

**Peer Acceptance,  
Parent-Child Fantasy Play Interactions,  
and Subjective Experience of the Self-in-Relation:  
A study of 4- to 5-year-old children**

Ilse de Koeyer  
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**Peer Acceptance,  
Parent-Child Fantasy Play Interactions,  
and Subjective Experience of the Self-in-Relation:  
A study of 4- to 5-year-old children**

Acceptatie door Leeftijdgenoten,  
Ouder-Kind Fantasiespel Interacties,  
en Subjectieve Beleving van het Zelf-in-Relatie:  
Een onderzoek bij 4- tot 5-jarige kinderen

(met een samenvatting in het Nederlands)

**Proefschrift**

ter verkrijging van de graad van doctor  
aan de Universiteit Utrecht  
op gezag van de Rector Magnificus, Prof. dr W.H. Gispen  
ingevolge het besluit van het College voor Promoties  
in het openbaar te verdedigen  
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door

Elisabeth Levina de Koeyer  
geboren op 12 oktober 1965, te Terneuzen

Promotor: Prof. dr J. Rispens  
Co-promotor: Dr P.P. Goudena

Faculteit Sociale Wetenschappen  
Universiteit Utrecht

Social rejection is a painful experience for children.  
To recall such childhood experiences is unpleasant,  
because it implicates us all, on one side of the event or the other.  
We must recall experiences of personal rejection and experiences of  
rejecting others. These recollections certainly violate the image of  
childhood as a time of innocence and joy. Yet rejection and its  
associated pain are real. Recognizing the reality of rejection is an  
important first step toward doing something about it.  
(Coie, 1990, p. 398)



To  
My Parents

And To  
My Peerless Peer





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Ilse



## Introduction

This dissertation investigates relations between peer acceptance, dyadic parent-child interactions during fantasy play, and subjective experience of the self-in-relation in 4- to 5-year-old children. A central assumption is that children who are better accepted by peers have a more adequate balance between *connectedness* and *autonomy* than less accepted children. Popular children have been found to be prosocial yet at the same time assertive (Newcomb, Bukowski, & Pattee, 1993). Rejected children, on the other hand, are more often aggressive without being prosocial. Sociometric status differences will be further reported in Chapter 1. This chapter also discusses the conceptual background of this thesis.

Chapter 2 gives an overview of the procedures. Characteristics of the sample and methods will be described. Eighty popular, average, and rejected Dutch children (mean age 60 months) were studied. Children were observed in their homes with their mothers and their fathers separately, while playing with fantasy-eliciting toys. They were also interviewed at school to assess their subjective experience of their parent-child relationships and of themselves. In the analyses reported in Chapters 4 and 6, parent-child interaction behaviors and subjective experience were related to continuous ratings of peer acceptance.

The first aim of this dissertation is to study direct relations between mother-child and father-child interaction patterns and children's peer acceptance. These will be investigated in Chapters 3 and 4. The *bidirectional* nature of parent-child interactions will be stressed. Both parent and child have an impact on each other, even if the parent can be seen as more experienced and skilled (Lollis & Kuczynski, 1997). The conceptualization of parent-child interactions as bidirectional has consequences for the level of measurement, which will be the *dyad*. Better accepted children and their parents are expected to interact in more horizontal ways. Horizontal interactions and relationships are characterized by *reciprocity* and *shared power*, reflecting autonomy-within-connectedness (Russell, Pettit, & Mize, 1998). It is expected that parent-child dyads of better accepted children will be more mutually responsive and will share more positive emotions. It is also anticipated that more popular children and their parents will try to control each other less, will have a greater balance of control behaviors, and will be engaged in play more than rejected dyads. A specific hypothesis is that they will be longer engaged in shared fantasy play. Chapter 3 will give a review of the literature about relations between parent-child interactions in various contexts and peer relations. In Chapter 4, results of the present study will be presented.

The second aim of this thesis is to explore whether children's subjective experience of themselves and others serves as a mediator between parent-child and child-peer relationships. This idea is concordant with attachment theory, which proposes that children who trust in the availability of their attachment figures will develop positive expectations of future interactions with others (e.g., Bretherton, 1990, 1991; Cassidy, 1990; Sroufe, 1990). Such positive expectations are assumed to be based on day-to-day interactions with caregivers and are expected to make children more open in their communication with others. This will make it more likely that they become accepted by peers. In line with these assumptions, the present study hypothesized that children's subjective experience of the self and of relationships with father and mother will mediate associations between parent and peer relationships. Chapter 5 will give an overview of the literature about attachment relationships and representations of attachment and the self, in relation to peer competence. Chapter 6 presents results from the present study. Because the study is cross-sectional, causal pathways from parent to peer relationships cannot be shown. However, this study can be seen as an exploration of relations between parent-child relationships, subjective experience of the self-in-relation, and acceptance by peers.

Chapter 7 will summarize and discuss the results against the background of the dimensions of connectedness and autonomy. I will also reconsider some of the concepts used in this study. In addition, suggestions will be made for further study of parent-peer connections.



# **Chapter 1**

## **Conceptual Background**

A central developmental task for children from 4 to 6 years of age<sup>1</sup> is the transition from the world of the family to the world of peers (Goudena, 1991; Parke & O'Neil, 1997). For several reasons, it is likely that the adjustment to kindergarten is easier if children are accepted by their peers than when they are rejected. Not only may well-liked children have a sense of belonging and self-efficacy (Ladd, 1989) but they are also likely to have better access to the peer group as a source of support, help, and opportunities for learning and enjoyment. Being rejected by peers, on the other hand, may limit children's developmental opportunities because rejected children have to cope with the strains and stresses of school without being able to turn to their peer group for support. At the same time, rejection is a stressor in itself (Bierman & Welsh, 1997; Coie, 1990). In addition, the development of prosocial skills and empathy may be impaired in children who are not accepted by peers. Rejected children also may be exposed to hostility and victimization. These children may be particularly at risk of experiencing social dissatisfaction as well as a lack of engagement in classroom activities (Ladd, Kochenderfer, & Coleman, 1997). In addition, even young children who are rejected have been found to be more lonely than children who are better accepted, especially when they also lack friends (Cassidy & Asher, 1992; Sanderson & Siegal, 1995).

Evidence suggests that not only the current development and well being of rejected children are threatened, but also their later development (e.g., Asher, Erdley, & Gabriel, 1994). Poorly accepted children are at risk for dropping out of school as well as other academic problems (O'Neil, Welsh, Parke, Wang, & Strand, 1997; Parker & Asher, 1987; Rubin, Bukowski, & Parker, 1998). Children who are rejected and aggressive have been reported to be at risk to later criminal behavior. It is less clear how early rejection is related to later psychopathology. Similarly, relations between early rejection of withdrawn children and their subsequent development have not yet been clarified (Asher et al., 1994). However, Rubin and Asendorpf (1993) do report that extremely withdrawn 5-year-olds are more likely to suffer from internalizing problems (anxiety, depression, being isolated) in adolescence. Withdrawal, which is increasingly evaluated

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<sup>1</sup> In the Netherlands, the majority of children enter full-time kindergarten as soon as they turn 4 years old, for four or five days per week.

negatively by peers from age 7 onwards, is a correlate of peer rejection (Newcomb, Bukowski, & Pattee, 1993). Rubin and Asendorpf (1993) also found a higher probability of later internalizing problems in children with early experiences of victimization or exclusion by peers. In sum, children who are rejected by peers are at risk for externalizing as well as internalizing behavior problems (Newcomb et al., 1993; Parker & Asher, 1987; Rubin et al., 1998). Therefore, it is important to gain insight into correlates of peer rejection and into the processes that may lead to it.

The current dissertation will investigate relations between kindergartners' peer acceptance, free play interactions with both parents, and subjective experience of parent-child relationships and the self. The model that is underlying the dissertation is presented in Figure 1.

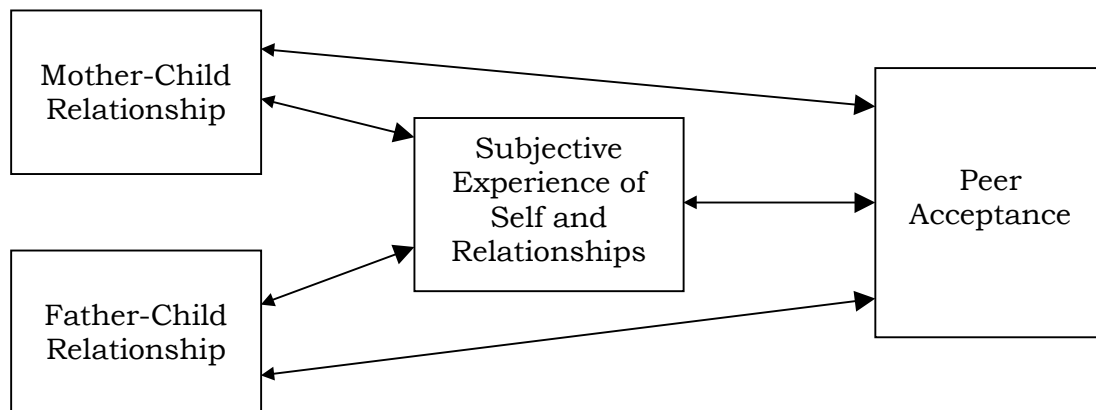


Figure 1. Expected relations between parent-child relationships and peer acceptance

In the remainder of this chapter, I will discuss the conceptual background of this dissertation. First, the concept of peer sociometric status will be taken into consideration by describing ways of measurement and by reporting on correlates of sociometric status in young children. Second, the parent-child relationship in relation to children's peer relationships will be discussed. I will describe two main empirical approaches to the study of family-peer linkages. Third, I will explore the possible role of subjective experience of self and others for children's peer acceptance. Two central dimensions throughout this dissertation will be those of *connectedness* and *autonomy*, which are thought to play a role in parent-child as well as peer relationships and also in children's experience of themselves in relation to others.

## **1 Peer acceptance in young children**

What makes a child accepted or rejected among peers? This question will be explored in the present section. Definitions, ways of measurement, stability, correlates, and possible origins of peer acceptance will be discussed.

### **1.1 Connectedness and autonomy**

The extent to which a child is accepted or rejected by peers can be seen as an index for his or her social competence (Rose-Krasnor, 1997; Rubin et al., 1998). Social competence has been defined as, “the ability to implement developmentally-appropriate behaviours that enhance one’s interpersonal relationships without causing harm to anyone” (Schneider, 1993, p.19). Rubin et al. (1998) offer a similar definition: “the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and cross situations” (p. 645). Like many other definitions of social competence (Rose-Krasnor, 1997), these reflect the “essential duality of self and other” (Rubin et al., 1998, p. 645). They point to the basic dialectic between *autonomy* and *connectedness* that has been considered as fundamental by many psychologists (Baxter, 1988; Connell & Wellborn, 1991; Emde & Buchsbaum, 1990; Pipp, 1990; Rose-Krasnor, 1997; Stern, 1985). As human beings, we are basically apart from others by living in a separate body (Pipp, 1990). At the same time, we are essentially related to others from birth on (Fogel, 1993). This basic paradox can be seen as a major challenge of life-span development (Stern, 1985).

Although both the need for autonomy and for connectedness are present from birth, their relative importance changes over the life span (Baumrind, 1989; Pipp, 1990). While for infants the emphasis is on connectedness to caregivers, toddlers start to experiment more with their autonomy. From 3 to 5 years of age, new forms of autonomy and control arise that remain embedded in connectedness with caregivers (Emde & Buchsbaum, 1990; Pipp, 1990). Around this age, children start to initiate relationships outside of the family while still being firmly rooted in the relationships with parents (Schaffer, 1996). Now they can continue to levels of connectedness with same-age children, one of which is acceptance by the larger peer group. Section 1.2 will explain how peer acceptance (connectedness with the larger peer group) can be assessed.

## 1.2 Measurement of peer acceptance in young children

The interrelations between members of a group can be assessed by *sociometric* methods (Cillessen & Ten Brink, 1991). The peer group consists of many observers who can give “inside information” about the social skills of individual children, which is based on varied and extended experiences with those children. At the same time, the sociometric status of a child cannot be seen as an individual characteristic of that child (Rose-Krasnor, 1997; Rubin et al., 1998). It is always a *relational* measure that expresses how this particular child is seen by this particular group of peers (with its own set of norms and values). This judgement is based on experiences of interaction of this child with these peers. Factors like group size, the relative proportion of boys versus girls, as well as aggressive versus non-aggressive children may all have an impact on children's position in the group. In addition, school or classroom characteristics may be of influence (Schneider, 1993), for instance, leadership style of the teacher, active attention for social development of children, and qualities of the surroundings (e.g., space, quality of materials).

The measures most frequently used to assess acceptance by peers are sociometric nominations and ratings (e.g., Cillessen & Ten Brink, 1991; Newcomb et al., 1993; Rubin et al., 1998). In the *nomination* method, children are asked to name a certain number of peers whom they like as well as peers whom they do not like. Using such data, two dimensions can be discerned: *social preference* ("likability") and *social impact* ("visibility"; Cillessen & Ten Brink, 1991; Coie, Dodge & Coppotelli, 1982; Newcomb et al., 1993). Along these dimensions, five sociometric status groups are distinguished. *Popular* children are highly liked. *Rejected* children are highly disliked. *Controversial* children are liked by some and disliked by others. They have a high social impact. In contrast, *neglected* children have a low impact on others: they are neither liked nor disliked. In every classroom, on average 15% of the children are popular, 15% are rejected, 10% are neglected, 5% are controversial, and the rest (55%) of the children have an *average* sociometric status (see review by Cillessen & Ten Brink, 1991).

*Rating* procedures imply that each child in a classroom rates the extent to which he or she likes or dislikes every other child (Cillessen & Ten Brink, 1991). In young children, the rating procedure has been found to be more reliable (Asher, Singleton, Tinsley, & Hymel, 1979; Collot d'Escury-Koenigs & Guerand, 1992). Rubin et al. (1998) suggest that the use of ratings has several advantages over the use of nominations. Rating scales differentiate more because every child is judged by every other child. In addition, children need not identify

peers they dislike, which may form an ethical dilemma for some children. In the study presented in this dissertation, sociometric ratings were used (see Chapter 2).

