Children’s cooperative and competitive interactions in limited resource situations: A literature review

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Abstract

The ability to balance cooperative and competitive behaviors has important implications for a child’s overall development. While socially competent children appear to learn highly successful strategies for entering peer groups and negotiating access to limited resources, the development of this level of social competence can be challenging for preschool-aged children. Early childhood educators may therefore have to intervene to develop the child’s social competence and promote the use of negotiation and effective conflict management strategies. Using theories of social exchange and human sociobiology, this paper reviews literature on cooperation and competition involving limited resources and highlights the implications of this research for early childhood education. Results suggest that a variety of individual and social-contextual factors might influence a child’s development of socially competent behavior. The review highlights the importance of teaching children to negotiate effectively with peers.

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1. Overview

1.1. Social competence and conflict

A defining feature of socially competent behavior is the ability to meet one’s own needs while maintaining positive social relationships with others (Rose-Krasnor, 1997; Rubin & Rose-Krasnor, 1992). Early peer interactions provide an important socialization function with respect to the development of social competence. It is through these early interactions that children learn how to take-turns, share resources, display feelings, take another’s perspective, and perhaps most importantly, how to manage conflicts (Howes, 1988; Parker, Rubin, Price, & DeRosier, 1995; Rubin, Bukowski, & Parker, 1998). The ability to regulate emotions and respond appropriately in conflict situations can have a significant impact on a child’s social and emotional development (Laursen, Hartup & Koplas, 1996; Shantz, 1987; Shantz & Hartup, 1992). Furthermore the attainment of effective conflict management skills is considered to be a central component of the socialization process as these skills can lay the foundation for the development of all future relationships (Weinstein, 1969).
For young children, relevant conflict situations may arise as they attempt to enter a peer group (Putallaz & Sheppard, 1992; Shantz, 1987). Studies of group entry behavior in young children have found that a considerable amount of skill is required in order to enter a group successfully. In particular, the child must be flexible, somewhat indirect, and able to take the perspective of others. Although this task is a challenge to master for even the most socially competent child, it is not surprising that children who are less competent have considerable difficulty with peer group entry (Black & Hazen, 1990; Borja-Alvarez, Zarbatany, & Pepper, 1991; Coie & Kupersmidt, 1983; Dodge, McClaskey, & Feldman, 1985; Guralnick, 1990, 1993; Phillips, Shenker, & Revitz, 1951; Putallaz & Gottman, 1981; Putallaz, Grimes, Efron, & Moliter, 1997).

Attempting to access limited resources is another situation that may also evoke conflict. For example, getting one’s fair share of snacks, gaining access to preferred toys or activities, negotiating a turn in a game, or competing for the attention of adults and peers are important aspects of children’s social behavior that may result in social conflict (Hartup & Laursen, 1993; Minuchin & Shapiro, 1983). Thus, while limited resource situations will occur throughout an individual’s life, some of the basic skills for managing such conflicts may develop during the preschool years, as children interact with peers to gain and maintain access to limited resources (Putallaz & Sheppard, 1992; Shantz, 1987). It is important to consider how children learn to negotiate with others in order to meet their own needs, as this may assist early childhood educators in supporting children’s social competence.

Helping children to become socially competent by developing appropriate conflict management skills is a critical aspect of early childhood practice (Bredekamp, 1997). However, studies that have investigated children’s behavior in limited resource encounters suggest there are a number of factors that can influence both the children’s interactions and the subsequent outcomes. Furthermore, these findings may have significant implications for defining social competence. The present review of literature related to children’s behavior in limited resource situations is intended to highlight these implications and offer some recommendations for how early childhood teachers might support the development of children’s conflict management skills in limited resource situations.

1.2. Development of social competence

Social competence encompasses a variety of social behaviors and capacities that enable individuals to interact more effectively with others (Rose-Krasnor, 1997; Rubin et al., 1998; Bukowski, Rubin & Parker, 2001). These behaviors and capacities have been conceptualized in a number of ways, including specific social skills (Cillessen & Bellmore, 2002; Waters & Sroufe, 1983), friendship formation and maintenance (Hartup, 1989, 1992), peer status (Coie & Dodge, 1983) and social information processing skills (Dodge, 1986; Goldfried & D’Zurilla, 1969; Spivack & Shure, 1974). Despite the variety of conceptualizations, most definitions of social competence emphasize the importance of effectiveness in interaction as well as knowledge or awareness of the environmental demands of any given situation (Putallaz & Sheppard, 1992; Rubin, et al., 1998).

Waters and Sroufe (1983) note that this effectiveness in interaction is dependent on an individual’s ability to mobilize and coordinate their own capacities in the face of environmental demands. They suggest that skills acquired in one developmental period may have significant consequences for all subsequent development, because success at one stage may prepare the child for the challenges and opportunities that lay ahead.

In her authoritative review on the development of social competence in young children, Howes (1987) suggested that the capacity to balance one’s own needs with the needs of others has its foundations in the first year of life. This capacity develops as infants begin to identify their peers as budding social partners. Skills related to this capacity develop as toddlers begin to engage in mutual social exchanges in the contexts of play that require corresponding roles, such as peek-a-boo and hide and go seek. In turn, these skills lay the foundation for a more complex set of capacities that are required to be effective during the preschool years. Through increased social interaction in the form of cooperative play and social exchanges, preschool children gain experience in social problem solving. They become more capable of anticipating the actions of others, understanding thoughts and feelings, and evaluating social outcomes.

In addition, as children develop their perspective-taking skills and capacity for empathy, they develop the capacity to initiate and maintain friendships with their peers (Eisenberg & Harris, 1984; Howes, 1988; Ladd, 1999). Through this increased social interaction they are able to practice their skills with a wide range of children who have differing play styles, thus enhancing their social knowledge of the peer group. As children become more aware of their peers’ styles of interaction, their judgments also seem to become more stable (Howes, 1987, 1988). Children who are
cooperative and friendly often become popular within the peer group. In contrast, children who cannot self-regulate their emotions and are highly aggressive are often viewed negatively by peers (Hartup, 1983; Howes, 1987, 1988; Vaughn & Waters, 1981).

Success in social interactions with peers would thus involve a complex set of interpersonal skills that require the child to balance his/her own needs with the needs of others (Rose-Krasnor, 1997). This balance, however, may at times be difficult to achieve, particularly when the child’s own needs are in conflict with those of their peers (Putallaz & Sheppard, 1992). Thus the ability to negotiate some sort of compromise during conflicts over limited resources would seem to be an important attribute for children to acquire during the early preschool years.

