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Sonja Sheridan and Pia Williams
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CONSTRUCTIVE COMPETITION IN PRESCHOOL
Sonja Sheridan and Pia Williams
University of Göteborg, Sweden

The purpose of this article is to draw attention to competition as a multidimensional phenomenon in preschool. Theories of competition is outlined here in relation to an empirical study of how preschool children compete constructively and how they themselves express and conceive competition in different situations. The data consists of video-observations, individual and group interviews as well as children’s drawings. The results show that cooperation and constructive competition exist simultaneously. Competition enters children’s lives at an early stage, and constructive competition is a dimension that can motivate children to achieve better at the same time as it makes activities more exciting. Constructive competition is also a dimension of children’s cooperation as well as individual activities.

Keywords: constructive competition, cooperation, learning, preschool-children, social interaction.
Introduction
Competing with each other seems to be a human characteristic that is expressed in a variety of ways. Some researchers think that life has become an endless series of competitions. From the cradle to the grave, people are competing to outshine each other at work, in educational settings, at leisure time and at home (Kohn, 1986). Other researchers think that cooperation, not competition, is an essential element of human culture in order to form communities of learners (Deutsch 2000; Johnson & Johnson, 1989, 1994; Bruner, 1996). In parallel, dominant discourses in society demand that individuals make their own decisions from a democratic perspective (Gesell & Frances, 1946; UN Convention, 1989; EU, 1996). The ability to form relations with others, to consider and respect their perspective and interests, and simultaneously accentuate oneself as an individual with one’s own intentions and rights in terms of cooperation and competition have been described as both juxtapositions and contradictions (Kohn, 1986; Johnson & Johnson, 1994).

The overall purpose of this article is to draw attention to competition as a multidimensional phenomenon with constructive dimensions. In line with research by Carnevale and Probst (1997) and Fülöp (2000, 2002), the article aims to show that cooperation and constructive competition exist simultaneously. We attempt to do this by outlining our theoretical standpoint on competition in relation to the results of an empirical study. We present how preschool children compete constructively and how they themselves express and conceive competition in different situations. We give examples of constructive ways of competing and describe the relation between constructive competition and children’s involvement in individual and collaborative activities.

Constructive competition is defined by Fülöp (2004) as a social and cultural phenomenon that upgrades children, develops their ambitions and motivates their learning, but it can be defined as destructive if it makes them compete against each other in order to hinder each other’s performance. In this article constructive competition is also defined as an educational phenomenon that motivates children in learning situations to stretch beyond their own expected abilities (Williams & Sheridan, 2006). To compete constructively in learning situations is an issue of developing one’s own, others’ and shared goals. This is possible when knowledge is seen as an unlimited resource for making sense of the world around us (Williams & Sheridan, 2006; Sheridan & Williams, manuscript). This allows constructive competition to develop, as knowledge is not limited, in the sense that learning in one area does not mean that there is less for others to learn there. That is why Fülöp says, “if we are to conceive preschool
and school as places where children increase their knowledge about the world and themselves, then both preschool and school are the very places where competition is essential for an infinite good, namely knowledge” (Fülöp, 2002, p.5).

Motivation to learn is one of the preconditions for accomplishing certain goals and enabling children to acquire knowledge (Giota, 2001). According to Fülöp (2002), competition is a kind of motivation that can be a significant driving force in learning. Her research shows that the arena for competition in school is wide; intellectual ability, achievement, artistic skills, physical skills, the teachers’ attention, love or respect, the peers’ acceptance or popularity, leadership and dominance can all become the arena of competition.

It is important to study competition among young children as it starts at an early age (Rogoff, 2003). Despite research on both cooperation and competition, little is known about young children’s competing patterns in preschool and how they affect their social interaction and learning. Consequently, one of the most important aspects of competition in preschool is to study how it affects children’s learning processes and social relations.