### 1.3 Correlates of sociometric status

A myriad of factors have been related to children's sociometric status (e.g., Newcomb et al., 1993; Rubin et al., 1998). Some of these are nonbehavioral. For instance, children who look better tend to be better accepted while unattractive children are more likely to be rejected. In addition, children who perform well in school are more likely to be accepted than children who have difficulty with school tasks (Coie, 1990; Newcomb et al., 1993; O'Neil et al., 1997; Pettit, Clawson, Dodge, & Bates, 1996).

Nevertheless, social *behaviors* are probably the main cause of peer rejection (Coie, 1990). According to Coie, "The difficulties of rejected children result from the way they *interpret* specific social situations, the way they react *affectively*, and their acquired *strategies* for dealing with them" (1990, p. 366, emphasis added). To date, most attention has been given to behavioral and cognitive correlates of sociometric status (see the review by Newcomb et al., 1993). The role of emotions has received surprisingly little attention (Coie, 1990; Gottman, 1991; Sroufe, Schork, Motti, Lawroski, & LaFreniere, 1984). Because emotions can be seen as processes that form, maintain, or disrupt relationships (Campos, Campos, & Barrett, 1989), they seem essential to interpersonal attraction versus rejection in children.

Some have proposed that behaviors of children in different sociometric status groups can be distinguished on the basis of the categories of sociability, aggression, and withdrawal (De Roos, 1995; Newcomb et al., 1993). These three categories can be seen as movements toward, against, or away from others (Horney, 1945, in Newcomb et al., 1993). A brief overview will now be given of behavioral, emotional, and cognitive correlates of popularity and rejection.<sup>2</sup>

A consistent finding in the peer acceptance literature is that *popular* children tend to move *toward* others. They have been found to be more prosocial as well as more cooperative than children from other status groups (Rubin et al., 1998). Well-liked children have also been found to be more positive and happy (Sroufe et al., 1984). Popular children are better able to initiate interactions, maintain contact, and resolve conflicts (Putallaz & Gottman, 1981). They have also been found to

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<sup>2</sup> Controversial and neglected children are not included in this overview, because this dissertation focuses on the dimension of likability and not on the dimension of visibility.

remain engaged in social fantasy play longer than rejected children (Connolly & Doyle, 1984). They interact with others to form or maintain relationships as opposed to merely trying to obtain instrumental goals (Rubin et al., 1998).

In hypothetical problem situations, popular children are able to give others the benefit of the doubt when they do something potentially negative to them (Asher et al., 1994; Dodge & Price, 1994). Moreover, they are able to give a higher number of solutions, which are also more prosocial than the solutions of children who are rejected (Pettit, Dodge, & Brown, 1988; Rubin et al., 1998). Better accepted children also know more about situations in which certain emotions are expressed (Denham, McKinley, Couchoud, & Holt, 1990; Garner, Jones, & Miner, 1994). In addition to moving more toward others, popular children also move less *against* or *away from* others. They have been found to be less aggressive or withdrawn than children from all other status groups (Newcomb et al., 1993). Despite all their positive characteristics, however, popular children can be aggressive as well. However, their aggression is mostly self-assertive and non-disruptive. This suggests that these children look after their own goals while not harming others (Newcomb et al., 1993), which fits precisely into definitions of social competence (Rubin et al., 1998; Schneider, 1993). In short, popular children's behaviors, emotions, and cognitions seem focused on maintaining relationships with others. At the same time, these children appear to be able to assert themselves when necessary. Thus, they seem to have found a *balance* between feeling connected with others while being an autonomous self at the same time.

*Rejected* children show behaviors that are opposite from those of popular ones (Newcomb et al., 1993). They are less sociable than average status children. Thus, they seem to move *less toward* others. On the other hand, rejected children move *more against* or *away from* others. They show more aggressive behaviors than average children, specifically more negative, physical and disruptive aggression. They are also more withdrawn, depressed, and anxious (Newcomb et al., 1993). Rejected children have also been found to have more difficulties with their emotions than children who are accepted by peers. They display more anger, tend to express emotions in inappropriate ways, and they understand emotions less well than children who are accepted by peers. Specifically, rejected children tend to confuse happy expressions with sad and angry ones (Denham et al., 1990; Sroufe et al., 1984).

The rejected group as a whole seems to be much more heterogeneous than the popular group (Cillessen, Van IJzendoorn, Van Lieshout, & Hartup, 1992; Rubin et al., 1998). approximately half of the rejected children are characterized by aggressive behaviors. A smaller

proportion (10-20%) can be described as extremely withdrawn (Rubin et al., 1998). The rest (30-40%) shows a combination of aggressive and withdrawn behaviors, or no clear behavior pattern (Coie, 1990; Cillessen et al., 1992). Currently, most is known about *aggressive-rejected* children, who use aggressive acts (kicking or hitting) or verbalizations (calling names) against peers. They tend to be more focused on themselves and more likely to undermine relationships with others than accepted children (Rubin et al., 1998). In hypothetical situations where another child does something potentially negative, aggressive-rejected children tend to attribute hostile intent to the peer (Asher et al., 1994; Dodge & Price, 1994). In hypothetical problem solving situations, they give fewer problem solving strategies that are more aggressive than those of more popular children. Moreover, they feel more efficacious in using such hostile, aggressive strategies (Pettit et al., 1988; Rubin et al., 1998). Finally, rejected children tend to perceive social success as something unstable that is caused by external factors while they see social failures as stable and caused by themselves (Rubin et al., 1998).

It has been proposed (Asher et al., 1994; Dodge & Price, 1994; Rubin et al., 1998) that aggressive-rejected children are subject to a vicious cycle of aggression and hostility. Interpreting ambivalent peer actions as hostile, they tend to react to such actions in an aggressive way. Because of their frequent aggressive acts, others see them in a negative way as well. Hence, others may become increasingly hostile toward the aggressive child, who in turn sees his worldview corroborated by his experiences.

Newcomb et al. (1993) underline that it is probably not aggressive behaviors per se, but rather the combination of these behaviors with a lack of social skills, which puts rejected children at risk. For instance, rejected children have been found to lack capabilities to successfully enter ongoing play of peers because they fail to share the focus of attention of others. For similar reasons, they fail to solve conflicts in a satisfactory way as well (Putallaz & Gottman, 1981). Another factor that may play a role in peer rejection is the finding that rejected children's view of themselves does not correspond very well with other people's views. A striking finding in Newcomb et al.'s (1993) meta-analysis is that rejected children do not see *themselves* as more aggressive than popular or neglected children, unlike every other rater does. For *withdrawn-rejected* children, the picture is different (Rubin et al., 1998). They seem to understand social cues and to be able to generate socially competent solutions in *hypothetical* situations. However, they seem unable to translate this knowledge in real-life behaviors.

In sum, rejected children have problems initiating and maintaining relationships with peers. In the face of conflict, a unique arena for testing one's autonomy, they often resort to aggressive behaviors. In such situations, they fail to negotiate. This makes it much more difficult to find a balance between their own and others' goals. For these children, the world seems a hostile, potentially confusing place. They expect that others want to harm them. At the same time, they have difficulty understanding emotional expressions and social rules among other children. It seems as though rejected children try to protect themselves from others by being aggressive or by retreating from others. This suggests that they seem to have trouble finding a balance between being *autonomous* yet feeling *connected* at the same time.

#### **1.4 Stability of sociometric status**

Although sociometric status cannot be considered a measure of individual functioning, it does bear significance for the individual child, especially when kept over time. Even young children's sociometric status has been found to be fairly stable. Across one year, approximately half of the children retain a popular or rejected status (Cillessen, 1991, in De Roos, Van Lieshout, & Riksen-Walraven, 1991; Cillessen & Ten Brink, 1991; Denham et al., 1990; Parke et al., 1997; Rubin et al., 1998). Sociometric ratings have been found to be correlated approximately .50 from 3 to 4 and from 5 to 6 years of age (Denham et al., 1990; Ironsmith, Leggett, & Poteat, April 1999; Rubin & Daniels-Beirness, 1983, in Rubin et al., 1998). If change occurs, it usually happens to and from the average group (Cillessen & Ten Brink, 1991; Parke et al., 1997). In sum, positive as well as negative peer judgements are relatively stable. Between the ages of 3 and 6 years, approximately half of the children retain their sociometric status over a one-year period.

#### **1.5 How do differences in peer acceptance arise?**

If there are children who become rejected from the beginning of school onward while others are socially accepted from the start, then how do such differences arise? As stated above, Coie (1990) suggests that the child's behavior is the main factor that causes peers to reject him or her initially. However, after this initial phase others' judgements may make it harder for the child to escape his or her rejected status.

This hypothesis is supported by two studies that have investigated relations between sociometric status and social behaviors in the first years of schooling (Denham & Holt, 1993; Ladd, Price, & Hart, 1988). These studies found that prosocial behaviors together with a lack of



aggression at the beginning of the first preschool year predicted social acceptance by peers approximately one year later. Children who were friendly, cooperative, showed positive affect, and were not aggressive, were more popular in the beginning of preschool. In addition, they were likely to remain accepted as well. Early arguing behaviors predicted declining social acceptance, although the behaviors themselves were not particularly stable: even if children changed their aggressive behaviors, they were likely to remain rejected. These findings are in contrast with Pettit et al. (1996), who found that children's behaviors tended to change with a change in their acceptance or rejection. This difference may be due to the fact that Denham and Holt observed children twice during the same school year while Pettit et al. studied them in separate school years. Maybe children get a "second chance" when a new school year starts. Nevertheless, it is possible that prosocial behaviors combined with a lack of aggression are important predictors of sociometric status early on while later reputation becomes more important than actual behaviors (Denham & Holt, 1993). In conclusion, prosocial and aggressive behaviors predict acceptance or rejection in kindergarten, regardless of whether sociometric status changes or remains stable in subsequent school years.

### **1.6 Potential precursors of peer acceptance**

These findings raise the question why some children show behaviors that put them at risk of being rejected at the beginning of school while others show such behaviors that they are easily accepted by others. Why do some children act more prosocially and others more aggressively? In other words, why do some children move more *toward* others while other children tend to move *against* others? Some possible explanations for these interpersonal differences will now be given.

#### **a. Child characteristics**

Behavioral genetic studies have shown that genetic make-up contributes significantly to young children's social behaviors, such as empathy, sociability, shyness, and externalizing behaviors (Schaffer, 1996; Zahn-Waxler, Robinson, & Emde, 1992; Zahn-Waxler, Schmitz, Fulker, Robinson, & Emde, 1996). Based on a large study with twins and other siblings, Rowe (1989, in Schneider, 1993) estimates that heritability accounts for approximately 36% of variance in sociometric status. However, some methodological problems make it difficult to interpret these findings. For instance, classmates could have judged twins in similar ways, because they might have confused them (Schneider, 1993). Nevertheless, genetic influences on social acceptance seem considerable.

Although temperament is not an entirely genetic construct, it can be seen as biologically based. Therefore, temperament research may shed some light on the potential effect of child characteristics on peer relationships. Lamb and Nash (1989) compared four possible ways in which mother-infant relationships could be related to infant-peer interactions. They found most evidence for the “general sociability hypothesis,” which states that sociable babies interact more positively with both their mother and with peers. De Roos (1995) followed a group of children in the first five years of life in the Netherlands. She asked mothers to fill out a temperament questionnaire at 12, 24, and 42 months of age. Easy temperament (characterized by high pleasure and interest scores) was one of the best predictors of affiliative behaviors in peer interactions at 42 months. Social behaviors in kindergarten, however, were best predicted by a *difficult* temperament (characterized by high anger and activity scores). Children rated as “difficult” in infancy or toddlerhood were likely to be less prosocial and at the same time more antisocial and withdrawn. In addition, children with a difficult temperament generated less prosocial solutions in a social problem-solving task. These findings are concordant with those of Billman and McDevitt (1980, cited in De Roos, 1995), who found that difficult temperament in 4-year-olds was related to more aggression toward peers. Another child characteristic that may influence social behaviors and peer acceptance, is the child’s gender. Boys are more likely to be aggressive and rejected while girls are more likely to be prosocial and popular (e.g., Denham, Renwick, & Holt, 1991; De Roos, 1995; Patterson, Cohn, & Kao, 1989; Pettit et al., 1996; Zahn-Waxler et al., 1996). Parke et al.’s (1997) study suggests that young boys are more vulnerable for stable peer rejection than girls. Girls have been found to be more stably popular from a young age on. These results suggest that boys may be more vulnerable for peer rejection at the beginning of school than girls (Parke et al., 1997). Possibly, different processes play a role in the development of social acceptance of boys and girls (Gottman, 1991; Rubin et al., 1998). In the present study, potentially confounding effects of gender and temperament will be controlled.

#### ***b. Experiences with siblings and peers***

Sibling relationships are unique, because siblings show a difference in knowledge and power, yet at the same time they generally are close enough in age that they can also interact on a horizontal level. Children learn many social rules from their siblings, for instance about possession, fairness, sharing, and turn taking (Schaffer, 1996). Similarities have been found between characteristics of children’s interactions with siblings and with friends (Schneider, 1993).

Notwithstanding the important roles of siblings in children's everyday lives, sibling relationships have been rarely studied, so that little is known about their impact on children's social acceptance by peers (Gottman, 1991; Schneider, 1993).

Experiences with peers from outside of the family, prior to kindergarten, have been found to be related to children's responsiveness to peers, length of peer interactions, and other indices of social competence (De Roos, 1995; Howes, 1988, in Howes, Matheson, & Hamilton, 1994; Lieberman, 1977; Pettit et al., 1988). Interestingly, findings from Lieberman (1977) suggested that peer experience foster mainly *verbal* social competence while *nonverbal* positive behaviors toward peers were related to a secure attachment relationship with mother at age 3. In her longitudinal study, De Roos (1995) observed children's interactions with four different unfamiliar peers at the ages of 12, 24, 36, and 48 months. Peer nominations were assessed at 60 months. Surprisingly, early *affiliative* behaviors (e.g., being nice, collaborating) bore no relation to later peer competence. Early *antagonistic* behaviors (e.g., argumentative, disruptive), on the other hand, predicted antisocial behaviors in triads, and a low level of withdrawal in the classroom at 60 months. In short, relationships of children with other children appear to influence the quality of subsequent peer relationships.