2. Cooperation and competition

Of particular relevance to the present review is how children manage situations that are competitive by virtue of limited resources, but which may require cooperation from others. In order to fully understand the complexities of such critical social situations, we first discuss how these terms have been defined in the literature and then describe how theories of social exchange and human sociobiology have contributed to the current conceptualization of cooperation and competition.

The ability to cooperate with others is a fundamental component of socially competent behavior (LaFreniere, 1996). However, Richard et al. (2002) noted that despite the emphasis on competitive behavior in the school environment, some uncertainty exists over whether competitive behavior is a healthy or unhealthy attribute. The uncertainty stems from the various ways in which competition and cooperation have been defined. These terms can be viewed as describing either the characteristics of the situation (i.e., the rules), or the goals, the attitudes and behaviors of the participants, or a combination of these factors. For example, a preschool child may be engaged in a competitive game that does not require cooperation, but may choose to behave in a cooperative manner (e.g., letting a friend have an extra turn). This could arise if the child’s social goal of making or maintaining a friendship is more important than winning the encounter. Similarly, one participant may view an outwardly cooperative endeavor (e.g., playing catch) as an opportunity to behave in a competitive manner if his or her social goal is to impress the partner by showing off his or her athletic skills (Renshaw & Asher, 1982, 1983; Richard et al., 2002; Rose-Krasnor, 1997; Van Avermaet, 1996).

2.1. Social exchange theories

Broadly speaking, social exchange theories propose that social behavior is about working toward maximizing one’s own rewards and minimizing one’s costs (Blau, 1964; Burgess & Huston, 1979; Homans, 1961; Thibaut & Kelley, 1959). In time, individuals begin to rely on their social exchanges and the future benefits or opportunities they afford. As a consequence, social interactions and developing relationships become valuable in themselves (Berscheid & Walster, 1978; Sheese & Graziano, 2002). Participants operating within this type of exchange relationship focus on reciprocity and therefore operate under the norms of equivalence (Laursen & Hartup, 2002). For example, under the equity norm each participant in a relationship should only receive as much as they give. If there is an imbalance, participants become distressed and work toward restoring equity (Walster, Traupmann, & Walster, 1978). Whereas under the norm of equality, participants are more concerned with the fair distribution of rewards that is evaluated independently of individual input (Sprecher & Schwartz, 1994).

Although exchange norms may account for some of our social behavior, it is important to recognize that human beings also operate according to communal norms (Clark, 1984; Clark & Mills, 1979). These can be distinguished from the norms governing exchange relationships by the fact that there is little regard given to the need for repayment under communal norms. Participants show “concern for the welfare of one’s partner and benefiting that partner in response to his or her needs” (Clark & Jordan, 2002, p. 3). These norms are most likely to occur between friends, romantic partners and family members, whereas other relationships tend to operate under exchange norms. The communal norm does not, however, only apply to close or long term relationships. For example, one can operate under a communal norm by assisting a stranger with a heavy parcel—concern shown without any recourse for the need for repayment (Clark & Jordan, 2002).

In exchange relationships children use different rules that vary with their cognitive abilities. In early childhood, equal sharing is practiced among peers; however different norms begin to be used as children distinguish between acquaintances and friends (Laursen & Hartup, 2002). For example, acquaintances are more likely to focus on equity
whereas friends are more likely to be concerned with equality (Clark & Jordan, 2002; Pataki, Shapiro, & Clark, 1994). Young school age children may also adopt communal norms with their close friends. However, it is not until preadolescence—when children are capable of taking the perspective of another in complex situations—that they use communal norms in their adult form (Clark & Jordan, 2002).

In some specific play situations a child who must depend on the cooperation of others in order to gain a desired resource may operate under the norm of equality, in which children try to ensure an equal distribution of resources regardless of individual input. However, if the children are acquaintances rather than friends the norm of equity may prevail. In such cases, only past cooperation is rewarded with present cooperation. That is, a child must display cooperative behavior during a task in order to be the recipient of cooperative behavior from other group members (Clark & Chrisman, 1994).

2.2. Human sociobiology

The concepts of competition and cooperation have been investigated within the theoretical approach of human sociobiology as well as social exchange theories (Charlesworth, 1982, 1988, 1996). This perspective is founded on the principles of evolutionary psychology and suggests that individuals’ behaviors are largely self-serving. For example, people are more likely to help kin as opposed to nonrelatives in order to maximize family survival and thus increase the likelihood that their genes will be passed to the next generation (Wilson, 1975).

This view, based in large part on the principle of survival of the fittest, “is misleading because unrestrained competition is an ineffective strategy in a social species as our own” (Krebs, 1996, p. 75). That is, if we consider the limited nature of many necessary resources, it is not surprising that the attainment of these resources may only be achieved by engaging in cooperative behavior with others who are also attempting to satisfy their own needs (Charlesworth, 1982, 1988, 1996; Foa, 1971). According to Trivers (1971) cooperating with nonkin also can be beneficial if they operate under the premise of reciprocal altruism—the tendency for individuals to help another only if they are helped in return (cited in Sheese & Graziano, 2002).

The propensity to choose between cooperation and competition has been extensively investigated using an experimental paradigm called the prisoner’s dilemma (Axelrod, 1984; Axelrod & Hamilton, 1981; Poundstone, 1992; Rapoport & Chammah, 1965). In this situation the adult opponents are hypothetical partners in crime who are given the choice between cooperation (i.e., not confess to the crime) or defection (i.e., confess to the crime). These decisions are made without knowledge of what their partner will choose to do. However, the opponents know that their choices directly impact the outcomes for each participant. The choices an individual makes in such situations tend to be related to the behavior of their partner. This highlights the dynamic nature of social interactions (Chadwick-Jones, 1976; Rapoport & Chammah, 1965; Wright, 2000). Thus according to Kelley (1965), cooperation and competition can be viewed as two ends of a continuum. Depending on the circumstances and the specific relationship, the individuals will cooperate or compete depending on which is considered the more appropriate course of action (Chadwick-Jones, 1976). However, the extent to which this behavior is prevalent in children is unclear because these studies have generally been conducted with adults.