**The Swedish preschool context**

Preschool has been an integral part of Swedish society in one way or another for many years, initially as an important aspect of the welfare system and today as the first step in the educational system. Swedish preschool tradition is based on its presumed benefits with regard to children’s development as individuals in a collective learning environment. Emphasis is laid on children’s rights to learn and develop in a stimulating and organised environment together with peers (Ministry of Education and Science, 1998). In this culture of collectivism, cooperation and equality, individual success and competition among peers are seen as a threat to children’s social interaction and togetherness. However, Sommer (2005) emphasises that children’s relations to the self and others is the foundation of psychological development, and that the relation between peers is a unique and a strong social force. He uses the concept *children’s competence of being together*. The child has to use its own ability in a way that makes cooperation possible with the group. The ability to form relations with others, to take others’ perspectives and at the same time stress oneself as an individual is the prerequisite for cooperation (Sommer, 2005; Williams, 2001).

**Cooperation and competition as intertwined dimensions**

Research has shown that cooperation contributes to children’s understanding of justice, growth of self-esteem, willingness to share and care, ability to handle symbolic thinking, the
fostering of communication skills and the development of creativity, as well as to critical thinking, and it motivates children to learn new skills (Damon & Phelps, 1989; Dillenbourg et al., 1996). Sharing a common interest seems to be one of the fundamental dimensions of cooperation, contributing to the development of the skills above. Teamwork and cooperation are seen as healthy forms of interaction (Williams, 2001).

Competition, on the other hand, is related to individualistic ambitions and is seen as a destructive force that should be eliminated from all kinds of learning environments for children and adolescents (Kohn, 1986; Johnson & Johnson, 1989, 1994). This means that competition and cooperation are conceptualized as two extremes or polar opposites (Fülöp, 2001). However, modern research indicates that competition and cooperation should not be viewed as mutually inconsistent. Instead, cooperation and competition should be considered as partners, not rivals (Carnevale & Probst, 1997; Fülöp, 2004). According to Fülöp (2002), cooperation and competition exist simultaneously and are parallel motivations and behaviours. This means that a child can be strongly competitive and at the same time exceptionally good at cooperation, and that these two abilities can be present simultaneously. The tendency to compete and cooperate is not only present in the same individual, but occurs in most group activities. For example, it is in the interest of the members of the group to carry out a group task in the most successful way, so they cooperate. While they are doing so, they can very well compete for the role of the “best collaborator or the best contributor.” Good friendship also includes competition, though conditions for constructive competition to develop are the goal of competition as task-oriented and the view of the competitor is peer oriented (Tassi & Schneider, 1997; Carnevale & Probst, 1997).

Fülöp, (2002) believes that, in short-term group tasks, everybody cooperates, but that, in real life, much more complicated learning situations arise. In educational settings, there are numerous situations when competition is an open process, meaning that all competitive parties are able to increase their gains in an infinite way.

In order to gain knowledge about competition, Fülöp (2001) believes that the properties of competition should be examined. Her criteria for constructive competition include: resources, a long- or short-term perspective, morals, intensity, experience of accomplishment or loss, the focus of the competing process, the experience of the other, explicit criteria for evaluation, vertical and horizontal processes, gender differences and the function of competition (Fülöp, 2004). In comparison with cooperative people, competitive people are flexible in their thinking and are highly cooperative with members of their own group when it is in competition with an out-group. In these studies, competitive people, unlike their cooperative
counterparts, appear to have the ability to adjust their thinking to the social context (Carnevale & Probst, 1997). This explains why some researchers state that competitive people foster in-group cooperation during inter-group competition (Fülöp, 2002).

Our research builds on Fülöp’s research since we are studying situations in which children cooperate, motivate each other, learn from each other, are involved in collaborative learning, imitate, etc and compete constructively in these individual and collaborative situations.

Our study focuses on constructive competition from an interactionistic perspective in which individuals and the environment influence and are influenced by each other in continuous interaction (Bronfenbrenner, 1979; Bruner, 1996, Sommer, 2005). The point of departure is that collaborative and competitive learning are intertwined. From an interactive perspective, competitive situations depend not only on how the learning environment as a whole is constituted to meet, extend and challenge the experience and intentions of children to compete constructively, but also on how the child can influence and form the environment in order to compete, cooperate and/or work individually. In other words, different interacting aspects, such as the organisation of an educational setting, the attitude and norms towards competition, the reward structure, the teachers’ approach, competence and “folk theory” about competition (Bruner, 1996), available resources and the particular society and culture in which the education takes place, influence if and in what way competition, cooperation and individual activities can occur in educational settings. From this perspective, cooperation and constructive competition are to be seen as intertwined dimensions of the same phenomenon.