### **c. Parent-child relationships**

A large body of literature suggests that the role of parent-child relationships is important, if not essential, for the development of social competence with peers (e.g., Erickson, Sroufe, & Egeland, 1985; Parke & Ladd, 1992; Parke & O'Neil, 1999; Sroufe & Fleeson, 1986). Processes by which parent-child relationships may be related to peer competence have been proposed by attachment theory (e.g., by providing a secure base for children to explore from) and social learning theory (e.g., by providing a model from whom to learn patterns of social interaction). The relation between parent-child and peer relations is central in this dissertation and will be discussed further in Section 2.

### **d. Multiple factors**

Although all of the above mentioned factors appear to influence children's peer relations at kindergarten age to some extent, they do not operate in isolation. For instance, at any point in time, human behavior can be seen as an interplay between genes and environment (e.g., Scarr & McCartney, 1983; Schneider, 1993). Behavior geneticists argue that the environment that is *not* shared with siblings has much more influence on individual differences than the shared environment (Harris, 1995, 1998). However, it is not yet clear what exactly is or is not shared between siblings within one family or what the processes

are that make children similar or different from each other (Schaffer, 1996). Various studies have found that a difficult temperament in itself does not increase the likelihood of developing behavior problems. It appears that child problems are more likely to arise in children with a difficult temperament if additional risk factors are present, for instance a lack of social support (Grusec & Lytton, 1988; Schaffer, 1996).

Furthermore, there may be various interrelations between relationships within the family that may influence children's social development (e.g., between parents, between siblings, or between various parent-sibling pairs; Boyum & Parke, 1995; Parke & O'Neil, 1997; Schaffer, 1996). For example, Fainsilber-Katz and colleagues have found that children who witness marital problems between their parents tend to have problems engaging in cooperative play with peers (cited in Parke & O'Neil, 1997). These children become hypersensitive for negative or conflictuous situations, which disrupts the flexibility of attention focusing.

Another issue that shows the complexity of influences on children's social development with peers is that there are potential gender differences. Some studies suggest that developmental pathways may differ for boys and girls. In addition, relationships with mothers and fathers may be differentially related to children's peer relationships (e.g., Isley, et al., 1996; MacDonald & Parke, 1984; Parke & O'Neil, 1997).

In conclusion, social competence with peers is related to a complex variety of factors. There are interrelations between genes and environment, between various relationships within the family and between relationships within and outside of the family. In addition, developmental pathways of social competence may vary for boys and girls, and relationships with mother and father may be differentially related to social development. From this, it follows that there are no simple unidirectional relations between parent and child relationships and peer relationships. Relations are expected to be multifold and complex. Nevertheless, this complexity does not deny that the way children interact with parents may be related to the way they relate to peers. A recent intervention study, for instance, showed that social behaviors with peers can be changed by altering mother-child interaction patterns (LaFreniere & Capuano, 1997, see Chapter 3). In the next section relations between characteristics of the parent-child relationship and children's sociometric status will be discussed in more detail.

## **2 Parent-child relationships and children's peer acceptance**

Since the 1980s many studies have found connections between characteristics of parent-child interactions or relationships and children's competence with or acceptance by peers (Ladd, 1991; Parke et al., 1989; Parke & O'Neil, 1997, 1999). In general, a positive affective climate, responsiveness, and gentle control strategies characterize the interactions of popular children with their parents. In contrast, communicative turns tend to be less well connected, more negative emotions are expressed, and more demanding control strategies are applied in parent-child interactions of rejected children. Furthermore, children interact in similar ways with their parents and with their peers in dyadic and triadic situations (Black & Logan, 1995; MacDonald & Parke, 1984; Parke & O'Neil, 1999; Putallaz, 1987).

### **2.1 Two research traditions**

In the study of parent-peer linkages, two research traditions can be distinguished (Parke & O'Neil, 1997, 1999). A first tradition has focused on relations between *styles* of parent-child interaction and children's social competence with peers (e.g., MacDonald & Parke, 1984; Putallaz, 1987). This mainly empirical tradition has been guided by implicit assumptions from various theoretical frameworks (Coie, 1990). However, many of these studies are based on the assumption that children learn, rehearse, and refine social skills in interactions with their parents (Parke & O'Neil, 1997). Mechanisms through which they do this are *modeling* and *reinforcement* (e.g., Isley et al., 1996, 1999). This type of research has progressed during the eighties and nineties through two phases (Parke & O'Neil, 1997, 1999). In the *first phase*, studies were aimed at *describing* specific behaviors in parent-child interactions that predicted variations in peer outcomes. The *second phase* is the search for *mediating processes* that may *explain* the observed relations between the parent and peer social systems (see Section 3).

A second research tradition has studied connections between parent and peer relationships from the point of view of *attachment* theory (e.g., Sroufe & Fleeson, 1986). Attachment theory and research suggests that the quality of the attachment relationship to one or both parents is connected to characteristics of children's peer relationships (Elicker, Englund, & Sroufe, 1992; Freitag, Belsky, Grossmann, Grossmann, & Scheuerer-Engelisch, 1996; Kerns & Barth, 1995; Moss, Rousseau, Parent, St-Laurent, & Saintonge, 1998). A potential problem with this assumption is that it is almost impossible to separate earlier from later

development. Relations with early development may be related more to continuity in caregiving than to the early experiences per se (Thompson, 1991). Nevertheless, secure attachment to one or both parents at 12 or 18 months has been related to more social competence with peers during the preschool and school periods (Elicker et al., 1992; Sroufe & Fleeson, 1986). Attachment theory explains connections between parent and peer relationships with the concept “internal working models” (Bowlby, 1973/1991; Bretherton, 1990, 1991). These consist of a set of affectively charged cognitions about the attachment relationship and the self (Cassidy, 1990). Working models of the attachment relationship are expected to generate expectations of future relationships. Both attachment theory and the more descriptive research tradition have suggested that they may serve as mediating variables between parent-child and child-peer relationships (Parke & O’Neil, 1997, 1999, see Section 3). The present study will investigate concurrent links between parent-child and peer relationships. Both more *direct* (Chapters 3 and 4) and *indirect* linkages (Chapters 5 and 6) will be examined.

## **2.2 Bidirectionality and horizontality**

The study of family-peer linkages is part of "a more general reorientation away from a focus on the individual as the unit of analysis to dyadic and larger units of analysis" (Parke, Ornstein, Rieser, & Zahn-Waxler, 1994, p. 11; Schaffer, 1996). This development is related to a shift toward the study of the *reciprocity* between parent and child as well as the *mutual regulation* between them (Fogel, 1993; Parke et al., 1994; Schaffer, 1996; Vyt & Van Aken, 1994). In addition, the role of the *context* in which parent-child interactions are studied is increasingly acknowledged (Pettit, Brown, Mize, & Lindsey, 1998; Parke, 1994). Thus, social behaviors are increasingly seen as interrelated with the interaction partner and the larger context. In addition, unidirectional parent-to-child effects have been questioned more than 30 years ago (Bell, 1968) and dyadic approaches to parent-infant interaction have started to emerge nearly 20 years ago (Užgiris & Fafouti-Milenković, 1985).

Nevertheless, the choice of methods and of the language used to describe parent-child interaction processes still reveal implicit beliefs in unidirectional, individualistic conceptions of parent-child interactions (Kuczynski, Harach, & Bernardini, 1999; Lollis & Kuczynski, 1997). For instance, a belief in parent-to-child causality becomes apparent in the use of words like “transmission” or “socialization.” Parent behaviors have been described in agentic terms (e.g., “allowance of autonomy,” “control strategies”) while child behaviors are being described in more

passive terms, like “compliance,” or “misbehavior” (e.g., Carson & Parke, 1996, p. 2224). There is, however, a growing acknowledgment of children's agency. Researchers increasingly try to describe parent-child interaction behaviors in dyadic terms, in accordance with bidirectional and relational perspectives (Bruner & Haste, 1987; Fogel, 1993; Kuczynski et al., 1999; Lindsey, Mize, & Pettit, 1997; Lollis & Kuczynski, 1997).

Another change in the conceptualization of parent-child relationships concerns the role of *power*. Because of parents' greater size, knowledge, and experience, the relationship with their children can be seen as mainly vertical in nature. Peer relations have traditionally been described as horizontal. However, Russell, Pettit, and Mize (1998) suggest that parent-child relationships have horizontal features as well. Horizontal interactions and relationships are characterized by *reciprocity* in combination with *shared power*, or (in other words) by autonomy-within-connectedness.

Studying horizontal characteristics of parent-child interactions may be particularly relevant for the study of parent-peer linkages. They are likely to be shared with characteristics of peer interactions (Russell et al., 1998). The interactions of better accepted children with both their parents and their peers seem to be more horizontal than those of less well accepted children. Popular children have been found to interact with both parents *and* peers in a reciprocal way while being assertive but not coercive. Rejected children tend to interact in less reciprocal ways while being more aggressive (Black & Logan, 1995; MacDonald & Parke, 1984; Putallaz, 1987). The greater horizontality in the interactions of children who are better accepted can be seen as a reflection of a more optimal balance between relationship-enhancing and autonomy-promoting behaviors. The interaction patterns of rejected children seem to reflect difficulties with being autonomous within a context of connectedness.

The conceptualization of parent-child relationships as partly characterized by horizontal features is also concordant with attachment theory. At kindergarten age, the attachment relationship is hypothesized to be in the phase of a “goal-corrected partnership” (Bowlby, 1969/1991; Sroufe, 1990; Waters, Kondo-Ikemura, Posada, & Richters, 1991). Both parent and child are now responsible for keeping a balance between proximity seeking (fostering connectedness) and exploration (fostering autonomy).

In the present study, parent-child relationships are seen as bidirectional in nature. I assume that both parent and child are active, agentic partners who share power and who are both contributing to the reciprocity between them. Furthermore, I will focus on dyadic measures

of parent-child interactions. From a bidirectional perspective, the interaction behaviors of the parent can only be understood within the context of the behaviors of the child, and vice versa. In addition, I will mainly focus on horizontal characteristics of the parent-child relationship, as parents and children in this study were observed in a free play situation. Relations between peer acceptance and dyadic, horizontal characteristics of parent-child play interactions are expected for several reasons. First, children can learn and practice horizontal interaction skills with their parents. Second, it will make them feel more autonomous and connected if they have repeated experience with interacting at a horizontal level with parents. This possibility will be explored further in the next section.

### **3 Subjective experience of self and others: a mediator?**

Parke and O'Neil (1997, 1999) suggest that the second phase in the study of family-peer connections reflects a quest for processes that may mediate the linkages between the worlds of parents and peers. Various mediating processes can be distinguished. They can be divided in emotional or cognitive processes (Parke & O'Neil, 1999; Mize, Pettit, & Meece, 2000).

First, better accepted children have been found to be better at adequately expressing emotions. In addition, they understand emotions better (Cassidy, Parke, Butkovsky, & Braungart, 1992; Denham et al., 1990; Garner et al., 1994). Emotion expression and understanding have also been linked to parent-child interactions (Denham, Zoller, & Couchoud, 1994; Dunn & Brown, 1994; Garner et al., 1994). Negative affect and conflict in the family have been related to lesser understanding of angry and sad emotions and to emotion regulation and its psychophysiological correlates (Mize et al., 2000; Parke & O'Neil, 1997). This may cause problems in peer relationships, especially during conflict (Denham et al., 1990; Dunn & Brown, 1994; Eisenberg, Fabes, & Murphy, 1996; Garner et al., 1994; Parke, 1994; Thompson & Calkins, 1996). A second group of potential mediators consists of social-information processing styles. From these perspectives, it has been suggested that children learn social rules (goals, attributions, outcome expectancies) in addition to ways of processing social information in the parent-child relationship (e.g., Pettit et al., 1988). Children's social information processing also varies according to sociometric status. A well-known finding in the literature on peer relationships, mentioned in Section 1, is that rejected children tend to interpret peers' intent in ambiguous provocations as hostile (Dodge &



Price, 1994; Rubin et al., 1998). Indeed, some evidence has been found for a mediating effect of children's social problem-solving skills between parent and peer relationships (Pettit et al., 1988, see Chapter 5).

### **3.1 Subjective experience as a mediator**

In the present thesis, I hypothesize that children's *subjective experience* of the self-in-relationship mediates relations between parent-child interactions and children's acceptance by peers. "Subjective experience" is broadly defined as "the way the child feels and thinks about the self in relation to others." The way children experience themselves in relation to others may explain (part of) the relation between parent and peer relationships. With adolescents and adults, it has been shown that the way situations are experienced are more important in explaining problem behaviors than the actual situations themselves, even if they were (objectively) traumatic events (Epstein, 1991; Jessor; 1981).

I prefer to use the broad term of subjective experience to terms such as "representations," "internal working models," and "self-concept," because of their theoretical connotations. It is as yet unclear what representations and internal working models are, and some have conceptualized them in rather cognitive ways (e.g., Bretherton, 1993; Harter, 1990). "Internal working models" suggest a "concretized brain structure" and seem to overemphasize the cognitive component (Sroufe, 1990, p. 296). Therefore, I will use "subjective experience" when possible, although I will use other terms when they occur in their own frameworks. In this way, I want to emphasize the affective nature of subjective experience. In addition, I believe that the kind of knowledge young children have about themselves is mainly experiential as opposed to rational knowledge (Epstein, 1991). These will be briefly discussed now.

### **3.2 Two kinds of knowledge**

When considering the role of subjective experience, it is important to distinguish two forms of knowledge: *immediate* knowledge of events (knowledge by acquaintance) and knowledge *about* events (knowledge by description). Several theorists have described these types of knowing (Buck, 1993; Epstein, 1991; James, 1890/1950; Pipp, 1990; Stern, 1985).