In such situations, one particularly effective strategy is called Tit-for-Tat (Axelrod, 1984; Axelrod & Hamilton, 1981; Chadwick-Jones, 1976; Wright, 2000). This approach is a classic example of reciprocal altruism (Smith, 1996). In a situation where cooperation would benefit both participants, adoption of a Tit-for-Tat strategy means that if an individual stops cooperating his or her partner will also stop. Similarly if one individual begins to cooperate, the opponent will also begin to cooperate. An important component of the Tit-for-Tat strategy is that it safeguards against cheating because if an individual stops helping, the other also will stop helping until the first person starts helping again (Krebs, 1996; Trivers, 1971). In this instance cheating refers simply to the failure to reciprocate and can be gross or subtle. For example, gross cheating occurs when an individual refuses to reciprocate at all. Subtle cheating occurs when the cheater reciprocates, but not to the same extent as the other person.

In light of the need for individuals to rely on one another, Charlesworth (1982, 1988, 1996) has suggested that all behaviors associated with gaining access to a limited resource represent competition. Cooperation is thus seen as merely one of several possible routes to success in obtaining the resource. Other possible routes include manipulation, deception, and aggression. Charlesworth (1996) also asserted that if group members must cooperate to use the resource, any inequity in the amount of resource use by group members serves as evidence that competition for resources has occurred.
According to human sociobiology, these within-group differences are manifested because individuals differ in both their abilities and their predisposition toward competing for resources (Charlesworth, 1982, 1988, 1996; Hawley, 1999; Strayer & Strayer, 1976). After numerous encounters, individuals may become aware of their limitations with respect to competing with others and thus a pattern of asymmetry is likely to emerge. This asymmetry between individuals has been observed by focusing on coercive and aggressive strategies, e.g., the number of attacks and threats leading to submission and the number of verbal commands leading to compliance (LaFreniere & Charlesworth, 1983; Strayer & Strayer, 1976). Consequently, it may become evident that some individuals are more socially dominant than others and therefore might assume a higher status in terms of dominance hierarchies within the classroom. Despite having aggressive tendencies, individuals who have high dominance status may become socially central to the group, as evidenced by the fact that they are often observed and emulated by other group members (Abramovitch & Grusec, 1978; LaFreniere & Charlesworth, 1983; Hawley, 1999).

Dominance status is also linked to both the sex of the child and his or her level of resource use in limited resource tasks (Charlesworth & LaFreniere, 1983; LaFreniere & Charlesworth, 1987). For example, in their series of studies investigating children’s access to a Movie-Viewer, Charlesworth and colleagues found that children who were high on a classroom-based dominance hierarchy (mostly boys) were able to gain greater access to the cartoons than those who are low on the hierarchy (mostly girls). As a result of this close association between status and access, some limited resource studies have defined dominance status in terms of the level of access children are able to obtain during a limited resource task (e.g., Charlesworth & Dzur, 1987).

In summary, the terms cooperation and competition can refer to the specific requirements of the task at hand, the strategies an individual chooses to adopt in a given situation, or a combination of both. Taken together these theoretical approaches suggest that interdependency as a social species and the desire to maintain interactions with others will influence social goals and will therefore determine to some extent how children respond (cooperatively or competitively) to a particular situation. It also highlights the multi-dimensionality of cooperative and competitive behavior, because children may have different social goals across different contexts and choose to compete or cooperate for different reasons.

3. Social competence in critical social situations

The common notion of socially competent behavior is that it is associated with only cooperative, friendly and prosocial behaviors (Eisenberg & Mussen, 1989). However, most definitions of social competence include behaviors designed to meet one’s own requirements while being cognizant of the needs of others. As stated earlier, some social situations place additional demands on participants that affect behavior. How children balance their own needs with the wishes of their peers during critical social situations has not received much attention in the literature.

According to Shantz (1987) when dealing with a conflict situation there are a number of ways for participants to “overcome one another’s opposition or resistance... including strategies and tactics such as persuading, bribing, threatening, sharing, insulting or physically aggression. In short, a variety of prosocial and anti-social behaviors may occur” (p. 285). The decision to utilize particular strategies may depend not only on children’s social or instrumental goals in the given situation but also on their level of social competence. Putallaz and Sheppard (1992) have suggested that competence and incompetence are not parallel constructs but rather “incompetence contains similar elements across all situations, whereas competent behavior and thought varies from situation to situation” (p. 330).

This view that social competence is multidimensional has been reiterated in recent work within the field of human sociobiology. For example, Hawley (1999) has suggested that social dominance should be viewed from both a strategy-based and developmental perspective. When viewed in this way it is evident that a significant relationship exists between social dominance and social competence (Hawley, 2002; Vaughn, Vollenweider, Bost, Azria-Evans, & Snider, 2003). In particular, Hawley (1999) suggests that the aggressive strategies, which might be adopted by socially dominant toddlers to coerce peers to comply, may become less acceptable as children move through the preschool years. Thus, socially competent children, many of whom may be socially dominant, begin to recognize the need to use a range of strategies (e.g., prosocial and coercive) to meet their needs, whereas less competent children continue to use only overtly aggressive strategies and subsequently may become rejected by the peer group.

Thus, prosocial and coercive behaviors may not represent two ends of the competence continuum; rather they may be two sides of the same coin. That is, in some situations socially competent children may choose to adopt a combination of prosocial and coercive strategies in order to meet their needs (Bukowski, 2003; Hawley, 1999, 2002;
Putallaz & Sheppard, 1992; Shantz, 1987; Vaughn et al., 2003). The remainder of the review will present evidence for this view by focusing on critical social situations that clarify the roles that competition and cooperation play in the development of social competence and effective conflict management skills.

4. Competitive situations that require cooperation

Researchers developed the Marble Pull game and the Movie-Viewer procedure to investigate the behaviors children use in competitive situations that require cooperation between participants. Madsen et al. developed the Marble-Pull game and used it in a series of studies with pairs of children aged 4–11 years (e.g., Kagen & Madsen, 1971; Madsen, 1967, 1971; Madsen & Shapira, 1970). In this game, two children attempt to gain marbles that are placed on a table between them. Retrieval of the marbles requires the operation of levers and the children can only gain the desired resource (marble) by coordinating their efforts and cooperating with each other. If one child tries to compete and gain more for him or herself by ‘pulling’ against the other child, neither participant benefits because the game is engineered so that the marble will simply drop through a hole and be lost. The children must take turns in order for an equal distribution of marbles to occur. In this type of situation competitive and cooperative behaviors are made overt and are therefore easily measured (Madsen, 1971 cited in Richard et al., 2002).