The settings and subjects
The study was carried out at two Swedish preschools at three different two-week periods during the autumn of 2003. Three girls and three boys aged five from each preschool were interviewed. In order to study how preschool children feel, communicate and act in competing situations and the meaning they give to competition, the methodology chosen was individual interviews, group interviews, video observations and children’s drawings.

The interviews and video observations
The children participated in both individual and group interviews. All of the interviews were semi-structured, recorded and transcribed verbatim and conducted during one day at each preschool. Each interview lasted about 20-30 minutes.
The questions were based on critical incidents that were highlighted with the help of four different photos. Two photos were used during the individual interviews and two in the group interviews. The photos were chosen with the objective of describing various competitive situations such as: structured competition, social comparison, social competition for the teacher’s attention and initial knowledge or competence. At the end of the interview, the children were asked to make drawings of a winning and losing situation.

The photos show: 1) Two boys who are building towers of wooden blocks. One boy has succeeded building a high tower, while the other boy’s tower keeps falling down. 2) A boy and a girl are running beside each other in a running competition. The boy is just ahead of the girl and both are about to reach the finishing line. 3) A teacher is stretching her arms out towards a toddler who is walking towards her. Two other children are simultaneously reaching out to the teacher’s knee. 4) Two girls and two boys are sitting in front of a computer. One of the girls and one of the boys are pointing at the screen.

The critical incident presented by the interviewer was that one child was winning, had more knowledge of the computer game, had the teacher’s attention etc. compared to the other child. We wanted to use the photos and critical incidents to understand how the children in the study communicate about competition as well as what seems to be important for them in a competitive situation. The question at issue was: How do preschool children think, feel and express themselves about competition?

The data also consist of 3 hours of video-recorded observations, which allowed detailed description and interpretation. Episodes from the children’s daily life in preschool were video-recorded in different situations throughout the day. Sequences of children’s togetherness, individual activities, cooperation and competition in the video observations were selected, what happened and how the children acted during their activities, was described, and the actual dialogues between the children were written down.

The analysis of the data
The analysis is based on interviews, video observations and drawings in an attempt to describe how children compete constructively and how they verbally express and conceive competition in different situations. The analysis is qualitative and focuses on the phenomenon of constructive competition and situations in which the children compete.

In order to grasp the totality of the data, all the material (the videotaped material, interviews and drawings) was read and studied repeatedly. In this phase of the analysis, the mate-
rial was studied in its entirety, which means that no difference was made between interviews and observational data. In the next phase we focused on each data material separately in order to visualize its specifics. Finally, once again the data material was analyzed as a whole. We related the results to theories of learning, cooperation and competition, and to the context of preschool. The process of analysis can therefore be described as interplay between empirical data and interactionistic theory, or as an analytical process of abduction, as it oscillates between the whole and the part and the whole, with the whole as the starting-point (Alvesson & Sköldberg, 1994).

Focus throughout this process was the children’s expressions of how, why and when they compete, feelings towards competition and the competing process, for example, to win over peers and/or to enhance their own competence, the experience of accomplishment or loss, the experience of the other as an opponent/rival or a competitor/challenger, rules, norms and values in relation to competition, competition in relation to children’s interaction patterns, motivational and learning aspects as well as gender perspectives.

Through the analytical process different themes emerged. They have been categorized into two main themes. They are; Constructive competition and its four sub-themes, competing, winning or losing, being motivated by the other and taking the perspective of the other. Competitive interaction with its three sub-themes, competition based on comparison, competition through cooperation and competition within common projects. The process enabled the recurrent themes to be distinguished showing how the children interact, compete, highlight situations and contexts where they compete in a constructive way and what meaning the children give to constructive competition as a phenomenon. Our themes can be related to Fülöp’s (2004) criteria for constructive competition, see page 5-6, but extend and deepen them due to the aim of this study in which constructive competition is seen as an educational phenomenon as well as the Swedish culture, the learning context of preschool and the age of the children.

