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PEER RELATIONS IN SCHOOL

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CHAPTER 7 PEER RELATIONS IN SCHOOL

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"Many school policies are based on the suppression of peer relations in classrooms." (Epstein, 1989)

Introduction

There is an ambivalent view about peer relations stemming from psychological theory and research. On the one hand there is a well-established position that peer relations have particular value for social and even cognitive development. In an influential book, Youniss (1980) adapted the theories of Piaget and Sullivan to show how peer relations differed from adult child relations by showing equality, cooperation, reciprocity and mutuality - all of which make a contribution to social development. This positive view has been given an added dimension with a more recent theory of socialisation which downplays the role of parents and other adults in favour of the important role of the group and particularly the peer group in development (Harris 1995). On the other hand, as we shall see below, much psychological research on peer relations has been concerned with difficulties experienced with peer relations in terms of, for example, peer rejection, bullying, victimisation and withdrawal.

There are now a number of reviews of research on peer relations (Berndt and Ladd 1989; Bukowski, Newcomb and Hartup 1996; Dunn 1993; Dunn 2004; Gifford-Smith and Brownell, 2003; Howe and Mercer, 2007; Ladd, 2005; Rubin, Bukowski and Parker, 1998, 2006; Rubin, Coplan, Chen, Buskirk and Wojslawowicz 2006). A recent review by Howe and Mercer (2007) is helpful in covering peer relations in school contexts. These provide a comprehensive coverage of current knowledge. In this chapter we will not seek to replicate these, but instead we will concentrate not only on formal peer relations (i.e., in the classroom) but also informal peer relations on school playgrounds, as well as the links between the two. We argue that this can shed distinctive light on peer relations more generally, but also informs current issues in educational and social policy.

A contextual approach

A main theme of this chapter is the adoption of a contextual approach. One useful theoretical tradition seeks to interpret learning and development within ecologically meaningful environmental contexts (Bronfenbrenner 1979; Weinstein 1991). Peer relations will take place in different contexts - out of school, e.g., at home or outside the home (though we do not address these contexts here), as well as in school. Pellegrini and Blatchford (2000) have suggested that within the 'microsystem' of a school, there will be smaller within school contexts, in particular the classroom and playground, which have qualitatively distinct sets of relationships, rules and dynamics that promote or hinder learning and social development. In this chapter we focus on these two school contexts - the classroom and playground.

Connections between contexts

There may be very little overlap between settings in peer relations and friendship networks. Children may have a school friendship network which is quite separate from their out of school network. For some pupils it may be difficult to meet their school friends out of school. At secondary level students may travel some distance to school, sometimes by car, and are unlikely to meet school friends, unless visits are arranged by parents. This situation may be becoming more common when the encouragement of parental choice of schools can result in long journeys to the desired school, rather than the automatic choice of the nearest, local school.

On the other hand there are likely to be important links between different settings. Schmuck and Schmuck (2001) give the example of their own seven year old son to show how the emotional dynamics of the informal peer group can go hand in hand with academic learning. He was struggling to make new friends, particularly those interested in team sports, and at the same time was having a frustrating time learning to read. In consequence he became, for a short time, out of control at home, and withdrew into excessive, sullen TV viewing. Schmuck and Schmuck argue that the formal school curriculum and classroom learning and instruction cannot be separated from the powerful informal relationships within the peer group. Peer relationships will affect academic learning and vice versa. Exploration of current knowledge about the connections between informal peer relations and school learning will therefore be another main theme of this chapter. This is relatively new area but one which we believe is very important to understanding social and academic development.

Historical and cultural changes over time

There is another kind of context – this time not a spatial but an historical context. Peer relations, and the contexts within which they occur, may be very different to the situation 10 or 25 years ago. There are many complex social cultural changes over time and these will inevitably affect peer relations. Peer relations are now the focus of much media interest usually because of the widespread reporting of bullying, anti-social behaviour and violence between gangs in inner cities. There is a widespread sense of risk and threat from criminality and bad behaviour when children and young children meet when unsupervised. This affects parents of school aged pupils and their decisions concerning the movements of their sons and daughters. There is a general sense that behaviour has got worse in recent years (Blatchford and Baines 2006). A recent report from UNICEF (2007) showed that on several indices UK children were less happy and had more difficulties with peers than those in other European countries. A recent submission to the Children's Society national enquiry (2007) indicated that the number of teenagers with no best friends had increased over the past 16 years, while those who reported being assaulted or threatened by a peer had increased.

There are signs that in the U.S., the U. K. and Australia that children of primary school age (5 - 11 years) have fewer opportunities out of school for interacting freely with peers and thus developing friendships and social skills. For example, a survey in the early 1990s showed that one important venue for peer interaction is disappearing: students are now far less likely to walk to school, in comparison to 30 years ago, and have far less independence out of school (Hillman 1993). A survey by the Home Office and the DCSF in 2003 found that two thirds of 8-10 year olds and nearly a quarter of 11-15 year olds had never been to the park or shops on their own (Home Office and DCSF 2005). In addition a third of 8-10 year olds had never played out with their friends without an adult present. A recent survey of pupil views (Blatchford, Baines and Pellegrini 2003) found that nearly a third of 8-15 year olds rarely met friends outside of school.

Even within school, breaktimes apart, there is little scope for peer interactions and socialisation with friends (Epstein 1983). Teaching and learning approaches in classrooms are dominated by whole class teaching and independent work (Baines, Blatchford and Kutnick 2003; Galton, Simon and Croll 1980; Galton, Hargreaves, Comber, Wall and Pell 1999; Kutnick, Blatchford, and Baines 2005) and formal efforts to teach social and emotional aspects of learning and citizenship may leave few opportunities for informal peer interactions or learning through direct experience. These reduced opportunities for peer interactions in class and outside of school emphasise the importance of breaktime in school which provides important opportunities for children to interact with peers and develop friendships.

Social and educational implications

The study of peer relations is connected to many difficult but important moral, social and educational policy issues, e.g., concerning independence and freedom of young people and adolescents. In the UK and other countries, e.g., the USA, politicians and other public figures have

been much exercised by this, e.g., with a legal requirement now in the UK that schools have anti-bullying policies, and recent concerns about anti-social behaviour leading to suggestions as drastic as that given recently by the main opposition leader for the reintroduction of a form of national service for 16 year olds.

Such policy suggestions almost inevitably have at their heart a constraining of young people's movements and further supervision and control. There have also been cautionary notes struck by Furedi (2002) and Gill (2007) who have argued that we should not let understandable concern about children's behaviour lead to policies that overly constrain them, so that they become unable to benefit from peer interaction and learn through experience, appropriate risk and even mistakes. An over concern with relatively unsupervised peer relations may also conflict with policies such as 'Every Child Matters', a UK government based policy framework to support the wellbeing of children and young people, which stress the importance of healthy social development and the importance of 'soft skills'. Indeed some have queried the way the education system stresses individual, private study leading to academic performance, when what employers say is most needed in the workplace is the ability to communicate effectively and problem solve together.

Coverage of this chapter.

This chapter draws mainly on psychological research and there are two main sections:

- Peer relations at school breaktimes/recess
- Peer relations and school classrooms.

The chapter is written by researchers in the UK and for illustration we draw on several of our own research projects, in particular the Nuffield Foundation funded national surveys of breaktimes in schools (conducted in 1995 and 2006) and survey of pupil views (Blatchford and Baines 2006; Blatchford and Sumpner 1996), and a Spencer Foundation funded project on playground activities and peer relations in London and USA schools (Blatchford *et al.* 2003; Baines and Blatchford, 2009; Pellegrini, Kato, Blatchford and Baines 2002; Pellegrini, Blatchford, Kato and Baines 2004). We will refer to these as the 'Nuffield' and 'Spencer' projects respectively. However, we also cover research from other countries (much research has in any case been conducted in the USA). Please note that the term 'breaktime' as often used in the UK is the same as 'playtime and the more common term 'recess', used in many countries.

The chapter seeks to highlight key research findings connected to overarching themes identified. In contrast to reviews cited above, we concentrate on formal and informal aspects of peer relations. In line with the research literature most emphasis is on primary and to a lesser degree early secondary education (e.g., with regard to research on transition).

Peer relations and school breaktimes

Background

In August 2007 the Observer newspaper carried an article about a newly opened secondary school - Thomas Deacon Academy - which replaced three local schools. Designed by architects working for Norman Foster it had no playground and no morning breaktime. These developments were seen to signal a school for the future and the logic of this, according to the headteacher, was that schools should treat children like adults and unstructured play activities were a thing of the past. In a similar way some schools in Canada and some US States have abolished 'recess' in the belief it will boost attainment and could easily be replaced by PE and more traditional forms of instruction. This action is an extreme reflection of a trend that has been evident over a number of years. Two national surveys in England conducted in 1996 and 2006 (Blatchford and Sumpner 1998; Blatchford and Baines 2006) have found that time allocated for lunchtime has been reduced, and management

policies toward breaktime have put more constraints on pupils' activities and movement. A similar picture has been found in the USA (Pellegrini 1995) and Australia (Evans 1990).

There are of course problems that can arise at breaktime, from a student's perspective, but a survey of over a thousand primary and secondary pupils (Blatchford and Baines 2006) found that the vast majority expressed a positive view, with only a small minority not liking breaktime. There was no evidence at all that pupils' felt breaktime should be cut back further; indeed over a half (54%) thought it is not long enough, 44% thought it was about right in length and only 2% thought it was too long.

One reason for the cut back in unstructured time is that students' behaviour, and in particular their behaviour when in the company of their peers, is seen as a problem (Blatchford and Baines 2006; Blatchford and Sumpner 1998). There have also been well publicised fears about bullying in schools, much of which occurs in the playground (Whitney and Smith 1993). Another reason for a decline in breaktime is pressure to maximise educational attainment and curriculum coverage (Blatchford and Sumpner 1998).

From a research point of view, there is an appreciation by some that much can be learned about children from studying their behaviour and experiences at breaktime (see Blatchford and Sharp 1994; Hart 1993; Pellegrini 1995; Pellegrini and Blatchford 2000; Pellegrini and Smith 1993; Smith 1994, 1996). The playground is a useful research site because it is one of the few occasions when children interact in a relatively safe environment, free of adult control, and when their play and social relations are more their own.

Perhaps the main reason for an interest in breaktime is because of the way that activities then are intimately connected with peer social relations. Although breaktime activities express something about the individual child, as we shall see below, individuals on the playground are situated and live their social lives in complex social structures. The relationship between breaktime activity and social relations is dynamic. Social structures involve and are expressed through e.g., play, games, even hanging around, and study of playground activity can help understanding of peer relations in terms of social structure, leadership, and individual differences.

Peer culture

There have been two main approaches to the study of pupil relationships in school: firstly, descriptions of peer culture stemming from sociological and ethnographical perspectives, and typically based on qualitative research methods, and, secondly, a concern with features of peer relations such as social competence and friendships, stemming from a psychological perspective, and typically based on quantitative research methods. This chapter concentrates more on psychological approaches but here we first summarise some features of sociological approaches.