In the Movie-Viewer situation (Charlesworth & LaFreniere, 1983), a more complex interaction of cooperation and competition is arranged. A group of four children must “cooperate to create a resource, for which they then compete” (Krebs, 1996, p. 76). The Movie-Viewer apparatus is constructed in such way as to restrict the viewing of the cartoons to only one child at a time. However, once the child is in the viewing position s/he cannot reach the controls that operate the viewer. Therefore, the child must be able to enlist the cooperation of two other children. For example, one child is needed to operate the light source and another child is needed to crank the gears to move the film. As there is always a fourth child in the room and only three positions, competition is inevitable. Throughout the session children are constantly vying for the viewing position; however they quickly realize that at least two of them must spend part of their time operating the equipment. As a consequence there is generally a great deal of activity as children constantly try to negotiate a role for themselves.

A number of researchers have used this Movie-Viewer situation to investigate young children’s (3–6 years) cooperative and competitive behavior (e.g., Charlesworth, 1996; Charlesworth & Dzur, 1987; Charlesworth & LaFreniere, 1983; Green, 1998; Green, Cillessen, Berthelsen, Irving, & Catherwood, 2003; LaFreniere & Charlesworth, 1987; Powlishta & Maccoby, 1990; Sebanc, Pierce, Cheatham & Gunnar, 2003). The results of these studies have been consistent in that the distribution of the resource is often highly inequitable. That is, in most groups, some children win by gaining a great deal of the resource, whereas other children lose by gaining very little of the resource, despite the fact that they often ended up helping the winners (Charlesworth, 1996). The findings from the Movie-Viewer studies have also illustrated that various factors such as familiarity of group members, dominance status, peer status, a child’s sex and whether a child is playing with same-sex or opposite-sex peers influence success and strategy use in this type of play situation.

4.1. Familiarity

It has been well established in the literature that children’s behavior changes as a consequence of how well they know their playmate (see Newcomb & Bagwell, 1995 for a review). This ability to distinguish between friends, activity partners, acquaintances, and strangers begins in the preschool years (Howes, 1987; Ladd, 1999; Rubin et al., 1998). In particular, friends and non-friends differ in their display of conflict, cooperation and competition (Hartup, 1989, 1992). However, there is evidence to suggest that differences in behaviors with friends versus acquaintances vary with the contextual demands of the situation and with participants’ sex. For example, in a series of studies with 6–10 year old children, Berndt (1981a, 1981b, 1986) found that there was a tendency for friends to work well together (even in competitive situations) if they could receive equal rewards. However, if the situation was more competitive such that sharing reduced the chances of gaining a reward, boys (but not girls) were more competitive with their friends than they were with their classmates. Friendship did not affect girls’ behavior in the tasks. The author suggested that in this competitive situation relative loss was more disturbing for boys than girls and attributed this difference to an interaction of relatively higher levels of spontaneity between friends and competitiveness in boys.
The highly competitive nature of the task appeared to influence the children’s behavior, with boys showing more competition with their friends than with their acquaintances. This situation (where cooperation amongst peers decreases the chance of a reward) is in contrast with the Movie-Viewer situation in which cooperative behavior increases the chances of receiving awards. In particular, in the Movie-Viewer task, Charlesworth and LaFreniere (1983) found that groups containing friends were more likely to work cooperatively together (and thus gain higher overall rewards) than groups containing few friends. Furthermore, friendship dyads within the groups gained more viewing time than non-friendship dyads.

Thus it appears that when cooperation is required friends will work together to receive a reward more than acquaintances will. However, if the task is purely competitive and does not require cooperation then friends (particularly males) will compete more with one another than they will with acquaintances.

These findings are consistent with the distributive norms espoused by social exchange theorists. In particular, if friends are more likely than non-friends to place greater emphasis on equality rather than equity, then it follows that in this particular type of situation—where reciprocity is key—that groups containing friendship dyads would have higher viewing times. That is, close friends may be less concerned with exactly how much their partner has helped if the overall goal is to gain more viewing time for both of them.

Furthermore, some preliminary evidence for the existence of these distributive norms can also be found when the overall percentage of viewing time as a function of time spent in the session is compared across studies. Charlesworth (1996) found that over a series of studies involving the Movie-Viewer (where all the children were classmates) that the movies were being watched approximately 80% of the time. In contrast, Green (1998) found that groups of strangers watched only approximately 50% of the time. This suggests the children in the Green study did not coordinate their efforts and utilize the resource to the same extent as familiar children in previous Movie-Viewer studies. There is some evidence to suggest that children who are unfamiliar to one another operate under the distributive justice norm of equity whereby each participant in the interaction only receives as much as they give. For example, Patiki et al. (1994) assigned first and third grade children to work with a partner on a joint task and then asked them to share a reward with their partner. They found that children were more likely to use equality (rather than equity) with their friends than they were with their classmates. The distinction, however became more salient with age with third graders in their study showing a greater preference for using the equality rule with friends than did first graders (cited in Clark & Chrisman, 1994). Therefore, if a child does not appear to provide an adequate amount of help to others, the group may be less inclined to assist the child in viewing the cartoons. This unwillingness to help one another and coordinate helping efforts would inevitably result in less overall viewing time. However, because of a desire to maintain their friendship bonds groups of friends may be more likely to operate under the norm of equality to ensure a fair distribution of rewards regardless of input. Therefore, they may be more inclined to overlook any discrepancies in relative contributions. However, there is a need for more studies that compare groups of unfamiliar children with groups of friends. This would further our understanding of distributive justice in situations that involve competition and cooperation.

### 4.2. Dominance status

A child’s position in a classroom-based dominance hierarchy has been found to be significantly related to how successful she or he is in competing in limited resource situations. For example, in the Movie-Viewer studies, children who were high on the classroom based dominance hierarchy gained more viewing time than low ranked children. Children’s position on the dominance hierarchy was ascertained by measuring the level of asymmetry in their social interactions with peers (e.g., two of the indicators were the number of attacks and threats leading to submission, and the number of verbal commands leading to compliance). The higher ranked children appeared to obtain the resource with little resistance from their lower ranked peers (Charlesworth & LaFreniere, 1983). In the studies conducted by Charlesworth et al. in which the children were familiar to one another, low ranked children seemed to avoid conflict with a dominant child by standing back or moving to a helping position and waiting for a turn rather than competing for a viewing position. According to Charlesworth (1996), low ranked children appeared to be acutely aware of their low position from previous encounters with these high ranked children.

