friends. There appeared to be a willingness to engage with others in an environment that would be more conducive to forging friendships.

Last sort of question – do you think things will be the same in secondary school as they are in primary school?

Well, I think I'll have more friends in [school name] because Anthony, he said he got loads more friends.

He's your brother?

Yeah.

He's your older brother who just up there? Okay.

Up there.

Okay. So what, so how do you think that's going to be different?

Like, because, like, there's loads of different people there that, like, there's... it's like totally different people that you don't know and, like...

(Mum) From different schools.

Yeah.

So are you quite looking forward to going there?

Yeah. I want to leave [school name]. Had enough of it.

……

you said there'd be more friends at secondary school, so tell me a bit more about how you might go meeting those people.

Like, because, like, in year seven I had, like, I'd be like really happy to meet new people and, like, see what they like and, like, what they like to do.

With respect to Child 1's conceptualisation of friendship, it appeared to hold different meanings for him inside school and outside. He did not appear to have any friends outside school (or at least he did not mention them) but he seemed confident enough in himself at home with other fulfilling activities such that it did not seem to be a concern for him. He claimed two friends in school (although these were not reciprocated) and although his relationship with them seemed to be based on a lack of rejection rather than an active engagement, was content with this. He was also looking forward to making more friends in his new school, and the fact that it was a different environment from his current school one was an important factor in his thinking he would be more successful.

Case study 2

Child 2 was a 10 year old girl in Year 5. She lived alternate weeks with her father and mother who were separated. In the sociometric nominations she had received two most liked (both of which were mutual nominations) and no least liked nominations. Her social life outside school questionnaire showed a slightly higher score (62.0) than average (57.7) indicating a higher level of satisfaction with her life outside school than most. This was consistent across both subscales of friends outside school and loneliness outside school. The teacher rated her overall social competence as exactly on the average and this was consistent across all three subscales.

Child 2 named a large number of friends in school and two friends outside school:

> **Who are your friends? Could be friends inside school, or outside school.**
>
> Rachel, she's outside school. Sarah who's outside school, and then I've got inside school Charlotte, Sophia, Emma, Olivia, Chloe, Hannah, Zoe…

It appeared that Child 2's perception of the size of her circle of friends was larger than it may have been in reality. Of course, it could be an artefact of the nomination process that limited nominations to three, and Child 2 would have been number four on many other's list. Of the six she listed in school two also nominated her, indicating that her perception of who her friends were was reasonably accurate.

For Child 2, there seemed to be two themes that I identified in the interview data that may help illuminate the friendship experience of the not-noticed child which related to how others were instrumental in her forming friendships and how she saw friendship as being able to permeate boundaries.

Role of others in friendship

The first theme concerned how there seemed to be a significant role to be played by others in forming friendships. She had been helped to make friends by others and taken on a passive role:

> **How would you make new friends?**
>
> I'm not quite sure because I don't know really how I made friends in [school name] because I was one of the new ones but I had a teacher that stuck by me sometime called Mrs Edwards. And she reminded me of my granny.
>
> **(laugh) Oh right, did she look like your granny? Or the things that she did were like your granny?**
>
> The things she did were like my granny.
>
> **Oh right. So you said she stuck by you, what did she do? Can you remember?**

Well like if I was feeling lonely she would play with me and then she like, and then she got other people to play with me. And then I kind of made friends that way.

…..

So how you might think about making friends at secondary school. 'Cause it sounds like you're quite good at it.

I'm still not quite sure 'cause normally people get me involved with their game.

Oh I see.

And then I normally make friends that way.

Oh I see. So it helps if someone else sort of invites you in?

Yes.

Okay. so would you feel a bit uncomfortable about marching up to someone and saying…

Yeah.

She had also made efforts to include others in friendship where she had taken a more active role:

Tell me a bit about these other ones inside school then.

Well Charlotte and Zoe are like Polish and they came in from [school name], like Chloe, Olivia, Sophia and Emma. And basically Hannah, she was new to school in year three and then we welcomed her and then she ended up being our friend ever since.

……

So tell me, so tell me a bit about when Hannah turned up in year three, what did you do?

Basically we like helped her get into people and to know people.

Uh huh, and how did you do that?

Basically we got her to like we introduced her to like people like that are your friends.

Friendship crosses boundaries

The second theme involved the idea that friendships could transfer between different environments. Child 2 seemed to have an idea that friendship could cross boundaries between schools, could be shared between school and home and also across school years within school:

> Because some people… like 'cause even if they don't go to the same school as you you could still be friends with them.
>
> …..
>
> **Okay. So do you see any of the, any of your school friends outside school?**
>
> I've seen Emma and Sophia. I've seen Chloe before, but… and at Emma's birthday party I've seen Olivia, but she don't, she's not allowed to come round Emma.
>
> …..
>
> **So are there any other people that you spend a fair amount of time with?**
>
> Like… I spend time with Lily in year three like 'cause me and Sophia normally if we don't, if we can't think of a game to play we normally play with Lily and Sandra.
>
> **Ah ha. And they're in year three? Ah. And what do you do with those two?**
>
> We normally like play 'It' or… I've forgotten, it's like hide and seek

Child 2's experience of friendship differed from Child 1. She appeared to have a wide circle of friends both inside and outside school, but recognised that others had been instrumental, certainly in the past, in helping her make friends. She appeared to have turned this previously passive role into a more active role when helping others to make friends. Child 2 did not appear to have such a clear demarcation between home and school environments as Child 1, and the boundaries for her were permeable, particularly for friendships.

2.4 Discussion

This study focused on sociometrically not-noticed children. It measured their social competence in school and satisfaction with their social lives outside school and

assessed whether differences in their experiences outside school had any influence on their levels of social competence inside school. It also used two abbreviated case studies to understand more about the lives of not-noticed children, in particular their social interactions and friendships both inside and outside school.

Social preference and social impact

Social competence in a school context was more strongly predicted by social preference than social impact, although both made significant contributions. In addition social preference but not social impact was significantly associated with satisfaction with social life outside school and loneliness outside school. These findings are consistent with research indicating that poorer outcomes are more closely associated with children being actively rejected as opposed to not being accepted and that social impact plays a far less significant role (Bukowski et al., 2000; Cillessen, 2011). Peer rejection rather than peer acceptance has been shown to have a greater association with lower levels of theory of mind (Banerjee & Watling, 2005) as well as stronger prediction of anti-social behaviour and engagement in work or education for adults (Nelson & Dishion, 2004). Those who are rejected have higher levels of anxiety, depression and withdrawal from peers (Bell-Dolan, Foster, & Christopher, 1995; Cassidy & Asher, 1992; Kupersmidt & Patterson, 1991; McMullen et al., 2014) and it may be that active peer rejection causes more stress for children that will manifest itself in such internalising problems. Suffering from such difficulties would lead to fewer opportunities for interaction and development of social competence. A lack of social impact may be not as stressful as being actively rejected leading to less likelihood of internalising difficulties and a correspondingly lower level of difficulties that are likely to reduce interactions. Certainly, a number of studies have found that not-noticed children are no different from average children for a range of internalising problems (Bell-Dolan et al., 1995; Juffer, Stams, & IJzendoorn, 2004; Newcomb et al., 1993; Tani & Schneider, 1997).

The small effect of social impact (higher levels associated with lower social competence) may be attributable to the controversial children rather than the not-noticed children. While not statistically different from any others they were lower than all but the rejected children. Controversial children have high social impact but also an above average number of least-liked nominations, and it is possible that this

degree of rejection is the salient force that determines their lower levels of social competence found in this study. Other studies, however, have not found controversial children to have low levels of social competence (e.g., Greener, 2000; Lopes et al., 2002; Newcomb et al., 1993) but studies are constrained by the low numbers of controversial children identified (Cillessen, 2011), so the findings for controversial children are subject to further investigation. It is interesting to note that friendship outside school was not associated with levels of social preference providing further evidence that those who are rejected are not without friends (e.g., Fink, Begeer, Peterson, Slaughter, & Rosnay, 2015; Ray et al., 1995) and may find social support through others, even those these may be deviant peer groups of similarly rejected children (Hay et al., 2004).

Social competence in school

In line with the hypothesis, the not-noticed children were found to be no different from average, popular or controversial children on social competence in school, emphasising again the fact that on multiple measures of social competence research has consistently struggled to identify a distinctive profile for them (e.g., Banerjee & Watling, 2005; Hatzichristou & Hopf, 1996; Greener, 2000; Lopes et al., 2002; Newcomb et al., 1993). The findings were replicated across the three subscales of prosocial / communication skills, emotional regulation and academic skills providing a more detailed, though not more distinctive, picture of the profile of not-noticed children.

Social life outside school

This study extended the sociometric research into looking at how children felt about their social lives outside school, in particular interactions with other children and friends. Here there were no differences between any of the sociometric groups, and thus not-noticed children were found, again, to be no different from others. Little is known about the non-school lives of not-noticed children, but the findings that their social lives, sense of loneliness and friendships outside school are no different from others is in line with existing findings. Baker et al. (1993) measured family environments on climate (e.g., conflict, warmth) and parental discipline and found that not-noticed children had environments no different from average or popular

children. They have also reported having the same number of friends outside school as average and popular children (Ray et al., 1995).

The study also demonstrated the reliability of a questionnaire in the non-school context previously used for within-school contexts. It also established the presence of two distinct factors in the instrument that are able to provide a finer grain of detail on children's views of their lives outside school: friendship outside school and loneliness outside school.

Impact of social life outside school on social competence

There was no correlation between not-noticed children's levels of satisfaction with their social lives outside school, or the subscales of friendship and loneliness outside school, and their social competencies inside school. This is a somewhat intriguing finding indicating that higher levels of satisfaction with their social lives including interaction with friends outside school did not necessarily translate into higher social competence inside school. It may indicate that for these not-noticed children their non-school environment achieves a minimum level of interaction and social contact required to develop their social competence skills which are then displayed in school. This would indicate a ceiling effect for social interactions beyond which they cease to impact on social competence.

Qualitative exploration of social interactions inside and outside school

The interviews with the two not-noticed children provided some insight into the lives of such children. Whilst the two case studies cannot be generalised beyond the particular circumstances of the children in question, the data presented here could allow the development of new areas of research and new ways of considering not-noticed children and theorising about them (Yin, 1994).

First, there is a potential explanation for why not-noticed children have as well-developed social competence as average children despite their apparent lack of peer interaction at school. They may have highly active and fulfilling lives outside the school classroom that provides the necessary social interaction. Quantitative measures indicated similar levels of non-school social life to all others which also provides partial support for this view. The sociometric methodology that identifies them as not-noticed is almost exclusively restricted to the reference group of the class

(for primary school children at least). Outside this reference group, it is entirely feasible that they are not "not-noticed" at all. Martín (2011) found that sociometric status for primary school children was not consistent between academic and leisure contexts and that only 24% were not-noticed in both contexts. Child 2 talked about a pattern of social interaction that would not typically be associated with a not-noticed child. She named many children she considered to be friends in other classes and outside school as well as in the same class (two of whom also nominated her as one of their most liked classmates). It appeared that she had a wide social circle beyond the classroom, where she was categorised as not-noticed, which was reflected in her above average score for friendship outside school. Why she was categorised as not-noticed is unclear and this may be an example of this particular quantitative methodology having fixed statistical cut-offs for categorisation that do not reflect the reality of children's experiences. The fact that children can function differently in different environments was also evident with Child 1 who seemed to operate in two clearly separate worlds: home and school.