Sociological and ethnographical approaches

A main conception of pupil cultures arising out of sociological and ethnographical approaches is of a sub-culture that stands apart from, and sometimes in opposition to, the mainstream culture of the school and classroom (Ball 1981; Hargreaves 1967; Lacey 1970), and as a product of working class culture (e.g., Sharp and Green 1976; Willis 1977). Peer culture may appear more informal than the parallel school culture but it nonetheless has its own hierarchy, rules and criteria of judgement (Pollard 1985).

Peer culture can be connected to breaktime activities and relations. Sutton-Smith (1990) concluded that "there is a culture of school playground play, just as there is a culture of schooling... (p5). Sluckin (1981) argued that breaktime offered children the opportunity for peer interaction in the context of which many lessons relevant to adult life are learned. Grugeon (1993) also argued that the

playground is a site of cultural transmission, though she more clearly show that for girls playground games and language contribute to gender identity, and a form of empowerment against boys. Thorne (1993) analysed the degree to which boys and girls in school can be said to have separate cultures and in line with a theme of this chapter argues that gender identity needs to be seen not as abstract and fixed but as it arises in school contexts.

A positive view can follow from an interest in children's play in primary schools, but other accounts of pupil culture stress more negative aspects. Kelly (1988, 1994), for example, drew attention to the extent of racist name calling and racist and sexist harassment can take place on school playgrounds (1994). Troyna and Hatcher (1992) showed how peer cultures express tensions between a desire for domination as well as equality, and can support racial teasing even when children themselves are not racist. They argue that a theory of children's relationships has to be able to account for both friendship and hostility. This also neatly sums up the direction of recent psychological research on peer relations (Schneider 2000). Pollard (1985) also recognised tensions in children's culture; on the one hand it offers children security from the teacher dominated classroom and their weak structural position in school, and this is largely centred on the playground, and on the other hand it offers constraints and expectations which bear on, and can be harmful to, its members.

Psychological approaches

Psychologists have studied playground behaviour as part of an interest in individual differences, e.g., differences between peer rejected and popular children. Some important, albeit rather dated, studies show that popular children tend to engage in more pro-social, and rejected children in more aggressive, behaviour (see review by Williams and Gilmour 1994) and reject values shared by the majority of their peers and the larger school community (Coie and Dodge 1998). Ladd and Price (1993) report that rejected children are less likely to play with friends, have less consistency in play partners, gravitate to younger play partners, and play preferences are less likely to be reciprocated. Boulton (1992) found that some children habitually spend large amounts of playground time alone, and that it is possible that such children can be overlooked by supervisors.

Parker and Asher (1987) in a widely cited review, identified the long term consequences of peer difficulties (in terms of peer acceptance, aggressiveness, and shyness/withdrawal) on later personal adjustment (in terms of dropping out of school, criminality and psychopathology). Strongest support was for a link between peer adjustment, in terms of aggressiveness and peer acceptance, and later adjustment in terms of dropping out of school and criminality. The relevance of these findings is that one of the main settings in school for peer rejection and peer difficulties is breaktime. On the other hand, popular children tend to be more intelligent, more socially skilled, less involved in conflicts with peers, and more sociable (see review by Savin-Williams and Berndt 1990).

We argue that one limitation of the psychological literature on peer relations is that it has focused mainly on one kind of child in particular - the troubled child. This can be seen in the many studies of the aggressive, rejected, bullied, victimised or withdrawn child. But there is a more positive side to individual differences in peer breaktime relations. Haslett and Bowen (1989, reviewed in Erwin 1993) classified differences in social skills of five year olds in terms of three types: 'agenda setters', who tended to initiate and dominate play, and to be active physically and verbally; 'responders' who reacted appropriately to play bids and maintained interaction without establishing the play agenda or initiating change; and 'isolates' who responded inappropriately and were insufficiently persistent and often overlooked. In the Spencer project we were interested in the degree to which children were actively involved in instigating and engaging in playground games and other activities and identified five types of player. These were: Key, Central, Team, Hoverer and Solitary (Blatchford, Baines and Pellegrini 2001). We return to these player types below when discussing social networks.

In many psychological studies which have made use of measures of breaktime behaviour, interest has not been on peer relations then but rather in behaviour then as an outcome in relation to a particular aspect of peer relations. In the following sections we concentrate on studies that have a primary interest in breaktime behaviour and activities.

Breaktime activities

There is not space for a comprehensive review of breaktime activities and readers are referred to Blatchford (1994; 1998), Boulton (1992), Evans (1990), Pellegrini (1995), Smith (1994) for a full account.

Sutton-Smith (1982: 68) has argued that; "the most important thing to know about peer culture is what is going on there. That is, that we might learn more of the structure and more of the function if we first studied what the action is (that is) the performances that are central to children..." . We still know surprisingly little about the nature of breaktime 'performances' and peer relations. Descriptions point to the vigour and involvement shown in the play of primary school children at breaktime. Boulton (1992) found that sociable contact between children, and rule games such as football, rounders and tig, as well as rough-and-tumble play, were common activities. Blatchford *et al.* (2003) in the Spencer project found that 6-7 year old children in London spent breaktime in three main types of activities, all of which usually involved peer interaction: first, conversation, second, play (vigorous, sedentary and fantasy play) and, third, game categories (chasing, catching, seeking; racing, ball games, jump skipping, games with materials, verbal games). Play and games each accounted for about a third of activities observed and conversation a fifth of activities. The remaining 11% represented no activity, i.e. when they were solitary or parallel onlooking/ unoccupied etc. The most obviously negative behaviours such as aggression, teasing/taunting, disputing, were all infrequent, as were incidents when children were told off or disciplined by an adult. In general this indicates that negative experiences on the playground, at least as observed in this study, were very rare, and that involvement in social activities and games were far more common. These findings indicate that a view of break time activities as predominantly conflictual and negative would be wrong.

There are several ways in which breaktime activities and in particular games may have a social role in peer relations during the primary school years. Drawing on Blatchford (1998) and Pellegrini and Blatchford (2002), we identify four roles for activities in social relations:

i. the game as a social scaffold

The game can act to support social interactions between children when they are relatively new to each other, soon after entry to school. Most children will probably know someone from their previous school but it is bound to be a time of uncertainty. If children are in different school classes, time at breaktime may be the only time they get to meet. One way children can connect with old and new acquaintances is through games and play. The game can support and give a justification for contacting and getting to know someone. Shared engagement in games may minimise the importance of other social skills. Davies (1982) describes how the compulsive dynamic of a game can draw children in, aiding friendship formation, and providing access to a shared children's culture.

ii. the game as consolidator of friendship groups

After entry to school the role of the game can change from a role in friendship formation to one of supporting and maintaining friendship groups. The range of games can narrow, and some children in a friendship group can have fewer opportunities for meeting others outside the group. So as friendship groups stabilise so do games. The games children play can contribute to their identity as a group. Games can also have a role in falling out - e.g., by going off with another group and playing a different game. But games can also be markers of reconciliation - by playing the same game one indicates a coming back into the fold. This process can still be seen at secondary level, when pupils are more

concerned with their own identities; there may be groups with particular interests and identities e.g. skateboarders, grungers, goths, sporty groups, girl groups into fashion and clothes (Brown 1990).

iii. the game as social exploration

An interest in exploring new social possibilities on the playground can be reflected in trying new games. So social exploration, e.g., involving girls and boys playing together for the first time can result in newer, sometimes more provocative, games like kiss chase. So a kind of creativity in games mirrors a social exploration – ‘border work’ as Thorne (1993) calls it.

iv. the game as superordinate goal

Playground activities can also bring children together who may not otherwise make contact. Informal child-organised activities, like games, are inherently motivating and enjoyable to children, and can draw them together for the purpose of playing. In some cases playground activities can reinforce group differences, but they can also help bridge differences, e.g., between different ethnic groups. Social psychologists have long been aware that ‘contact theory’, i.e., just bringing children from different groups together, is usually inadequate as a way of ensuring integration, and long ago showed that some form of ‘super-ordinate goal’ is needed to bring about integration and cooperation (Sabini 1992). In the Spencer study we concluded that some playground activities may do more than externally and adult imposed schemes to facilitate real integration by creating ‘authentic’ joint activities involving different ethnic groups.

Age differences

This analysis particularly applies to primary schools, but there is a large difference between primary and secondary stages in breaktime activities. In a follow up study at 16 years of children studied at 11 years (Blatchford 1998) the main change was that games other than football had all but disappeared. By 16 years the most popular activity was talking to friends, hanging around and socialising (72%). The active nature of primary school breaktimes therefore contrasts with the more covert and sometimes apparently unfocused activities of the last years at school. But one needs to be cautious about concluding that secondary breaktimes are of less social importance. As they move through secondary school, pupils’ social lives become important in new and deeper ways and are vital in their developing sense of who they are.

These differences in breaktime activities between primary and secondary sectors no doubt owe a lot to developmental factors but may also be connected to different policy and practice in the two sectors. This was suggested in the Nuffield study where it was found that breaktime was seen by staff as more of a problem in secondary schools but at the same time received less attention and planning, and less effort was put into training and supporting staff, and providing facilities at breaktime. These differences provide a context for the behaviour and attitudes of secondary pupils vs primary pupils.

Gender differences in breaktime activities and peer relations

Rigorous and detailed account of sex differences in everyday playground behaviour can allow us to extend broader aspects of gender differences (Maccoby 1998) e.g., in terms of factors leading to social influence in friendship groups among boys and girls.

Differences between boys and girls in play and breaktime activities (Maccoby 1986; Pellegrini and Smith 1998; Smith 1994; Zabatany, McDougall and Hymel, 2000) and social networks (Belle 1989; Fiering and Lewis 1989) are well documented. For example, primary school boys play with other boys because they enjoy physically vigorous activities; girls segregate themselves from boys’ play groups because they do not enjoy rough play and prefer more sedentary activities that may enhance intimacy (Maccoby 1990; Pellegrini and Smith 1998). Gender differences in vigorous play are the result of both socialization and hormonal events (Pellegrini and Smith 1998). In the Spencer study,

boys showed more rough and tumble play, aggression and being disciplined and girls showed more positive affection. Aggression, though rare, was most common during vigorous play and conversation, but not ball games (Blatchford *et al.* 2003; Pellegrini *et al.* 2002). While boys played in larger game networks than girls, the size of their active networks (who they directly interact with) were the same. The distinction made in this study between active and game networks helps clarify contrary predictions concerning changes in time. It is the 'active' network size which appears to be stable (i.e., not increase), while it is the game network which increases in size over time, perhaps with familiarity and more interest in games with rules.

These results show that sex segregation of playground game groups is marked, as it is in USA data (Pellegrini *et al.* 2004). However, mixed sex groups did occur on playgrounds; boys interacted with females in either mixed or predominately female groups in 13% of observations and girls with boys in 17% of scans. Cleavage between boys' and girls' play and activity is therefore common but not inevitable. There did not appear to be particular games which supported more mixed sex play; rather there were a number of games that brought boys and girls together, the most likely being ball games, conversation, chasing catching and seeking games and fantasy play.

There is likely to be an age effect on gender differences, e.g., in terms of the separation and coming together of girls and boy groups as they pass through secondary school (Cairns *et al.* 1998; Maccoby 1998). Research on 16 year old pupils in their last year of secondary school still found gender differences in pupil activities (Blatchford 1998). Boys were more likely to report playing football, other ball games, and cards and chess. Girls were more likely to talk to friends and socialise, do school work, and listen to music.