In order to better understand why some children achieved more viewing time than others within each group, Charlesworth et al. compared the strategies of those children who viewed the most with those who viewed the least (Charlesworth & Dzur, 1987; Charlesworth & LaFreniere, 1983; LaFreniere & Charlesworth, 1987). Some differences
were found between high and low use children with regard to the types of strategies they used. In mixed-sex groups containing 2 boys and 2 girls, high resource use children attempted to take over the viewing position more frequently than low use children and tended to use more commands and aggressive attacks in order to access the viewing position (Charlesworth & LaFreniere, 1983; LaFreniere & Charlesworth, 1987). They also tended to use a greater number and range of strategies and relied on a combination of prosocial and assertive strategies in order to stay in the viewing position (Green, 1998).

Given the interdependence of time spent viewing, helping and bystanding, it is not surprising that high use children would have lower overall bystanding and helping times as compared to low use children. When high and low resource use children are compared on time spent helping and bystanding, Charlesworth and LaFreniere (1983) found that high and low use children spent approximately the same amount of time helping others and a similar pattern of results was found in the Green (1998) study. However there is some inconsistency in the Movie-Viewer studies with regard to the relative amount of time high use children spend helping as opposed to just bystanding. Charlesworth and LaFreniere (1983) found that when high use children weren’t watching the cartoons they divided their time equally between helping others and bystanding. In contrast, Green (1998) found that high use children spent more time in one of the helping positions than bystanding.

This discrepancy could be attributed to how helping is defined. In the Green (1998) study high use children appeared to engage in a subtle form of cheating when they were in one of the helping positions. The Movie-Viewer in this study had a curtain, which covered the television screen. Therefore, in order to view the cartoons a child in one of the helping positions had to raise the curtain and keep it raised by holding onto a string that was attached to a pulley. If the child released the string the curtain would fall. Green (1998) found that high resource use children spent fewer seconds helping appropriately than low resource use children when they were in a helping position. In particular, high resource use children were more likely to misuse the equipment by continuously raising and lowering the curtain rather than holding it steady. This seemingly covert type of helping strategy appears to be one way in which high use children manipulate the situation to their advantage and undermine the resource use of others. For example, these children may have been increasing their chances of gaining more viewing time by frustrating the child in the viewing position enough so as to ensure that the viewing child will relinquish his or her position. The high resource use child also maintains a positive image in the group because they appear to be making a contribution by helping.

According to Charlesworth (1996), high resource use children were more likely to engage in a mixed-strategy approach, i.e., a combination of cooperative and competitive behaviors and strategies, when involved in the task. These successful high use individuals were able to assert themselves by taking over the viewing position and recruiting the help of others. They used a combination of prosocial and coercive strategies. Most importantly, these high use children also remained involved in the ongoing activity by spending some time helping—which created a reciprocal pattern of behavior. However, as Green (1998) suggests, they may not have been helping appropriately.

In summary, the findings from the Movie-Viewer studies suggest that the children who gain the most viewing time in the group do contribute to the ongoing activity, and therefore could be considered to be socially competent as they are considerate of the needs of others. However, the inequity that prevailed within each group (regardless of the familiarity of the group members) suggests that during competitive situations that require cooperation, socially competent children may still manipulate the situation such that their own needs take precedence. Furthermore, another factor that appears to contribute to both the distribution of the resources and the strategies used to obtain the resource is the sex of the child and whether or not they are playing with same-sex peers.

4.3. Same-sex and opposite-sex play groups

Although neither social exchange nor human sociobiological theories place much emphasis on possible sex differences in accessing resources, there were several observations of sex differences in the Movie-Viewer studies by Charlesworth and Dzur (1987) and Sebanc et al. (2003). This section will examine sex differences in the findings from the Movie-Viewer studies by drawing upon literature within the field of developmental psychology.

Despite a considerable amount of effort on the part of early childhood educators there is evidence that girls are less likely than boys to have equal access to activities and materials in educational settings when placed in mixed-sex contexts. For example, in a study of preschool children’s microcomputer use in the classroom, King and Alloway (1992) found that boys were more likely to assert themselves at the expense of girls. This had a two-fold
effect. First, the computer became known as a ‘boy’ activity and therefore was avoided by some girls. Second, when entry attempts were unsuccessful, girls often gave up trying to participate in the activity and instead took on a bystander role.

Similar results have been found in the Movie-Viewer studies where boys tended to dominate the resource in mixed-sex groups and dyads (e.g., Charlesworth & LaFreniere 1983; Green et al., 2003; LaFreniere & Charlesworth, 1987; Powlishta & Maccoby, 1990). Considering that sex-segregation begins early and is a consistent feature of children’s social worlds (Leaper, 1994; Maccoby, 1988; 1998; Maccoby & Jacklin, 1987; Serbin, Moller, Gulko, Powlishta, & Colbourne, 1994; Serbin, Sprafkin, Elman, & Doyle, 1982), the differences that have been found in the play behavior, social organization, and leadership styles of girls and boys may be one reason why boys have been more successful in obtaining access to limited resources in several of the studies included in this review. It is possible for example, that boys have more experience in competing with others in an overt manner (Benenson et al., 2002; Roy & Benenson, 2002). They often play in larger groups than girls, place a greater emphasis on the establishment and maintenance of dominance hierarchies, and boys’ speech is often directive, as it is used to assert power and influence over others (Archer, 1992; Maccoby, 1998; Maccoby & Jacklin, 1987).

In contrast, girls play in smaller groups and engage in more intimate social interactions, turn-taking, and cooperative endeavors. Leadership in girls groups revolves around suggestions rather than demands (Archer 1992; Maccoby, 1998; Maccoby & Jacklin, 1987). As a result of these observed behavioral differences, boys have been characterized as exhibiting a more competitive style of interaction, whereas girls have been described as evidencing a more communal or cooperative orientation (Eagly, 1987; Leaper, 1994). Despite the emphasis in the literature on sex differences in behavior, there are many instances in which girls and boys behave in similar ways (Leaper, 1991; Underwood, 2004).

When children have been observed attempting to access the Movie-Viewer in same-sex groups, sex differences and similarities in children’s behavior are apparent. For example, Charlesworth and Dzur (1987) found that groups comprised of girls used more verbal behavior and groups of boys used more physical strategies to gain access. Green (1998) also found that boys were more likely than girls to use physical strategies such as pushing others out of the way to obtain the resource. Boys also used a greater number of overall strategies than girls, including a larger number of verbal commands. Charlesworth and Dzur (1987) also found there was a significant difference between boys and girls in the amount of apparent pleasure they gained from the movie-viewer experience, with boys showing more positive affect than girls.