The analyses converge as well as giving information and knowledge from different perspectives and sources of how children understand constructive competition. The video recordings and group interviews confirm the themes from the individual interviews and vice versa. At the same time, different aspects become more visible through, for example, justice was a prominent subject in the group interviews. This can be explained by the fact that other critical incidents were presented during the group interviews and/or that during these interviews children in the group influenced one another as they communicated and interacted during the interview situation. The video-observations revealed children’s constructive competition in competitive situations, such as playing games, while the interviews highlighted compe-
tion among the children in physical activities, such as racing one another, and playing computer games. Our intention was both to visualize various perspectives of constructive competition and control their validity and reliability, so that both the validity of the data and the analysis were strengthened through triangulation (Hammersley & Atkinson, 1995).

Ethical aspects of research have been considered, and anonymity was guaranteed to all participants. The parents of the interviewed children consented to the research project, and both teachers and children participated in the study voluntarily.

Constructive competition
The first main theme is divided into four interacting sub-themes that describe the children’s feelings and expressions of competition. The sub-themes are intertwined and are discussed in regard to their unique qualities: competing, winning or losing, being motivated by the other and taking the perspective of the other.

Competing
Young children compete and enjoy competing. Competing is mainly associated with physical activities such as sports and playing different games. In the video-observations, we found a variety of games and play activities where the children often ended the activity by exclaiming: I won, or other children asked: Who won? Competing was observed in situations that recurred daily in preschool. It could be a question of being the first to take off one’s boots, getting out in the playground, grabbing the first swing or being the lucky one who was allowed to sit on the teacher’s lap during story time. Competing also seemed to be strongly connected with play, and the children combined playing and competing in an inseparable and unproblematic activity in which the playful element of competing was obvious.

Interviewer: Do you usually try and beat your friends at anything in your preschool… do you usually try and beat anyone?
Ayla: Yes I usually try and beat Stina and Lena and Nina and Tom and Stefan and Lars and them…
Interviewer: What do you try and beat them at?
Ayla: Kissing games.

When the children in the group interview discussed the photos of the running race, they immediately used the word win and pointed out that the children in the photo had their minds on winning. They claimed that to win, both of the children in the photo had to try a little harder as well as try to run faster. They also described how their physical size, being short or tall etc,
influenced their chances of winning. Interestingly, most children in the interviews viewed competition in itself as more important than winning. It is the thrill of competition that makes everyday activities exciting.

Both girls and boys said that boys are more competitive than girls, and compete in more areas. Boys said that they were stronger and faster than girls.

Interviewer: Who usually wins?
Olly: Me and Henry and Andy.
Interviewer: So all three of you usually win?
Olly and Andy: Yes.
Andy: All the biggest children, we come first.
Henry: Yes.
Andy: We usually win.
Olly: Except the girls.
Henry: Yes, and boys.
Interviewer: Do the boys beat the girls?
Olly, Henry and Andy: Yes.
Interviewer: Why’s that, d’you think?
Henry: Because…
Olly: Because we’re much faster.

In the drawings both sexes drew themselves as winners and a peer from the same sex as losers. Exceptions are drawings of the other sex as losers and one girl who drew a boy as a winner and a girl as a loser. From a gender perspective, the children assumed that the boys were more competitive and won as they were stronger and faster than girls. However, when it came to the phenomenon of competition, our results showed no gender differences.

Winning or losing
This theme focused on feelings in relation to winning and losing. The will to win, the thought of winning and the effort it takes to win were the primary motives. How the children acted in recurrent activities in preschool showed that they were aware of who usually won in different situations. This was not discussed by the children as an obstacle or something that was good or bad. Instead, the winner acted and talked in ways that showed that he or she was prepared to help and teach other children winning strategies.

Let us examine a video-observation of a Memory game in which two girls are engaged in a competitive situation. When the girls have played the game for a while it is obvious that one of them is the winner, as her pile of picture cards is considerably higher than the other girl’s. Both of them are aware of who the winner is but winning and losing the game is secondary to the joy of playing and doing something together. The winning girl Anna also tries to teach her
friend Bibi some strategies during the whole game in order to make Bibi interested in playing the game again:

Anna: Look, I have …
Bibi: …you won.
Anna: No… I’ve got to take these first [picks up the last pair of picture cards]
Bibi: You won.
Anna: [nods] mmm…I won [The girls compare their piles of cards and it is obvious that Anna’s pile is the biggest. They laugh]
Anna: Let’s play again…and I’ll let you…then I’ll tell you where they all are…

One of the constructive aspects in the example above is when Bibi admitted that she knew that Anna was the winner as she had got the most pairs. But Anna parried by suggesting that they could play again and that she would tell Bibi where to find the pairs. Anna showed fairness when offering to share her knowledge with Bibi so that their chances of winning would be more equal. However, our interpretation is also that by teaching and helping each other competitors become equal opponents. Equality among the competitors seems to make the competitive situation more exciting.