Friendships and breaktime activities

There have been many studies of the development of children's friendships. This research is too numerous to be covered here (see reviews in Dunn 1993, 2004; Gifford-Smith and Brownwell 2003; Hartup 1992; Ladd 2005; Parker and Gottman 1989, Rubin *et al.* 1998, 2005, 2006). Here we concentrate on friendship relations in the context of breaktime and informal contacts between pupils in school. Breaktime has a main role to play in friendship relations because it is at breaktime that friends, perhaps not in the same class at school, have a chance to meet; a time when important social networks are formed and a time when important social skills can be learned; a time when they can fall out, but can also develop strategies for avoiding conflict. Given the difficulties children may face in meeting out of school (Blatchford and Baines 2006), breaktime may be the main setting within which friendships are formed and develop. We know that one of the main reasons why pupils like breaktime is because it is a chance to meet friends (Blatchford 1998). Of course breaktime can have a negative side. Social relations can be fractious, and the misery caused by bullying and harassment has to be recognised and dealt with. But it is a salutary finding that students say that the best thing about school is the chance to meet their friends (Survey to Children's Society national survey – Layard and Dunn 2009) – and it is breaktime that provides the main forum for their social life and well-being at school (Blatchford and Baines 2006).

Here we adapt Hartup (1992) and Pellegrini and Blatchford (2000) to indicate two possible functions of friendship relations to school adjustment. The role of friendships in classroom engagement and academic progress and learning is dealt with later.

Context for acquisition of social skills

Children can learn and develop important social skills during their interactions with peers in the playground at recess. These skills are negotiated during the give and take characteristic of interaction between equals. Hartup has argued that friendships during childhood act as 'cooperative socialization contexts' (Hartup 1989 in 1992), i.e., friendships support cooperation, reciprocity, effective conflict management, intimacy, and commitment, and these begin early in life and extend into

adolescence. Later, between 11 - 17 years, self disclosure and intimacy become important, as do giving and sharing, exclusiveness and intimacy and commitment. In a similar way Maxwell (1990) describes friendships in terms of a socialisation function, e.g., through learning to control aggressive impulses in socially acceptable ways. He concludes: "The peer group provides arguably the most efficient and highly motivating context for the learning and development of social skills which will ultimately enable children to live effectively as a member of adult society." (p. 171)

Evidence for a connection between friendship and social skills comes from studies which have compared the behaviour of children who differ in terms of whether they have friends or not. Bagwell and Newcomb (1996) conclude that friendless children display less adaptive social competencies and social skills when interacting with peers. Howes (1989) (as reported in Hartup, 1992) found that in young children social behaviour between stable friends was more competent, children were more successful in group entry, more complementary and reciprocal in their social play, more cooperative, and more likely to engage in pretend play.

As we have seen, Sluckin (1981) argued that playtime offers children the opportunity for peer interaction in the context of which many lessons relevant to adult life are learned. He draws out rules that are implicit in the ways children play and deal with each other on the playground. These rules, originally negotiated in the playground, form the bases for broader peer interaction patterns in school. This notion of breacktime play as preparation for adulthood has been called a 'socialisation model' (see Pellegrini, 1995).

Adjustment to school

Friendships can provide support for people faced with stressful events, and can improve children's social and academic adjustment to school (Ladd, Kochenderfer and Coleman 1996, Savin-Williams and Berndt 1990). More supportive friendships can help children have more positive perceptions of school and help them behave better (Berndt and Keefe 1992). Berndt and Keefe make the point that the success of friends in helping adjustment to school will depend very much on the quality of friendships involved. If based on mutual respect and collaboration, and if viewed positively, then they will help involvement in school, but if friendships are viewed more negatively then behaviour may become more disruptive.

One particularly stressful point in school is transfer from primary to secondary school. Pupils must adapt to an increased school size, different teachers, new rules, and more formal organisational and working arrangements. However, one of the main changes is in the social realm. On transfer children are no longer the oldest in the school, they must re-establish old friendships and develop new friendships with unfamiliar peers, avoid being bullied, and find their place within the new social structure and culture (Hargreaves and Galton 2002). Disruption of the social realm is unsettling for pupils at this key point between childhood and adolescence when peer relationships become increasingly important and a main focus of psychological energy and attention (Sullivan 1953). Students show an increased dependency on friendship support, invest heavily in the peer group (Furman 1989) and identification and conformity with peers also increases (Wentzel 1991). Similarly, researchers suggest that many adolescents begin to value social goals over academic goals (Anderman, Maehr and Martin 1994) and the socially disruptive nature of transfer may facilitate this. Research on transfer is inconsistent about the extent of the disruption caused. Some suggest that socially it is a 'menacing' period (Beynon 1985; Delamont and Galton 1986) yet others stress a period of excitement (Rudduck 1996) and pupils adjusting remarkably quickly. Some pupils find the transition difficult, particularly less able and more able boys, children of particular ethnic backgrounds and some girls (Galton, Edwards, Hargreaves and Pell 2003; Hargreaves and Galton 2002; Rudduck, Berry, Demetriou and Goalen 2003). But equally children can adapt well socially and academically to the new school. Friendship stability and quality appear important for social adjustment (Berndt, Hawkins and Jiao 1999) and particular friendships and social networks may

'socialise' children into positive or negative school attitudes, motivation styles, and behaviours and thus may be important to whether adolescents 'tune' in or out of school (Farmer and Rodkin 1996; Wentzel and Caldwell 1997).

Berndt *et al.* (1999) found that stable friendships across transition to high school were associated with higher levels of leadership and sociability. Positive friendships were also related to increased school adjustment, achievement and engagement. They also found that friendship could have negative implications for adjustment. Children who had stable poor quality friendships with others that had behaviour problems and were high in sensitivity-isolation increased in their levels of these behavioural dimensions. In a similar study, Berndt (1996) reports that children with more supportive friendships at the beginning of 7th grade showed increased popularity by the following spring. This is consistent with the view that children who have close friendships on entry to school can quickly tap into new networks of friends of friends and so develop a positive set of relationships in the class as a whole.

Negative effects of friendships and peer relations

A realisation that friendships may also have a more negative side is given powerful expression by several very high profile crimes in both the US and UK involving young friends. One example was the James Bulger case – where two friends Jon Venables and Robert Thompson kidnapped and killed the toddler. Both boys had delinquent and anti-social backgrounds, were bullies but also victims of bullying and abuse, and were socially rejected by many of their peers. In the USA in a Colorado school 25 students were killed at their high school by two teenagers dressed in black trench coats and wearing masks. Apparently these adolescents were members of a group of outcasts labelled by the press the 'trench coat mafia'. Hartup (1996) reports the case of a pair of anti-social boys who planned the ambush and murder of the mother of one of them. Of course atrocities involving young people as aggressors have been committed by lone individuals but the cases cited above are distinctive in being carried out by children who were friends. There were also similarities in terms of child characteristics, their family circumstances and relationships, and, importantly, peer relations. In all cases children seem to have been socially rejected by their peers but had come together and become friends.

In the Bulger case, in particular, the combination of the young age of the culprits and the fact they were friends created a widespread sense of unease about the reasons why it is that young people can engage in such behaviour, but also how friendship can be a driving force behind it. While these cases are extreme, there are other more everyday examples, e.g. friends filming each other engaged in delinquent activities to contribute to social networking and video sharing websites, and groups of children that bully and abuse others (Salmivalli, Arja and Lagerspetz 1997). There has thus been recognition (Hartup 1996; Newcomb and Bagwell 1996) that one cannot consider the developmental significance of friendships without distinguishing the identity of a child's friends (e.g., their personality characteristics). Friends tend to be similar to each other, and may become more similar over time (Newcomb and Bagwell 1996). Friends may be caring and supportive but children who associate with friends whose behaviour is antisocial, antischool or delinquent may be influenced to behave in these ways (Newcomb and Bagwell 1996). There is much recognition now that any consideration of the effect of friendships therefore needs to consider the quality of their relations. There is growing evidence that friendship quality is implicated in psychological adjustment, e.g., loneliness, and complex models have been evolved to show the place of friendship quality in this connection (e.g., Newcomb and Bagwell, 1996).

Bullying

One of most high profile aspects of peer relations in school, and one which has done probably more than any other to suggest the negative consequences of informal peer interaction is bullying. This was relatively unexplored until the early 1990s. However some high profile court cases, child

suicides and revenge killings have brought the notion of bullying into the public eye. This has led to a large number of national initiatives across many countries to help reduce the amount of bullying within schools (e.g., in the UK: 'Safe to Learn: Embedding anti-bullying work in school', DCSF, 2007). There has been considerable research focus on bullying in schools, much of which occurs in school playgrounds (Olweus 1990, 1993; Smith and Sharp 1994; Whitney and Smith 1993).

Traditionally boys are considered to bully more than girls. However we now know that boys and girls tend to engage in different types of bullying (Olweus 1993). Boys tend to engage in more direct physical or verbal bullying while girls engage in more indirect bullying. Since direct bullying is easier and more obvious to observe it is likely that girls' bullying has been underestimated. Often the purpose of bullying is to establish or maintain social status, and gain psychological reward in terms of validating self esteem through dominance of another (Sutton, Smith and Swettenham 1999b).

Where and when does bullying occur?

Bullying can be done in private (e.g. for extortion etc.) but most bullying episodes are public. Bullying tends to take place on school playgrounds (Olweus 1993). Bullying often takes place in a social context in which other children look on or even participate and different kinds of role have been identified: bullies and victims; assistants, reinforcers, defenders and outsiders (DeRosier, Kupersmidt and Patterson 1994; Pepler and Craig 1995). Emphasising the group based nature of bullying, Salmivalli and colleagues (1997) found that children with complementary or similar bullying roles (e.g., bullies and defenders) tended to be members of the same network, and that those undertaking the bullying, as opposed to victims, defenders and outsiders, tended to be members of larger social networks. This further highlights an inter-group facet of bullying and conflict - an area that has received scant attention in relation to peer relations and social networks on the playground.

Bullying and victimisation can occur during transitions between school stages when children are establishing new relationships and a new social system of popular and unpopular people. Bullies quickly identify potential victims (Perry, Willard and Perry 1990). Schools where there is a lack of supervision on the playground, or where aggression, dominance and bullying are tolerated are likely to have higher levels of bullying (Olweus 1993).

Recent research has also begun to examine the growing incidence of bullying that is conducted through the use of mobile phones and computers (e.g. in terms of sms messaging, picture and video recording, and online via e-mail, forums, video and picture sharing and social networking websites). Cyberbullying is rather different from everyday bullying as it is not conducted face to face, potentially allows bullies to act anonymously, and in some instances may take place between persons that have never met. This phenomenon introduces new issues and problems. For example while most face-to-face bullying takes place in school and therefore schools take a responsibility in its prevention and resolution, most cyberbullying takes place outside of school. This raises questions about how it can be prevented and who should take responsibility for prevention and resolution. Cyberbullying will not be discussed in this review further but for additional information see Shariff (2008) and Kowalski, Limber and Agatstone (2008).