Secondly, their low level of interaction in school may be due to their needing others to intervene in order to raise it rather than a lack of any necessary social competence. They may benefit from the help of others in forming relationships that will then lead to greater social interaction. For Child 2, others had initially been instrumental in helping her make friends and she had since taken a more active role in helping others who struggled to form relationships.

Thirdly, although not a primary research question of the study, the fact that not-noticed children do not appear to suffer from internalising problems such as loneliness, anxiety, and depression any more than average children (Bell-Dolan et al., 1995; Juffer et al., 2004; Newcomb et al., 1993; Tani & Schneider, 1997) may also be partially accounted for by their non-school lives, above and beyond the social interaction element. Child 1's ability to express his individuality and engage in enjoyable experiences such as social media and cooking may have provided an inoculation effect against such difficulties and contribute to his lack of self-rated loneliness outside school.

Further research

Three areas would be worth pursuing to investigate why not-noticed children's level of interaction is lower than average but why their social competence is unaffected. First, the development of social competence may indeed require interactions with others but little research appears to have investigated what importance the quantity of interaction plays. It may be that there is a minimum amount of interaction required for the development of such skills (Bowker & Raja, 2011), and not-noticed children do in fact achieve this across various environments.

Secondly, motivation to engage may be lower for not-noticed children, hence their sociometric status is more one of choice than a problematic situation for them. Some studies have already raised this as a potential rationale for why not-noticed children have such a low profile (Harrist et al., 1997; Morris et al., 1995; Sandstrom & Cillessen, 2003) but it does not yet appear to have been tested as a hypothesis. Child 1's motivation to interact appeared context-specific in that he seemed far more motivated to make friends in his next school than in his current where his experience was of being rebuffed. Recent research into preference-for-solitude (Wang et al., 2013) among socially withdrawn children may be helpful in determining why not-noticed children are not noticed. Socially withdrawn children have been categorised into three broad groups (Asendorpf, 1990, 1993): unsociable, shy, and avoidant. A key difference has been noted between the unsociable and the avoidant (Coplan et al., 2013). Both had high preference-for-solitude but the unsociable had significantly less social anxiety, negative affect, and depression than the avoidant. In addition the unsociable were no different from a non-withdrawn comparison group on any of the measures. This suggests that being unsociable may be a relatively benign form of withdrawal. Supporting this contention Galanaki (2013) notes the difference between loneliness and voluntary solitude and how voluntary solitude can bring benefits such as peacefulness, problem-solving and self-reflection. The similarities between Asendorpf's unsociable category and the not-noticed children in their low social profile and how little different they are from average in terms of psychological well-being is striking. Only one study, as far as the author is aware, has integrated the sociometric approach with one investigating unsociable children. Harrist et al. (1997) found some level of overlap between unsociable and not-noticed children but not that they were synonymous. Not-noticed children were more likely to be classified as

unsociable but only if they were also withdrawn. However, neglected children were equally likely as not to be withdrawn in the first place.

Indications that not-noticed children may actually prefer their level of social interaction are long-standing. Asher (1988; cited in Asher, 1990) reported asking primary school children if they would like help in improving relationships with other children. Almost half of the rejected children wanted help, but only 16% of the not-noticed did. Northway (1944, p13) described "socially uninterested" children in terms very similar to the characterisation of not-noticed children: "often quiet and retiring...interests are personal rather than social…uninterested in other children… accept requirements of classroom procedure with passivity". Motivation to interact would appear to be a promising area to pursue.

Thirdly, limiting a child's sociometric status to the classroom excludes a large part of children's lives that likely exerts a huge influence on their adjustment and well-being. The findings point to the need for more research that takes into account the lives of children outside the classroom and to begin to understand the salient elements for them in different environments in order to make more sense of their functioning inside it.

Limitations

This study had a small sample size of 202 participants. Differences between not-noticed and average children may be subtle and require larger samples to identify them. However, studies with over 1,000 participants (Hatzichristou & Hopf, 1996; Volling et al., 1993) have not detected any differences. The only source of information for children's social competencies was from teachers. It is known that they are not as sensitive to noticing differences between sociometric groups as the peers themselves or observation (Newcomb et al., 1993; Rubin et al., 2005). Others have noted that adult and peer reports of the same phenomenon can have low correlations (Achenbach, McConaughy, & Howell, 1987; Gest, 2006; Harter, 1982; Rubin et al., 2005) but are higher where behaviours are more obvious (such as aggression or conduct problems; Achenbach et al., 1987; Parker & Asher, 1987). In future, multiple informants should be used to measure variables. The qualitative element had only two participants, and with a larger sample size a greater breadth and depth of themes may have emerged. In addition, I was aware that whilst conducting the interviews

and interpreting the data I was playing an active role in the research (Langdridge, 2007). I was co-constructing the meaning attributed by the interviewees to their experiences and, as such, there was potential for my biases to influence which themes were identified. I sought to make such biases transparent by re-reading the data over time and challenging my identification of the themes, as well as keeping an informal research diary that I could refer to in order to help trace the development of themes. My prior knowledge of the schools and interviewees played a minimal role in my analysis of the data as neither interviewees came from the school where I was the link-EP, and any work I did at the other two schools came after analysis of the interview data. Finally, information about special educational needs was not obtained for all participants, so it is not known whether the not-noticed children in this study had a higher proportion of those who find social interactions more difficult (for example were on the autistic spectrum) which may have skewed the results for this group.

Implications for practice

There are two practical implications for educational psychologists and other professionals working with children. First, any children identified as not-noticed must be considered to belong to a highly heterogeneous population. It is important to consider their lives outside school as well as their motivation to interact with others before coming to any conclusions about their well-being or whether to intervene on their behalf. Secondly, any interventions to raise their social profile such that they receive more most liked nominations should carefully consider engineering situations whereby more social contact is supported, rather than teaching them social skills. Potentially, the only difference between an average child and a not-noticed one is that the not-noticed one needs help to become noticed. Once that hurdle is overcome, the social skills they possess will be sufficient for positive relationships to develop.

2.5 Conclusion

The study was unable to find any quantitative differences between not-noticed children and average children for social competence in a school context or for their social lives outside school. Equally, there were no associations between not-noticed children's satisfaction with their social lives outside school or their social competence

inside school. This extends into non-school contexts the existing picture that finds few differences if any between not-noticed children and average children.

The theoretical position that a lack of social impact equates to a lower level of interaction probably holds true in the classroom. The reason why a lack of social impact has little apparent effect on children's social competence or well-being remains unclear. This study re-affirmed the research that finds that social preference (in particular the presence of rejection) is a more powerful predictor of outcomes than social impact. In the case of not-noticed children there may be explanations. The vast majority of sociometric research has only considered sociometric status, social impact and social preference in the classroom and this study has pointed to the fact that children can have very different social lives outside class from inside it. The not-noticed children in this study were no different from other children in their social interactions, as measured by friendship outside school, and case study information indicated that they had fulfilling lives outside as well. This may be a situation where two environments interact and an anomalous situation in one can be explained by what is happening in the other.

Not-noticed children are a population who appear on the whole to be as socially skilled as average children and no more at risk for poorer well-being than average. They are a heterogeneous population and the situation of an individual child may be more or less problematical depending on circumstances. Further research that explores their heterogeneity in motivation to interact would be beneficial in identifying if there are sub-groups who may be at greater risk than others.

Appendices

Appendix A Literature search terms and flow chart

The key words used were taken from the PsychInfo database thesaurus as being relevant to research under investigation. The searches were aligned to the Newcomb et al. (1993) broad behavioural category of sociability and three searches were run. Global limiters were used with all three searches: publication year range of 1991 to 2015 inclusive, published in the English language, dissertations were excluded, and children of school age only. Due to the PsychInfo age criteria not overlapping precisely with school age (5 to 12 years approximately) two search limiters were used to capture all potential records: Childhood (birth - 12 years) and School Age (6 - 12 years).

Search 1:

("Sociometric Tests" OR "Sociometry") AND "Peer Relations"

OR

("Sociometric Tests" OR "Sociometry") AND ("Sociability" OR "Social Acceptance" OR "Social Behavior" OR "Social Groups" OR "Social Interaction" OR "Social Isolation" OR "Social Networks" OR "Social Skills" OR "Social Skills Training")

This returned 122 records.

Search 2:

"Peer Relations" AND ("Sociability" OR "Social Acceptance" OR "Social Behavior" OR "Social Groups" OR "Social Interaction" OR "Social Isolation" OR "Social Networks" OR "Social Skills" OR "Social Skills Training")

AND

“sociometr*” in the Abstract

This returned 229 records.

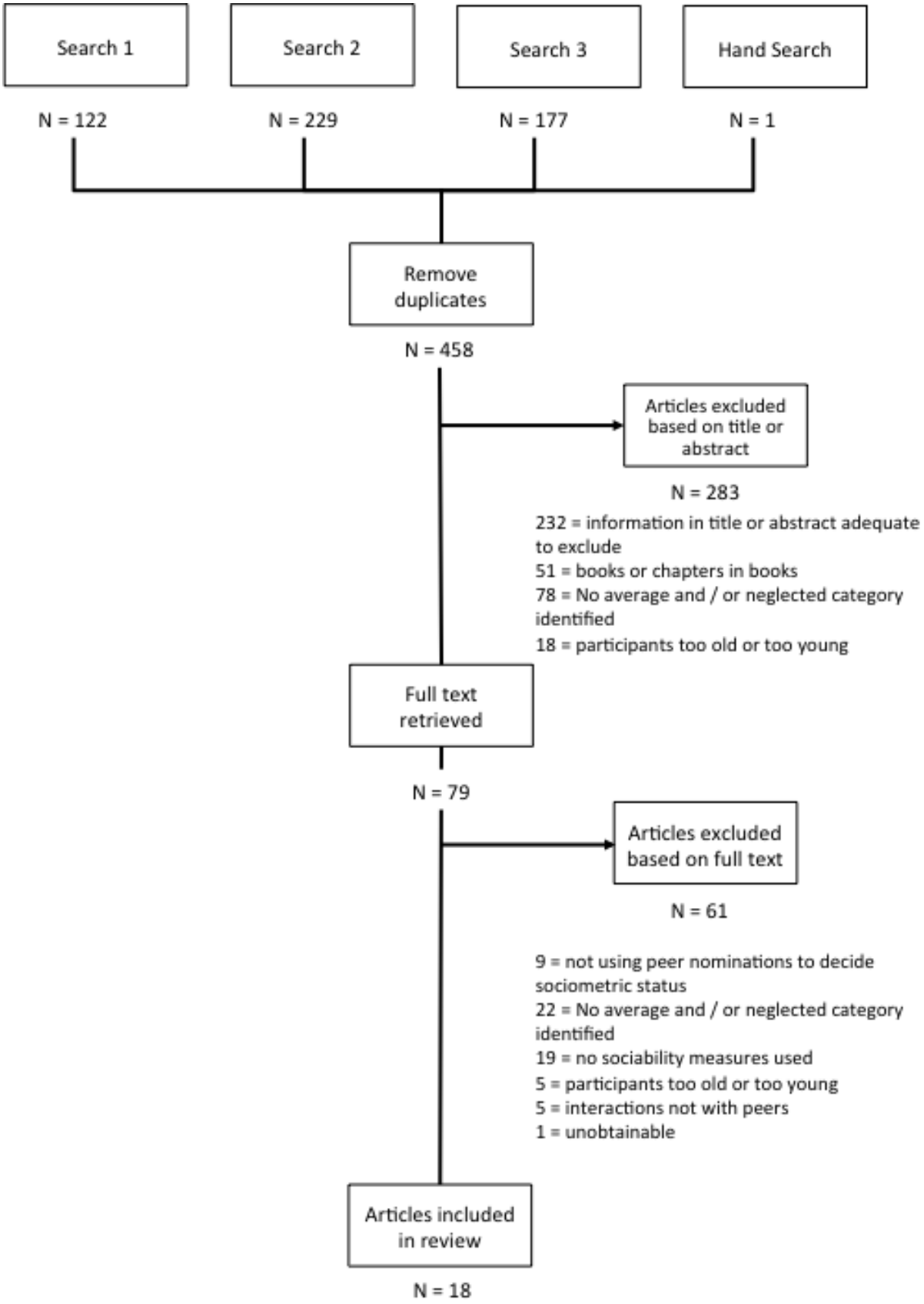
Search 3:

“neglect*” OR “ignored” OR “unnoticed” in any part of the database record

AND

"Peer Relations" OR "Sociability" OR "Social Acceptance" OR "Social Behavior" OR "Social Groups" OR "Social Interaction" OR "Social Isolation" OR "Social Networks" OR "Social Skills" OR "Social Skills Training"

This returned 177 records.