Despite these differences in interaction style, there were some similarities between all-boys and all-girls groups. For example, in both the Charlesworth and Dzur (1987) and Sebanc et al. (2003) studies, boys and girls did not differ in terms of the number of commands and demands they used. Furthermore, no differences were found in the amount of time children spent viewing the cartoons in all-girls versus all-boys groups. The children were equally interested in obtaining the resource. In fact, in Green et al.’s (2003) study of unfamiliar children, groups consisting of all girls used the resource more efficiently than groups consisting of all boys. Specifically, all-girls groups were able to gain more viewing time than all-boys groups.

Another finding that has implications for sex and gender research is that regardless of the sex of the children in the groups and regardless of the familiarity of the children, the distribution of resources was usually inequitable (Charlesworth, 1996; Green et al., 2003). That is, some children gained more viewing time than others and this was evident in mixed-sex groups, same-sex boy groups, and same-sex girl groups. The inequity in use of the resource in the mixed-sex groups was primarily caused by girls missing out. However, the inequity in both same-sex girl groups and same-sex boy groups highlights the importance of recognizing that a tendency toward competitiveness is likely to exist within both boys and girls.

When high and low resource use girls and boys were compared in same-sex groups, Charlesworth and Dzur (1987) found that high usage was related to high frequencies of verbal and physical behaviors and a greater range of particular strategies, but only for girls, suggesting that predictors of resource use for girls and boys may differ. These authors found that boys with high resource use gave significantly less help to others than boys with low use. When high resource use boys weren’t viewing they tended to spend more time observing rather than helping. In contrast, there was a trend for girls with high use to help more than girls with low use. More recently, Green’s (1998) investigation of children who were unfamiliar with one another in both same-sex and mixed-sex groups did not reveal any sex differences in the behavior of high use boys and girls and between low use boys and girls in either mixed or same-sex groups. These findings suggest that sex differences between high and low resource use boys and girls may only emerge when children are playing with familiar peers.
Despite this propensity for both girls and boys to engage in competitive behavior (at least as evidenced by the Movie-Viewer studies) there is evidence to suggest that girls and boys may experience competition differently. For example, Benenson et al. (2002) point out that although girls and boys may be equally interested and capable of engaging in direct competition and aggression, there appear to be differences in how comfortable they are with competitive encounters. In particular, Benenson et al. (2002) videotaped pairs of same-sex peers as they played a series of competitive games (where cooperation was not required) and found that when the opponents could see each other (i.e., there was no barrier between them) girls displayed higher levels of discomfort than boys.

The findings from these studies also highlight the importance of looking beyond differences between girls and boys to the existence of individual differences within groups of girls or within groups of boys (Green, Bigler, & Catherwood, 2004; Maccoby, 2002). For example, it is assumed that many young boys and girls will miss out on gaining access to prized roles and resources due to classroom hierarchies that favor boys, however female dominance hierarchies might exist that also exert effects (Carlson Jones, 1984). That is, despite their reputation for cooperative behavior, some girls are also missing out during their same-sex encounters. The limited resource scenario appears to be a good way of examining this phenomena because it allows the close observation of children’s behavior in same and mixed-sex groups in order to determine if there is there something distinctive about the behavior of successful girls versus successful boys.

Evidence from limited resource studies suggest that some children appear to take control of resources and are better able to manipulate the situation to their advantage (Hawley, 2002; Hawley & Little, 1999). Who are these high resource users? In mixed-sex groups they are generally boys (LaFreniere & Charlesworth, 1987) but this is not always the case. For example, Green (1998) reported that 7 of the 20 mixed-sex groups (consisting of 2 boys and 2 girls) had a girl as the highest user in the group. These girls may simply have been the most dominant children in the classroom (e.g., Charlesworth & LaFreniere, 1983; LaFreniere & Charlesworth, 1987). Another explanation is that these children might have had higher status in the eyes of their peers. Although there is some evidence to suggest that there is a degree of overlap between social dominance and social competence (Bukowski, 2003; Vaughn, 1999; Vaughn et al., 2003; Vaughn & Waters, 1981), the relationship between social dominance and sociometric status is less clear (Sebanc et al., 2003).

4.4. Peer status

A child’s status within the classroom is often defined by asking fellow classmates to rate each class member in terms of relative liking or nominate those students whom they like most or least (Dunnington, 1957). The resulting scores of social impact (few vs. many nominations) and social preference (liked or disliked) are then used to determine a child’s individual status in the classroom (Cowie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1983; Peery, 1979). Popular children are considered to be socially competent in that they have the skills to make and maintain friendships and are able to get along with other children and play in a cooperative manner (see Rubin et al., 1998 for a review).

To date, two studies involving the limited resource situation have included measures of peer status. First, Putallaz and Sheppard (1990) assessed pairs of popular and pairs of low-status 6-year-old children during a limited resource play situation. They found that popular dyads tended to have more collaborative and cooperative approaches to using the toys. Conversely, low status children tended to be highly competitive with one another. These findings suggest that peer status is related to cooperation and competition. The authors point out, however, that this finding must be interpreted with caution because the scenarios did not place the additional demand of requiring cooperation and children from different status groups were not paired with one another.

In the second relevant study, Sebanc et al. (2003) observed children aged 3–6 years who were placed in same-age, same-sex groups of four and given the opportunity to play with a Movie-Viewer. The authors used a sociometric technique to determine peer acceptance and peer rejection. In particular they asked children to nominate three children that they ‘especially liked’ and three that they ‘didn’t like much’. They found that high peer acceptance was related to high access to the limited resource, but only for boys. Furthermore, for boys, being nominated by other boys was positively related to boys’ use of commands and demands during the movie-viewing activity. In contrast, girls who gained the most viewing time were accepted less than girls who gained the least amount of time. It is possible that peer acceptance was related to the expectation that girls adhere to the norms of communal behavior (Eagly, 1987) and equality (Benenson et al., 2002; Maltz & Borker, 1982). These sex differences were reiterated by teacher reports of assertiveness. For boys, acceptance by same-sex peers was positively associated with teacher ratings of assertive social
skills. For girls, however, only acceptance by opposite-sex peers was positively associated with assertive social skills. As the authors suggest, the consequences of engaging in assertive behaviors can be very different for girls and boys. These findings not only highlight the importance of recognizing that children are experiencing different social worlds but that socially competent behavior may be defined differently for girls and boys (Sebanc et al., 2003).