The effects of bullying

There is considerable evidence that severe bullying can result in long term problems. Victims are likely to have lower self esteem. Olweus (1992) found that children that had been victims at 15-16 were more likely to show symptoms of depression and continued to have poor self esteem when they were 23. Sharp and Thompson (1992) found that victims of bullying were likely to avoid

school to avoid bullying; experience difficulties concentrating on school work and sleeping; and feel physically ill after being bullied. Boulton and Smith (1994) found a number of associations between classification of pupils as bullies and victims and features of their breaktime behaviour, self concept, and social status.

Characteristics of victims

Victims are a more heterogeneous group than bullies and consist of passive victims and aggressive victims (or bully victims). Passive victims are often physically smaller, of average ability and not popular with peers. They are not aggressive or assertive but they are more submissive and they initiate conversations at lower rates than other classmates - so they may be characterised as quiet and shy. They are less confident in peer interactions more generally and are much more anxious, they are often rejected by their classmates. Their parents are more likely to be over-protective. According to Olweus (1993) they are less likely to be victimised once they reach adulthood.

Aggressive victims are also bullied but display a hostile style of social interaction. They are often hot tempered and are high in reactive aggression (as opposed to planned or instrumental aggression) in response to provocation. Unlike bullies and normal victims, aggressive victims are not liked by any of their peers. Indeed they are the most rejected – possibly because they are so inconsistent. These children – unlike usual victims – are the children that are most likely to be associated with negative developmental outcomes – e.g. dropping out of school, behaviour problems, and crime. Their family backgrounds involve inconsistent parenting styles and abuse (Bowers, Smith and Binney 1994). They are more likely than normal victims to try to associate themselves with bullies. The bullies encourage them by acting pro-socially towards them (Pepler, Craig, Ziegler and Charach 1993).

Characteristics of bullies

Bullies tend to be outgoing, socially confident, showing little guilt and powerful and dominant within their own peer groups. They are typically bigger and stronger than their victims (Olweus 1993; Smith and Sharp, 1994). Bullies can be rejected or disliked by classmates, but are popular with other aggressive classmates (Cairns, Cairns, Neckerman, Gest and Garipey 1998). Families of bullies are high in conflict and low in warmth, and parenting strategies often involve use of aggression and threats (Loeber and Dishion 1984). Bullies are at risk of criminality and victims are at risk of depression and suicide (Olweus 1993).

The popular stereotype of a bully is usually of a male who is physically powerful yet intellectually simple – resorting to aggression and violence because they know of no other means to get what they want. A similar view is that bullies do not process social information effectively and essentially lack social skills (Crick and Dodge 1999). This stereotype of the bully is supported by research, particularly in relation to research on physical aggression. Camodeca and Goossens (2005) find evidence to show that both bullies and victims show deficits in social information processing. They suggest that victims and bullies present deficits at the start of information processing and bullies alone also present deficits at the end of information processing. Bullies and victims tend to perceive ambiguous situations as hostile and also tend to respond reactively with anger and retaliation.

However Sutton, Smith and Swettenham (1999a) have questioned this social information processing deficit model and suggests that some bullies may actually be highly skilled both socially and intellectually. Bullies are better at Theory of Mind tasks than followers or victims (Sutton *et al.* 1999a; Sutton 2001). Sutton (2001) suggests that the best way to see bullying is in terms of the phrase ‘It’s easy, it works and it makes me feel good.’ Bjorkqvist, Osterman and Kaukiainen (2000) found that social intelligence is highly correlated with indirect aggression and Gini (2006) found that victims but not bullies have difficulties in social cognition tasks. However, Kaukiainen, Salmivalli, Lagerspetz, Tamminen, Vauras, Maki and Poskiparta (2002) found that there were

socially unskilled bullies with learning difficulties, who were often victims themselves, and also socially skilled bullies with high self confidence and average to high ability and social intelligence. This suggests that bullies are not a unified group but also gives credence to Sutton's model that some bullies at least can be skilful social manipulators and that bullies may lack emotional and empathic understanding of others' feelings. The educational implications of this view are provocative, in the sense that some anti-bullying strategies, which encourage schools to help children become sensitive to other's perspectives, and which work on improving social skills, may in reality simply serve to equip bullies to be even more effective.

Social networks

Early research on peer relations and friendships (e.g., Rubin 1980) provides fascinating descriptions of group formation, roles and socialisation effects, but there has been a more recent revival of interest in social networks (Cairns, Xie and Leung 1998; Kindermann 1993; Kindermann and Valsiner 1995). This has been informed by ecological approach to the understanding and investigation of peer relationships in context. In their bioecological model, Bronfenbrenner and Ceci (1994) differentiate between the distal cultural system of values and social behaviours that have an indirect effect on the individual, and the more proximal processes representing the day to day experiences that have a more direct impact. This approach also emphasises that social networks develop their own micro-culture and socialising effects. A prime arena for capturing the performances and processes involved in the functioning of peer social networks is during breaktime because socialising with peers then is intrinsically group based. It is during these activities that the complexities of structural relationships between members within and between social networks can be studied.

Research on peer relations has tended to be organised into discrete areas such as gender and ethnic differences, social skills, bullying, rejection and friendships. This is necessary but also tends to segment an overall appreciation of peer relations in school and it also tends to detract from an appreciation of its complex, group based nature. Many of these overlapping peer relations constructs come together in an analysis of social networks. Rather than providing a full review of this field (see Cairns *et al* 1998; Gifford-Smith and Brownell 2003; Rubin *et al.* 2006), we draw on observation data on networks at breaktime, taken from the Spencer study, in order to show how many of the constructs already examined play a part in the overall group basis of school peer relations (see Baines and Blatchford 2009, for further information).

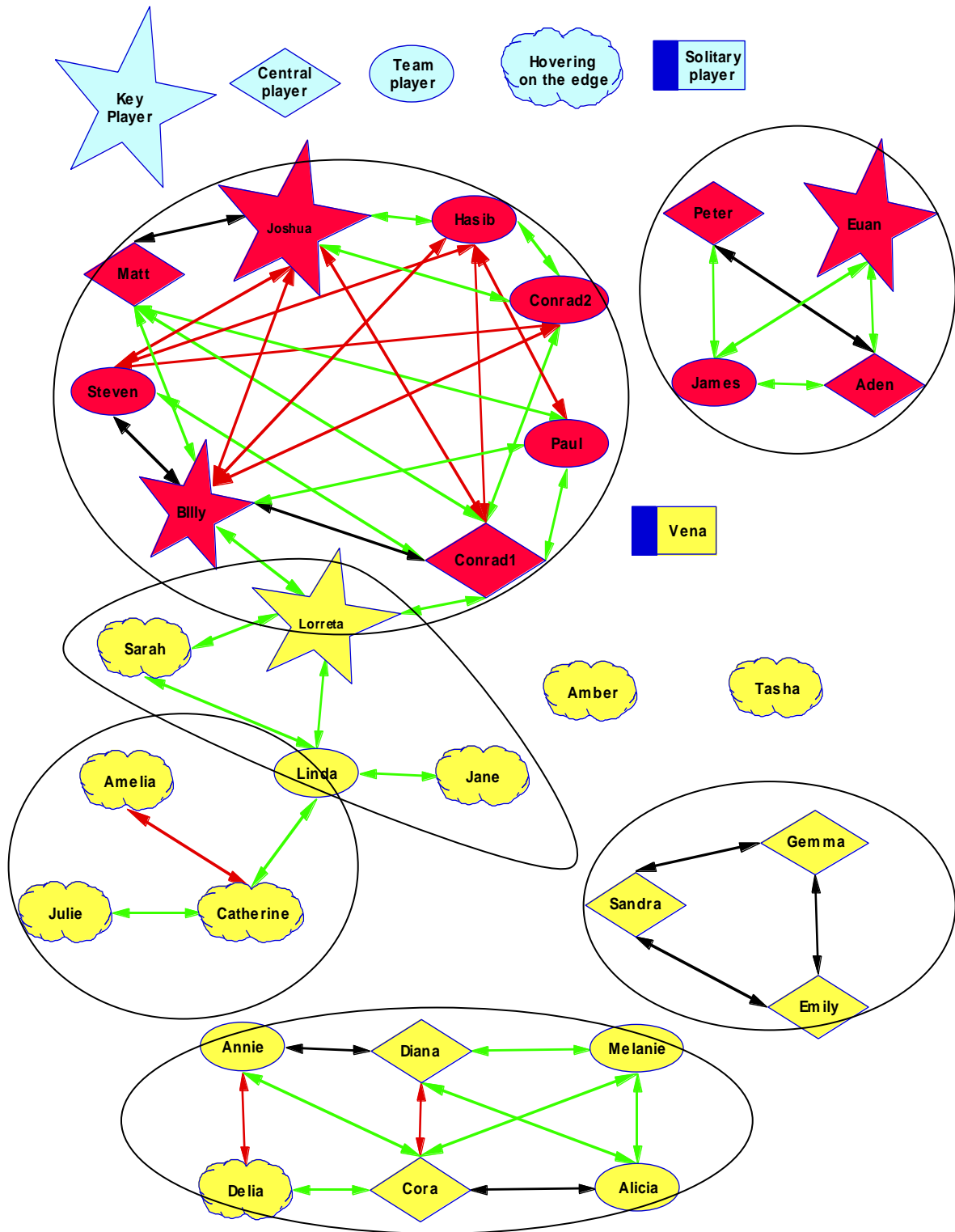


Fig. 1: Map of the social networks in one class resulting from systematic observation data collected as part of the Spencer project.

Fig. 1 shows the social networks from one of the classes involved in the study. The different coloured arrows show different levels of relationship between students, with the black lines indicating that students spend more than 50% of their time together, the red lines more than 37% of their time together and the green lines showing more than 25% of their time together. Some groups contain at least one main relationship and others spend less time within the group. Some groups consist of children that spend equivalent amounts of time together (either a lot or alternatively little).

Consistent with previous research on gender differences (Benenson, Apostoleris and Parnass 1998) boys and girls formed separate groups. With the exception of one girl and two boys the two sexes are completely separated. There are two main groups of boys, one medium size and one very large and four groups of girls, three of which are medium and one large. This illustrates the general trend for boys groups to be larger (Benenson *et al.* 1998; Cairns *et al.* 1998). The male groups are highly interconnected as indicated by multiple links to many members within groups, the female groups less so. There are also three girls (but no boys) not connected to groups. One is an 'isolate' who rarely hangs around with any of these children. The other two were social 'butterflies', visiting different groups and thus spending little time with any one group.

Networks were connected to breaktime activities. Each of these groups had a distinct game activity profile. The very large group of boys engaged in physical, sporty and sometimes competitive/cooperative team activities. The smaller male group engaged exclusively in fantasy and rough and tumble play. Similarly the large group of girls engaged in a combination of chasing and fantasy activities and the triad of girls spent most of their time chatting and grooming each other.