Search 1
Search 2
Search 3
Hand Search
N = 122
N = 229
N = 177
N = 1
Remove duplicates
N = 458
Articles excluded based on title or abstract
N = 283
232 = information in title or abstract adequate to exclude
51 = books or chapters in books
78 = No average and / or neglected category identified
18 = participants too old or too young
Full text retrieved
N = 79
Articles excluded based on full text
N = 61
9 = not using peer nominations to decide sociometric status
22 = No average and / or neglected category identified
19 = no sociability measures used
5 = participants too old or too young
5 = interactions not with peers
1 = unobtainable
Articles included in review
N = 18

Appendix B Details of systematic literature review articles

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children

Cirino and Beck (1991)	US	643; 8 years (2nd grade) and 11 years (5th grade)	Not reported	***Social information processing:***
				• Attribution of intentions of known peer
				  ○ Asked what the intentions of the known peer were (1 = very bad / selfish…5 = very good, fair)
				• Feelings towards peer
				  ○ Asked how they would feel towards the known peer IF they had behaved as predicted (1 = v angry…5 = very happy)
				• Behaviour towards peer
				  ○ Asked what they would do IF the predicted behaviour by the peer had happened (verbatim responses coded for prosocial OR not prosocial category)
					10 scenarios developed for the study involving peers known to the children:
					• 5 scenarios had ambiguous intentions from the known peer
					• 5 scenarios had negative outcome for the participant but a pro-social behaviour from the known peer
						Self report	Attribution: Neglected girls attributed more negative intentions towards known peers in a hypothetical story than average girls; no differences for boys between sociometric categories.
							
							No differences between sociometric categories found for how children would feel towards the peer in the story, or how they would behave towards the peer in the story.

Kupersmidt and Patterson	US	714; 8 to 10 years old at start of study for	4.2%	***Unpopularity*** – "a scale containing both internalizing and externalizing behavior problems according to Achenbach and Edelbrock (1987), is	Achenbach Youth Self-Report (YSR) (Achenbach & Edelbrock, 1987)	Self report	Girls: Sociometric status was not a predictor for unpopularity in

Appendix B

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
(1991)		sociometric status; Reassessed 2 years later for measures 2nd, 3rd and 4th grades at start of study		best characterized as representing general relationship difficulties" p440 Study has one sub-scale of the Achenbach Youth Self-Report (YSR) instrument called unpopularity but unknown what items from the overall instrument they are.			the clinical range (above the 98 percentile). Boys: Authors did not report on boys' unpopularity due to the co-morbidity between their measures of unpopularity and depression for boys. Hence they were combined them into a different scale (referred to as "internalising").
Ollendick, Weist, Borden, and Greene (1992)	US	600; 10 years old, then assessed for variables 5 years later 4th grade at start of study	11.5%	Nomination of peers for ***likeability*** (three questions: Those who help others, Those who are liked by everyone, Those who are especially nice)	Pupil Evaluation Inventory – abbreviated for the study (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976)	Peer	Neglected children no different from average (or rejected or controversial) on likeability
Juvonen, Keogh, Ratekin, and	US	102; 10 and 11 years old	22.5%	***Social competence*** – in a school context	Health Resources Inventory (HRI) (Gesten, 1976)	Teacher	Neglected children were no different from average or popular on any measure

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Bernheimer (1992)		5th and 6th grade		Children's and teacher's factors differed slightly and included a few different items in different factors. Children's self report had 4 factors: • *Rules (social norms at school and in class)* o Behave well at school o Follow class rules o Rarely require restrictions o Polite and courteous o Work well without adult help o Carry out requests o Apply learning to new situations o Work well with distractions o Adjust well to changes in routine o Not moody o Do original work • *Peer sociability (behaviours likely to promote acceptance)* o Plays enthusiastically o Well-liked by classmates o Have many friends o Handle competition well o Solve problems with friends on my own • *Gutsy/Frustration tolerance (emotional and behavioural regulation)*		Self report	(whether self-reported or teacher reported). Although not statistically different the scores for the self-ratings and teacher ratings of the neglected children were similar to or exceeded those of the popular and average children.

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				○ Question rules that seem unfair ○ Defend views under pressure ○ Express own ideas willingly ○ Accept fair limits ○ Accepting things not going own way ○ Deal with failure Teacher's report 5 factors: • *Rules (social norms at school and in class)* ○ Behaves well at school ○ Follows class rules ○ Rarely requires restrictions ○ Polite and courteous ○ Works well without adult help ○ Accepts imposed limits ○ Carries out request and directions ○ Is trustworthy • *Peer sociability (behaviours likely to promote acceptance)* ○ Plays enthusiastically ○ Well-liked by classmates ○ Has many friends ○ Happy person ○ Tries to help others ○ Is affectionate towards others			

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				• *Frustration tolerance (emotional and behavioural regulation)* o Accepts things not going own way o Deals well with failure o Faces pressures of competition well o Accepts criticism well o Mood balanced and stable o Generally relaxed			
Bryant (1992)	US	165; 10 to 13 years 4th - 6th grade	17.0%	***Interpersonal behaviour*** - measured by conflict resolution strategies Anger retaliation strategies: exploding in anger in response to a classmate expressing anger Calm strategies: remaining calm and talking in response to a classmate's expression of anger until the problem is resolved and both people feel OK about each other Withdraw / avoid strategies: withdrawing and avoiding a classmate as a response to a classmate's expression of anger	Measure developed for the study – peers nominated 3 classmates who fitted descriptors	Peer nomination	Anger retaliation strategies: neglected no different from popular or average Calm strategies: neglected no different from average, rejected or controversial Withdraw / avoid strategies: neglected no different from popular, average, or controversial

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Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Volling, MacKinnon-Lewis, Rabiner, and Baradaran (1993)	US	1221; 7 to 10 years 1st to 4th grade	6.9%	***Social competence*** – in specific social situations 6 subscales from the Taxonomy of Problematic Situations questionnaire (Dodge et al, 1985): • *Peer entry* (5 items) assess situations in which the child's task is to initiate inclusion into the peer group and is represented by such items as "when a group of peers have started a club or group and have not included this child" and "when this child asks a peer to play and the peer chooses to play with a third child instead." • *Response to provocation* (10 items) assesses the child's responses to peer provocation. Example items include "when a peer takes this child's turn during a game" and "when peers call this child a bad name." • *Response to success* (3 items) assesses whether the child's responses to being identified as superior are appropriate or inappropriate and includes such	Taxonomy of Problematic Situations questionnaire (Dodge et al, 1985)	Teacher	Neglected no different from average on any of the teacher-rated 6 measures Neglected no different from popular on peer group entry, response to success, response to failure, reactive aggression, proactive aggression

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				examples as "when this child has won a game against a peer" and "when this child performs better than a peer in school work." • *Response to failure* (9 items) measure children's inappropriate responses to failure situations and is exemplified by such items as "when a peer performs better than this child in a game" or "when this child is having difficulty with a particular school work problem." • *Social expectations* (11 items) measures the child's ability at meeting established norms for social behavior such as "when a peer tries to start a conversation with this child" and "when this child needs help from a peer and should ask for help." • *Teacher expectations* (6 items) assess the extent to which the child meets norms established by the teacher for classroom behavior. Example items include "when the teacher is trying to speak to the whole class" and "when this child is standing in			

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				line with peers and must wait a long time."			
Crick and Ladd (1993)	US	338; 9 to 11 years 3rd and 5th grades	12.4%	***Attributions for social outcomes*** 4 categories of story with different outcomes: • positive-relational where the child would end up with a positive experience (e.g., being liked) • positive-instrumental where the peer in the scenario would do something the child wanted • negative-relational • negative instrumental. The children scored their likelihood (1 to 5) of attributing three different reasons for the outcome in question: • internal (it was something the child did or an attribute they possessed) • external (it was something the peer in the story did or an attribute they possessed) • mutual (it was an interaction between the peer in the story and the child themself).	Social scenarios created for the study	Self report	Neglected children were no different from any other category on attributions for social outcomes

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Vandell and Hembree (1994)	US	326; 8 years 3rd grade	11.0%	***Friendship*** – number of mutual friends ***Socio-emotional adjustment*** – composite of peer interactions and emotional well-being; two scales from questionnaire Peer interactions: • teases other children • initiates peer interactions • shares toys, games, materials • plays with peers • does not threaten peers • helps peers • listens when peers speak • does not hit or kick peers • takes turns • does not fight with peers • accepts peers' initiations • does not tattle • prefers activities with peers Emotional well-being • open and honest with others • not fearful or afraid • shows interest and participates • content and happy • extroverted	Nominations of most liked checked to see if mutual Social, emotional and academic functioning (Santrock & Warshak, 1979)	Self report Parent Teacher	The number of mutual friendships was not significantly associated with being neglected or being in the average sociometric group Neglected sociometric status did not predict their socio-emotional adjustment as rated by teachers or parents.

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Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				Self-concept – composite of 4 scales in questionnaire covering social, cognitive, physical and general competencies	Perceived Competence Scale for Children (Harter, 1982)	Self report	Neglected sociometric status did predict the children's own self-concept (lower than other children's).
Morris, Messer, and Gross (1995)	US	229; 7 and 8 years 1st and 2nd grade	10.3%	***Social interactions in playground*** frequency of interactions classified as: • Negative – rejecting or oppositional behaviour or utterances, hitting and kicking, grabbing items, destroying another's construction • Positive – cooperation, sharing, hugging, holding hands • Solitary play – all activity on own	Classification of types of social interaction from Strain and Timm (1974)	Observation	Neglected children no different from average or popular for negative interactions; Neglected children engaged in fewer positive interactions and more solitary play than average (and popular children)
Ray, Cohen, and Secrist (1995)	US	447; 7 to 12 years 1st to 6th grade	12.5%	***Friendship in class, playground, non-school*** • Perceived number of best friends in class • Perceived number of best friends in playground • Perceived number of best	Unlimited nominations for both best friend and friends (but only used best friend as the dependent measure as being more reliable) in class, playground (those other classes playtime was shared with not	Self report	Neglected children no different from average, popular or rejected in number of perceived best friends in class or in playground or non-school.