Epstein (1991) distinguishes between rational cognitions and experiential cognitions, which are primarily preconscious. Rational cognitions are logical, can be analyzed, are encoded in symbolic representations of reality, and are experienced as though we are in

control of them. Experiential cognitions are holistic, highly emotionally laden, learned directly from experience, and are experienced as though we passively receive them. The experiential system is highly adaptive for daily functioning. It has been evolving in human-like species for more than 7 million years. The rational system is relatively new, less than 5,000 years old. While the rational system is very useful for long-term planning, analyzing, and symbolic communication, the experiential system is better suited for rapid processing of information and immediate action. The experiential and rational systems of knowledge are not totally distinct, but interconnected (Derryberry & Reed, 1996; Epstein, 1991). According to Epstein, unconscious physical processes or "vibes" influence conscious thinking. These can be vague, unidentified feelings, or "rushes" as Stern (1985) calls them. They can also be clear emotions. Further, it is possible to talk about experience as well as to experience words. In art, symbols evoke images and feelings (Epstein, 1991; Stern, 1985).

### **3.3 Subjective experience of parent-child relationships**

From the perspective of attachment theory, it has been proposed that earlier attachment relationships exert influence over later relationships through the workings of "internal working models" (Bowlby, 1973/1991; Bretherton, 1990, 1991). For an infant, the function of internal working models is to predict the whereabouts of attachment figures in order to be able to reach the "set goal" of proximity (Bowlby, 1973/ 1991). According to attachment theory, infants have an innate tendency to seek proximity to caregivers. As the child gets older, it becomes increasingly difficult to always be physically close to an attachment figure. The development of internal working models is thought to begin around 8 or 9 months of age. Around that age, the child begins to discover under what conditions he or she feels secure and begins to be able to plan his behavior accordingly. From this age onward, an infant may try to influence mother's behaviors in such a way that the conditions for security (nearness of the mother) are met. With age, internal working models tend to become increasingly important. Based on actual communication patterns with the parents, the child learns what behaviors can be expected from the attachment figure, most importantly if the attachment figure is available when needed. Research has found some support for these hypotheses (Bretherton, Ridgeway, & Cassidy, 1990; Cassidy, 1988; Main, Kaplan, & Cassidy, 1985).

### **3.4 Subjective experience of the self**

Subjective experience of the self is believed to be closely intertwined with the development of the experience of the relationships with the parents (Baldwin, 1899/1973; Bowlby, 1973/1991; Bretherton, 1993; Cassidy, 1990; Emde, Biringen, Clyman & Oppenheim, 1991; Fogel, 1993; Mead, 1934/1974; Sullivan, 1953; Stern, 1985). The main characteristic of internal working models of the self is the degree to which the self is accepted by attachment figures. In Bowlby's words:

Thus an unwanted child is likely not only to feel unwanted by his parents but to believe that he is essentially unwanted, namely unwanted by anyone. Conversely, a much-loved child may grow up to be not only confident of his parents' affection but confident that everyone else will find him lovable, too (Bowlby, 1973/1991, p. 238)

The belief that children's self-esteem develops in the parent-child relationship is widespread. In contrast, surprisingly little research has been done to test this hypothesis. One classic (interview) study was carried out by Coopersmith (1967). He studied 10-11-year-old boys who varied in self-esteem. Results suggest that boys with high self-esteem experience acceptance by parents, clearly defined limits, and respect for the child's autonomy within these limits. High self-esteem boys were more independent and creative. They also rated previous peer relationships as better than boys with low self-esteem did. Low self-esteem boys felt more isolated. Coopersmith's study suggests that children with higher self-esteem experience more connectedness and are more autonomous.

The present study seeks to investigate such relationships in young children. However, some theoretical and methodological issues are raised in the study of young children's experience of themselves (Cassidy, 1990). Young children have limited linguistic and cognitive capacities. Therefore, it is still a point of debate whether they are able to make a general judgement about themselves and to communicate about their subjective experience of self and others (Verschueren, Marcoen, & Schoefs, 1996; Verschueren & Goudena, April 1999).

### **3.5 Subjective experience in young children**

According to Susan Harter "young children 'exude' a sense of overall self-esteem as manifested in certain behaviors within their repertoire" (1990, p.303). However, they cannot consciously verbalize a concept of their self-worth below the age of 7 or 8 years (Harter, 1990, 1998). It appears that Harter mainly studies rational knowledge of the self, while

experiential knowledge may play a much larger part in children's experience of themselves (Epstein, 1991). Repeated interactions with parents may influence children's sense of themselves mainly in an experiential way while they are not yet able to conceptualize their self-esteem in abstract ways.

Even if young children cannot yet consciously verbalize how they experience themselves and others, they may be able to express it more symbolically, for instance in pretend play (Bretherton, Prentiss, & Ridgeway, 1990; Cramer & Skidd, 1992; Fein, 1989; Sroufe, 1990). Although both are symbolic communicative systems, the nature of the symbols in verbal communication and in fantasy play differs. Words are rather abstract and "digital," while fantasy play communicates more through holistic images (metaphors, stories). The latter can be seen as the "language" of the experiential system (Epstein, 1991).

In accordance with this idea, some researchers have found that even young children can communicate about themselves in coherent ways when adequate methods are used. For instance, Rebecca Eder (1990) found that even 3,5-year-olds are capable of ascribing psychological attributes to themselves when hand puppets are used to interview them. Attachment theorists have also developed several playful methods that are designed to assess children's working models of self and attachment relationships (Bretherton, Oppenheim, & Prentiss, 1990; Cassidy, 1988). With such methods, children may be able to reveal the way they experience the relationships with their parents.

Indeed, evidence has been found for the validity of such measures (e.g., Cassidy, 1988; Oppenheim, 1990; Verschueren et al., 1996). This will be reviewed in Chapter 5. As hypothesized, the quality of working models of the attachment relationship in young children has been related to observed attachment quality (Cassidy, 1988; Main et al., 1985). Secure children tend to respond in a more open and coherent manner to incomplete doll stories about attachment themes than insecure children. Avoidant children tend to avoid the story themes, and hesitate to complete the stories. Insecure ambivalent children often display negative, hostile stories. The stories of disorganized children tend to lack organization and to have bizarre qualities. The security of children's internal working models of attachment has also been related to social competence with peers (Verschueren & Marcoen, 1999; Verschueren et al., 1996). Children who depicted their parents as available and themselves as worthy of attention were rated as more socially competent than children who told insecure stories.

## **Summary of Chapter 1**

This dissertation assumes that children who are better accepted by peers have found a more optimal balance between being an autonomous self while at the same time feeling connected to others. Popular children have been found to be more prosocial and at the same time more assertive than rejected children, which seems to reflect that they feel autonomous within connectedness. They tend to move toward others. Rejected children, on the other hand, move more against or away from others. They have been found to be more aggressive or withdrawn than others are.

While peer acceptance is related to a complexity of factors, this dissertation focuses on relations between peer acceptance and parent-child relationships. Both direct and indirect connections between parent and peer relations are expected. Better accepted children are expected to engage in more horizontal parent-child interactions, characterized by connectedness and room for autonomy. Children may learn more reciprocal, less controlling patterns of interaction by seeing their parents as models and by repeatedly experiencing these interaction behaviors. Chapter 3 and 4 will investigate such direct pathways and also explore the role of interaction context. Better accepted children are expected to engage in more shared fantasy play with parents. More indirectly, repeated experience with connectedness and room for autonomy in parent-child interactions may give children the subjective experience that they are accepted and loved as an autonomous self. These feelings and thoughts about the self in relation may then influence the child's expectations about subsequent interactions with peers. Relations between parent-child relationships, subjective experience, and peer competence will be explored in Chapters 5 and 6. In the next chapter, I will give an overview of the recruiting methods and characteristics of the sample, the procedures, and the instruments used in the present study.



## **Chapter 2**

### **Overview of the study**

Chapter 2 first gives an overview of the recruitment of the participants, the characteristics of the sample, and the procedures that were used in the present study. In addition, research instruments will be described and descriptive data will be presented.

### **1 Recruitment of participants**

The present study is part of the Utrecht Social Development Project (USDP), a longitudinal study of social development in kindergarten and elementary school that started in 1995 (Van den Oord & Rispen, 1999). The USDP aims at identifying factors that may lead to success or failure in social functioning of 4- to 12-year-old children, with a special focus on social network structures in classrooms. Participating schools are located in the province of Utrecht in the center of The Netherlands. Children's peer acceptance and other social, emotional, and cognitive behaviors are assessed every two years via peer sociometric ratings and nominations as well as teacher and parent questionnaires.

#### **1.1 USDP sample and procedures**

The sampling procedure for the USDP followed several steps (Van den Oord & Rispen, 1999; see Figure 1). First, all school directors in the target area were invited to participate. Fifty-three percent (270 of 510) replied and 29% (77 schools) were willing to cooperate. After randomly excluding a number of schools, 51 schools participated. Their characteristics (such as number of students, minority group children, and level of later education) did not differ from the 219 nonparticipating schools (Van den Oord & Rispen, 1999). Second, parents of children born between August 1991 and October 1992 were informed about the study. After excluding children who did not speak Dutch or who had a mental disability, a target sample of 1192 children was obtained. Parents of 110 children (9 %) refused to participate, so that the final sample consisted of 1082 children (50% girls). The majority (89%) had Dutch parents. Other children's parents came from Turkey, Morocco, Surinam, or European countries (Van den Oord, Rispen, Goudena, & Vermande, 2000).

Between October 1996 and March 1997, the children were individually interviewed at school. With the help of photographs, children rated and nominated their best and least liked classmates from the same age group. They also nominated classmates' social

behaviors (e.g., aggressive and dominant behaviors). Sociometric ratings (Asher, Singleton, Tinsley, & Hymel, 1979) were obtained with a 3-point scale ranging from 1 (*don't like to play with*) to 3 (*like to play with...a lot*). Ratings did not differ between the 110 nonparticipating children and those of the participating children (Van den Oord et al., 2000).

## **1.2 Participants in the present study**

Participants were recruited from the first Wave of the USDP (see Table 1). Sociometric data were collected between October 1996 and March 1997, when the children were 4 to 5 years of age. Most children in the Netherlands enter school as soon as they turn 4 years old. Then, they spend two years in full-time kindergarten. Some schools have separate classrooms for 4-to-5-year-olds and 5-to-6-year-olds but often groups consist of children between 4 and 6. Thus, the age range in the two kindergarten years can be quite variable. For the USDP, only children born between August 1991 and October 1992 were selected to participate, because it was expected that children from this age range would be in the same classrooms in third grade.

Selection of participants for the present study proceeded in two steps. First, schools were selected that were likely to be able to provide us with an adequate number of children from the extreme status groups. Second, approximately even numbers of popular, average, and rejected children were selected from these schools. After this, schools and then parents were approached to ask for their consent.

## **1.3 Selection of schools**

For practical reasons, an attempt was made to include schools that were not too distant from the city of Utrecht. The schools preferably had more than one kindergarten classroom in order to provide as many potential participants as possible. Classrooms had to meet three criteria to be included in the study. First, they had to contain a minimum of nine children for whom sociometric data were available. In this way, each child was rated by at least eight classmates. Second, because cross-cultural comparisons were beyond the scope of this study, the majority of the children (80% or more) in these classrooms were required to come from Dutch cultural backgrounds. Third, at least two (preferably more) children had to be of extreme SMS (i.e., popular or rejected).



#### **1.4 Selection of popular, average and rejected children**

The present study was interested in studying children from a range of sociometric ratings. Therefore, approximately equal numbers of popular, average, and rejected children were selected with comparable numbers of boys and girls in each group. Sociometric status (SMS) was determined on the basis of the USDP sociometric ratings (Asher et al., 1979). Ratings were averaged for every child in all the classrooms. Because the classrooms differed in size, standard scores of the peer ratings were calculated. Children were then classified as either *popular* ( $z > 1.0$ ), *average* ( $-.8 < z < .8$ ), or *rejected* ( $z < -1.0$ ).

In contrast to the nomination method, the rating method does not distinguish between the *likability* and the *visibility* dimension of SMS (Cillessen & Ten Brink, 1991). Therefore, using ratings as a selection procedure does not rule out the possibility of including *controversial* and *neglected* children. To assure that none of the selected children was either controversial or neglected, a computer program was used (SSRAT, Maassen & Landsheer, 1996) with which the ratings could be converted into nominal data. SSRAT transforms sociometric ratings (1 = don't like to play with, 2 = sort of like to play with, 3 = very much like to play with) into dichotomous scores. *Liking* scores are recoded into "1" for every rating of 3, and "0" for every rating of 1 or 2. For *disliking*, every rating of 1 is transformed into a score of "1," while ratings of 2 or 3 become "0." Based on the transformed ratings, SSRAT is able to classify children into the five SMS groups defined by Coie, Dodge, and Coppotelli (1982).

SSRAT can compute status groups for different levels of probability. In the present study, this was done for alpha levels of .01, .05, and .10. The division of status groups was compared with the one reported by Cillessen and Ten Brink (1991). These authors concluded that in an average classroom, 15% of the children are popular, 15% are rejected, 10% are neglected, 5% are controversial, and 55% are of average SMS. The alpha-level of .10 best resembled this distribution (at .05 and .01 a much larger proportion of children than expected on the basis of the division of status groups reported by Cillessen and Ten Brink fell into the average category). For this reason, it was decided to select the children based on an SSRAT probability level of .10.

To summarize, children who were selected for the present study had standardized sociometric ratings of  $> 1$  (*popular*), between  $-.8$  and  $.8$  (*average*), or  $< -1$  (*rejected*). They also had to be popular, average, or rejected according to the SSRAT method (Maassen & Landsheer, 1996), to rule out the possibility of including controversial and neglected children.