We can ask questions about what it is that draws these particular children together into these groups. Is the presence of a close friendship at the heart of the group, the individual characteristics of a student, is it something to do with the activity that is engaged in, or is it something more disparate such as attainment or motivation to learn? Research has clearly emphasised the notion of homophily - that social networks consist of members that are similar on particular dimensions (Epstein 1989; Kindermann 1993). The example clearly illustrates the influence of relatively surface factors like gender, school class, and also deeper factors like similarity of activity interest. However, social network formation may be more complex than this. What may function to bring students together at one point in time (e.g. breaktime activity, as suggested earlier), may be different for students coming later to the group and may not be the same reason that they stay together. After some time friendship, intimacy, loyalty and so on may provide the glue that keeps social groups together. As theorised by Cairns (1979), group members may also be different in a number of ways and may take on complementary roles. Little research has examined this notion of complementarity within groups.

We can illustrate this possibility in terms of the notion of game involvement roles. As we saw above, we distinguished between Key players, Central players, Team players, Hoverers and Solitary players. In Figure 1 Billy, Lorreta and Joshua are main organisers of games; they choose the teams, decide who races, and on occasions even who has won. These are the 'key players' within one group but this role was affected by the social context. Billy was the overall key player and when Loretta was present would allow her to take charge in organising games. When neither Billy nor Lorreta were around Joshua would become an active and dominant voice within the group. Other children, Conrad1 and Matt in particular, were often verbally involved in the planning and playing of games and activities and were deemed 'central players'. Conrad 1 was side-kick to Billy and Matt to Joshua. The remaining boys were less involved in the organisation of games but were engaged in the action and thus termed 'team players'. Sometimes children leave games to observe other activities or to socialise with others; these types of players we have called 'hoverers'. There were also 'solitary' players – children who spent much time alone on the playground. Time spent alone appeared, in some cases, to be self determined and others imposed.

Social network researchers have also examined a notion of network centrality or visibility within the group (Ellis and Zabatany, 2007; Gest, Graham-Bermann and Hartup 2001). In the above example, Key players were often highly visible and therefore might be highly central but even team players could be considered core members of a group since they were consistently involved, though may not be salient, within the group. Network centrality is related to number of friends and sociometric status and correlates both with pro-social and antisocial behaviour (Gest *et al.* 2001) as

well as leadership and athletic ability (Farmer and Rodkin 1996). Boys displaying high levels of physical and verbal aggression and girls with high levels of relational aggression had higher network centrality scores than children not displaying these characteristics (Xie, Farmer and Cairns 2003).

The literature has tended to consider social networks, defined as groups of students that hang around together, and friendship networks as synonymous. While significant overlap has been found to exist between social networks and friendships (Baines and Blatchford, 2009; Cairns *et al.* 1998), there are some key differences. Friendships may incorporate past playmates and others that a child may not choose to play with in school. Similarly, social networks may contain friends of friends, thus offering opportunities for the development of new friendships, and in some case enemies. For example, research has indicated that bully/victims often exist in the same network as the bully (Ladd 2005). In Figure 1, the large group of boys consisted of a number of students that were more closely affiliated than others. Other aspects of social networks will be illustrated in the next section where social networks are considered in relation to learning.

Peer relations in classrooms

Within classrooms pupils vary a good deal in how well they work together. Some are helpful and constructive, others are over dominating, some are passive and left out, and still others are destructive and unhelpful. These differences are important because, as teachers know, they can mean the difference between a class that is easy to teach and academically productive and a class that is not. Teachers report that peer relations affect the quality of classroom processes and learning and they can cause difficulties that must be resolved by the teacher. Yet we know surprisingly little about how these features of informal peer relations actually affect classroom dynamics and functioning. Peer relations researchers have tended to focus almost exclusively on the connection between peer relations and social adjustment and competence and less on their relationship with school academic outcomes.

In this section we will consider

1. peer relationships and school outcomes in terms of:
 - a. peer relations and school attainment and academic adjustment;
 - b. social networks and school outcomes;
 - c. peer relations and school belonging;
 - d. friendships and learning interactions.
2. Effects of school factors on peer relations.
3. The formal role of peer relations in classroom learning –specifically, research on collaborative and cooperative group work.

1. Peer relationships and school outcomes

1.a Peer relations and school attainment and academic adjustment

Children who are low in peer acceptance or characterised as rejected are more likely to show poor social skills and higher levels of aggression and noncompliance (Coie, Dodge and Kupersmidt 1990 in Wentzel and Asher 1995) but are also likely to show disengagement, anti-school attitudes, and low achievement, academic motivation and readiness to learn (Buhs, Ladd and Herald 2006; DeRosier *et al.* 1994; Ladd, Kochenderfer and Coleman 1997; Vandell and Hembree 1994; Wentzel 1991; Wentzel and Asher 1995). Studies of sociometric status and friendship have consistently reported concurrent and longitudinal connections with school attainment and adjustment outcomes. Such research typically shows that popular/ accepted students tend to do well academically, are more prosocial and have higher self regulatory skills (Coie *et al.* 1990; Rubin, LeMare, and Lollis 1990; Wentzel 1991; Wentzel and Asher 1995; Wentzel and Caldwell 1997). Neglected pupils achieve higher than average academic levels, are more motivated and compliant and are often liked

by teachers. Controversial children achieve at lower than average levels, are more aggressive and less compliant (Wentzel 1991; Wentzel and Asher 1995). It should be noted that these studies are essentially correlational in nature (despite sometimes sophisticated regression analyses) and so causal direction (i.e., from peer relations to outcomes) cannot be exactly inferred.

Studies examining the long term consequences of peer difficulties (in terms of peer acceptance, aggressiveness, and shyness/withdrawal) suggest that aggression and lack of acceptance in particular are related to increased levels of depression, anxiety, lower academic achievement and drop out of school (Parker and Asher 1987; Ladd and Troop-Gordon 2003). More recently, researchers have begun to examine variables that potentially mediate longitudinal connections between acceptance profiles and school adjustment variables. Wentzel (2003) examined the possible mediating effects of perceived support from classmates and social and academic motivation. While negative associations were found between controversial status and learning effort, rejected status and prosocial goals, and neglected status and perceived support from peers, these variables were not found to mediate the connection between sociometric status and school adjustment. In another longitudinal study of children from kindergarten through to 5th grade, Buhs *et al.* (2006) found that classroom engagement mediated connections between peer rejection and learning for rejected-excluded children but not rejected-victimised children. The latter group tended to drop out of school – but attendance did not mediate reductions in achievement.

Wentzel (2003) identified different profiles for popular, neglected and controversial children. Girls that were controversial and neglected achieved higher than average, whereas for boys with these profiles the opposite was the case. Popular children only achieved at average levels and were more inclined to display irresponsible behaviour.

A major shortcoming of research in this area is that studies treat sociometric status as a trait-like characteristic of individual pupils. Yet, there are indications that sociometric status may vary by school peer group (Cairns *et al.* 1988; Wentzel 2003). There are reports of marked changes in sociometric status after transfer to a new school. For example Sluckin reported the case of Neil who had been popular at primary school and then went on to become rejected after transfer to a secondary school (Sluckin 1981). The suggestion is that particular values and forms of behaviour linked with popularity in one context may or may not be associated with acceptance in another. Peer groups in different schools can have different sets of values and a child's sociometric status may be determined partly by these values. For example, different correlates of sociometric status might be expected in a high flying school, where academic learning and responsible behaviours may be viewed positively, and in a school in a deprived area, where attitudes to formal education may be more negative. Sociometric status may also vary according to other social factors such as socioeconomic, cultural and ethnic background of students in the peer group. There may however be particular correlates that are consistently related to particular profiles regardless of the school, such as pro-sociality, internalising/ externalising behaviours, anxiety, aggression, and so on. The above research suggests that there is a fairly distinct profile associated with peer rejection, but that other peer acceptance status profiles may vary across circumstances.

There has been little attention paid to the possibility that individuals may have some control over their social status. While this may not be the case for those children who are rejected, students may be able to raise or lower their salience within the peer group. For example, within a context where academic success is seen as 'uncool' by the peer group, some academically capable students may reduce their explicit effort and involvement in school to avoid detection and possible rejection/victimisation. Such strategies when combined with others (e.g. engagement in disruptive behaviour) may inflate social acceptance. In a similar fashion, researchers interested in bullying roles have noted that 'outsiders', those children that do not get involved in bullying episodes, appear to be able to avoid being bullied or victimised. Such avoidance behaviour may also help

students go unnoticed by evading others' attention, but equally this behaviour may lead to an 'average' or 'neglected' sociometric status. Such possibilities deserve more attention from researchers.

1b. Social networks and school outcomes

While most research on peer relations has focused on an individual pupil's status within the peer group, research over the last decade or so has become increasingly interested in the role a child's immediate social network plays in development. In the section on breaktime above we used a case study of one school class to illustrate how social networks arise through interactions at breaktime. Here we examine research on the connection between social networks and school outcomes.

Social network researchers identify selection and socialisation processes. Selection processes reflect the common finding that social networks are often homogenous on a number of dimensions, that is, people with similar views and values are attracted to each other to form or become members of a group (Cairns *et al.* 1998). Socialisation processes, on the other hand refer to the tendency for group members to become increasingly similar over time. These processes are much harder to identify because it is difficult to eliminate explanations that draw on external factors that may have had a role in selection. The majority of research on social influence processes tends to focus on adolescence because it is generally believed that at this time social networks become more important than position in the overall peer group (Gifford-Smith and Brownell 2003).

Farmer, Estell, Leung, Trott, Bishop and Cairns (2003) studied the connection between 7th graders' levels of aggression, teacher-rated popularity and social network membership relative to future school drop out (up to the end of high school). Findings show that being a member of an aggressive group (defined in terms of proportion of aggressive members), was linked to higher levels of drop out for aggressive students (but not non-aggressive students). Being part of a popular group or a group with no popular members was also linked to dropping out. Groups that were mixed in terms of aggression were protective for aggressive students. Both popular and non-popular students that associated with aggressive peers were more likely to drop out.

These findings have a bearing on models suggested to explain connections between peer rejection and other peer problems with long-term adjustment problems and drop out of school reported earlier (Parker and Asher, 1987). Models suggested either give a primary role to peer relations, or see peer relations as a reflection of other underlying characteristics, but both are primarily concerned with characteristics of the individual child and pay scant attention to the role of peers or social context in mediating these negative outcomes. The findings from Farmer and colleagues suggest a third model in which peer networks play an influential role in facilitating delinquency, school adjustment and drop out. When aggressive and/or rejected children get together to form a deviant group, then individual school drop out and other adjustment difficulties may occur. Socialising in groups of similar-minded peers may therefore serve to facilitate children with high levels of aggression or at risk of rejection into negative adjustment outcomes, whereas socialising with sympathetic but different-minded peers may function to discourage negative outcomes. Other studies offer insights into these socialisation processes. Dishion, Spracklen, Andrews and Patterson (1996) discuss the notion of 'deviancy training' whereby members of deviant groups reinforce and elevate the status of deviant behavior and activities through laughter and approval. Other studies have identified social network and friendship socialization effects on deviant activities such as drug use, cigarette smoking and alcohol use (Dishion, Capaldi, Spracklen and Li 1995; Mounts and Steinberg 1995; Pilgrim, Luo and Urberg 1999; Urberg, Degirmencioglu and Pilgrim 1997).