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				friends non-school • Mutual best friends in class • Mutual best friends in playground	including own classmates), outside school		Neglected children had fewer mutual best friends in class than popular and average; no different from average for mutual best friends in the playground.
Hatzichristou and Hopf (1996)	Greece	1041; 10 to 12 years 5th grade and 6th grade	16.1%	***Popular / prosocial behaviour*** consisting of 3 items: • Liked by everybody and helps everybody • Leader in school • Tries to behave in a proper way to gain the teacher's approval • Composite popular / prosocial measure of the above 3 items ***Interpersonal behaviour*** (4 items: quarrels with others more often, dangerous behaviour, not obedient, immature / inappropriate responses) ***Relationships with peers*** scale extracted from SDQ-1 questionnaire – unknown what items this includes (Greek language only article is referenced)	Coie et al 1982 used the same questions Pupil Behavior Rating Scale (PBRS; Lambert & Bower, 1962) Self-Description Questionnaire (Marsh, Parker, & Smith, 1983)	Peer ratings Teacher Self report	For peer-rated behaviours: neglected differ from average only on two measures: "liked by everybody and helps everybody" (neglected are less liked), and on the composite behavioural descriptor "popular / pro-social" (neglected are less pro-social) Teacher-rated behaviours: neglected differ from average on no dimensions Self-reported relationships with peers: Neglected no different from any other sociometric category

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Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Harrist, Zaia, Bates, Dodge, and Pettit, (1997)	US	554; 6 years Kindergarten	14.8%	Separates children into socially ***withdrawn*** and ***nonwithdrawn*** first based on playground observation of their play. Withdrawn = 0.5 SD above mean for solitary focused (playing purposefully on own) and solitary unfocused (wandering aimlessly on own) play – quite a generous category and not an extreme withdrawal category (p292). Clusters of withdrawal defined based on how they differed from nonwithdrawn using 7 measures established via teacher reports on social behaviour at school using TRF and TCPR (isolates self, timid, anxious, immature, sad/depressed, lacks restraint, angry/defiant): ***Unsociable***: socially competent but just have low levels of interaction with peers ***Passive-anxious:*** timid and anxious	Assessment of playground play Achenbach Child Behaviour Checklist (TRF; Achenbach & Edelbrock, 1986) Teacher's Checklist of Peer Relationships (TCPR; Dodge, 1986)	Observation Teacher	Neglected as likely to be non-withdrawn as average. Neglected children (who were also withdrawn) more likely than chance to be unsociable and less likely than chance to be active-isolates.

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				Active-isolates: immature, lacking restraint, angry/defiant ***Sad/depressed***: sad and depressed, timid, immature, isolates self (but not stable over time and not a particularly clear category as admitted by authors p285)			
Cillessen and Bellmore (1999)	US	644; 9 years 4th grade	13%	***Accuracy of self-perception*** Difference between self-reports and teacher reports of different variables rather than the values themselves on the following scales: • Disruptive conduct (child: 6 items; teacher 3 items) • Anxiety / withdrawal (child: 6 items; teacher 3 items) • Peer sociability (child: 6 items; teacher 1 item • School adjustment (child: 6 items; teacher 3 items) Also looked at unlimited nominations for peers • Accuracy of "who likes you most in your grade" (% correct	Child Rating Scale (Hightower et al., 1987) used by children for self report and Teacher-Child Rating Scale (Hightower et al., 1986) by teachers but different items for each scale	Self report Teacher Self report	Neglected children no different from average or popular on any of the 4 self-other perceptions of behaviour Neglected children no different from average in

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				between who the child nominated and the actual nominations) • Accuracy of "who likes you least in your grade" (% correct between who the child nominated and the actual nominations)			their accuracy rates for "who likes you most" Neglected children less accurate than average children in their accuracy rates for "who likes you least"
Greener (2000)	US	332; 9 to 11 years 3rd – 5th grade	16.3%	***Pro-social behaviour*** 10 items of a 22 item questionnaire (also included relational aggression, overt aggression and sociometric components). Prosocial items were: • shares with others • friendly to others • asks others to play • says nice things to others • cares about how others are doing • is polite to other kids • cheers up others when they are sad or upset about something • asks other kids to join the group at play or activity time • includes other kids in their conversations • helps out others when they need	Peer Assessment of Prosocial Behaviour developed for the study and based on Greener & Crick (1999) that identified 8 items of prosocial behaviour	Peer report	Neglected children no different from average in their pro-social behaviour

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				it			
Gest, Graham-Bermann, and Hartup (2001)	US	205; 8 and 9 years 2nd and 3rd grades	11.7%	***Network centrality*** ***Reciprocated friendships***	Number of free recall nominations for being in a social group in class Number of mutual friendships in class	Peer report Self-report	Neglected children higher chance of being in the low network centrality group and lower chance of being in high network centrality group Neglected children less likely to have 1 or more reciprocated friendship.
Lopes and	Portugal	173 then 154;	15%	***Popular / pro-social behaviour***	Coie et al. (1982) used the same	Peer report	Neglected children no

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Rutherford (2002)		10 to 14 years; assessed in 5th grade then same children in 6th grade	then 18%	7 items from 19 descriptors: • cooperates with peers • acts snobbish • defends self in arguments • acts independently • achieves much • leads peers • tried to be teacher's favourite One further item not included in popular / prosocial behaviour scale: • affiliates with peers	items		different from average for popular / pro-social behaviour or any of the seven individual items. For "affiliates with peers" neglected had lower affiliation than average.
Sandstrom and Cillessen (2003)	US	118; 10 to 13 5th grade	13.6%	***Social exclusion*** 32 pre-determined items covering 19 negative and 13 positive events that may have happened. 17 of these related to three categories of social exclusion (see below). Children completing diaries ticked off each item if it occurred that school day at school. ***Experience of exclusion*** Exclusion items were items like incidents in which children are rebuffed or ignored by the peer	Daily diaries completed for 7 days analysed for examples of being excluded, positive social interactions and participation in social activities	Self-report	Neglected boys experienced less exclusion than average boys; neglected girls no differences from any other sociometric category. Neglected children no different from any other sociometric category for positive social interactions or participation in social activities

Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
				group: • A kid ignored me • When I tried to play with one kid, another kid wouldn't let me • I had a good idea but nobody would listen • Kids had a secret and would not tell me • Kids wouldn't let me join their game • I had nobody to hang out with **Positive social interactions** • A kid liked an idea I had • A kid said something nice to me • A kid gave me something nice • A kid shared with me • I felt special or popular • A kid stuck up for me • A kid made me laugh today **Participation in social activities** • I was picked to lead an activity • I went somewhere fun with another kid • I played at another kid's house • I invited another kid to my house to play			

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Authors and Year	Country	Participants (*N*, age, year)	% Negl.	Type of sociability	Instrument	Source of information	Main findings for neglected children
Banerjee and Watling (2005)	UK	308; 5 and 9 years Year 1 and Year 4	15.6%	***Theory of mind*** Understanding mental states of others via a faux pas test. 4 scenarios where characters make faux pas (unintentional insults to another character in the story)	Based on Baron-Cohen, O'Riordan, Stone, Jones, & Plaisted (1999)'s faux pas test	Self-report	Neglected no different from average or popular children on faux pas scores

Appendix C Participant information, consent and ethics

Parental information sheet and consent – phase 1 (quantitative questionnaires)

Information Sheet for Parents

(Version 1.0 16.9.2014)

Sociability in school and outside: Phase 1

I would like to invite your child to take part in a research study. I thought you might find the following information about the study helpful. Please do contact me if there is anything that is not clear or if there is anything you would like to know more about.

Researcher: Jerry Brown (University of Southampton)

ERGO Study ID number: 12805

RGO reference number: 12805

What is the research about?

The purpose of this study is to find out more about children's relationships inside and outside school. We know a lot about what makes children popular or unpopular in class and how that affects them. However, we know relatively little about children who are neither popular nor unpopular as most research has concentrated on those that are either popular or unpopular. We also know very little about children's social lives outside school as much of the research focuses on what happens inside school.

This study will aim to find out more about those children who are neither popular nor unpopular in class. The study aims to identify a clearer picture of the social skills and social lives of this group of children by talking to children about their friendships both inside and outside their classroom and school.

The study is being conducted by Jerry Brown, a trainee educational psychologist at Southampton University, and will be written up as a doctoral thesis.

Why has my child been chosen?

Your child's school has agreed to take part in this research study. There are a number of primary schools across Hampshire and in Southampton taking part and Years 5 and 6 will be included.

What will happen to my child if they take part?

In phase 1 of this study, all children taking part will fill out two questionnaires in class, which will take no more than 30 minutes in total. They will be asked which three classmates they most like and which three they least like. They will also complete a questionnaire about their friendships and social contacts outside school. Their class teacher will complete one short questionnaire for each child about the child's communication and social skills.

Once all these data have been gathered, I will be able to identify different groups of children based on their level of popularity. In phase 2 of this study, I would then like to talk individually to a small number of the children that don't appear to be one of the few who are either very popular or very unpopular and explore how they see friendship inside and outside school. These interviews would take about 45 minutes and take place at home. If your child is in this group and I would like to interview them, I will contact you again for your permission to talk to them.

Are there any benefits to my child taking part?

This is an area of great interest to the schools as they are obviously keen to ensure that all children have healthy social relationships. Since we already know about popular and unpopular children we need to add to our limited knowledge of the others who are not at the extreme ends of the social spectrum. This will help us ensure that we understand what all children may need in order to have positive relationships with other children.

In addition, by taking part in the research study each school will be given a breakdown of each class showing the proportions in the different categories of popularity. No individual children will be named to maintain anonymity and the school can use the information to help decide whether any whole-class work on social interactions and friendship would be of benefit to the whole class.

Are there any risks involved?

There have been many studies that have used the same approach and negative impacts are very unlikely. However, very occasionally someone may become upset either answering the questions or when in the interview so to safeguard all those who participate, a named member of school staff will be available to provide support to individual children throughout the study. Should anyone become distressed during the questionnaires or interview they will be sensitively supported and will have the choice to continue or drop out of the study.

What will you do with the information?

The responses to the questionnaires and the interview data will be used by me for my thesis that forms part of my doctorate in educational psychology at the University of Southampton.

Will my child's participation be confidential?

Your child's participation in this study will be kept confidential and will not be shared with the school. All the information your child gives us will be treated as confidential unless we feel that they or someone else is at risk of harm.

Your child will be given an ID number and this will be used instead of their name. Any written information (e.g. the questionnaires they and the teacher complete) will have this ID number on it, instead of their name. This ID number will also be used for any information we keep on a computer.

All information (electronic or hard copy) kept by the University of Southampton will be held in accordance with data protection laws and securely protected.

What will happen to the findings of the research study?

As explained above, the findings should prove useful to schools.

The overall findings will be written up for my thesis and it is also possible that the findings will be presented in academic forums or submitted for publication in academic journals. It is important to note that all data used in this way will be kept confidential and it will not be possible to identify an individual child or school. A summary of these findings will also be provided to all participating schools and if your child took part you can obtain a copy from the school once the research is finished.

What happens if I change my mind?

You or your child can decide to stop taking part in this study at any time without giving a reason. This will not affect their legal rights, education, or care. You should contact me via email **jrsb1g12@soton.ac.uk** to let me know.

What happens if something goes wrong?

If you have any concerns or want to make a complaint about the way you or your child have been treated as part of this study, you can contact the Faculty of Social and Human Sciences research support office by email fshs-rso@soton.ac.uk or by telephone 02380 593856.

Where can I get more information?

If you would like more information about this study or have any questions about your child's participation, please contact me by email at the university: jrsb1g12@soton.ac.uk.

How do I give consent for my child to take part?