Table 1  
Sampling procedures for the present study

<b>USDP</b>	510 schools in Utrecht were approached ↓		
	270 schools in Utrecht responded ↓		
	51 schools (83 classrooms) were randomly selected ↓		
	1082 children gave sociometric ratings and nominations (born between August 1991-October 1992; mean age 4.8 years) 1192 children (from the same age group) received sociometric ratings (Van den Oord et al., 2000) ↓		
<b>The present study</b>	19 schools were selected; classrooms consisted of: a) at least 9 children who had been given sociometric ratings b) at least 80% children from Dutch-speaking families c) at least 2 children in extreme status groups (popular or rejected) ↓		
	16 schools (32 classrooms) gave permission to participate ↓		
	149 children were selected; they were a) of popular, average or rejected sociometric status b) from two-parent, Dutch-speaking families ↓		
	parental permission was received for 80 subjects ↓		
	popular ( <i>n</i> = 30)	average ( <i>n</i> = 27)	rejected ( <i>n</i> = 23)

### **1.5 Permission procedure**

After selecting children who met the above criteria, directors of 19 schools were approached to request permission to participate in the present study. Three of the schools that were approached (16%) refused because of time constraints. Sixteen schools (32 classrooms) were prepared to participate. In these schools, 149 children had been selected on the basis of the sociometric ratings. Teachers were asked to give consent forms to their parents. Sixty-nine parents (46%) refused to participate. The majority objected to the home visits (mostly for privacy reasons). Other parents mentioned time constraints or expressed doubts about the relevance of the study.

Although high nonresponse rates are not uncommon in observation studies (e.g., MacDonald & Parke, 1984: 75%; Putallaz, 1987: 65%), they do raise questions about the generalizability of the results. Gerrits, Van den Oord, and Voogt (2001) compared the 80 participants and 69 nonparticipants in the present study. The groups did not differ with regards to peer ratings and nominations of acceptance or rejection, self-reports of well being (OCD, Barth & Parke, 1993), and teacher ratings of attention problems, aggression, restlessness, and fear/uncertainty. To assess the extent to which the nonresponding group was biased on all of these variables overall, Gerrits et al. applied a mathematical formula that takes effect sizes into account. The mean bias was .01, which means that the bias or difference between the “observed” mean in the group of respondents and the true “unobserved” mean in the total sample was only .01 standard deviation on average. Thus, the high nonresponse rate was not related to a high amount of bias in the present study and the sample can be regarded as representing the larger population.

## **2 Characteristics of the sample**

The final sample consisted of 80 children. There were 30 popular, 27 average, and 23 rejected children (37 girls and 43 boys; see Table 2). All of their mothers participated. Four fathers refused to participate (one father of a popular girl, two of average girls, and one of a rejected boy). One father (of a rejected girl) agreed to participate but could not be scheduled because of time constraints. One other father (of a rejected boy) agreed to participate but the child refused to play with his father. In sum, the father-child interaction data pertain to 74 children (29 popular, 25 average, and 20 rejected).

Table 2

Distribution of gender (per parent) across status groups

<b>Sociometric status</b>	<b>Mother-child</b> ( <i>n</i> = 80)		<b>Father-child</b> ( <i>n</i> = 74)	
	<i>Boy</i>	<i>Girl</i>	<i>Boy</i>	<i>Girl</i>
Popular ( <i>n</i> = 30)	16	14	16	13
Average ( <i>n</i> = 27)	13	14	13	12
Rejected ( <i>n</i> = 23)	14	9	12	8
<b>Total</b> ( <i>n</i> = 80)	43	37	41	33

The mean age was 60.4 months ( $SD = 3.9$ ; range 52-68). Most children came from classrooms with an age range from 4 to 6 years (75%). The rest was in classrooms with children aged 4 to 5 years. This proportion did not differ for children from the various status groups. Total class size ranged from 21 to 40 children ( $M = 27.2$ ,  $SD = 5.2$ ), and the mean size of the target age group was 14.9 ( $SD = 5.7$ ).

## 2.1 Demographic characteristics

All children came from intact families, mainly (85%) from middle- to high-income levels. They had on average 1.3 siblings (range 0-4). There were 30 eldest, 9 middle, 35 youngest, and 4 only children.

## 2.2 Validation of the sociometric status groups

To see if SMS was related to expected variables, status groups were compared via one-way ANOVAs with post-hoc Bonferroni tests with regards to peer-nominated SMS, aggressiveness, and prosocial behaviors. In addition, teacher ratings of social and task-related behaviors were compared across SMS groups. Based on the literature (see Chapter 1, Section 1.3), it was expected that popular children would be more prosocial and less aggressive than rejected children. Average children were expected to fall in between. Gender differences were also tested, using *t*-tests.

**Peer nominations** More children than expected by chance fell in the same SMS group, whether assessed by ratings or nominations ( $\chi^2(8) = 42.67$ ,  $p = .000$ ). As expected, rejected children were nominated as more aggressive than popular children ( $F(2, 77) = 4.90$ ,  $p = .001$ , Bonferroni  $p = .002$ ). They were also found to be less prosocial than both average and popular children ( $F(2, 77) = 6.83$ ,  $p = .002$ , Bonferroni  $p = .007$ ).

**Teacher ratings** The USDP asked teachers to fill out a questionnaire about children's social behaviors and school performance. Unfortunately, teachers of 24 subjects in the present study (30%) did not return questionnaires. Thus, teacher ratings are available for 69 children only (24 popular, 21 average, and 14 rejected children). *T*-tests comparing children with and without teacher data show no differences in children's age, peer ratings of acceptance, peer nominations of aggressive and prosocial behaviors, and vocabulary scores (as assessed in the child interviews). Teachers rated popular children as better liked by peers than rejected children ( $F(2, 53) = 3.51, p = .04$ ) but not as more prosocial ( $F(2, 53) = 1.31, ns$ ). Rejected children were rated as more physically aggressive ( $F(2, 53) = 5.39, p = .007$ ) than popular and average children were (Bonferroni  $ps = .006$  and  $.05$ ). Rejected children were also somewhat more likely to be mean or a bully to peers than popular children were ( $F(2, 54) = 3.31, p = .04$ , Bonferroni  $p = .056$ ). They were judged to more often destroy things ( $F(2, 54) = 3.98, p = .02$ ) than average children (Bonferroni  $p = .03$ ) and marginally more often than popular children ( $p = .08$ ). Average children were judged to get their way more often than popular children ( $F(2, 53) = 4.62, p = .01$ , Bonferroni,  $p = .02$ ).

Teachers also rated groups differently with regards to task-related behaviors. Popular children were rated as better able to work independently ( $F(2, 54) = 6.72, p = .002$ ) than average ( $p = .07$ ) and especially rejected children ( $p = .002$ ). Popular children were more task-oriented ( $F(2, 53) = 4.56, p = .02$ ), had better learning skills ( $F(2, 51) = 3.83, p = .03$ ), and were better able to concentrate ( $F(2, 52) = 3.38, p = .04$ ) than rejected children were (Bonferroni  $ps = .01, .03$ , and  $.05$ ). Girls were rated as better able to work independently ( $t(54.42) = 2.64, p = .007$ ), to concentrate ( $t(53) = 2.07, p = .04$ ), and to work on a task for a long time ( $t(53.24) = 2.46, p = .02$ ). Boys were more easily distracted ( $t(51.95) = -2.22, p = .03$ ) and more fidgety ( $t(54) = -1.96, p = .055$ ). Overall, the teacher ratings validate the SMS groups in this study.

### **3 Data collection procedures**

The goal of this study was to investigate relations between peer acceptance, subjective experience of self and others, and parent-child fantasy play interactions. In brief, the procedures for data collection were as follows. Children were selected based on SMS groups, as described above (Section 1.4). However, I will use continuous standardized ratings of peer acceptance. In this way, I will be better able to test interaction effects with gender (see Chapter 4, Section 1).

Subjective experience of self and others was assessed in individual interviews at the children's school. We made home visits to videotape parent-child interactions during free fantasy play. Parents filled out a number of questionnaires about themselves and their children (see Section 4). They received a booklet with questionnaires about the child after they had given their permission for participation. Next, we started visiting the children at school and contacting the parents to schedule home visits. We usually made the home visits after we had become familiar with the children at school. I will describe the procedures in more detail below.

**School visits** Two or three female experimenters visited each school. The interviewers first spent some time in the classrooms, in order to let the children become familiar with them. After this, the participating children were interviewed individually in a separate room in the children's school. Each of the four interviews took place on a different day. Because we wanted to encourage the children to feel at ease as much as possible, we tried to keep the same researcher with the same child in each session. If this was not possible, a maximum of two different interviewers tested the child (unless the child seemed very shy).

In the first session, we first talked a little bit with the children to make them feel comfortable. We then asked them to name their friends in school and outside of school (see Section 4.1). After this, we administered two subtests of a Dutch intelligence test (RAKIT, Revision Amsterdam Intelligence Test for Children; Bleichrodt, Drenth, Zaal, & Resing, 1984): *Vocabulary* and *Verbal Fluency*. This was done to control for potential effects of verbal competence on self-perception measures (cf. Verschueren, Marcoen, & Schoefs, 1996). The Vocabulary subtest consists of a list of words and a series of pictures grouped in fours. The experimenter reads from a list of words and asks the child to point at the picture to which that word belongs. This subtest can be considered a test of passive vocabulary. *Ideational Fluency* consists of five questions (e.g., "What can you put in your pocket?"). The child is asked to give as many answers as possible in 1 minute. Scores on both subtests are standardized in such a way that the mean is 15 and the standard deviation is 5. The mean standard score for Vocabulary in the present sample was 17.5 ( $SD = 4.8$ ) and for Ideational Fluency it was 12.9 ( $SD = 4.6$ ). There were no differences between SMS groups or boys and girls. Because the scores on the subtests were correlated ( $r(80) = .25$ ,  $p = .02$ ), their mean was computed to form a single measure of *Verbal Competence* ( $M = 15.2$ ,  $SD = 3.7$ ).

In the second session, interviews about self-perceptions were administered. We always started with Harter's *Pictorial Scale of*

*Perceived Competence and Social Acceptance* (PSPCSA, Harter & Pike, 1984). After this, we administered Cassidy's *Puppet Interview* (PI, Cassidy, 1988; Verschueren, Schoefs, & Marcoen, 1994). The rationale of this order was that children would find it easier to respond to the more structured PSPCSA. This was expected to make it easier for them to respond to the more unstructured PI. During the third and fourth sessions, we administered *Doll Story Completion Tasks* (DSCT, Bretherton, Oppenheim, & Prentiss, 1990; Cassidy, 1988; Verschueren & Marcoen, 1994). In this procedure, children were asked to complete story stems about emotionally charged situations with father and mother. We administered the father and mother stories in counterbalanced order. Both PI and DSCT were videotaped with a VHS-camera. We always introduced the PI and the DSCT in a playful way to make sure the children understood what we asked from them. The measures of subjective experience will be described in Section 6.

**Home visits** After we started visiting the children at school, we contacted the parents by telephone to schedule two home visits. Attempts were made to counterbalance the order of the recordings of mother-child and father-child interactions. However, most mothers were easier to schedule than the fathers were. Therefore, we recorded 64% of the mothers and 37.5% of fathers first. This was similar between SMS groups or genders.

Two experimenters<sup>3</sup> visited children and parents on a weekday or Saturday, usually in the afternoon. The children were always familiar with at least one of these experimenters. During the first visit, we asked the parents to give us the questionnaires about the child. We then handed them two identical sets of questionnaires, one for the mother and one for the father. These were collected at our second home visit, or the parents sent them in the mail (see Section 4).

To assess parent-child fantasy play interactions, we brought a set of toys that we put on the table in a standardized manner. There were two similar toy sets: one for the first visit and one for the second. The toys were chosen in such a way that they would be likely to elicit fantasy play and would be attractive for both boys and girls. In each set, there was a Duplo doll family, furniture, a car for the family, and building blocks. In addition, there was either a zoo or farm animals and either a policeman or fireman with appropriate vehicles. A Super-VHS camera was placed opposite the dyad at approximately 1.50 meters (5 feet) from the table. The camera was aimed at parent and child in such a way that their faces and upper bodies were visible. Parents and children were asked to play together for 15 minutes. The experimenters left the room

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<sup>3</sup> All but one of these were female.

so that they would not disturb the parent and child. After 10 minutes, one of the experimenters came back to check the workings of the camera. At that point, the experimenter said: "I am just coming in to check the camera. It is not over yet. You have 5 more minutes." After 5 minutes, both experimenters came back into the room and told parent and child that they could stop playing.

## 4 Parent Questionnaires

The parents were asked to fill out a series of questionnaires about their child's health, social network, temperament, and emotional development. In addition, we asked each parent to report on their own social and emotional functioning. Most of these questionnaires were translated into Dutch from questionnaires used by Ross Parke and colleagues in the University of California at Riverside (UCR) Social Development Project (e.g., Isley, O'Neil, & Parke, 1996; Parke et al., 1997). In this section, results from these questionnaires will be presented to get a better view of characteristics of the sample. SMS groups were compared with one-way ANOVAs and post-hoc Bonferroni comparisons.

### 4.1 Child characteristics

Seventy-eight families (98%) returned the child questionnaires. The mothers (96%) most often filled these out. Children did not differ with regard to health problems (e.g., asthma, eczema), emotional or behavioral problems (e.g., problems with peers), and life events in the past year (e.g., death of a relative, relocation, hospital visits). In addition, no differences were found on the 45-item *depression* subscale of the Parent Inventory of Children (PIC, UCR Social Development Project).

Parents rated children's *temperament* on a Dutch version of the Revised Dimensions of Temperament Survey (DOTS-R, Koot, 1991; Lerner, Palermo, Spiro III, & Nesselroade, 1982). The DOTS measures the following dimensions of temperament: activity level (general and during sleep), approach/withdrawal, flexibility, mood, rhythmicity (sleep, eating, and daily habits), and task orientation. The only difference between status groups was that rejected children tended to be more active than popular ones ( $F(2,75) = 2.99, p = .06$ , Bonferroni,  $p = .05$ ). This is consistent with De Roos (1995). She found that preschool "difficult" temperament (high anger and activity scores) predicted kindergarten antisocial and withdrawn behaviors, both correlates of rejection (see Chapter 1, Section 1.6a). There were no gender differences.