Most of the children expressed that in a competitive situation they believed that everyone intended to win, for example, when the interviewer showed the photo of two children running beside each other in a competition, one boy said: *I think….I think Carl thinks he’s going to win and I also think Anna thinks she’s going to win.*

Many of the children pointed out spontaneously that they felt happy when they won. They described winning as something fun where the winner was the one who was best, felt good, and was faster than his/her peers.

In most of the drawings, the winner was depicted with a smiling mouth, a happy face and with arms stretched above his/her head. The opposite was also found where the children expressed their feelings about losing as something negative, feeling sad or angry. The losers were drawn with sad eyes, a sad mouth and with their arms sagging. One girl expressed this as:

Interviewer: How d’you feel when you win?
Gwen: Happy.
Interviewer: And how d’you feel when you lose?
Gwen: Sad.
Interviewer: Why d’you feel sad when you lose?
Gwen: ’Cos I’m angry.

However, it can be fun to compete even if you are losing. In a few drawings the losers are drawn with a smiling face despite their losing. Our interpretation is that the thought of losing is not seen as a final loss but could be viewed either as motivation to achieve better next time,
or as a playing activity where the goals are far above the pragmatic goal of winning or losing. The analyses of our video-observations and interviews as well as other research confirm this interpretation. Evaldsson and Corsaro (1998) stress the importance of viewing children’s play and games as situated activities that are produced in and articulated with features of the interwoven local cultures that are children’s lives. In some of our observed situations, the goal was not to win but to take part in a game in order to have a playmate. Winning is important but being together is even more important for some children.

Competing and being motivated by peers
This theme shows that the children are motivated by peers to achieve better in various situations. As preschool children mainly associate competing with physical strength, their verbal examples are often from various sport themes. For example, running together with a friend motivates them to run faster; either the peer is just ahead of them or behind them. They are spurred to try harder in order to achieve individually in a collective context. But even if the thought of winning motivates them to run faster, the children makes it quite clear that it has to be a fair race where you are not allowed to cheat or hold your friend back. This is in agreement with the research that Fülöp (1999, 2000) did on Japanese schoolchildren. The Japanese school system supports competitive situations between individuals even though their society is characterized by cooperation and collective thinking. The primary aim of the competition is, however, not beating anybody else but about beating and improving oneself, and going on to compete with the peer collective and the society.

The video showed that Anna and Bibi motivated one another during the Memory game. The element of competition was kept alive by the girls as they continually asked each other who was leading and who had the biggest pile of cards. Every time one of the girls managed to get a pair she shouted and looked happy. The other girl was then eager to catch up and was motivated to get on with the game:

Bibi: Now let’s start...let's play [Bibi turns two similar cards. Anna puts her arm out to take a card but Bibi protests]
Bibi: No...yeh....I've got a pair.... [she holds up her cards to show Anna]...I’ve got another one [shows the cards and tells Anna that it is her turn again as she got a pair]
Bibi: Yeh, yeh I won [shouts! It is then Anna’s turn and twice she picks up pairs of cards and holds them up to show Bibi the picture of a snake]
Anna: Now I know what to do... …that’s great....wow….snake and… snake [shows her cards]
The children motivate one another. Again and again the analyses of the data material show that the children observe and imitate a peer who is more able in a specific situation. It could be in a game, playing outside or inside, when drawing or during circle time. They are also of the opinion that those who know more ought to show or help a peer who is less able. This in turn really motivates children who have competence in a particular area.