These studies, apart from Farmer *et al.* (2003), do not examine school-related outcomes, but similar deviant patterns may be expected in the case of anti-school attitudes and other academic outcomes. There is an increasing literature on socialising effects and academic achievement and engagement

(Berndt and Keefe 1995; Sage and Kinderman 1999). Kindermann (2007) found small levels of peer network influence on students' classroom engagement (as reported by teachers) after taking selection and teacher and parental involvement into account. While homogeneity in peer network engagement levels existed over the year, there was a marked instability in network composition over time, suggesting that when networks split students sought out new groups/members with similar engagement profiles.

Ryan (2001) found evidence of peer friendship network socialising effects on academic achievement (averaged across grades in English, maths, science and social studies), in measures of school liking but not on the perceived value of school or beliefs about future school success. These latter two findings are important because they question the general view that peers are responsible for negative attitudes about the value of learning and education. These findings also reinforce the view of Brown, Dolcini and Leventhal (1997) that peer influence is selective, influencing certain aspects of behaviour and beliefs but not others. Many school related values may be more affected by family and teacher attitudes given that students may have most discussions about school with these persons. There are also suggestions that other types of peer relations, such as best friends (Hallinan and Williams 1990), may be more influential in particular aspects of the socialisation. For instance, Urberg *et al.* (1997) found that while a peer group was responsible for the socialisation of levels of alcohol intoxication, it was the best friend that had influenced individuals to drink alcohol in the first place. However, it may also be the case that general cultural attitudes across the peer group as a whole affect the extent to which school is valued. A host of other factors may also play a role such as socioeconomic background, neighbourhood, and school factors.

The literature on social networks therefore suggests that peer group influence can affect individual children in both negative and positive ways. Efforts are thus needed to try to maximise and take advantage of the beneficial effects of peer influence to enhance school adjustment and engagement outcomes. Research on peer influence is at an early stage and further developments in methodological and statistical approaches are required to press this work forward.

1c. Peer relations and school belonging

Recent research on school adjustment has begun to emphasise the importance of feelings of school relatedness or belonging for motivation, engagement and academic performance (Conell and Wellborn 1991; Osterman 2000). The extent to which these needs are fulfilled predicts engagement and performance within the school context, and contributes to the adoption of goals defined by the institution and the social groups within it (Conell and Wellborn 1991). Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearinger and Udry (1997) suggest that school belonging may offer protection from non-academic risks such as violence, deviance, teen pregnancy and ideas of suicide.

Involvement with the school peer group in terms of peer acceptance and friendship (as well as relations with teachers, and parents) has been hypothesised as being central to feelings of school belonging (Lubbers, Van der Werf, Snijders, Creemers and Kuyper 2006; Osterman 2000). Students who are accepted by their peers might be anticipated to feel greater levels of school belonging and thus have higher levels of motivation to engage in classroom activities than those who are friendless or rejected. Bukowski, Hoza and Boivin (1993) suggest that acceptance offers feelings of inclusion and membership and friendship allows feelings of closeness and need for security. Friendship may play an important role in enhancing feelings of inclusion and acceptance whilst circumventing the deleterious effects of rejection and victimisation by the wider peer group. A longitudinal study in Holland (Lubbers *et al.* 2006) found that peer acceptance and friendship had an impact on academic progress but largely in a negative, rather than a positive, way. That is, low peer acceptance was related to downward mobility in terms of setting (tracking) and grade retention (being held back a

year) but not upward mobility. Rejection, exclusion and ostracism by peers have important implications for students' attainment. Peer relations were connected to school belonging and engagement but these variables did not mediate the link between peer relations and academic progress. Lubbers et al. (2006) interpret their findings in terms of rejection and friendlessness heightening feelings of not being wanted and reducing feelings of school belonging.

Conceptualising friendship and social acceptance as indicators of feelings of school belonging may be too simplistic. Sociological research is clear that schools can have a cohesive peer culture that is anti-school and anti-learning; it is quite possible for students to feel a sense of involvement and belonging to the peer group but not feel any connection with the ethos or values of the school and academic life (Schmuck and Schmuck, 2001). Some time ago Coleman (1961, cited in Berndt and Keefe 1995) suggested that students may seek acceptance by the peer group over academic engagement and attainment because peers value social goals over academic success.

In a detailed qualitative study of one high school, Hamm and Faircloth (2005) showed the importance of friendships in allowing a sense of school belonging in spite of a peer group that held anti-learning culture. Within the school the overall peer group attitude was one of cliquishness and exclusivity, involving denigration by peers of academic effort. Drawing on interview data, Hamm and Faircloth reported that students looked to friends to counteract alienation and lack of peer acceptance. Friends then enabled students to have a sense of school belonging, enhanced their feelings of self worth, offered companionship and academic support and enjoyment of classes. However, rather than suggesting that the sense of belonging encouraged by friendships was directly transferred to the school, they indicated that the friendship base provides feelings of security that then allows students to invest themselves more fully in school activities – their sense of school belonging then begins to develop. This is consistent with Ladd, Kochenderfer and Coleman's (1997) suggestion that friendships enable a child to have the psychological capacity to adjust socially and academically and explore new settings. What is missing from Hamm and Faircloth's report is detail on the extent to which those students that were part of the cliquish and disengaging peer group also held feelings of school belonging. But it may of course be possible to feel a sense of school belonging but to reject the academic and formal learning side of school.

1d. Friendships and learning interactions

Very little research has examined how informal peer relations influence classroom interactions and engagement within classrooms. One important facet of informal peer relations is friendships. There are strongly held professional views about whether friends should be seated together. Some teachers believe that children will work less effectively when with a friend because they will distract each other. Hamm and Faircloth (2005) indicate that students report that friends often distract them from engaging in class.

On the other hand, it might be expected that when working together friends would work better, because they know each other well and their collaboration would be more effective. Friendships offer opportunities for co-operation, reciprocity, effective conflict management, intimacy, commitment, and self disclosure (Hartup 1992). All of these skills are important for learning interactions within the classroom.

In a review of research on friendship as co-workers, Zajac and Hartup (1997) show that working with friends can be beneficial for learning; friends are better at co-operating, collaborating and discussing than non-friends; and friends show more disagreement, more elaboration of their own and partners' ideas and more frequent checking of progress. An important finding is that when disagreements arise between friends these encourage more deductive reasoning rather than leading

to petty disputes as is the case with non-friends. Friends may perform better on written narratives, specifically creative writing. This might be seen as a kind of complex problem solving task.

In a meta-analysis of the differences between friends and non friends on cognitive tasks, Newcomb and Bagwell (1995) reviewed 82 studies in which 524 variables were examined in relation to friendship status and learning. There were four main advantages in favour of friends. First, there was more positive engagement between friends (talking, smiling and cooperation), second, better conflict management (resolving conflicts constructively), third, more task activity (staying on task, communicating about performance), and fourth, relationship properties were better (concern with equality and loyalty, less dominance and submission). This looks as if teachers might be advised to put friends together to work on tasks. However, there is some evidence that friends work better together on difficult rather than easy tasks.

There are several reasons for the superior performance of friends on some tasks. In essence friends: know each other better, they have more commitment, are more likely to help each other, they are more secure with each other so they are more likely to speak up and disagree with each other and finally they are better disposed to resolving conflicts. Research in the UK (Miell and MacDonald 2000) suggests that friends work more effectively on creative work in music because of the higher level, 'transactive' quality of their collaborations, within which friends extend and elaborate ideas that have already been discussed. However in a peer tutoring task, where an expert must teach a novice, friends may not perform as well as non-friends because this requires a dominance relationship that conflicts with the mutual nature of friendships (Foot and Barron 1990). However, as classroom learning experiences are often adult led, involve independent work and are often uninspiring (Baines *et al.* 2003; Galton *et al.* 1999; Phelan, Yu and Davidson 1994), it is little wonder that friends draw each other off task (Hamm and Faircloth 2005; Kutnick and Kington 2005). Indeed, Hamm and Faircloth (2005) report that reduced opportunities to interact with friends in classrooms led to reports of boredom and disengagement. These findings suggest advantages in grouping friends together for certain types of academic tasks, rather than separating them, as is commonly done (Blatchford, Kutnick and Baines 1999).

Studies of learning interactions between friends are limited by the artificiality of the situation in which they are conducted (Zajac and Hartup 1997). These studies often involve testing of friends in small groups away from the classroom and usually on novel activities. The extent to which such findings may extend to real classroom settings is questionable. Another shortcoming is that research has not considered differences in the quality of friendships relative to learning interactions.

2. School effects on peer relations

The last section suggested that peer relations may be related to particular academic outcomes. However, there is another body of literature (albeit much smaller) that looks at the connections in the reverse order, that is, at the impact of school organization and school life on peer relationships.

In many schools children are grouped in some form or other. Children are grouped into classrooms primarily on the basis of age and then within classes often according to ability (Baines *et al.* 2003). Pupils spend a lot of time in these groupings and classes and it is therefore not unreasonable to suggest that they may have a marked impact on friendships, peer groups and social status. Indeed many of the investigations reported earlier examine friendship in school or use the class as a bounded unit or context from which to make judgments about sociometric status. The experiences of students within these class and group contexts and the way the teacher approaches classroom life and learning within these contexts may have a marked effect on the nature of peer relations (see Schmuck and Schmuck 2001, for a review). However, only very limited research has examined these effects. Specifically, there appears to be very little knowledge about how the social organisation

of schools and the dynamics of classrooms affect friendship formation and collaboration between friends (Zajac and Hartup 1997). It might be thought, for example, that in more individualistic, and more competitive classrooms, friendship relations may be affected and collaboration between friends in class may not be so effective, but there has been little research on this.

Hallinan (1976) compared schools with a traditional arrangement of classes based on same age and grouped homogeneously by ability with schools with a more open arrangement where classes were more mixed in terms of age and groupings for instruction were more strategic where pupils could work alone, in pairs or other forms of groupings. She found that the friendship structures in open schools were more diffuse or spread out than structures in traditional schools which were more focused with a few very popular children and a few isolates. Hallinan suggested that these structures arose from the increased opportunities for communication with a range of peers in open arrangement schools (Hallinan 1976; Hallinan and Tuma 1978). Homogenous ability grouping within classes leads to friendships between students of similar ability rather than of a range of abilities (Hallinan and Sorenson 1985).

Similarly Epstein (1983) examined how the nature of the physical structure and classroom layout, the nature of grouping practices and levels of encouragement and tolerance within schools affected the nature and structure of friendships. So called 'high participatory' schools encouraged friendship patterns that were more varied in terms of sex and ethnic mixing and fewer isolates and highly popular children.

Ramsey (1991) reports results from Bossert (1979) who compared social patterns in classrooms structured around ability grouping and academic competence, and those in which children worked in interest groups and several tasks at once. In the former, friendships tended to be between children of similar ability, while in the latter, friendships developed out of shared interest. Interestingly, friendship patterns changed when children changed settings, so that when, in the following year, children in the multi task setting changed to a competitive one, they abandoned previous friends and interacted with same-ability peers. The reverse pattern occurred in the case of children moving from a competitive to a multitask classroom.