The parents as well as the children themselves rated *number of friends* of the children. As expected, parents reported that popular children had more playmates ( $M = 6.77$ ,  $SD = 2.22$ ) than rejected children ( $M = 5.09$ ,  $SD = 2.65$ ,  $F(2, 73) = 3.71$ ,  $p = .03$ , Bonferroni:  $p = .04$ ) in the Social Network Inventory (UCR Social Development Project). The average group was not different from both extreme groups ( $M = 5.50$ ,  $SD = 2.19$ ). Self-reports by the children confirmed this finding. Popular children tended to mention more friends ( $M = 5.77$ ,  $SD = 3.19$ ) than rejected children ( $M = 4.00$ ,  $SD = 2.35$ ;  $F(2, 77) = 2.87$ ,  $p = .06$ ) and the average group fell in between ( $M = 4.67$ ,  $SD = 2.35$ ). In addition, popular children and parents more often agreed on who the child's friends or playmates were ( $M = 2.67$ ,  $SD = 1.32$ ) than average ( $M = 1.62$ ,  $SD = 1.58$ , Bonferroni  $p = .02$ ) and rejected children and parents did ( $M = 1.39$ ,  $SD = 1.27$ , Bonferroni  $p = .005$ ),  $F(2, 76) = 6.53$ ,  $p = .002$ . This finding confirms that other raters tend to agree more with popular than with rejected children's self-reports (Newcomb, Bukowski, & Pattee, 1993). Number of friends did not differ between boys and girls.

In sum, few differences between popular, average, and rejected children arose. However, those that were found were all in the expected direction. Parents reported no differences in mental or physical health and in life events. The only temperament difference between status groups was that rejected children tended to have a higher activity level than popular children. Further, as expected, popular children had more friends or playmates than rejected children and they agreed more with their parents about who these friends were.

#### **4.2 Characteristics of Parents**

Ninety percent of mothers ( $n = 72$ ) and 95% of the fathers ( $n = 70$ ) returned their questionnaires. The others were lost in the mail or not returned. Below, parents' responses are described and compared across SMS (one-way ANOVAs) and gender ( $t$ -tests).

**Activities and play** Children typically spent more time with their mothers than with their fathers. Most mothers spent at least 4 hours with their child on a normal weekday and in the weekend (76% and 93% of mothers). Most fathers (94%) spent no more than 3 hours with their child on a regular weekday. Thirty-six percent of fathers spent only 1 hour or less, 34% spent 2 hours and 24% 3 hours a day. In the weekend, 86% of the fathers spent 4 hours or more with their child, similar to the mothers. Parents also reported on the different types of activities they engaged in with their children. The time spent in play (mainly fantasy play and physical play) is of most interest here. Of both mothers and fathers, 83% indicated that they played with their children. Mothers spent most time playing games (89%). Fathers spent

most time in physical play (79%). Fathers played more physical play ( $t(67) = 2.79, p = .007$ ) and less fantasy play ( $t(67) = -3.48, p = .001$ ) with their children than mothers. Mothers played more physical play ( $t(67) = -2.80, p = .007$ ) with boys than girls, and fathers engaged in more fantasy play with daughters ( $t(67.23) = 3.04, p = .003$ ) than with sons. These gender differences are consistent with previous research that found that males are more engaged in physical play and females more in pretend play (e.g., MacDonald & Parke, 1984). These patterns did not differ across SMS groups.

**Parental Beliefs** Almost all mothers (98%) and fathers (91%) indicated that they considered self-esteem to be most important for their child. Most mothers (78%) and fathers (66%) deemed friendships important as well. More fathers (51%) than mothers (31%) also thought success in school to be important.

**Health, life events, and social support** On an adapted version of the BSS (Jansma & Klugkist, 1996), mothers reported no differences across status groups in health problems, hospitalization, and threatening life events (e.g., burglary, car accident) in the past year. More fathers of average children than expected by chance had experienced health problems in the past ( $\chi^2(2) = 6.85, p = .03$ ). For 10% of all the fathers, these health problems were still present. Fathers of children who were popular, average or rejected were not different in experiences of hospitalization or threatening events during the past year.

Most mothers indicated high levels of social support (on a 4-point scale). Mean support scores were 3.39 ( $SD = .38$ ) from the partner, 2.26 ( $SD = .43$ ) from relatives, and 3.55 ( $SD = .33$ ) from friends. Fathers reported high levels of support from their partner ( $M = 3.32, SD = .39$ ), their family ( $M = 3.12, SD = .51$ ), and their friends ( $M = 3.40, SD = .38$ ). There was a tendency for fathers of popular children to feel more supported by their partners ( $M = 3.45$ ) than fathers of rejected children ( $M = 3.21$ ),  $F(2, 67) = 2.78, p = .07$  (Bonferroni  $p = .08$ ). Most mothers (72%) and fathers (57%) had three friends or more; they saw them several times per month (92% of mothers, 65% of fathers).

**Loneliness** Parents completed the UCLA Loneliness Questionnaire (UCR Social Development Project), which consists of 20 items that probe for feelings of isolation from other people versus feeling connected. Most mothers reported low levels of loneliness ( $M = 1.69, SD = .35$ ) on a 4-point scale. There were no differences between mothers of children that varied in SMS or gender. The mean score for fathers' loneliness was also quite low (1.81 on a 4-point scale), but a significant difference between fathers was found ( $F(2, 66) = 3.37, p = .04$ ). Fathers of average children felt more lonely ( $M = 2.00, SD = .58$ )

than fathers of popular children did ( $M = 1.64$ ,  $SD = .34$ , Bonferroni  $p = .04$ ). Fathers of rejected children fell in between ( $M = 1.87$ ,  $SD = .53$ ).

In sum, mothers spent more time with their children than fathers during weekdays. Most mothers and fathers played with their children. Fathers spent more time engaged in physical play and less in fantasy play than mothers did. Mothers played more physical play with sons than they did with daughters. Fathers played more fantasy play with daughters than sons. Both parents considered self-esteem and friendships as important in their children's lives. Fathers thought that academic development was more important than mothers did. The fathers of average status children were more likely to suffer some health problems (than expected by chance). They were also more likely to feel lonely than fathers of popular children were. Fathers of popular children tended to feel more supported by their partners than fathers of rejected children did.

## 5. Parent-child interaction behaviors

As described above, 80 mother-child dyads and 74 father-child dyads were videorecorded at home. The recordings were coded with a computerized system (The Observer 3.0 for Windows, Noldus Information Technology, 1997) from the 7<sup>th</sup> until the 14<sup>th</sup> minute. It was thought that after several minutes parent and child would be more used to the situation. During the presence of the experimenter, who came in to check the workings of the camera, parent and child interaction behaviors were not coded. In this section, I will first describe the coding system. Next, I will give some descriptive data pertaining to the parent-child interactions. Relations with child gender, age, and temperament will be explored.

### 5.1 Coding system

The coding system (De Koeper, 1998) aimed at assessing four types of behaviors: mutual responsiveness, expressed emotions, control behaviors, and play behaviors. Some of these behaviors were coded real time; others were coded for every 10-second episode. The hypotheses were tested with observation scores for every 10-second episode (see Chapters 4 and 6). Below, the observation categories will be described first. Second, I will describe how they were combined into dyadic categories.

**Mutual responsiveness:** Every 10 seconds, one of three mutually exclusive codes was given for the mutual responsiveness of the dyad during the largest part of the episode (i.e., for more than 5 seconds). This coding system was developed by the author of this dissertation,

based on Black and Logan (1995) and Rocissano and colleagues' system of "dyadic synchrony" (Rocissano, Slade, & Lynch, 1987; Rocissano & Yatchmink, 1984). The following codes were used:

1. *Coherent*: parent and child exchanged at least three verbal turns that were relevant for the partner and they shared the same nonverbal focus of attention.
2. *Partially coherent*: a) parent and child shared three or more verbal turns, while not sharing their (nonverbal) focus of attention; b) they shared their nonverbal focus but only two verbal turns; c) they shared their nonverbal focus but did not talk at all; d) one of the partners talked about the shared focus of attention, while the other was only acting.
3. *Incoherent*: a) verbal turns of one interaction partner were irrelevant with respect to the previous utterances of the other partner; b) one partner had a verbal turn that was clearly directed at the other but the other did not react; c) they shared two verbal turns but did not share their nonverbal attentional focus; d) they were engaged in separate activities.

**Reliability** Two research assistants, blind to children's SMS, coded mutual responsiveness. One of the assistants coded the mother-child interactions, the other the father-child interactions. Both were trained until they reached 80% agreement with the author of this dissertation. Then they double coded a randomly selected 15% percent of the tapes. The codes of every 10-second interval were compared. Mean percentage agreements were 81% for both coders (ranges: 70-95% and 71-88%). Cohen's Kappa had a mean of .65 (range .47-.91) for the first coder and .64 (range .48-.78) for the second.

**Emotional expressions:** The coding of emotional expressions was based on Cassidy, Parke, Butkovsky, and Braungart (1992) and MacDonald and Parke (1984). Positive and negative expressions occurred with a duration of at least 1 second were coded real time for parent and child separately. We attempted to code positive or negative tone of voice, but this could not be done reliably. Therefore, codes were mainly based on facial expressions. After attaining reliability, a trained research assistant first coded the expressions of the child for the entire 7 minutes, and then those of the parent. She coded all the mother-child interactions first, and then all the father-child interactions. One of five codes could be given:

1. *Very positive*: laughter, laughing in a clearly audible way, or touching the other in a tender way (which happened very infrequently).

2. *Positive*: smiling, laughing softly, and singing.
3. *Neutral*: no sign of positive or negative expressions.
4. *Negative*: angry or frustrated facial expression (frowning), taking something from the other in a rough way, or a clearly whining voice.
5. *Very negative*: clearly angry (throwing with things, calling out loud, putting something on the table in a very rough way), sad (crying, cryface), or afraid (frightened expression).

Negative behaviors were coded very infrequently and were not analyzed. Very positive emotions also occurred infrequently. It was decided to use a single “positive” category that consisted of positive and very positive behaviors (mainly smiling and laughter).

**Reliability** Fifteen percent of the interactions were double coded by two trained research assistants. The codes of both coders were compared per 10-second episode. If both coders had coded a positive or very positive emotion that lasted at least 2 seconds, it was coded as an agreement. If one coder coded a (very) positive emotion in an episode and the other did not, it was coded as a disagreement. The average agreement was 92% for children's expressions (range 81-100%) and 96% for parents' expressions (range 88-100%). Kappa values were .75 for children (range .40-1.0) and .87 for parents (range .72-1.0).

**Control behaviors:** Control behaviors were coded every 10 seconds according to a system developed by Colwell, Mize, and Lindsey (1998). In every dyad, the child was coded first and the parent second by a trained research assistant. There were 5 codes that reflect increasingly more control (i.e., imply increasingly that the other has to do or is not allowed to do something in order to be accepted by the one who controls):

1. *No conversation*: during the entire 10-second interval the parent or child does not direct any communicative act to the other and does not react to the other.
2. *Social exchange*: the individual talks or interacts nonverbally with the partner. There is no attempt to control the other's behavior.
3. *Gentle control*: the individual attempts to influence the other's behavior but does not assert power. He or she can make a suggestion or a polite (but explicit) request to direct the attention of the other or to limit the other's behavior but he or she does not use a demand or prohibition. There is no intention to make the other do (or not do) something, merely a suggestion that the other may do or not do something. The other has freedom of choice. Facial

expression and tone of voice should be neutral or positive. For instance, “Maybe you could be the mother and I could be the child.”

4. *Firm control*: the individual uses a verbal demand or a physical intervention to direct the partner's attention or to limit the other's behavior, but remains neutral or positive in his or her facial expression and vocal intonation. The difference with category 3 is that the one who controls clearly wants the other to do or not do something. For instance, “Okay, now put this one here.”
5. *Negative control*: the individual uses a direct demand or physical intervention to influence the other. This is accompanied by a negative intonation, facial expression, or nonverbal abrasiveness. A distinctive feature of this category is that the control is demanding and judgmental: the other is expected to do or not do something in order to be accepted by the controlling individual. For instance, “Mom, put that *down!*” (angry voice, frown on the face); the child puts the toy ‘TV’ in the ‘house,’ and father says, “Is the TV *that* close to the table (in disbelief). That's impossible, isn't it. You can't walk around it in that way, can you? Look behind you. Things aren't so close together in our house, are they?”

**Reliability** A research assistant, blind to the children's SMS, was trained until she reached at least 80% agreement with the author of this dissertation. Interrater reliability assessed on 15% of the mother-and father-child interactions. Percentage agreements for control behaviors of the child ranged from 74-93% (mean agreement 87%). For control behaviors of the parent, agreement ranged from 74-95% (mean 86%). Mean Cohen's kappa's were .72 (range .44-.83) for children, and .70 (range .50-.89) for parents. After having established reliability, the research assistant first coded all the mother-child interactions, and then all the father-child interactions, in order to diminish potential bias.

**Play behaviors:** Play behaviors were coded each time they occurred with a duration of least 3 seconds, for every individual separately. The coding system was based on De Lorimier, Doyle, and Tessier (1995). One of four codes could be given:

1. *Fantasy play*: objects, characteristics of the environment, or identity are treated in a non-literal way. This is mainly indicated in a verbal way. For instance, pretending that an object is something else or that there are objects or situations not actually there. Playing

imaginary roles is also included in this category.<sup>4</sup> In a pretend conversation between two doll figures, both the verbal fantasy turns and the listening turns were coded fantasy play.

2. *Other Play*: all play that is not pretend play. Most behaviors in this category are nonverbal, but they can also be verbal. Characteristics of play are that it is intrinsically motivated, autotelic (the acting is a goal in itself), and that the individual is engaged in the action. In addition, play actions are guided by the question “What can I do with this object?” (Rubin, Fein, & Vandenberg, 1983). Examples of other play are construction play (e.g., building blocks), manipulative play (e.g., making a doll jump up and down, just for pleasure), and rhymes, songs, or games.
3. *No Play*: All actions that did not fit into any of the play categories are coded *as no play*. No play was also coded during exploration, defined as utterances or actions guided by the question, “What can this object do?” (Rubin et al., 1983) as well as when the individual was merely touching the toys without being engaged in the action or showing pleasure.