**Competing and take the perspective of the other**

Central to this theme is the children’s perspective of the other, even if it conflicts with their own interests. Justice and fairness are very important to children in individual projects as well as in collaborative and competitive situations. For example, when the children discuss the dilemma of who is going to sit on the teacher’s lap. Here it is obvious that it is important to give prominence to the aspect of justice, and there is no limit to the children’s ingenious ideas about how to let everybody have the opportunity to sit on the teacher’s lap. They suggest that the children in the photo should take it in turns, squeeze in make sure that one child sits on the teacher’s lap and one on her shoulder.

In Williams’ studies (2001) of letting a child teach a peer a game, the same pattern of taking the perspective of the other is seen. The children showed that they were able to take the perspective of the other child though the outcome was not always the one expected, and they showed awareness of changes in the learning child and continued to teach until some change was achieved. Helping each other is self-evident for most children even if it is a game like Memory, a jigsaw puzzle, being able to be a part of an ongoing play or a running competition. A game situation is special in the sense that it contains a factor of competition where the goal is to win. This makes it difficult for the children to take the perspective of the other, as they have to let go of the natural goal of the game, which is to win. Despite this, their own urge to win can be of minor importance in relation to the needs of their friend:

Andy: Um…mm… William's never first
Interviewer: Mmm…
Andy: Mm… mm… we can let him come first some time.
Interviewer: You do that.
Andy: Then you can run a bit faster, but not too fast.
Interviewer: So he can catch up with you
Andy: Yes, that’s right.
Interviewer: Why do you do that?
Ollie: Or we could run as fast as he does.
Interviewer: Why?
Ollie: So he can come first too.
Here it is interesting to focus on how the children interact. For some, the excitement of winning the game is naturally the main focus, but others seem to disregard the game situation and apprehend the situation in a wider perspective.

Despite this complicated situation, the children show that they can take the perspective of their peer and adapt the intervention to the peer’s ability to learn. Here we can see collaborative processes among the children where one child follows and observes a peer very carefully in order either to let him/her win the game from kindness, or to teach him/her in order to have advantage of it so that he/she can be used in a later situation, as a potential play or game mate. In other words, the children take the perspective of the other both tacitly and explicitly so as to be able to fully participate in various situations.

Themes of competitive interaction
The second main theme, competitive interaction, is derived from three interacting sub-themes of children’s competitive relationships with one another: competition based on comparison, competition through cooperation and competition within common projects.

Competition based on comparison
Recurrent everyday experiences and activities that are important in young children’s lives, such as constructing, playing, playing games, being accepted as a playmate in ongoing activities etc. are the objectives of competition in preschool. The children either compete openly or secretly with one another. The act of competing is, in itself, an individual project in which the child has his or her own goals that can be achieved through his/her own efforts or by observing and imitating peers. Rogoff (2003) describes how children in many communities are encouraged to observe skilful persons in action and highlights how they learn through intent participation, by observing and listening in on ongoing activities that are important both to them and their group.

In the various aspects of competition based on comparison, the children position themselves, solve problems, and learn how to succeed with different tasks. In constructive competitive situations, the children compare their own ability with that of their peers and thereby become motivated to learn and acquire the same competences as their friends. Let us exemplify this phenomenon with a video-observation in which the children observe and imitate each other in order to learn and extend their understanding in different areas while engaged in a competitive situation. In the selected episode, two girls, Alva and Jonna, are sitting beside each other doing similar jig-saw puzzles. Neither of them is sure of the rules so they look at
each other and discuss how to proceed. Each one of them tries different ways, discusses how to succeed with their own puzzle, and have eye contact as they keep checking how the other girl is doing.

The interviews also show that the children consciously observe and imitate peers as one of their learning strategies. They suggest, for example, that the boy in the photo should observe how the other boy has built his tower:

Cathy: Yes, then he must do the same and see how the other boy builds
Interviewer: Why does he do that?
Cathy: So it turns out the same as that

The children say that now and again they check how their peers are carrying out their tasks before they continue.

Tina: So… then I look at what they’ve done …and I try to remember ..
Interviewer: Do you?
Tina: Yes, that’s what I always do… I have a look and then I just build it.