If you are happy for your child to take part, you don't need to do anything. The school has agreed to take part and so the Year 5 and Year 6 classes will participate.

If you do NOT wish your child to take part, then please fill in the slip at the end of this sheet and return to your school.

What will happen to my child if they do not take part?

If you choose not to take part in this research study, your child will carry out a suitable activity at the same time as the rest of the class are completing their questionnaires

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Sociability in school and outside study

If you **DO NOT** wish your child to participate in Phase 1 of this research study, please return this slip to your child's school by Tuesday 25th November 2014.

Name of child (print name)……

Signature of parent/ carer/ guardian ……

Date……

Ethics Approval

From: ERGO <ergo@soton.ac.uk>

Date: Monday, 13 October 2014 09:46

To: Jerry Brown <jrsb1g12@soton.ac.uk>

Subject: Research Governance Feedback on your Ethics Submission (Ethics ID:12442)

Submission Number 12442:

Submission Title Ignored children:

The Research Governance Office has reviewed and approved your submission

You can begin your research unless you are still awaiting specific Health and Safety approval (e.g. for a Genetic or Biological Materials Risk Assessment) or external ethics review (e.g. NRES).The following comments have been made:

Submission ID : 12442 Submission Name: Ignored children Date : 13 Oct 2014 Created by : Jeremy Brown

This is to confirm that the work detailed in your protocol and Ethics Application will be covered by the University of Southampton insurance programme. As Chief or Principle Investigator you are responsible for the conduct of the study and you are expected to:

1. Ensure the study is conducted as described in the protocol/study outline approved by this office

2. Advise this office of any amendment/change to the protocol, methodology, study documents, research team, participant numbers or start/end date of the study

3. Report to this office as soon as possible any concern, complaint or adverse event arising from the study

Failure to do any of the above may invalidate your ethics approval and therefore the insurance agreement, affect funding and/or sponsorship of your study; your study may need to be suspended and disciplinary proceedings may ensue.

On receipt of this letter you may commence your research but please be aware other approvals may be required by the host organisation if your research takes place outside the University. It is your responsibility to check with the host organisation and obtain the appropriate approvals before recruitment is underway in that location.

May I take this opportunity to wish you every success for your research

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ERGO : Ethics and Research Governance Online

http://www.ergo.soton.ac.uk

Information Sheet for Parents

(Version 2.0 23.1.2015)

Sociability in school and outside: Phase 2

[name of child] recently took part in the first phase of my research project and I would like to invite him / her to take part in an interview as a follow-up. I thought you might find the following information about the study helpful. Please do contact me if there is anything that is not clear or if there is anything you would like to know more about.

Researcher: Jerry Brown (University of Southampton)

ERGO Study ID number:

RGO reference number:

What is the research about?

The purpose of this study is to find out more about children's relationships inside and outside school. We know a lot about what makes children popular or unpopular in class and how that affects them. However, we know relatively little about children who are neither popular nor unpopular as most research has concentrated on the popular and unpopular ones. We also know very little about children's social lives outside school as much of the research focuses on what happens inside school.

This study will aim to find out more about those children who are neither popular nor unpopular in class. The study aims to identify a clearer picture of the social skills and social lives of this group of children by talking to children about their friendships both inside and outside their classroom and school.

The study is being conducted by Jerry Brown, a trainee educational psychologist at Southampton University, and will be written up as a doctoral thesis.

Why has [name of child] been chosen?

[name of child] recently completed a questionnaire along with their classmates about who they get on with in class. Each child nominated the three children they most liked

and the three they least liked. Based on the class information **[name of child]** was one of those who received comparatively few nominations of either kind.

I would like to talk in a bit more detail with **[name of child]** about his / her views on friendship both inside and outside the classroom.

What will happen to [name of child] if he / she is interviewed?

I would have an informal conversation with **[name of child],** explain why I was talking with them, and what the purpose of the conversation was. I would then talk with them about their friendships inside and outside the classroom. I would seek to understand their views on them and what it means to them. I would talk with them at home at a convenient time and date.

This would take about 45 minutes. The conversation would be audio-recorded and transcribed but any details that would identify an individual child or school will be anonymised.

Are there any benefits to [name of child] taking part?

This is an area of great interest to the schools as they are obviously keen to ensure that all children have healthy social relationships. Since we already know about popular and unpopular children we need to add to our limited knowledge of the others who are not at the extreme ends of the social spectrum. This will help us ensure that we understand what all children may need in order to have positive relationships with other children.

Are there any risks involved?

Very occasionally someone may become upset talking about their social lives or friendships inside and outside school so to safeguard all those who are interviewed, a named member of school staff will be available to provide support to individual children throughout the study. Should anyone become distressed during the interview they will be sensitively supported and will have the choice to continue or drop out of the study.

Will my child's participation be confidential?

Your child's participation in this phase of the study will be kept confidential. The school does not know which children have been invited to be interviewed. All the information your child gives us will be treated as confidential unless we feel that they or someone else is at risk of harm.

Your child will be given an ID number and this will be used instead of their name. Any written information (e.g. the interview transcript) will have this ID number on it, instead of their name. This ID number will also be used for any information we keep on a computer.

All information (electronic or hard copy) kept by the University of Southampton will be held in accordance with data protection laws and securely protected.

What happens if I change my mind?

You or your child can decide to stop taking part in this study at any time without giving a reason. This will not affect their legal rights, education, or care. You should contact me via email **jrsb1g12@soton.ac.uk** to let me know.

What happens if something goes wrong?

If you have any concerns or want to make a complaint about the way you or your child have been treated as part of this study, you can contact the Faculty of Social and Human Sciences research support office by email fshs-rso@soton.ac.uk or by telephone 02380 593856.

Where can I get more information?

If you would like more information about this study or have any questions about your child's participation, please contact me by email at the university: jrsb1g12@soton.ac.uk.

If you are happy for [name of child] to talk to me about their social interactions inside and outside school please fill out the attached consent form and return to me at the university (University of Southampton, School of Psychology, Shackleton Building (B44), Highfield Campus, Southampton SO17 1BJ) or by email to jrsb1g12@soton.ac.uk.

CONSENT FORM (date 23/1/15 – V2.0)

Study title: Sociability in school and outside

Researcher name: Jerry Brown

Study reference: 12805

Ethics reference: 12805

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (dated 23/01/2015 – V2) and have had the opportunity to ask questions	☐
I agree for my child to be interviewed for the purpose of this study	☐
I understand that the interview will be audio-recorded and anonymous quotes may be used in the reporting of the study	☐
I understand my child's participation is voluntary and I / they may withdraw at any time without any legal rights being affected	☐

Data Protection

I understand that information collected about my child during their participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study. All files containing any personal data will be anonymised.

Name of child (print name)……

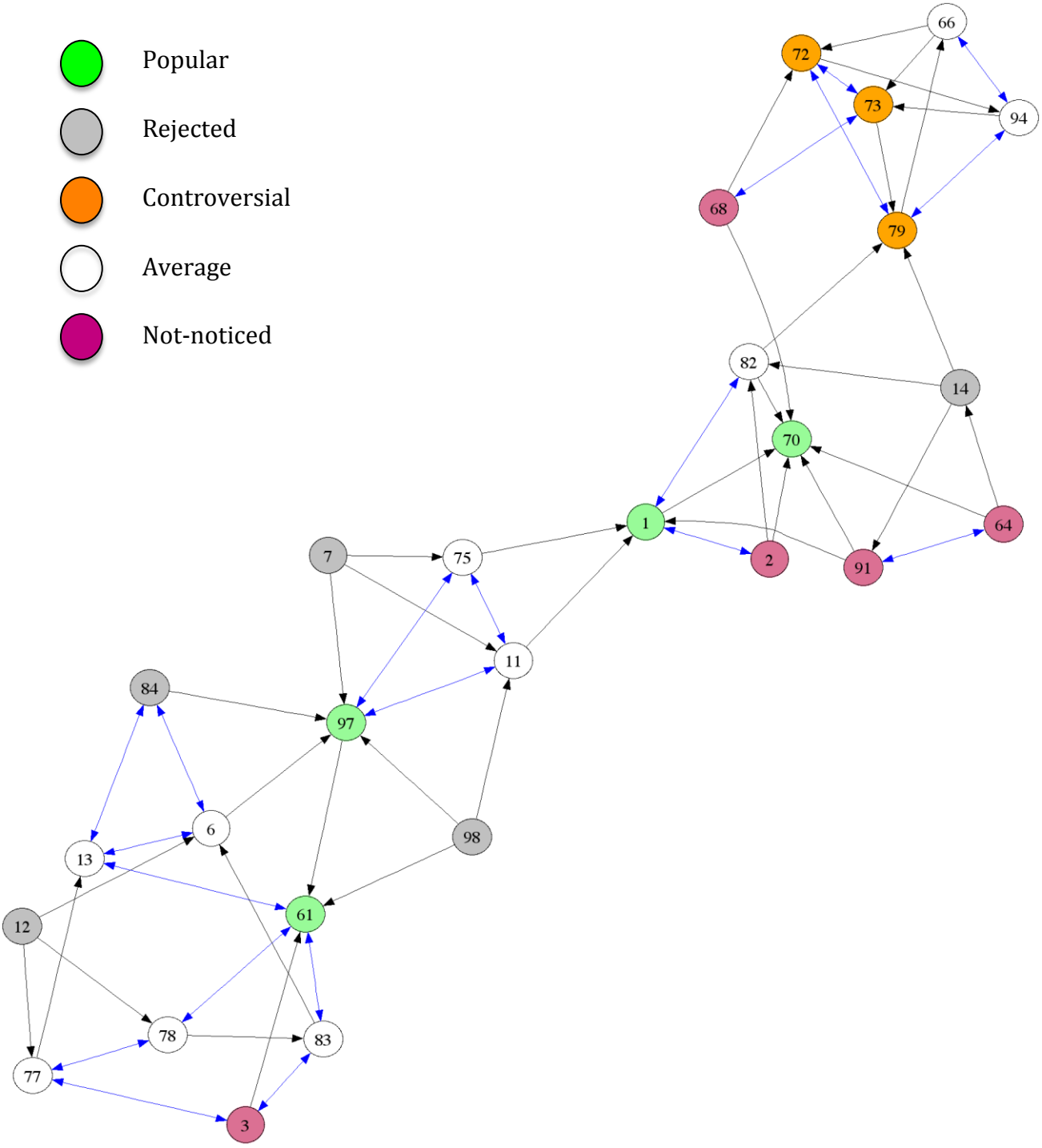
Signature of parent / carer/ guardian ……

Date……

Phone number or email address you can be contacted on to arrange the interview:

……..