**Reliability** A research assistant was trained to reach 80% agreement. Interrater reliability was calculated on a randomly selected 20% of the tapes. Every 10-second interval time point (i.e., second 10, 20, 30, etc.) was compared. When at that point the same behavior was coded, this was taken as an agreement. Differences that lasted less than 5 seconds were not seen as a disagreement. Percentage agreements were 87% for the child’s play behaviors (range 71-100%). For the parent’s play behaviors, the mean agreement was 90% (range 71-100%). Cohen's kappa's were .77 for children (range .52-1.00), and .82 for parents (range .57-1.00).

## 5.2 Dyadic interaction codes

Combined categories were computed for every 10-second interval. The length of the observations varied somewhat between dyads, because the experimenter (who came in to check the workings of the camera) disrupted the parent-child interactions. Therefore, I calculated *proportion measures* for every observation category by dividing the total number of 10-second episodes, in which a certain behavior occurred,

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<sup>4</sup> Since the toy dolls were very clearly depicted as a family (i.e., father, mother, boy, girl, grandfather, grandmother), merely ascribing these roles to the dolls was not considered fantasy play.

by the total number of episodes that were coded.<sup>5</sup> Then, dyadic codes were created. Combinations were made within the four behavioral categories in such a way that they reflected the dimensions of connectedness and autonomy. In addition, two codes were created that were a combination of several types of behavior. Both will be described in this section.

**Combinations within categories:** Dyadic codes were created within each category described above. This was done in the following ways:

**Mutual responsiveness:** this was already coded with the dyad as unit of observation. The **coherent** code (sharing the verbal and nonverbal focus of attention) was seen as reflecting connectedness between parent and child. This code was used for further analysis.

**Emotional expressions:** every episode in which both parent and child showed a positive emotional expression for at least 2 seconds was called an episode of **shared positive emotions**. This measure was seen as an indication of connectedness between parent and child.

**Control behaviors:** it was assumed that the balance of control between parent and child would be meaningful, because this would say something about how control attempts of parent and child relate to each other. This could be seen as an index of each individual's autonomy, and of the respect each individual had for the autonomy of the other. However, the total amount of control, and the positive or negative emotional tone of this control were also considered important. The use of coercive control has been found to be adversely related to children's competence, while firm control has been found to be beneficiary, at least when combined with parental warmth (Baumrind, 1989). Moreover, relations have been found between peer rejection and negative or coercive control or a high amount of overall control (e.g., Black & Logan, 1995; Putallaz, 1987). For these reasons, it was decided to create separate dyadic measures of the amount of non-negative and negative control.

A measure of **total negative control** was formed by calculating the proportions of episodes in which either parent or child, or both, used negative control. A measure called **total non-negative control** reflected the sum of gentle and firm control of parent and child together. That is, the proportions of gentle and firm control were first summed for each individual and then these were summed. Finally, the **balance of control** between parent and child was calculated by dividing the total

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<sup>5</sup> For example, if the experimenter had been present for one 10-second episode, the total number of coded episodes was  $42-1 = 41$ . If positive emotions had been coded during 5 episodes, the proportion of positive emotions was  $5/41 = .12$ .



non-negative control of the child by the total number of non-negative control behaviors of parent and child. Values below .50 reflect relatively less control of the child in comparison to the parent. Values above .50 reflect relatively more control of the child (e.g., a balance of control of .40 means that the child exerted 40% and the parent 60% of the control attempts).

**Play behaviors:** when both parent and child were engaged in pretend play for at least 3 seconds, an episode was defined as *both fantasy play*. *Both other play* was defined as an episode in which parent and child played other play for at least 5 seconds.<sup>6</sup> A measure of **dyadic play engagement** was formed, indicating the proportion of episodes in which both parent and child were engaged in either fantasy play or other play.

**Combinations across categories:** I combined the separate categories into two additional codes. The first was meant to reflect horizontality or balance in the parent-child interactions (Russell et al., 1998). The second reflected the extent to which parent and child shared fantasy play.

**Balance:** this measure was meant to indicate the extent to which the interaction could be seen as horizontal, reflecting autonomy-within-connectedness. During an episode of balance: a) the dyad was mutually responsive; b) there was a balance in control behaviors and neither partner showed negative control (i.e., one member of the dyad may show social exchange and the other gentle control, or one gentle and the other firm control); c) parent and child are both actively engaged in either fantasy play or other play. For instance:

Father and child are trying to put the whole doll family in the car but it doesn't fit:

Fa: "Oh, no! We've got two more [dolls]!"

Ch: (looks at father, smiling)

Fa: "What are we going to do with them?"  
(reaches out to help child)

Ch: "How do I know?" (laughing)

Fa: "We can't leave them behind, you know.  
We *are* taking them with us!"

Child puts dolls on top, while father keeps the car steady.

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<sup>6</sup> Since other play was usually nonverbal, at least half of the episode had to consist of such play in order to code it an "other play" episode. The criterion duration for fantasy play was shorter (3 seconds) than for other play (5 seconds), because of its verbal nature.

**Shared fantasy play:** an episode that is mutually responsive, in which both parent and child played fantasy play for at least 3 seconds. This means that they were sharing at least three verbal turns in a fantasy play mode.

### 5.3 Descriptive data

In this section, descriptive data will be presented of parent-child interaction behaviors. Table 3 gives an overview of the means, standard deviations, and ranges of dyadic mother-child interaction and father-child interaction behaviors. Relations with potential confounding variables will be explored. Differences between boys and girls will be tested in *t*-test analyses. Correlations will be computed between with age, verbal competence, and temperament scales. Further analyses are presented in Chapters 4 and 6.

Table 3

Means, standard deviations, and range of interaction behaviors

<b>Dyadic Interaction behaviors</b>	<b>Mother-Child</b>		<b>Father-Child</b>	
	mean ( <i>SD</i> )	range	mean ( <i>SD</i> )	range
Mutual responsiveness	.33 (.13)	.07 - .76	.35 (.14)	.05 - .68
Shared positive	.09 (.10)	.00 - .41	.08 (.11)	.00 - .51
Total non-negative control	.61 (.17)	.24-1.15	.67 (.17)	.24-1.07
Total negative control	.02 (.04)	.00 - .20	.02 (.04)	.00 - .15
Balance of control	.43 (.15)	.14 - .85	.40 (.14)	.06 - .71
Dyadic play engagement	.47 (.20)	.10 - .93	.44 (.17)	.10 - .85
Shared fantasy play	.23 (.17)	.00 - .78	.20 (.15)	.00 - .66
Balance	.11 (.09)	.00 - .39	.10 (.07)	.00 - .24

**Length of observations** The mean number of episodes was 41 for both mother-child (*SD* = .42) and father-child (*SD* = .68) interactions. SMS groups or boys and girls did not differ.

**Order of recording** Sixty-four percent of the mothers and 37.5% of the fathers were the first parent to be observed. *T*-tests showed that father-child interactions were less mutually responsive when fathers were recorded first ( $t(72) = 2.67, p = .009; M_1 = .30, M_2 = .38$ ). Consequently, these interactions between fathers and children were also less

balanced ( $t(72) = 1.99, p = .05; M_1 = .07, M_2 = .11$ ). In addition, a lower proportion of negative father or child control was observed ( $t(71.75) = 2.89, p = .005; M_1 = .01, M_2 = .03$ ) when fathers were observed first. This suggests that fathers might have felt somewhat less at ease when they were the first parent to be filmed. There is at least one study that suggests that fathers may be more influenced by being observed (Russell, Russell, & Midwinter, 1992).

**Between mother-child and father-child interactions** Total control between father and child was higher than between mother and child ( $t(73) = -2.25, p = .03$ , see Table 3).<sup>7</sup> Correlational analyses between mother-child and father-child interaction behaviors showed that dyadic play engagement ( $r(74) = .34, p = .003$ ) and shared fantasy play with mother and father were correlated ( $r(74) = .27, p = .02$ ). When mothers were more engaged in play with their children, fathers were too.

**Within mother-child and father-child interactions** In the **mother-child** interactions, mutual responsiveness was correlated with shared positive emotions ( $r(80) = .33, p = .003$ ) and total non-negative control ( $r(80) = .35, p = .001$ ). Total control was also related to dyadic play engagement ( $r(80) = .29, p = .009$ ). In sum, when mother and child shared their focus of attention more, they were likely to share more smiling and laughter and to exert more control. More control was used during play. For girls, mutual responsiveness with mother was also related to dyadic play engagement ( $r(33) = .38, p = .02$ ). In more mutually responsive interactions, mothers and daughters were more involved in play together. This was not the case for boys ( $r(43) = -.14, ns$ , Fisher's  $z = 2.35, p = .02$ ).

There were no significant correlations between different **father-child** interaction behaviors. For father-daughter interactions, however, mutual responsiveness was negatively correlated to shared positive emotions ( $r(33) = -.40, p = .02$ ). On the contrary, father-son mutual responsiveness was positively correlated with shared positive emotions ( $r(41) = .32, p = .04$ ). The difference between these correlations was significant (Fisher's  $z = 3.13, p < .003$ ). Thus, fathers and daughters shared *less* but fathers and sons *more* positive emotions when they were more mutually responsive. Possibly, mutual responsiveness was mainly verbal for girls and their fathers.

**Confounding variables** Shared positive emotions between mother and child was correlated with children's age ( $r(80) = .27, p = .01$ ). Older children shared more positive expressions with their mothers. In

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<sup>7</sup> Paired samples  $t$ -tests were used, because the child was part of both mother- and father-child dyads.

addition, there were some correlations between temperamental characteristics and parent-child behaviors. Activity level was correlated with mother-child mutual responsiveness ( $r(77) = -.29, p = .01$ ) and balance ( $r(77) = -.25, p = .03$ ), and with father-child non-negative control ( $r(71) = .28, p = .02$ ). Children who were more active experienced less mutual responsiveness and (relatedly) balance with mothers. They experienced more control in the interaction with father. Total non-negative control of father and child was also correlated with task-orientation ( $r(71) = -.46, p = .000$ ). More control was exerted in father-child interactions when children were less task-oriented. Approach-withdrawal was related to balance between mother and child ( $r(77) = -.28, p = .01$ ) and between father and child ( $r(71) = .24, p = .04$ ) and to father-child shared fantasy play ( $r(71) = .24, p = .045$ ). Children who tended to withdraw from novelty experienced less balance with mother but more with father. They also shared more fantasy play with father. There were no relations between the parent-child variables and the child's rhythmicity, mood, and flexibility-rigidity. There were no significant child gender differences.

## **6 Subjective experience of self and others**

In this section, the assessment procedures of subjective experience will be described. For each instrument, descriptive data will be given. I will first describe the doll story completion procedure (Verschueren & Marcoen, 1994), then the Puppet Interview (Cassidy, 1988), and finally the Pictorial Scale of Perceived Competence and Social Acceptance (Harter & Pike, 1984). Then, I will also describe interrelations between these measures, as found in the present study.

### **6.1 Doll Story Completion Test (DSCT)**

Story completion procedures have been developed within attachment research in order to assess young children's perceptions of their attachment relationships (Bretherton, Oppenheim, & Prentiss, 1990; Bretherton, Ridgeway, & Cassidy, 1990; Cassidy, 1988). In such procedures, the experimenter plays out the beginning of a story about an attachment-related theme, using appropriate dolls and props. After this, the child is asked to complete the story ("What happens next?"). Probes are used to elicit child responses. Usually, these probes are quite unstructured and merely intended to encourage the child to elaborate (e.g., the child's response is merely repeated).

The DSCT in the present study was based on the one used by Verschueren et al. (1996), who adapted it from Cassidy's doll play procedure (Cassidy, 1988; Verschueren & Marcoen, 1994). An

important difference with most other story completion tasks is that in the procedures delineated by Verschueren and Marcoen, the same story stems are presented for the child to play stories about the relationship with mother and with father. Most other researchers use a complete doll family (see, for instance, Bretherton, Ridgeway, & Cassidy, 1990). By playing stories about only one parent at a time, it becomes possible to assess the quality of the mother-child and father-child relationships separately. In stories about mother-child relationships, a child doll is paired only with a mother doll and in the father-child stories only with a father doll. Different than Verschueren and Marcoen did, we named the child doll by the child's own name. This was done because we assumed this would heighten the chance of identification with the doll. However, in order to prevent the child from feeling too self-conscious, we were careful to never directly address the child as if he or she were the doll.<sup>8</sup> The other guidelines for using the story completion procedure were similar to those of Verschueren and Marcoen (1994).

**The story stems** Three story stems were used. The first story was called "Monster in the bedroom" (Bretherton, Ridgeway, & Cassidy, 1990; Verschueren et al., 1996). This story probes for parental responsiveness to the child's fear. At the beginning of the story, the parent puts the child to bed and says, "Good night." Then, he or she goes 'downstairs,' and sits on the couch. The experimenter says, "[Name child] goes to sleep. She is all alone in the bedroom. It is very dark in the room. All of a sudden, she wakes up and shouts, 'There's a monster in my bedroom. There's a monster in my bedroom.' What happens next?" The child is then encouraged to finish the story. The second story is about a child who comes home from school and has quarreled with a peer at school (Verschueren & Marcoen, 1994). The mother doll sits on the couch. The experimenter has the child walk in the 'room,' and say (in a crying voice), "Mommy, mommy, I quarreled with another child at school today." Then the child is asked to complete the story. The quarrel story is about parental responsiveness to signals of child distress. In the third story, the child doll comes home from school with a 'present.' He or she says, "Daddy, I made a present for you at school." The theme of this story is parental responsiveness to a positive social signal of the child (Cassidy, 1988). Cassidy found a test-retest correlation of .63 ( $p = .001$ ) for the "present" story, over an interval of one month. The stories were presented in counterbalanced order.