4.5. Affect, temperament and personality characteristics

The finding that a child’s peer status is related to success during limited resource tasks demonstrates that specific individual factors may impact a child’s social interactions. There is evidence to suggest that a child’s temperament (Eisenberg et al., 1993; Hinde, 1976; Rubin, Coplan, Fox, & Calkins, 1995) and attachment style (Sroufe, 1983; LaFreniere & Sroufe, 1985) are also related to the way a child responds to social partners during critical social encounters and how others respond in return. However, to date few limited resource studies have investigated these individual level characteristics.

In her study of preschool children, Hawley (2002) assessed the personality (e.g., agreeableness, hostility) of each member of pairs of children as they attempted to play with a desirable toy. She did not find any relationship between this measure and the use of prosocial or coercive strategies. However, she noted that “personality measures are traditionally poor predictors of specific behavior patterns in specific contexts” (p. 174). She did, however, find a relationship between parent ratings of social competence and the use of both prosocial and coercive strategies.

LaFreniere (1996) manipulated the affective states of pairs of preschool boys by ensuring that one lost and the other child won during a competitive encounter. The children were then asked to engage in a competitive task that required cooperation. He found that boys who had lost during the initial encounter and who had been rated by their classroom teacher as angry-aggressive showed more negative affect and were less able to share a limited resource during the subsequent encounter than the children who had been rated as competent by the classroom teacher. These findings suggest that individual differences in affective control may play a role in children’s success during critical social situations. Further studies investigating the influence of individual characteristics on resource use are needed. Future studies also could explore the potential usefulness of these types of critical social situations for use as a diagnostic tool, similar to the wealth of information that has been obtained from the use of the ‘peer group entry’ scenario (see Putallaz & Gottman, 1981; Putallaz & Wasserman, 1990).

5. Describing the skilled competitor

The findings from the limited resource studies have shown that when children are faced with a situation that is competitive but requires cooperation there are many factors that can influence the nature of the interactions and the subsequent outcomes. It appears that a child’s ability to successfully negotiate with his or her peers requires a considerable amount of skill. In her review of the development of social competence, Rose-Krasnor (1997) suggested that researchers are still unclear about how we define the optimal level of social success. She proposed that the relationship may in fact be curvilinear—too much social success may indicate that the person has shown little regard for the needs of others, too little social success may mean that the individual put others needs before her or his own needs. Moderate success might be the ideal level as it “provides the child with opportunities to develop negotiation and compromise skills, while still promoting a sense of self-efficacy and confidence” (p. 119).

Putallaz and Sheppard (1992) acknowledged the complexity of socially competent behavior in their analysis. They proposed that during critical social situations the socially competent child demonstrates the ability to master four meta-principles. The first is relevance—the child behaves in light of the different behaviors and skills required across different settings. The second involves being socially centered. The socially competent child shows awareness of other-oriented strategies; socially competent children show a genuine interest in social interaction for its own sake. The third meta-principle is social perceptiveness. In particular, children must be able to accurately appraise their social world by determining relevant social norms. The last meta-principle refers to the ability to balance “one’s own interests with those of other children” (p. 351).

These principles suggest that one reason why some children are able to gain more of a limited resource than other children could be due to the approach they take in such situations. Considering the first two principles, a competent child may quickly recognize the need for cooperation and use a relevant set of strategies to socially engage with their peers. They are also more likely to determine the social norm in this activity—that all the children in the group are
trying to access the resource. This awareness may influence the extent to which they balance their active pursuit of the viewing position with their willingness to contribute to the ongoing activity by remaining involved rather than standing back to wait for an opportunity.

Thus, competent children are able to “compete in the company of others” (Bukowski, 2003, p. 39). Part of this skill concerns having a good sense of timing. Competent children appear to have the ability to make suggestions that are followed by contagious enthusiasm and interest (Waters & Sroufe, 1983). They try to make it fun for everyone, and in this respect their competitive behavior has a certain finesse (Hawley, 1999).

Analyses of strategies used by the more socially competent children revealed that they most often use a combination of prosocial and coercive strategies. In addition, Green’s (1998) findings showed that such children used different types of strategies when attempting to access the resource than they used to maintain control of the resource. Successful children appear to withhold more coercive strategies until they are in control of the resource. Further, when children were able to use coercion combined with humor their tenure in the desired position may be prolonged. Timing as well as strategy comes into play. Competent children may decide to relinquish their role if they perceive that others are tiring of their dominance. Once they are dethroned, they are more likely to continue the pattern of reciprocal exchange by spending at least some of their time helping as opposed to just standing back. In this respect they are still part of the group and can continue to vie for another turn at the viewer. They may do this by negotiation, manipulation, deception, humor, cheating, or—depending on who is in the viewing position—by asserting their authority in another take-over bid (Charlesworth, 1996).

Researchers have noted the use of these strategies during the Movie-Viewer task (Charlesworth, 1996; Green, 1998). For example, some children would ‘entertain’ the others by verbally describing the cartoons while still maintaining the viewing position. Other children developed a strategy of sharing that was clearly unequal but was implemented in such a way that the other group members were unaware of the inequity. For example, one child suggested that he would be time-keeper and tell the others when it was time to change roles. His time keeping was heavily biased in his favor—which meant he had much longer turns at the viewer. In other groups, individuals came up with creative ways to distract the child in the viewing position and thereby instigate a takeover bid, e.g., telling the viewing child that the teacher wants them to go and receive a prize.

6. Implications for early childhood practice

The early childhood classroom can be a socially demanding environment, particularly for the novice negotiator. It is therefore imperative that young children be given ample opportunity during these early years to develop their conflict management skills in preparation for middle school. Early childhood educators need to be sensitive to the complex range of social issues that emerge in their classrooms. For example, the familiarity of peers with one another and a child’s sex can play an important role in the way resources are shared and the styles of communication that are adopted. Similarly, a social dominance hierarchy is likely to emerge as children become more familiar with one another. A child’s place within this hierarchy may be dependent in part on their ability to successfully negotiate conflict situations with their peers. Many benefits are likely to be accrued for those children who are able to manage these daily encounters, including priority of access to resources and the maintenance of positive social relationships. There are important implications for those who are unable to navigate their social world. Without the requisite skills it is likely that these children will not only miss out on important educational experiences but also run the risk of being neglected or rejected by their peer group—labels that are very difficult to change once formed.