Appendix D Sociometric map



Appendix E Questionnaires

Social Competence Scale – Teachers

Please rate each of the listed behaviours according to how well it describes this child

0 = not at all 1 = a little 2 = moderately well 3 = well 4 = very well

1	Functions well even with distractions	0	1	2	3	4	14	Is aware of the effect of his / her behaviour on others	0	1	2	3	4
2	Can accept things not going his / her way	0	1	2	3	4	15	Works well in a group	0	1	2	3	4
3	Copes well with failure	0	1	2	3	4	16	Plays by the rules of the game	0	1	2	3	4
4	Is a self-starter	0	1	2	3	4	17	Pays attention	0	1	2	3	4
5	Works / plays well without adult support	0	1	2	3	4	18	Controls temper when there is a disagreement	0	1	2	3	4
6	Accepts legitimate imposed limits	0	1	2	3	4	19	Share materials with others	0	1	2	3	4
7	Expresses needs and feelings appropriately	0	1	2	3	4	20	Cooperates with peers without prompting	0	1	2	3	4
8	Thinks before acting	0	1	2	3	4	21	Follows teacher's verbal direction	0	1	2	3	4
9	Resolves peer problems on his / her own	0	1	2	3	4	22	Is helpful to others	0	1	2	3	4
10	Stays on task	0	1	2	3	4	23	Listens to others' points of view	0	1	2	3	4
11	Can calm down when excited or wound up	0	1	2	3	4	24	Can give suggestions and opinions without being bossy	0	1	2	3	4
12	Can wait in line patiently when necessary	0	1	2	3	4	25	Acts friendly towards others	0	1	2	3	4
13	Very good at understanding other people's feelings	0	1	2	3	4							

Social Life Outside School

Please put a tick in the column that you think best describes how you would answer the questions below

	Always	***Most of the time***	***Sometimes***	***Hardly ever***	***Never***
1. Is it easy for you to make new friends outside school?					
2. Do you like to read?					
3. Do you have children to talk to outside school?					
4. Are you good at working with other children outside school?					
5. Do you watch TV a lot?					
6. Is it hard for you to make friends outside school?					
7. Do you like school?					
8. Do you have lots of friends outside school?					

	Always	***Most of the time***	***Sometimes***	***Hardly ever***	***Never***
9. Do you feel alone outside school?					
10. Can you find a friend outside school when you need one?					
11. Do you play sports?					
12. Is it hard to get children outside school to like you?					
13. Do you like science?					
14. Do you have someone to play with outside school?					
15. Do you like music?					
16. Do you get along with children outside school?					
17. Do you feel left out of things outside school?					
18. Are there other children you can go to when you need help outside school?					

Appendix E

	Always	***Most of the time***	***Sometimes***	***Hardly ever***	***Never***
19. Do you like to paint and draw?					
20. Do you get along with other children outside school?					
21. Are you lonely outside school?					
22. Do children outside school like you?					
23. Do you like playing board games?					
24. Do you have friends outside school?					

Appendix F Interview protocol

Interview Schedule:

Introductions

Children will be interviewed in their own homes. A quiet private space is to be used. The researcher will ensure that the child is put at their ease through some general conversation and introductions before the interview starts.

Description of study

I am interested in your views of friendship. You remember when your class filled out the questionnaire on who you most liked and who you least liked? I am particularly interested in the friendships and social lives of children who are neither very popular nor very unpopular. There has been a lot of work done on what makes people very popular or unpopular in class, but hardly any on those who aren't either of those.

So I'd like to ask you a few questions and have a conversation about your views on friendship. But before we start I'd like to make sure that you are OK talking to me about that. I'm going to record the conversation and then type it up, but I'll take out your name and any other information (like other people's names, and schools) so no-one will know it's you talking. So everything will be kept confidential, unless I feel that you or someone else is not safe, then I will have to tell someone else.

Your parents have agreed that it's OK for me to talk with you, but you don't have to if you don't want to, and no one would mind if you decide you don't want to do this anymore. Also, if at any time you want to stop, just let me know and we'll stop.

There are no right or wrong answers; it's what you think that is really important. You don't have to tell me something if you don't want to.

Our chat may last 45 minutes but we'll see how we get on, and if it takes less time then that's fine.

[Gain verbal assent to proceed]

Section 1: Representation of friendships

Could you please draw me a picture of you with your friends? Now add in some other people who are important to you.

[or as an alternative] Draw a quick picture of yourself in the middle of this piece of paper. Now write the names of friends around you. Now add in the names of other people who are important to you.

General questions to elicit views:

- Tell me a bit more about the people / this person you have written down
- For each person in the depiction:
    - tell me about 'X'?
    - how do you feel about 'X'?
    - how did you become friends with 'X'

    - why do like 'X'?
    - do you remember when you first met X? What was it like? What did you do? What did X do?
    - now that you are friends, what do you do together? Tell me about a time/the last time you were together, what did you get up to?
- I notice that there are a lot / few from your class; your school; outside school. Tell me a bit more about why that might be the case.

Section 2: Experience of friendship

Can you tell me how you feel about friends inside school?

Can you tell me how you feel about friends outside school?

How do you make friends?

How do you keep friends? So what happens when you disagree about something? When was the last time you didn't like something a friend did/said – what happened? How did you stay friends after that? Tell me about that…

Can you give me some examples of that…..?

List of References

Achenbach, T., & Edelbrock, C. (1986). *Manual for the teacher's report form and teacher version of the child behavior profile*. Burlington: University of Vermont Press.

Achenbach, T., & Edelbrock, C. (1987). *Manual for the youth self-report and profile*. Burlington: University of Vermont Press.

Achenbach, T., McConaughy, S., & Howell, C. (1987). Child/adolescent behavioral and emotional problems: implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*, 213-232. doi:10.1037/0033-2909.101.2.213

Arbeau, K., & Coplan, R. (2007). Kindergarten teachers' beliefs and responses to hypothetical prosocial, asocial, and antisocial children. *Merrill-Palmer Quarterly*, *53*, 291-318. doi:10.1353/mpq.2007.0007

Asendorpf, J. (1990). Beyond social withdrawal: Shyness, unsociability, and peer avoidance. *Human Development, 33*, 250–259. doi:10.1159/000276522

Asendorpf, J. (1993). Beyond temperament: A two-factorial coping model of the development of inhibition during childhood. In K. Rubin & J. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp. 265–289). New Jersey: Erlbaum.

Asher, S. (1990). Recent advances in the study of peer rejection. In S. Asher & J. Coie (Eds.), *Peer rejection in childhood* (pp. 3-14). New York: Cambridge University Press.

Asher, S., & Coie, J. (Eds.). (1990). Peer rejection in childhood. New York: Cambridge University Press.

Asher, S., & Dodge, K. (1986). Identifying children who are rejected by their peers. *Developmental Psychology, 22*, 444-449. doi:10.1037/0012-1649.22.4.444

Asher, S., & McDonald, K. (2011). The behavioral basis of acceptance, rejection, and perceived popularity. In K. Rubin, W. Bukowski, & B. Laursen (Eds.), *Handbook*

of peer interactions, relationships, and groups (pp. 232-248). New York: The Guilford Press.

Asher, S., Parkhurst, J., Hymel, S., & Williams, G. (1990). Peer rejection and loneliness in childhood. In S. Asher & J. Coie (Eds.), *Peer rejection in childhood* (pp. 253-273). New York: Cambridge University Press.

Asher, S., & Wheeler, V. (1985). Children's loneliness: a comparison of rejected and neglected peer status. *Journal of Consulting and Clinical Psychology*, *53*, 500-505. doi:10.1037/0022-006X.53.4.500

Baker, A., Barthelemy, K., & Kurdek, L. (1993). The relation between fifth and sixth graders' peer-rated classroom social status and their perceptions of family and neighborhood factors. *Journal of Applied Developmental Psychology*, *14*, 547-556. doi:10.1016/0193-3973(93)90006-H

Bandura, A. (1977). *Social learning theory*. New Jersey: Prentice-Hall.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Vol. 6. Six theories of child development - Revised formulations and current issues* (pp. 1-60). Connecticut: JAI Press.

* Banerjee, R., & Watling, D. (2005). Children's understanding of faux pas: Associations with peer relations. *Hellenic Journal of Psychology, 2*, 27–45.

Baron-Cohen, S., O'Riordan, M., Stone, V., Jones, R., & Plaisted, K. (1999). Recognition of faux pas by normally developing children with asperger syndrome or high-functioning autism. *Journal of Autism and Developmental Disorders, 29*, 407-418.

Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529. doi:10.1037/0033-2909.117.3.497

Bell-Dolan, D., Foster, S., & Christopher, J. (1995). Girl's peer relations and internalizing problems: Are socially neglected, rejected, and withdrawn girls at risk?. *Journal of Clinical Child Psychology*, *24*, 463-473. doi:10.1207/s15374424jccp2404_10

Bellmore, A. (2011). Peer rejection and unpopularity: Associations with GPAs across the transition to middle school. *Journal of Educational Psychology, 103*, 282-295. doi:10.1037/a0023312

Berridge, K., & Robinson, T. (2003). Parsing reward. *Trends in Neurosciences*, *26*, 507-513. doi:10.1016/S0166-2236(03)00233-9

Bierman, K. (2004). *Peer rejection: Developmental processes and intervention*. New York: The Guilford Press.

Bierman, K., Kalvin, C., & Heinrichs, B. (2015). Early childhood precursors and adolescent sequelae of grade school peer rejection and victimization. *Journal of Clinical Child and Adolescent Psychology*, *44*, 367-369. doi:10.1080/15374416.2013.873983

Bishop, F., & Holmes, M. (2013). Mixed methods in CAM research: A systematic review of studies published in 2012. *Evidence-Based Complementary and Alternative Medicine*. doi:10.1155/2013/187365

Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist*, *57*, 111-127. doi:10.1037/0003-066X.57.2.111

Boivin, M., Poulin, F., & Vitaro, F. (1994). Depressed mood and peer rejection in childhood. *Development and Psychopathology*, *6*, 483-498. doi:10.1017/S0954579400006830

Bowker, J., & Raja, R. (2011). Social withdrawal subtypes during early adolescence in India. *Journal of Abnormal Child Psychology, 38*, 91–126. doi:10.1007/s10802-010-9461-7

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101. doi:10.1191/1478088706qp063oa

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

* Bryant, B. (1992). Conflict resolution strategies in relation to children's peer relations. *Journal of Applied Developmental Psychology, 13*, 35-50. doi:10.1016/0193-3973(92)90004-2

Bukowski, W., & Adams, R. (2005). Peer relationships and psychopathology: Markers, moderators, mediators, mechanisms, and meanings. *Journal of Clinical Child and Adolescent Psychology, 34*, 3-10. doi:10.1207/s15374424jccp3401_1

Bukowski, W., & Newcomb, A. (1985). Variability in peer group perceptions: Support for the "controversial" sociometric classification group. *Developmental Psychology*, *21*, 1032-1038. doi:10.1037/0012-1649.21.6.1032

Bukowski, W., Sippola, L., Hoza, B., & Newcomb, A. (2000). Pages from a sociometric notebook: An analysis of nomination and rating scale measures of acceptance, rejection, and social preference. In A. Cillessen & W. Bukowski (Eds.), *Recent advances in the measurement of acceptance and rejection in the peer system* (pp. 11–26). California: Jossey-Bass.

Cadwallader, T. (2001). Sociometry reconsidered: The social context of peer rejection in childhood. *International Journal of Action Methods: Psychodrama, Skill Training, and Role Playing, 53*, 99-118.

Card, N., & Little, T. (2006). Proactive and reactive aggression in childhood and adolescence: A meta-analysis of differential relations with psychosocial adjustment. *International Journal of Behavioral Development, 30*, 466-480. doi:10.1177/0165025406071904

Carr, E. (2009). Understanding inadequate pain management in the clinical setting: The value of the sequential explanatory mixed method study. *Journal of Clinical Nursing, 18*, 124-131. doi:10.1111/j.1365-2702.2008.02428.x

Cassidy, J., & Asher, S. (1992). Loneliness and peer relations in young children. *Child Development, 63*, 350–365. doi:10.1111/j.1467-8624.1992.tb01632.x

Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review, 13*, 471–502. doi:10.1006/drev.1993.1021

Cillessen, A. (2011). Sociometric methods. In K. Rubin, W. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 82-99). New York: The Guilford Press.