Barton and Cohen (2004) showed how change in classroom composition could have a marked impact on peer relations. They examined children's peer relations following the transition from mixed-sex fourth-grade classrooms to same sex fifth and then sixth grade classrooms. The change to same-sex classrooms was associated with more mutual friendship nominations among boys in both fifth and sixth grades. Nominations of physical and relational aggression, victimization, rejection, and passive/withdrawn increased for girls in fifth-grade, but decreased in sixth-grade.

A number of studies indicate that teachers have a key role to play in encouraging and changing relationships in the classroom. Schmuck (1966) found that in classes where there was a more centrally structured peer group where there is a narrow focus of rejection and acceptance nominations, teachers were less likely to involve students that were on the fringes of the peer group. By contrast emotionally supportive peer groups tended to have teachers that encouraged prosocial and helpful behaviours. Research by Flanders and Havumaki (1960) indicates that teacher praise and positive behaviour can have an impact on the way students are perceived by peers. This work also showed how a combination of positive reinforcement and effort to get popular and unpopular children to work together paid off in relation to the less popular students.

3. The formal role of peer relations in classroom learning

Though school teachers will have responsibility for a whole class, it should be noted that a pupil will spend the majority of classroom time in the presence of peers (whether simply sitting next to or actually working with other children). Thus, each pupil will have a very limited amount of time to

interact with their teacher and we need to consider the role of within class grouping and, in particular, collaborative groupwork in relation to the pupil's learning and the quality of interactions with peers as well as teachers.

Despite the potential of collaborative groupwork to enhance cognitive development and school attainment (Damon and Phelps 1989; Johnson and Johnson 2003; Webb and Palincsar 1996), research in the UK has shown that children, as well as their teachers, often do not like working in groups (Cowie and Rudduck 1988). Galton (1990) found that children often feel insecure and threatened when told to work in groups – and pupils respond to this threat by withdrawal from participation or looking to the teacher to give legitimacy to their responses within groups. Teachers have expressed particular concern about: loss of classroom control, increased disruption and off-task behaviour (Cohen and Intilli 1981); children not being able to learn from one another (Lewis and Cowie 1993); group-work being overly time consuming and assessing children when working in interactive groups is problematic (Plummer and Dudley 1993); and only the more academically able profit from group work. Teachers have also expressed the view that pupils, particularly boys, will misbehave during group work and that discussion within group work may cause conflict between pupils (Cowie 1994).

A number of studies show that we cannot just put children into groups and expect them to work well together; group-work skills have to be developed (Webb and Mastergeorge 2003). It is well known (see Gillies 2003; Mercer, Wegerif and Dawes 1999) that pupils need to have the skills to communicate effectively through listening, explaining and sharing ideas. But effective group work involves more than this; pupils have to learn to trust and respect each other (Galton 1990). They also need skills in how to plan and organise their group work, make considered group decisions, reach a compromise and avoid petty disputes (Baines, Blatchford and Chowne 2007). The overall problem seems to be that there is little coordination between the size of pupil groupings, their composition, pedagogic purpose of learning task and interactions among group members. Blatchford, Kutnick, Baines and Galton (2003) argue that there is little awareness of 'social pedagogical' relationships inherent in the classroom and make a number of suggestions for developing successful peer learning in classrooms. Further discussion of the links between collaborative groupwork and cognitive development can be found in a recent review by Howe and Mercer (2007)

How to make peer learning more effective: research on collaborative and cooperative group work. Some studies in an experimental tradition of co-operative learning (Slavin 1995; Johnson and Johnson 2003) stem from social psychological theories of Deutsch (1949) and Lippett and White (1943) and stress the advantages of interdependence within heterogeneous groups. Findings show consistent enhanced relational and pro-school attitudes among pupils, and moderate learning gains (Gillies 2003; Johnson and Johnson 2003; Slavin, Hurley and Chamberlain 2003). These experimental studies are insightful but necessarily focus on singular aspects of behaviour within classrooms (e.g., communication) and take place over a limited duration of time. They tend not to consider the whole classroom context within which group work takes place.

There are a number of studies that have explored ways in which group work and group work processes can be more effective. One set of studies explores group processes connected to cognitive and attainment progress (see Mercer 2000; Webb and Farivar 1994; Webb and Mastergeorge 2003). Webb has argued that effective group working is dependent on effective communication among group members (including pupil-pupil explanations, pupil ability to help others in need and ability to ask for help from others). Pupils who undertake focused questioning, exploration of alternate answers and explanation for these answers are more likely to solve cognitive-based problems.

Based on the understanding that skills in talk and discussion are likely to promote and support learning within the classroom, particular attention has been directed at various forms of talk such as argumentation, exploratory talk, and collaborative discussion (Anderson, Chinn, Chang, Waggoner and Yi 1997; Mercer 2000; Simon, Erduran and Osborne 2002). Such talk between peers functions to engage learners and coordinate understanding while allowing teachers to gain a range of insights into children's conceptual understanding and may be linked to formative feedback. Exposition of children's alternative views has been developed in a range of argumentation techniques for use in the classroom (for example, see Johnson and Johnson, 1994). As part of a wide-ranging approach to transforming teaching and learning at Key Stages 1 and 2 in England, a National Strategy has produced a suite of training and guidance materials concerning teaching and learning approaches for classrooms, with group work applications to numeracy and literacy and for group working generally (DfES 2003; 2004). These materials are based on the work of Mercer and colleagues, as well as other recent research. Materials focus on developing teachers' knowledge and understanding of a range of general groupwork issues such as benefits and drawbacks of various group sizes and pupil attainment grouping.

Other UK based research focusing on cognitive processes includes that by Howe, working with Tolmie and others (see Howe and Tolmie 2003). This research established that tasks which uncover differences between group members' personal ideas about the topic in hand and lead to an exchange of views are central to growth in understanding (Howe, Rodgers and Tolmie 1990; Howe, Tolmie and Anderson 1991; Howe, Tolmie, Anderson and Mackenzie 1992; Tolmie, Howe, Mackenzie and Greer 1993), and that discussion of this kind can have two effects, post-activity reflection and individual change, or on-task synthesis of different perspectives (Howe, Tolmie and Rodgers 1992; Tolmie and Howe 1993; Howe, Tolmie, Greer and Mackenzie 1995, Williams and Tolmie 2000). They found it most productive to direct support at initial procedures for gathering information and achieving a consensus about which elements are important, and then leave group members to debate its wider meaning among themselves (Howe and Tolmie 1998; Howe, Tolmie, Duchak-Tanner and Rattray 2000; Howe and Tolmie 2003).

A new approach to groupwork based on a large scale quasi-experimental study is that used in the SPRinG (Social Pedagogic Research into Group work) project (Blatchford, Galton, Kutnick and Baines 2005). This addressed the wide gap between the potential of group work and its limited use in schools and the three main concerns given above. The SPRinG project is distinctive in being a general programme that applies group work across the curriculum and over the school year. The team worked with teachers of children aged 4-14 years to develop a programme of group work that could be successfully integrated into school life, and which took on board the concerns and difficulties teachers can have with group work. The program (see Baines, Blatchford and Kutnick, with Chowne, Berdondini and Ota 2008) built on, and extended, previous research by stressing three key principles:

- First, it stresses supportive relationships between pupils through a 'relational' approach. Activities were designed to help pupils communicate effectively through listening, explaining and sharing ideas, but also to help them trust and respect each other, and plan, organise and evaluate their group work.
- Second, the programme provides guidance on the key role of the teacher in adapting grouping practices for different purposes and learning tasks and in supporting and guiding groups. The key aim is to encourage pupil independence rather than directly teaching pupils.
- Third, for group work to be successful the classroom and groups need to be organised and managed in supportive ways. There was guidance on classroom seating arrangements, and characteristics of groups such as their size, composition and stability over time.

The project was extensively evaluated (see Baines *et al.* 2007; Baines, Rubie-Davies and Blatchford 2009; Blatchford, Baines, Rubie-Davies, Bassett and Chowne 2006; Blatchford *et al.* 2005;

Pell, Galton, Steward, Page and Hargreaves 2007; Kutnick, Ota and Berdondini 2008). Its effectiveness was tested by comparing pupils trained with the SPRinG programme with pupils who were not, but who were engaged in parallel educational research. The main research question was whether the group-work programme led to increases in learning and attainment, more 'favourable' behavioural and dialogue patterns supportive of learning and motivational patterns and attitudes to learning. The study involved an intervention over a longer time frame than many such studies, taking a full school year, rather than being performed just before and after the usual brief intervention period.

The research found that far from impeding learning, group work led to raised levels of achievement. At Key Stage 2 (7-11 years), for example, the programme concentrated on science activities and led to significantly higher attainment and higher conceptual understanding and inferential thinking (effect sizes 0.21 – 0.58). At Key Stage 1 (4-7 years) in reading/literacy children in the experimental condition improved more than those in the control group (effect size = 0.23). In mathematics, children in the experimental group improved more than the control children (effect size 0.71). Despite some teachers' worries that group work might be disruptive, systematic classroom observations showed it actually improved pupils' behaviour in class. SPRinG groupwork raised pupil levels of engagement in learning, encouraged them to become more actively engaged in the learning process and facilitated more higher level, thoughtful learning processes. There were suggested benefits in terms of social; inclusion in classrooms.

Conclusions

Positive and negative aspects of peer relations

A theme of this chapter has been a tension between positive and negative features of peer relations. Though children value peer relations and friendships, we should not overlook ways in which friendship groups can support rejection and stereotyping, and how they can lead to insecurity, jealousy and resentment. Many pupils love breaktime in schools, but the school playground can be a cruel place for some children and victims of bullying can suffer enormously.

This reflects an important feature of peer relations: any given aspect can present opportunities and difficulties for children. As Hartup and Laursen (1993) have argued, there is a long standing tradition of work in psychology which stresses the importance to interpersonal relationships of both 'affirmations' and 'conflict', and children necessarily have to learn to manage both these facets of social relations. One line of research, in fact, has shown ways in which conflict has a central and productive role in children's social development (see chapters in Shantz and Hartup 1992). Brown (1990) has made the point that it is not whether peer influences are basically positive or negative that is the point; they are both mixed blessings. The challenge for research, and by implication for schools, is to clarify how and under what circumstances peer groups benefit development.

Models of the role of friendships and peer relations in development

Hartup (1996) has argued that good evidence to support the developmental importance of peer relations and friendships during childhood is not strong. Much evidence is correlational, that is, some features are related to later outcomes, but not necessarily in a causal way. With this caveat in mind, there are two basic models recognised in many papers concerning the role of peer relations and friendships in social development. In the first model, peer relations and friendship relations play a direct role in development; for example, low peer acceptance causes peer developmental outcomes. However, a second model does not assume that peer relations directly affect developmental outcomes. Rather, underlying individual differences and behavioural/social difficulties lead to poor peer and friendship relations and hence poor developmental outcomes. Low peer acceptance is therefore a symptom of the underlying disturbance (personality traits/ behavioural problems). So, according to

this model, poor peer relations do not cause maladjustment, but are a reflection of it. There are further possible models which highlight the greater involvement of peers in influencing developmental outcomes. Research needs to go beyond such simplistic models to focus on the complex multivariate dynamic between individual characteristics, peer relations, the quality and nature of relationships and the socialising influence of peers, and a host of other variables including family factors, background (SES, ethnicity and so on).