Fülöp (2004) believes that competition has three social functions: 1) self-evaluation – a comparison of one’s own achievements, 2) comparing oneself with others who are better and 3) comparing oneself with others who are not as good. This sub-theme demonstrates that observing, imitating and comparing oneself with others are prerequisites for establishing your own competence in constructive competitive situations and your own position in the peer group. Indirectly or directly, they also compare themselves, their own ability and knowledge with those of their peers in order to confirm whether they already have the competence or not, and state: “I know that already.” The sub-theme shows that the children compare themselves with peers in order to learn about their position and relation to them, to learn about and advance their own ability in different areas, thereby becoming more skilful competitors. More important from the perspective of constructive competition is that the children mainly use upward comparison i.e., observe and imitate more skilful children and become motivated to do the same as them in order to reach their own goals.

**Competition through cooperation**

In this sub-theme, the children go one step further and work together with their peers to reach personal goals related to the competitive situation. They ask their friends to show them and teach them how to solve different problems. Now and again the children face the same problems and cooperate to solve and overcome them together. In those situations, their individual
goals coincide and become shared goals. The children suggest that cooperation benefits both parties. It can therefore be seen as an achievement strategy.

Interviewer: What do you think that Tom and John (the children in the photo) should do?
Joe: They should help each other to build Tom’s tower.
Interviewer: Why is that better?
Joe: Then both of them (the towers) will get bigger.

If we return to the video-sequence of the jigsaw puzzles, the analysis shows how the two girls oscillate between individual work and cooperation. Here Alva and Jonna are competing to finish their own game and cooperating and helping each other at the same time. They discuss different strategies, correct one another and show each other how to proceed in order to get their own puzzle right:

Alva: Then we have to do like this, don’t we?
Jonna: No, now we did it wrong.
Alva: No, you did, not me, I haven’t done it wrong [Alva looks at Jonna’s puzzle. Both of them turn their puzzles round at the same time to see if they have done them right. At the same time they glare at each other.]

The video-sequence of Anna and Bibi playing the game Memory, mentioned earlier (p. 10), also illustrates this sub-theme. It is interesting to see that Anna, who is successful in finding pairs, every so often tries to make Bibi aware of how to find pairs among all the picture cards. Obviously it is in Anna’s interest to teach Bibi, even though both of them are trying to win the game. The competitive situation is defined as constructive as Anna is teaching her friend in a way that benefits both of them. Bibi develops her playing skills, and, in turn, Anna gets a playing partner that is more equal. The game also proceeds in a friendly and jolly atmosphere:

Anna: look I have now
Bibi: you won
Anna: no I’m gonna take these first [picks up the last pair of cards]
Bibi: you won
Anna: [nods] mmm…I won [The girls compares their piles of cards and it is obvious that Anna’s pile is the biggest. They laugh together]
Anna: let’s play again…and I’ll let you…then I will tell you where all of them are…

There are clear rules among children about how to interact in competitive situations (Tassi & Schneider, 1997). Teaching a friend and sharing one’s knowledge with others are principles of behaviour that the children in this study expect. None of them suggests that knowledge is private. Instead, most of the children propose that Tom can practise building his tower by himself, but at the same time they also suggest that his friend can teach him how to build:

Interviewer : How can Tom learn how to build in a good way?
Andy: He should just… he has to carry on building and learn by himself and do it over and over again till he knows how to do it.
Interviewer: Ok… can he learn from John?
Andy: No.
Interviewer: Can’t he?… can John teach Tom?
Andy: …yes
Interviewer: How?
Andy: That you… that you can build one like that, first you take one like that… then that one… and then you take the same one…

Children take helping a peer for granted. Friends are expected to share their competence and knowledge with others:

Interviewer: Why is it better if Lotta helps Per (the children in the photo)
Nelly: Because then you’re being nice.
Interviewer: Do you become friends then?
Nelly: Yes.
Amelia: I think that he shall help, do you know why, do you know what is said, friends...

Children’s ability to teach each other to use more advanced methods and to solve problems when given the opportunity to practise in a social context is well known and emphasised in Vygotskij’s (1986) theory. In his theory about a zone of proximal development he holds that children’s development is advanced by participating in activities that are slightly above their current level of competence. What this study has shown is that preschool children cooperate and volunteer to share their knowledge even in competitive situations. From the perspective of constructive competition it is interesting to note that the child with certain skills often and voluntarily teaches the other children, and that the children cooperate to solve their common problems in situations where none of them is sure of how to proceed. In view of the democratic values in society and preschool in Sweden this might be culturally ingrained (Ministry of Education and Science, 1998). Friendship is built on helping each other and the experience of the other as a friend allows constructive competition to develop.