* Cillessen, A., & Bellmore, A. (1999). Accuracy of social self-perceptions and peer competence in middle childhood. *Merrill-Palmer Quarterly, 45*, 650-676.

Cillessen, A., Bukowski, W., & Haselager, G. (2000). Stability of sociometric categories. In A. Cillessen & W. Bukowski (Eds.), *Recent advances in the measurement of acceptance and rejection in the peer system* (pp. 75–93). San Francisco: Jossey-Bass.

* Cirino, R. & Beck, S. (1991). Social information processing and the effects of reputational, situational, developmental, and gender factors among children's sociometric groups. *Merrill-Palmer Quarterly, 37*, 561-582.

Coie, J. D., & Dodge, K. A. (1983). Continuities and changes in children's social status: A five year longitudinal study. *Merrill-Palmer Quarterly, 29*, 261-282.

Coie, J., Dodge, K., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology, 18*, 557-570. doi:10.1037/0012-1649.19.2.224

Conduct Problems Prevention Research Group (CPPRG). (1995). *Psychometric Properties of the Social Competence Scale – Teacher and Parent Ratings. (Fast Track Project Technical Report)*. Pennsylvania: Pennsylvania State University.

Coplan, R., Rose-Krasnor, L., Weeks, M., Kingsbury, A., Kingsbury, M., & Bullock, A. (2013). Alone is a crowd: social motivations, social withdrawal, and socio-emotional functioning in later childhood. *Developmental Psychology, 49*, 861–875. doi:10.1037/a0028861

Coplan, R., Ooi, L., Rose-Krasnor, L., & Nocita, G. (2014). 'I Want to Play Alone': Assessment and Correlates of Self-Reported Preference for Solitary Play in Young Children. *Infant and Child Development*, *23*, 229-238. doi:10.1002/icd.1854

Corrigan, A. (2003). *Social Competence Scale – Teacher Version, Grade 3 /Year 4 (Fast Track Project Technical Report).* Retrieved from http://www.fasttrackproject.org/techrept/s/sct/sct3tech.pdf

* Crick, N., & Ladd, G. (1993). Children's perceptions of their peer experiences: Attributions, loneliness, social anxiety, and social avoidance. *Development Psychology, 29*, 244–254. doi:10.1037/0012-1649.29.2.244

Davies, B. (1982). *Life in the classroom and the playground: The accounts of primary school children*. London: Routledge and Kegan Paul.

Deater-Deckard, K. (2001). Annotation: Recent research examining the role of peer relations in the development of psychopathology. *Journal of Child Psychology and Psychiatry, 42*, 565–579. doi:10.1111/1469-7610.00753

Demir, A., & Tarhan, N. (2001). Loneliness and social dissatisfaction in Turkish adolescents. *The Journal of Psychology*, *135*, 113-123. doi:10.1080/00223980109603684

Denham, S. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, *17*, 57-89. doi:10.1207/s15566935eed1701_4

Denham, S., Blair, K., DeMulder, E., Levitas, J., Sawyer, K., Auerbach–Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, *74*, 238-256. doi:10.1111/1467-8624.00533

Department for Communities and Local Government. (2010). *English indices of deprivation*. London: Department for Communities and Local Government. Retrieved from https://www.gov.uk/government/collections/english-indices-of-deprivation

DeRosier, M., & Thomas, J. (2003). Strengthening sociometric prediction: Scientific advances in the assessment of children's peer relations. *Child Development*, *74*, 1379-1392. doi:10.1111/1467-8624.00613

Dodge, K. (1985). Facets of social interaction and the assessment of social competence in children. In B. Schneider, K. Rubin, & J. Ledingham (Eds.), *Children's peer relations: Issues in assessment and intervention* (pp. 3-22). New York: Springer-Verlag.

Dodge, K. (1986). A social information processing model of social competence in children. In M. Perlmutter (Ed.), *Minnesota symposia on child psychology* (vol. 18. pp. 77-125). New Jersey: Erlbaum.

Dodge, K., McClaskey, C., & Feldman, E. (1985). Situational approach to the assessment of social competence in children. *Journal of Consulting and Clinical Psychology, 53*, 344-353

Fetters, M., Curry, L., & Creswell, J. (2013). Achieving integration in mixed methods designs - principles and practices. *Health Services Research, 48*, 2134-2156. doi:10.1111/1475-6773.12117

Field, A. (2009). *Discovering statistics using SPSS*. (3rd ed.). London: Sage Publications.

Fine, G. (1987). *With the boys: Little league baseball and preadolescent culture*. Chicago: University of Chicago Press.

Fink, E., Begeer, S., Peterson, C. C., Slaughter, V., & Rosnay, M. (2014). Friendlessness and theory of mind: A prospective longitudinal study. *British Journal of Developmental Psychology*, *33*, 1-33. doi:10.1111/bjdp.12060

Forgas, J., Williams, K., & Laham, S. (2005). Social motivation: Introduction and overview. In J. Forgas, K. Williams, & S. Laham (Eds.), *Social motivation: Conscious and unconscious processes* (pp. 1-20). Cambridge: Cambridge University Press.

Franz, D., & Gross, A. (1996). Parental correlates of socially neglected, rejected, and average children a laboratory study. *Behavior Modification*, *20*, 170-182. doi:10.1177/01454455960202002

Franz, D., & Gross, A. (2001). Child sociometric status and parent behaviors: An observational study. *Behavior Modification*, *25*, 3-20. doi:10.1177/0145445501251001

Frederickson, N., & Furnham, A. (1998). Sociometric classification methods in school peer groups: A comparative investigation. *Journal of Child Psychology and Psychiatry*, *39*, 921-933. doi:10.1111/1469-7610.00392

Galanaki, E. (2013). Solitude in children and adolescents: A review of the research literature. *Psychology and Education: An Interdisciplinary Journal, 50*, 79-88.

Gazelle, H. (2008). Behavioral profiles of anxious solitary children and heterogeneity in peer relations. *Developmental Psychology*, *44*, 1604-1624. doi:10.1037/a0013303

* Gest, S., Graham-Bermann, S., & Hartup, W. (2001). Peer experience: Common and unique features of number of friendships, social network centrality, and sociometric status. *Social Development*, *10*, 23–40. doi:10.1111/1467-9507.00146

Gest, S. (2006). Teacher reports of children's friendships and social groups: Agreement with peer reports and implications for studying peer similarity. *Social Development*, *15*, 248-259. doi:10.1046/j.1467-9507.2006.00339.x

Gesten, E. (1976). A health resources inventory: The development of a measure of the personal and social competence of primary-grade children. *Journal of Consulting and Clinical Psychology, 44*, 775-786.

Gifford-Smith, M., & Brownell, C. (2003). Childhood peer relationships: Social acceptance, friendships, and peer networks. *Journal of School Psychology*, *41*, 235-284. doi: 10.1016/S0022-4405(03)00048-7

* Greener, S. (2000). Peer assessment of children's prosocial behaviour. *Journal of Moral Education*, *29*, 47-60. doi:10.1080/030572400102925

Greener, S., & Crick, N. (1999). Normative beliefs about prosocial behavior in middle childhood: What does it mean to be nice? *Social Development*, *8*, 349-363. doi:10.1111/1467-9507.00100

Harrist, A., Achacoso, J., John, A., Pettit, G., Bates, J., & Dodge, K. (2014). Reciprocal and complementary sibling interactions: Relations with socialization outcomes in the kindergarten classroom. *Early Education and Development*, *25*, 202-222. doi:10.1080/10409289.2014.848500

* Harrist, A., Zaia, A., Bates, J., Dodge, K., & Pettit, G. (1997). Subtypes of social withdrawal in early childhood: Sociometric status and social-cognitive differences across four years. *Child Development, 68*, 278-294. doi:10.1111/j.1467-8624.1997.tb01940.x

Harter, S. (1982). The perceived competence scale for children. *Child Development, 53*, 87-97.

Hartup, W. (1989). Social relationships and their developmental significance. *American Psychologist, 44*, 120-126. doi:10.1037/0003-066X.44.2.120

Hartup, W. (1996). The company they keep: Friendships and their developmental significance. *Child Development*, *67*, 1-13. doi:10.1111/j.1467-8624.1996.tb01714.x

* Hatzichristou, C., & Hopf, D. (1996). A multiperspective comparison of peer sociometric status groups in childhood and adolescence. *Child Development, 67*, 1085-1102. doi:10.1111/j.1467-8624.1996.tb01784.x

Hawes, S., Byrd, A., Henderson, C., Gazda, R., Burke, J., Loeber, R., & Pardini, D. (2014). Refining the parent-reported Inventory of Callous–Unemotional Traits in boys with conduct problems. *Psychological assessment*, *26*, 256-266. doi:10.1037/a0034718

Hay, D., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry, 45*, 84–108. doi:10.1046/j.0021-9630.2003.00308.x

Hightower, A., Cowen, E., Spinell, A., Lotyczewski, B., Guare, J., Rohrbeck, C., & Brown, L. (1987). The Child Rating Scale: Development of a self-rating scale for elementary school children. *School Psychology Review, 16*, 239-255.

Hightower, A., Work, W., Cowen, E., Lotyczewski, B., Spinnell, A., Guare J., & Rohrbeck, C. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary school children's problem behaviors and competencies. *School Psychology Review, 15*, 393-409.

Hodges, E., Boivin, M., Vitaro, F., & Bukowski, W. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. *Developmental Psychology, 35*, 94–101. doi:10.1037/0012-1649.35.1.94

Horney, K. (1945). *Our inner conflicts*. New York: Norton.

Howell, K., Miller, L., Lilly, M., & Graham-Bermann, S. (2013). Fostering social competence in preschool children exposed to intimate partner violence: Evaluating the preschool Kids' Club intervention. *Journal of Aggression, Maltreatment & Trauma*, *22*, 425-445. doi:10.1080/10926771.2013.775986

Hubbard, J., & Coie, J. (1994) Emotional correlates of social competence in children's peer relationships. *Merrill-Palmer Quarterly, 40*, 1–20.

Hubbard, J., Smith, M., & Rubin, R. (2013). Use of latent profile analysis to assess the validity of a peer-rejected group of children. *Journal of Clinical Child and Adolescent Psychology, 42*, 843-854. doi:10.1080/15374416.2013.804410

Jiang, X., & Cillessen, A. (2005). Stability of continuous measures of sociometric status: A meta-analysis. *Developmental Review, 25*, 1-25. doi:10.1016/j.dr.2004.08.008

Juffer, F., Stams, G., & IJzendoorn, M. (2004). Adopted children's problem behavior is significantly related to their ego resiliency, ego control, and sociometric status. *Journal of Child Psychology and Psychiatry*, *45*, 697-706. doi:10.1111/j.1469-7610.2004.00264.x

* Juvonen, J., Keogh, B., Ratekin, C., & Bernheimer, L. (1992). Children's and teachers' views of school-based competencies and their relation to children's peer status. *School Psychology Review, 21*, 410-422.

Kjøbli, J., & Ogden, T. (2014). A randomized effectiveness trial of individual child social skills training: six-month follow-up. *Child and Adolescent Psychiatry and Mental Health*. doi:10.1186/s13034-014-0031-6

* Kupersmidt, J., & Patterson, C. (1991). Childhood peer rejection, aggression, withdrawal, and perceived competence as predictors of self-reported behavior problems in preadolescence. *Journal of Abnormal Child Psychology, 19*, 427-449. doi:10.1007/BF00919087

Ladd, G. (2005). *Children's peer relations and social competence: A century of progress*. Connecticut: Yale University Press.