A separate but allied debate, concerning the role of peer relations in development, involves the extent to which they can be considered a developmental 'advantage' or 'necessity'. Hartup (1992) shows the difficulties of distinguishing between these two views not the least because of methodological difficulties and lack of causal data. He tends to favour the first of these two models: 'The current evidence suggests... that we can better argue that friendships are developmental advantages than argue that these relationships are developmental necessities.' (Hartup, 1992: 200-201). Newcomb and Bagwell (1996 in Bukowski *et al.*) are equally careful in their choice of words, though rather more optimistic about the importance of children's friendships. After stressing the need for research that can establish the causal significance of friendships, they conclude "...we are left with little more than our conviction that the friendships of children and adolescents have a special place in development." (1996: 318).

Contextual approach

But the attempt to identify a specific role for peer relations in development is unlikely to be successful. In this chapter we have stressed a contextual approach, and have seen a number of ways in which contextual factors are important in understanding peer relations in school. The first reflects the structure of this chapter and recognises the two discrete contexts for peer relations: the classroom and the playground. We have also seen differences between primary and secondary schools in the context they provide for peer relations. We have seen a number of ways in which the classroom context and organisation can affect peer relations and also the way that peer relations can differ between school classes, sometimes encouraging and sometimes inhibiting school learning.

In the Spencer project we also found a number of ways in which whole schools differed in, and affected, pupils' breaktime experience and peer relations (Blatchford and Baines 2006). Schools are likely to differ in the extent of inter-peer group rivalries and conflicts. Titman (1994) has made the point that the design of the school grounds and the nature of breaktime experience can affect pupils' view of the school ethos. We have also suggested ways in which contexts affect sociometric status in complex ways, e.g., that in some schools children who want to learn and do well feel they should keep their heads down and may be classified as average or neglected.

Pupil culture and peer relations in schools are therefore likely to be best conceived as something emerging in context and affected by the school culture and environment. Epstein (1989) has said: "It is no longer feasible to study or explain the selection of friends with attention only to psychological constructs and child development terms. It is also necessary to give attention to the designs of the school, classroom, family, and other environments in which peer relations and the selection and influence of friends take place" (1989: 183). But in fact very little is known about ways in which schools differently affect breaktime experiences and pupil relations, and this is an important area of future research. Schneider (1993) argues that in sharp contrast to knowledge about the impact of family factors on peer relations, research on school effects appears limited and fragmented.

Importance of informal peer relations to learning

The success of peer relations and groupwork in classrooms will depend ultimately on the separate informal network of relationships between peers in the school. We feel it is vital for researchers to seek better understanding of connections between informal and school based peer relations, because

of its contribution to the wider study of peer relations but also because of its relevance to school learning and the ways schools deal with peer relations.

We believe that the informal nature of peer relations is significant in relation to the wider role of peer relations in development and also their potentially unique role as a force in school learning. Consideration of peer relations may help bring out the potential of more informal contexts for learning. For example, Vygotskian thought on learning contexts has tended to stress the one to one tutorial relationship, usually adult to child, or at least expert to novice, and relations between intellectual equals (and relationships around informal, playful activities) are not therefore central. However, peer relations can be an inherently motivating context for action and learning. In contrast to adult child relations, they are more horizontally organised and power is more likely to be evenly shared. In comparison to adult-child tutoring relations, peers would tend to be seen as less effective, but we need to recognise and value the distinctively different nature of peer to adult child relations. This may require more recognition of the qualities that make them different to adult child relations (see Damon and Phelps 1989; Pellegrini and Blatchford 2000). Given the difficulties adults can have in adjusting to the child's way of looking at things, it may be that peers are better able to understand each other directly, and therefore, to use Vygotskian terms, be better agents of 'intersubjectivity'. Peer relations may, to use yet other Vygotskian terms, be a good inter-psychological context to further intra-psychological functioning. There is something paradoxical in the view that cognitive development depends on adults having to be very skilful in accommodating children into joint actions, and in a sense pretending to be at a level they are not, while children (e.g., during play with each other) typically and naturally have no such difficulty with each other - just watch any school playground (Pellegrini and Blatchford 2002) or friends in the home. We too easily ignore the inherently informal and motivating nature of peer and friendship relations (see Blatchford *et al.* 2003, for a longer treatment of these points).

A' relational approach': bridging informal and class based peer relations

Recently researchers have begun to emphasise the importance of a relational approach to training in group work skills. Such an approach aims to develop and build social relationships in the classroom and the result is to provide a firm foundation on which communication, group planning and problem solving skills can be added. (eg Baines, Blatchford and Kutnick 2008; Baines *et al.* 2009). The approach aims to take advantage of the processes developed in everyday friendship relations to underpin suggestions concerning successful groupworking. The SPRinG programme, for example, seeks to develop these in the classroom.

We therefore propose that relational skills shown in informal peer relations can overlap with relational skills that can benefit peer co-learning in classrooms. They are likely to involve similar social processes, e.g., perspective taking, mutuality, conflict resolution, problem solving and trust. So rather than see informal and class based peer relations as separate, we could do more to examine linkages between, and common processes underpinning, informal and formal expressions of peer relations. A focus on helping productive classroom relationships needs awareness of peer relations in different contexts – and there may be a feedback loop to better understanding and facilitating informal peer relations, e.g., at breaktime. To use a different term, informal peer relations can provide conditions for 'psychological safety' (Chang and Lee 2001), i.e., when students feel comfortable speaking up in front of others because they know that their contributions and views will be listened to, valued and respected.

School approaches to peer relations: social skills

There are no simple answers to ways in which schools should deal with questions about peer relations and friendships in classrooms. In the case of friendships, for example, decisions about seating friends together in classrooms will need to be informed by a number of factors; as we have seen, friends may be good for some tasks and learning situations but not others. Teachers need to take account of these

and use friendship groups accordingly. We have also seen that friends tend to be similar to each other and that there may therefore be problems when friends are antisocial - they may be more aggressive and less stable. It may not therefore be advisable to put such children together, or they would need to be monitored closely by the teacher.

It is likely that the possible negative influences of friendships are more salient to teachers and affect their decisions about classroom organisation. Teachers may assume that more troublesome students will adversely affect their friends if seated together, but this may inform a more general strategy concerning the seating of friends in classrooms. This strategy may avoid unnecessary trouble but is largely reactive and may weaken existing friendships and will not help children make new friends. Berndt and Keefe (1992) suggest this may lead to further deterioration in friendship relations and hence a less positive view of school.

A specific direction of work has concerned ways of helping children who have difficulties with peer relations. One main approach has involved efforts to help individuals develop more effective social skills. The evidence that less popular children have less competence in general social skills, suggests that rejected children could be helped by programmes of social skill training. One famous approach was developed by Spivak and Shure in the 1970s, and aimed to help children become more effective in social problem solving, by analysing causes and generating solutions to social problems. There have been specific initiatives to encourage interpersonal relations, collaborative conflict resolution, peer counselling and assertiveness training, which have been used as part of preventive work to reduce conflict and bullying (Sharp and Cowie 1994; Sharp, Cooper and Cowie 1994). Roffey, Tarrant and Majors (1994), drawing on a wide range of applied work, offer many examples of action to help young pupils' social relations and friendships, including role playing exercises, activities to learn and practice social skills, group work strategies, and exercises to improve classroom social climate. School initiatives such as SEAL (Social and emotional aspects of learning) and PSHE (Personal, social and health education) lessons in schools, that deal with peer relations may be helpful. Berndt and Keefe (1992) feel that a combination of individual skills based programmes and more general programmes directed at cooperation are likely to maximise the positive effect of friends.

However, it is probably over simplistic to think that difficulties faced by some children are just to do with inadequacies in their social skills repertoire. It may, for example, have much to do with the more general aims and attitudes of children toward others. As a result of social skills training, children may be able to behave appropriately, but their underlying social orientation toward others may be unaltered, for example they may still want to dominate others, or always want others to show they like them. Moreover, interventions predominantly based in classrooms will always be at best partially successful, because, as we have seen in this chapter, the classroom is only one school context within which children meet. Interventions addressing peer relations in classrooms will need to be aware of peer informal relations and culture e.g., as seen during breaktime (Blatchford 1998).

An allied point can be made: the implication of much developmental psychological research is that pupils with poor or inadequate social skills, or who have few friends, are more likely to behave inappropriately during breaktime play and activities and are more likely to be rejected or isolated. It is arguable, however, whether simply cutting back on breaktime, will help such pupils. Breaktime is the time when their actions have possibly negative social consequences, but also when their difficulties are likely to be worked through.

Some approaches to bullying in schools also risk being counter-productive. Though quite rightly concerned with stopping extreme forms of bullying, there is a danger that if schools are too heavy handed young people will not have the opportunities to engage in the more frequent, everyday relatively unsupervised interactions through which they learn about each other, and learn strategies for coping with each other.

Implications for school management

A main problem arises out of a tendency toward growing restrictions on pupils' peer relations, friendships and unsupervised activities, on the one hand, and the likely benefits of these activities for their social development, on the other hand. There is a tension, in other words, between a greater control of pupil behaviour, and the likely value of pupil independence. The move to greater control, which is probably gaining dominance, risks overrunning pupils' freedoms and the positive aspects identified above, while a more non-interventionist stance risks allowing anti-school cultures to develop and dominate, and have a destructive effect on school learning. An important challenge facing schools, therefore, is getting the balance between the two polarities right. Blatchford (1998) discusses some possible ways this reconciliation might proceed.

It is understandable if difficulties found as a result of anti-social behaviour lead to adult-led solutions. Reports from the Institute of Public Policy Research (IPPR) indicate that the behaviour of teenagers in the UK is worse than in other countries, and suggest that we should seek to increase time spent with parents and adults and time spent in adult structured and supervised clubs in and out of schools (Margo and Dixon with Pearce and Reed 2006). These conclusions are part of a negative view of relatively independent peer interaction – that it can lead to negative, anti-social behaviour, and that it is best kept to a minimum and controlled. It is the same view as that voiced by schools with regard to problems arising at breaktime.

But we query the view that the solution is yet more adult structure and control. Just as important, we feel, is dealing with peer relations in everyday school contexts (e.g. during school breaktimes). Whilst schools and teachers can be effective in teaching children about moral understanding, children also learn from their own experiences, mistakes and reflections. We sympathise with a submission to the Children's Society national enquiry which suggested that teacher training might include more on the ability to promote cooperation and friendship between students. It is clearly difficult to get the balance right, but a coherent approach to peer relations in schools, within which there is attention to informal and class based co-learning, could do much to improve learning and also school ethos. Schools can use the opportunities to work on soft skills and citizenship. School breaktimes can play a role here. The difficulties that staff know arise at breaktime can be viewed positively in the sense that they can be the basis for discussion with pupils and greater involvement of pupils in school decisions and management (Blatchford 1998), within a moral framework provided by the school.

To return to the quote at the beginning of this chapter, we suggest that we seek to encourage schools to distance themselves from a position within which peer relations are 'suppressed' to one where they are considered deliberately and positively in relation to social development and school learning.

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