Competition within common projects
In this sub-theme, the children compete within the framework of a common project. When you extend your own and shared knowledge in different areas, activities such as constructing, learning how to play a game etc. become common projects. A common project means that children cooperate and have the same goals and interests (Deutsch, 2000; Johnson & Johnson, 1994). The children are equal participants who want to be part of the peer group by both learning from each other and, as individuals, contributing something different from the others to add to the common good. This sub-theme shows that the children in a common project also have individual goals, to achieve personal intentions etc. and that these goals are intertwined with their shared goals.
The two chosen video-sequences demonstrate how the children simultaneously cooperate and compete constructively as they both want to understand the game, to win and to stay friends. In one of them, Alva and Jonna cooperate in order to understand the game, where understanding the game becomes a common project. At this stage, both of the girls have the same understanding of the game and their common goal is to comprehend it in order to win. The video sequence shows that both girls are helped by each other, and if they had not come to the same conclusion, they would have had to go to the teacher. It is also obvious that competing is the nerve of the game and the driving force of cooperation.

The interviews confirm that the children’s individual activities through mutual interests can turn into a common project among peers with shared goals. They learn from one another and stress that collaboration benefits both parties. For many of the children it is a question of fairness to find common solutions and to acquire the same competence in different areas. It seems as if it is the principle of fairness that makes these children strive to share their knowledge.

Elin: I think he (Tom) builds a tower together with me so that it is both of us that are doing it.
Interviewer: Yes, why do you think that’s better?
Elin: Otherwise it’s so unfair if he can’t build anything

In research, cooperation is often seen as a socially accepted form of interaction, and from an educational perspective, it contributes to children’s learning in a number of ways. Some claim that competition is destructive both for the individual and for the collective as a whole (Kohn, 1986; Johnson & Johnson, 1994). Contrary to this, the results of our study show that children interact individually, cooperate and compete in a constructive way and that all three patterns of interaction are intertwined.

Conclusions
There is a paradox between the discourse of competition and cooperation. By studying situations in which children are engaged in individual and/or collaborative learning activities, we found competition to be a multidimensional phenomenon containing dimensions of constructive competition and cooperation, and that constructive competition is intertwined with different kinds of interaction patterns.

According to Johnson and Johnson (1994), cooperation and competition are interpreted as phenomena seen from a dualistic perspective. Their argument is that students should use and master the following three goal structures: competitive, individualistic and cooperative, and know when to compete, when to work on their own, and when to cooperate. Contrary to
this, we show that children continuously and successfully integrate and combine all three in one and the same learning activity. Children observe, imitate, compare competences and skills with one another in both individual and collaborative learning situations, and during the same activity they move between different patterns of interaction at the same time as they compete with one another. We found that constructive competition motivates children to cooperate.

Constructive competition is built on mutual respect but also the understanding that other children have competences and skills that are attractive or necessary to acquire. It is often the child with specific skills who tries to teach other children and make them aware of different strategies. Winning is very important for the children, but being together, being friends is even more important than winning per se. Constructive competition motivates children to achieve and, at the same time, it makes learning and every day activities more exciting and is by that not only a “spicy part” in cooperative situations. It is a forceful dimension that motivates and encourages children to try harder, to enhance their own as well as their peer’s competences. It is a cognitive, social and emotional challenge that makes children more focused and involved in the activity.

The results of this article draw attention to strategies in research and praxis for motivation and learning in the educational system. From a pedagogical viewpoint, preschool is a learning environment in which children can learn and act individually, and cooperate and compete constructively. The preschool environment provides all the necessary conditions for constructive competition to develop among children. Nevertheless, constructive competition is an unknown concept in preschool praxis. Preliminary analyses of interviews with teachers show that they are against competition among children since it is experienced as a destructive force (Sheridan & Williams, manuscript). By being aware of the constructive aspect of competition, the teacher can include it in her/his pedagogical methods and use it as a motivating force in preschool.

References