Ladd, G. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An examination of four predictive models. *Child Development, 77*, 822-846. doi:10.1111/j.1467-8624.2006.00905.x

Lambert, N., & Bower, E. (1962). *A process for in-school screening of emotionally handicapped children*. New Jersey: Educational Testing Service.

Langdridge, D. (2007). *Phenomenological psychology: Theory, research and method*. Harlow: Pearson Education.

* Lopes, J., Cruz, C., & Rutherford, R. (2002). The relationship of peer perceptions to student achievement and teacher ratings of 5th and 6th grade students. *Education and Treatment of Children, 25*, 476-495.

Luthar, S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, *71*, 543-562. doi: 10.1111/1467-8624.00164

Maassen, G., Linden, J. van der, Goossens, F., & Bokhorst, J. (2000). A rating-based approach to two-dimensional sociometric status determination. *New Directions for Child and Adolescent Development, 88*, 55-73. doi:10.1002/cd.23220008806

Masten, A., & Coatsworth, J. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, *53*, 205-220. doi:10.1037/0003-066X.53.2.205

Malik, N., & Furman, W. (1993). Practitioner review: problems in children's peer relations: what can the clinician do? *Journal of Child Psychology and Psychiatry, 34*, 1303-1326. doi:10.1111/j.1469-7610.1993.tb02093.x

Marsh, H., Parker, J., & Smith, I. (1983). Preadolescent self-concept: Its relation to self-concept as inferred by teachers and to academic ability. *British Journal of Educational Psychology, 53*, 60-78. doi:10.1111/j.2044-8279.1983.tb02536.x

Martín, E. (2011). The influence of diverse interaction contexts on students' sociometric status. *The Spanish Journal of Psychology*, *14*, 88-98. doi:10.5209/rev_SJOP.2011.v14.n1.7

McClelland, M., Acock, A., & Morrison, F. (2006). The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school. *Early Childhood Research Quarterly*, *21*, 471-490. doi:10.1016/j.ecresq.2006.09.003

McMullen, J., Veermans, K., & Laine, K. (2014). Tools for the classroom? An examination of existing sociometric methods for teacher use. *Scandinavian Journal of Educational Research*, *58*, 624-638. doi:10.1080/00313831.2013.838694

Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.

Moffitt, T., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., ... & Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, *108*, 2693-2698. doi:10.1073/pnas.1010076108

Moreno, J. L. (1934). *Who Shall Survive? A new approach to the problem of human interrelations*. Washington, DC: Nervous and Mental Disease.

* Morris, T., Messer, S., & Gross, A. (1995). Enhancement of the social interaction and status of neglected children: A peer-pairing approach. *Journal of Clinical Child Psychology*, *24*, 11-20. doi:10.1207/s15374424jccp2401_2

Nelson, S., & Dishion, T. (2004). From boys to men: Predicting adult adaptation from middle childhood sociometric status. *Development and Psychopathology*, *16*, 441-459. doi:10.10170S0954579404044608

Nelson, D., Robinson, C., Hart, C., Albano, A., & Marshall, S. (2010). Italian preschoolers' peer-status linkages with sociability and subtypes of aggression and victimization. *Social Development, 19*, 698-720. doi:10.1111/j.1467-9507.2009.00551.x

Newcomb, A., Bukowski, W., & Pattee, L. (1993). Children's peer relations: A meta-analyic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin, 113*, 99–128. doi:10.1037/0033-2909.113.1.99

Northway, M. (1944). Outsiders: A study of the personality patterns of children least acceptable to their age mates. *Sociometry*, 7, 10-25.

Ochoa, S., & Olivarez, A. (1995). A meta-analysis of peer rating sociometric studies of pupils with learning disabilities. *The Journal of Special Education, 29*, 1-19. doi:10.1177/002246699502900101

* Ollendick, T., Weist, M., Borden, M., & Greene, R. (1992). Sociometric status and academic, behavioral, and psychological adjustment: A five-year longitudinal study. *Journal of Consulting and Clinical Psychology, 60*, 80–87. doi:10.1037/0022-006X.60.1.80

Pagani, L., Fitzpatrick, C., & Parent, S. (2012). Relating kindergarten attention to subsequent developmental pathways of classroom engagement in elementary school. *Journal of Abnormal Child Psychology*, *40*, 715-725. doi:10.1007/s10802-011-9605-4

Palacios, J., Moreno, C., & Román, M. (2013). Social competence in internationally adopted and institutionalized children. *Early Childhood Research Quarterly*, *28*, 357-365. doi:10.1016/j.ecresq.2012.08.003

Parker, J., & Asher, S. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin*, *102*, 357-389.

Parker, J., Rubin, K., Erath, S., Wojslawowicz, J., & Buskirk, A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology: Theory and method vol. 1* (pp. 419-493). New Jersey: John Wiley & Sons, Inc.

Peery, J. C. (1979). Popular, amiable, isolated, rejected: A reconceptualization of sociometric status in preschool children. *Child Development, 50*, 1231-1234.

Pekarik, E., Prinz, R., Liebert, D., Weintraub, & Neale, J. (1976). The pupil evaluation inventory: A sociometric technique for assessing children's social behavior. *Journal of Abnormal Child Psychology, 4*, 83-97. doi:10.1007/BF00917607

Piaget, J. (1932). *The moral judgment of the child*. Glencoe, IL: Free Press.

Prinstein, M., Rancourt, D., Guerry, J., & Browne, C. (2009). Peer reputations and psychological adjustment. In K. Rubin, W. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 548-567). New York: The Guilford Press.

Raver, C. & Zigler, E. (1997). Social competence: An untapped dimension in evaluating Head Start's success. *Early Childhood Research Quarterly, 12*, 363-385. doi:10.1016/S0885-2006(97)90017-X

* Ray, G., Cohen, R., & Secrist, M. (1995). Best friend networks of children across settings. *Child Study Journal, 25*, 169-188.

Riggio, R., & Reichard, R. (2008). The emotional and social intelligences of effective leadership: An emotional and social skill approach. *Journal of Managerial Psychology, 23*, 169-185. doi:10.1108/02683940810850808

Robertson, D., Farmer, T., Fraser, M., Day, S., Duncan, T., Crowther, A., & Dadisman, K. (2010). Interpersonal competence configurations and peer relations in early elementary classrooms: Perceived popular and unpopular aggressive subtypes. *International Journal of Behavioral Development, 34*, 73-87. doi:10.1177/0165025409345074

Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development, 6*, 111–135. doi:10.1111/j.1467-9507.1997.tb00097.x

Rubin, K., Bukowski, W., & Parker, J. (2006). Peer interactions, relationships, and groups. In N. Eisenberg, W. Damon, & R. Lerner (Eds.), *Handbook of child psychology: Vol. 3, Social, emotional, and personality development* (6th ed., pp. 571-645). New Jersey: John Wiley & Sons, Inc.

Rubin, K., Coplan, R., Chen, X., Buskirk, A., & Wojslawowicz, J. (2005). Peer relationships in childhood. In M. Bornstein & M. Lamb (Eds.), *Developmental science: An advanced textbook (5th* ed., pp. 469-512). New York: Lawrence Erlbaum Associates.

Rubin, K., Hymel, S., Lemare, L., & Rowden, L. (1989). Children experiencing social difficulties: Sociometric neglect reconsidered. *Canadian Journal of Behavioral Science, 21*, 94- 111. doi:10.1037/h0079775

Rubin, K., Le Mare, L., & Lollis, S. (1990). Social withdrawal in childhood: developmental pathways to peer rejection. In S. Asher & J. Coie (Eds.), *Peer rejection in childhood* (pp. 217-249). New York: Cambridge University Press.

Rubin, K., Wojslawowicz-Bowker, J., & Gazelle, H. (2010). Social withdrawal in childhood and adolescence: Peer relationships and social competence. In K. Rubin & R. Coplan (Eds.), *The development of shyness and social withdrawal* (pp. 131-156). New York: The Guilford Press.

Ryan, R. & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist, 55*, 68-78. doi:10.1037/0003-066X.55.1.68

Sameroff, A., & MacKenzie, M. (2003). Research strategies for capturing transactional models of development: The limits of the possible. *Development and Psychopathology, 15*, 613–640. doi:10.1017.S0954579403000312

* Sandstrom, M., & Cillessen, A. (2003). Sociometric status and children's peer experiences: Use of the daily diary method. *Merrill-Palmer Quarterly, 49*, 427-452. doi:10.1353/mpq.2003.0025

Santrock, J., & Warshak, R. (1979). Father custody and social development in boys and girls. *Journal of Social Issues, 35*, 112-125. doi:10.1111/j.1540-4560.1979.tb00816.x

Schwartz, D., Dodge, K., Pettit, G., Bates, J., & The Conduct Problems Prevention Research Group. (2000). Friendship as a moderating factor in the pathway between early harsh home environment and later victimization in the peer group. *Developmental Psychology*, *36*, 646-662. doi:10.1111/j.1467-8624.1996.tb01714.x

Smith, J., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. Smith (Ed.) *Qualitative Psychology*. London: Sage.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.

Tani, F., & Schneider, B. (1997). Self-reported symptomatology of socially rejected and neglected Italian elementary-school children. *Child Study Journal, 27*, 301-317.

Thijs, J., Koomen, H., & Van Der Leij, A. (2006). Teachers' self-reported pedagogical practices toward socially inhibited, hyperactive, and average children. *Psychology in the Schools*, *43*, 635-651. doi:10.1002/pits.20171

Thorndike, E. (1920). Intelligence and its use. *Harper's Magazine, 140*, 227-235.

Underwood, M., Kupersmidt, J., & Coie, J. (1996). Childhood peer sociometric status and aggression as predictors of adolescent childbearing. *Journal of Research on Adolescence*, *6*, 201-223.

* Vandell, D., & Hembree, S. (1994). Peer social status and friendship: Independent contributors to children's social and academic adjustment. *Merrill-Palmer Quarterly*, *40*, *461*-477.

Vaughn, B., Shin, N., Kim, M., Coppola, G., Krzysik, L., Santos, A. J., ... & Korth, B. (2009). Hierarchical models of social competence in preschool children: A multisite, multinational study. *Child Development*, *80*, 1775-1796. doi:10.1111/j.1467-8624.2009.01367.x.

* Volling, B., MacKinnon-Lewis, C., Rabiner, D., & Baradaran, L. (1993). Children's social competence and sociometric status: Further exploration of aggression, social withdrawal, and peer rejection. *Development and Psychopathology*, *5*, 459-483. doi:10.1017/S0954579400004521

Wang, J., Rubin, K., Laursen, B., Booth-LaForce, C., & Rose-Krasnor, L. (2013). Preference-for-solitude and adjustment difficulties in early and late adolescence. *Journal of Clinical Child and Adolescent Psychology, 42*, 834–842. doi:10.1080/15374416.2013.794700

Willlig, C. (2013). *Introducing qualitative research in psychology* (3rd ed.). Berkshire, UK: Open University Press. [eLibrary version]. Retrieved from http://lib.myilibrary.com/Open.aspx?id=497263

Woolfson, L., Whaling, R., Stewart, A., & Monsen, J. (2003). An integrated framework to guide educational psychology practice. *Educational Psychology in Practice, 19*, 283–302. doi:10.1080/0266736032000138535

Yin, R. (1994). *Case study research: design and methods*. London: Sage.

Youniss, J. (1980). *Parents and peers in social development: A Piaget-Sullivan perspective*. Chicago: University of Chicago Press.

* = article identified in systematic literature review