The studies reviewed suggest that children need to develop an additional set of skills to negotiate effectively with peers. Selman and Domerest (1984) suggest that children’s negotiation strategies can be classified into a number of developmental levels. For young children, coercion or fleeing is the preferred strategy. However, as children acquire more skills most of them are able to assert their own needs and engage in friendly persuasion. Eventually, these children are capable of successfully anticipating and integrating other’s reactions and are able to engage in negotiations that are cognizant of the quality of future relations. Thus, negotiating with peers requires a child to develop a somewhat mature role as they attempt to satisfy their needs in a given situation, yet still maintain positive peer relations. This is not always an easy balance to achieve.

In addition to the negotiation skills required to enter a role or access a resource, the studies reviewed demonstrate the dynamic nature of children’s social play and its role in peer negotiation. Preschool children frequently move in and out of play situations throughout their day (Howes & Matheson, 1992) and as a result, roles and resources are often up for
re-negotiation. Therefore, a socially competent child must be able maintain their role or at least be able to re-negotiate should a take-over bid arise. When children are attempting to negotiate access to a role or resource they may be more successful by using prosocial strategies. However, once they are in the role, successful children may also need to make use of more assertive strategies to recruit others’ help.

The Movie-Viewer literature suggests that successful children use a wider range of strategies and in doing so tend to engage in more verbal interaction than less successful children. This verbosity is often combined with humor and creative solutions. This pattern is often the deciding factor in whether peers choose to go along with another child’s suggestions (McGhee, 1988).

Some children appear to have these negotiation skills from an early age whereas others have great difficulty working and playing effectively with peers. How and why particular children are at different developmental stages with regard to these skills is most likely a combination of many individual and contextual factors that are beyond the scope of this review. Despite this caveat, there are likely to be some strategies that will be useful for early childhood practitioners who are aware of the strategies of socially competent children as they teach children to cooperate with one another– even when situations are seemingly competitive–and thereby encourage the development of effective negotiation skills.

6.1. Classroom culture

Most practitioners would be aware of the need to ensure that children know the importance of sharing and engaging in prosocial and cooperative behavior. Often these rules and ways of playing are emphasized early in the school year. However, the literature on children’s cooperative and competitive interactions in limited resource situations suggests that it may be important to add an additional layer to this philosophy early in the school year. Educators may need to develop a classroom culture where fairness, cooperation, and assertiveness are all recognized as skills that both girls and boys should and can possess and that these are behaviors that children can all work together on achieving. Furthermore, educators may want to encourage children to recognize the inequity that often manifests in many play situations. Children might not realize that inequity is inevitable (because there are not always enough resources for everyone) and children need to be made aware of the need and appropriate ways to negotiate access. For those children who usually dominate many play situations, an important lesson will be for them to recognize this and give other children a chance to participate. Along these lines several classroom-based conflict resolution and peer mediation programs have been developed (e.g., see Johnson, Johnson, Dudley, & Magnuson, 1996).

Another important aspect of classroom culture that was revealed through these studies is that assertive behavior appears to be accepted by children as appropriate behavior for boys, but not for girls. It is necessary to recognize that the development of social competence for boys and girls may differ, and that children will have different experiences with familiar and unfamiliar peers, and to move forward from that starting point. For example, there could be an emphasis in the classroom on how to ask for what one wants in a polite, but assertive way and to emphasize that this is how both girls and boys should behave and that it is appropriate for both boys and girls to participate.

6.2. Specific classroom activities

In the limited resource scenario described in this review, the cartoons playing on the movie-viewer could not be seen unless children coordinated their efforts. One way to encourage the development of effective negotiation skills would be to develop games and activities that have cooperative behavior as a central component, but that also involve an element of competition. In particular, games could include a cooperative function where success depends on help from others (e.g., painting a class mural). They could also include a number of specific roles, where some roles might be seen as better than others, but the overall activity requires that participants frequently change roles so that every child gets a turn at both the more and the less desirable roles (e.g., staging a puppet show).

Although sex segregation among children appears to be common in preschools (Powlishta, 1995), most educators would agree that being able to work and play with peers of both sexes is an important developmental skill. However, if girls frequently miss out in mixed-sex encounters, then we need to ensure that they have the skills required to cooperate and compete successfully with boys. There is a great deal of inequity in the distribution of resources even within single sex groups. One possible strategy that could enable those girls with less developed negotiation skills to acquire a more
assertive approach is to encourage them to assert their needs first with other girls. The more competent girls could act as peer mentors or co-leaders in the activity and help other girls to develop strategies that enable them to achieve success in competition for limited resources.

Boys tend to use more coercive strategies when they are competing with others in their attempts to access a limited resource. It would therefore seem important to get boys involved in group activities that require cooperation and model, discuss, and reinforce strategies that are noncoercive in order to expand their strategic repertoire. For example, while some sports and games involve competition (e.g., baseball, football), adults and older more socially competent peers may be able to arrange other activities that require boys to cooperate in order to achieve a desired goal (e.g., assembling a toy from parts, making a group mural painting, joint block building, and cooperating on a simple scientific experiment). As the boys would have to rely on each other to achieve the group goal, such activities would seem to be useful contexts for developing effective negotiation skills. Once children have had sufficient practice working and playing cooperatively, mixed-sex game opportunities could be developed. There also may be some advantage in using novel games and activities that have not been stereotyped as a boy or girl activity. Perhaps it would be less likely that one sex would have an advantage over the other in terms of experience with the activity.

7. Summary and conclusions

Learning how to cooperate with peers during competitive limited resource encounters is a critical skill to acquire. The ability to negotiate with others during social conflicts is an essential component of the socialization process and is one that is perhaps best learned during the early years. Theories of social exchange and human sociobiology have contributed to our understanding of the processes involved during social interactions. In particular, studies that have used the Movie-Viewer situation have shown there are various factors that can influence both the strategies and outcomes of these encounters.

These findings have led us to question what it means to be socially competent during these limited resource situations. It appears that socially competent children are able to achieve the right balance between meeting their own needs and the maintaining positive relations with others by utilizing a range of prosocial and coercive strategies. These children have a wide repertoire of negotiation skills and creative social problem solving strategies whereas their less competent peers have great difficulty working and playing effectively with others. Numerous individual and contextual factors have most likely contributed to these differences. However, despite these individual differences it is likely that all children may benefit from learning how to negotiate effectively with their peers as this may have a positive influence on their well being and future adjustment.

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