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<sup>8</sup> For instance, we did not ask, "What would *you* do next?" but always "What would [name of child] do?"

**Coding** The stories were first transcribed from video. The protocols were then coded according to the detailed guidelines by Verschueren and Marcoen (1994). The protocols were encoded with the child's identification code and coded independently from each other in order to reduce coder bias (cf. Cassidy, 1988 and Verschueren et al., 1996 for similar procedures). They were first rated on a 5-point scale and then categorized. Higher ratings reflect more security. If a story was completed with little hesitation, the parent was portrayed as available and responsive to the child's signals, and parent-child interactions were positive and open, it received a rating of 4 or 5. Such stories were classified as "secure." Two types of insecure stories were distinguished. When the child was reluctant to complete the story or respond to the experimenter's probes (e.g., did not want to play, said "I don't know"), the story was categorized as "avoidant" and received a rating of 1 or 2. In such cases, the child enacted no or minimal parent-child interactions. When negative, hostile interactions were portrayed or the story contained bizarre elements, it was coded as "bizarre/ambivalent" and also rated 1 or 2. Stories that were neither clearly secure nor insecure received a rating of 3 and were categorized as "secure/insecure." In the present study, the rating data will be used for further analyses (see Chapter 6). Every child received a mean rating for the three stories about mother and a mean rating for the stories about father. Classifications (secure, avoidant, or bizarre/ambivalent) were based on the categories of the separate stories.

**Missing data** Two girls (1 average, 1 rejected) refused to do the DSCT. Both children had also refused the Puppet Interview. They seemed apprehensive of the open-ended nature of these instruments. Due to video recording problems, we could not analyze the mother stories for 4 additional (popular) children (2 girls and 2 boys) and the father stories for 5 additional children (2 popular, 2 average, and 1 rejected, all boys).

**Reliability** A research assistant was trained to obtain a minimum of 80% agreement on the story classifications with the author of this dissertation. Next, 25% of the stories were double coded. Correlations for the mother-child stories were .70 for "quarrel," .90 for "present," and .78 for "monster." The mean correlation for mother stories was .79. Cohen's Kappa was calculated for the 4 categories (secure, secure/insecure, avoidant, and bizarre/negative). The mean Kappa for mother stories was .69. Kappas ranged from .65 (quarrel) to .75 (present). The ratings of the father stories were correlated .75 (quarrel), .87 (present), and .84 (monster). The mean correlation was .82 for the three father stories. Kappas ranged from .61 (present) to .75 (quarrel; mean Kappa = .69).

**Relations between attachment stories** Mother-child “present” and “monster” ratings were significantly correlated ( $r(74) = .39, p = .001$ ) and so were “present” and “quarrel” ( $r(74) = .35, p = .002$ ). Similarly, for the father stories, “present” and “monster” ( $r(73) = .26, p = .03$ ) and “present” and “quarrel” ( $r(73) = .41, p = .001$ ) were correlated. No significant relations were found between the “monster” and “quarrel” stories (responsiveness to child's fear and to child's distress). The internal consistency (Cronbach's alpha) for the 3 stories about mother was .52 and for the stories about father .54.<sup>9</sup>

**Order of assessment of Stories about Mother and Father** Stories about the relationship with mother and with father were assessed with a mean interval of one week (7.67 days,  $SD = 7.24$ ). The mean intertest interval was not related to the mean security scores of stories about mother or father. For 60 percent of the children, stories about mothers were assessed first. Chi-square analyses showed no differences in mother-first or father-first between the status groups or between boys and girls. Furthermore,  $t$ -tests revealed no differences between security scores for stories assessed first or second.

**Descriptive data** Table 4 gives an overview of means and standard deviations of the security ratings. Ratings in our study were lower than those in Verschueren et al.'s studies were. In Verschueren & Marcoen (1999) the mean score, both for mother-child and father-child stories was 2.77. Our average mother-child security scores were .50 scale point lower than Verschueren et al.'s (one-sample  $t(73) = -5.38, p = .000$ ), and our father-child scores were .45 lower (one-sample  $t(72) = -4.83, p = .000$ ).

**Confounding variables** Girls were found to display more security in the mother-child attachment stories ( $t(54.28)^{10} = 2.43, p = .01$ ). There also was a trend that girls scored higher on the father-child stories ( $t(63.00) = 1.74, p = .09$ ). These findings are in accordance with Verschueren et al. (1996), who also found that girls represented their attachment relationships as more secure ( $M = 3.10$  for girls,  $M = 2.60$  for boys). There were also some relations with temperament. Higher security scores with mother were related to lower regularity in the child ( $r(72) = -.25, p = .03$ ). Children who presented the relationship with mother as more secure had less regular daily habits. More security with father was positively correlated with approach-withdrawal ( $r(71) = .27, p = .03$ ). Children who were more secure with father were more inclined to approach novel people and situations than to withdraw from them.

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<sup>9</sup> The "present" story contributed most in the mother (alpha = .05 with this item deleted), and father-stories (alpha = .28 with this item deleted).

<sup>10</sup>This  $t$ -value reflects a significant difference in variance between boys and girls.

No significant correlations were found between story ratings and child age or Verbal Competence.

Table 4

Descriptive data of the Story Completion Method

Story Completion Tasks		Mean (SD)	Range
<b>Mother stories</b>	<i>Girls</i> (n = 33)	2.53 (.91)	1 - 4
	<i>Boys</i> (n = 41)	2.07 (.62)	1 - 3
	<b>Total (n =74)</b>	<b>2.28 (.79)</b>	<b>1 - 4</b>
<b>Father stories</b>	<i>Girls</i> (n = 35)	2.49 (.90)	1 - 4.3
	<i>Boys</i> (n = 38)	2.16 (.68)	1.3 - 3.3
	<b>Total (n =73)</b>	<b>2.32 (.80)</b>	<b>1 - 4.3</b>

**Categories** When at least two of the three stories were coded as secure, avoidant, or bizarre/negative, the total classification was this respective category. When one story was secure, one secure/insecure, and one insecure, the child's attachment representation was classified as "secure/insecure." When one story was secure, one avoidant, and one bizarre/negative, the classification was bizarre/negative. The presence of bizarre or negative events in any of the stories was regarded as least secure because it has been associated with the disorganized attachment classification (Cassidy, 1988).

In Table 5, frequencies and percentages of the story completion categories are displayed. Congruent with the low scores on the rating scales a high percentage of stories were categorized as insecure. With mother, 16% of the children were classified as secure, 18% as secure/insecure, 46% as avoidant and 20% as bizarre/negative. With father, 18% were categorized secure, 11% secure/insecure, 52% avoidant and 19% bizarre/negative. A chi-square analysis of mother-child attachment categories x gender showed significant differences in cell distributions ( $\chi^2$  (3) = 9.14,  $p$  = .03). More girls than boys were categorized as secure and more boys were coded as avoidant or bizarre/negative. No differences between the genders were found in the distribution of attachment classification with father.



Table 5

Frequency distributions across attachment story categories

<b>Mother-child</b>	Girls (n = 33)	Boys (n = 41)	Total (n = 74)	$\chi^2$	p
Secure	9 (27%)	3 (7%)	12 (16%)	9.14	.03
Secure/Insecure	8 (24%)	5 (12%)	13 (18%)		
Avoidant	12 (36%)	22 (54%)	34 (46%)		
Bizarre/Negative	4 (12%)	11 (27%)	15 (20%)		
<b>Father-child</b>	Girls (n = 35)	Boys (n = 38)	Total (n = 73)	$\chi^2$	p
Secure	8 (23%)	5 (13%)	13 (18%)	2.64	ns
Secure/Insecure	5 (14%)	3 (8%)	8 (11%)		
Avoidant	17 (49%)	21 (55%)	38 (52%)		
Bizarre/Negative	5 (14%)	9 (24%)	14 (19%)		

The percentage of secure children in the present study is much lower than in previous studies (44-53% secure; Verschueren et al., 1996; Verschueren & Marcoen, 1999). When the secure and secure/insecure categories were summed, 34% of the children were secure with mother and 29% with father. Percentages of avoidant children (46% with mother and 52% with father) were much higher than the 20-30% found in Verschueren et al.'s studies (1996; Verschueren & Marcoen, 1999). A chi-square comparison between our distributions of mother-child and father-child attachment categories and those found by Verschueren and Marcoen (1999) were highly significant (mother-child:  $\chi^2 = 14.14$ ,  $p = .001$ ; father-child:  $\chi^2 = 34.85$ ,  $p = .000$ ). These low percentages are mainly due to the boys' categorizations. Only 19% of boys were found to be secure or secure/insecure with mother and 21% as secure or secure/insecure with father. For the girls, these percentages are 51% and 37%, respectively. The distribution of girls' mother-child attachment styles is not significantly different from that of Verschueren and colleagues, but for father-child it is lower ( $\chi^2 (2) = 13.42$ ,  $p = .001$ ). Also, fewer boys than expected ( $n = 10$ ) were categorized as secure, while more boys than expected ( $n = 12$ ) were avoidant in comparison to Verschueren and Marcoen's distribution ( $\chi^2 (2) = 18.49$ ,  $p = .000$ ). A similar result was

obtained for the comparison of father-child distributions ( $\chi^2 (2) = 23.32$ ,  $p = .000$ ). Possibly, boys were less interested in this procedure of doll play. It is also possible that boys' task attitude was less good, as boys were rated by teachers as less task-oriented and concentrated (see Section 2.2).

**Summary of findings** To summarize, girls presented the relationships with their mothers as more secure than boys did. They tended to be more secure with fathers as well. Boys' security scores were not only lower than girls', but also lower than those found in other studies. There were no relations between security ratings and child age and verbal competence, but there were some relations with temperament. Children who were more secure with mother had less regular daily habits. Children who were more secure with father tended to approach novelty more.

## 6.2 Puppet Interview

Jude Cassidy (1988) developed the Puppet Interview (PI) to measure self-esteem in young children. The interview consists of 20 items about self-worth (positive or negative) and the ease with which children admit imperfections about themselves (open or perfect). The questions are directed to a hand puppet<sup>11</sup> on the child's hand and the child answers as though he or she were the puppet. The underlying assumption of this instrument is that the child will reveal how he or she thinks a "generalized other" sees him or her. This, in turn, is believed to be a reflection of the child's feelings of self-worth. Because of the indirect and playful nature of the instrument, it is believed to reveal not only conscious but also unconscious beliefs about the self (Verschueren et al., 1996). Cassidy (1988) found that 71% of the classifications were stable across a 1-month period. The correlation between scale scores was .68,  $p = .001$ .

**Coding** The videorecorded interviews were transcribed first. Next, the protocols were coded according to guidelines in Verschueren, Schoefs, and Marcoen's (1994) adapted coding system. In this system, a distinction is made between the dimensions of Positiveness (affective quality) and Openness to admit imperfections of the self. Verschueren et al. (1996) have found that these dimensions were unrelated ( $r = .15$ ,  $ns$ ). Both dimensions are rated on a 6-point scale. Higher ratings reflect more Positiveness or Openness. The **Positiveness** score is based on fifteen questions that aim at eliciting a global statement about the self. Examples are: "Is [child] a good boy/girl?", "Would you like to play with

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<sup>11</sup> In the present study, one hand puppet was a duck, called "Kwak" and the other a hippo, called "Hippo."

him/her?", "Would you like to be his/her friend?". Verschueren et al. (1994) give detailed guidelines to decide whether an answer is negative, mildly negative, or not negative. If the child makes at least one strong or two mild negative statements about the self, the interview is coded as "Negative." Otherwise, it is judged to be "Positive." For example, if the child is asked, "Do other people like [child]?" and he or she answers "no" and cannot name anyone who likes him or her, this answer is coded as "Negative." The criteria may seem strict. However, because young children have been found to have a tendency to overestimate themselves (Harter, 1990; Van der Meulen, 1994), even one negative statement about the self can be considered significant (Verschueren et al., 1996). **Openness** to admit imperfections of the self is determined by the answers on the remaining five questions (e.g., "Is [child] ever a bad boy/girl?" If no, "Never?"). When the child admits not to be perfect on at least one of these questions, the interview is classified as "Open." Otherwise, it is coded as "Perfect."

**Classifications** The interview can be classified as Positive or Negative and as Open or Perfect. In addition, combinations of these categories can be made into four categories, i.e., Positive Open, Positive Perfect, Negative Open, and Negative Perfect. In the present study, only the continuous rating data were used for further analysis. However, I will present descriptive data of the classifications below.

**Missing data** The same girls who refused the doll stories also refused to participate in the PI. Both children seemed apprehensive of the open-ended nature of the instrument. One interview (of a popular girl) could not be coded because of equipment failure. Thus, the PI data pertain to 77 children (34 girls).

**Reliability** The author of this dissertation trained an undergraduate research assistant until they reached 80% agreement. Next, twenty interview protocols (25%) were double coded. The transcriptions were encoded with the children's identification codes. In this way, both coders were blind to the SMS of the child. The ratings of both coders were correlated .94 on the Positiveness scale and .98 on the Openness scale. Interrater reliability of the classification into the Positive or Negative PI categories, as measured by the Kappa statistic, was .90. For the categorization of the Open and Perfect categories, this was 1.00. Kappa for the classification into combined categories was .93.

**Descriptive data** Table 6 gives an overview of the means and standard deviations of PI-scale scores. PI data will be related to gender, age, verbal competence, and temperament. In addition, the distribution of rating scores and categories will be compared to results presented by Verschueren and her colleagues.

Table 6

Descriptive data of the Puppet Interview

Puppet Interview		Mean (SD)	Range
<b>Positiveness</b>	Girls (n = 34)	2.59 (1.54)	1 - 6
	Boys (n = 43)	3.44 (1.69)	1 - 6
	<b>Total (n = 77)</b>	<b>3.06 (1.67)</b>	<b>1 - 6</b>
<b>Openness</b>	Girls (n = 34)	3.09 (1.22)	1 - 5
	Boys (n = 43)	2.77 (1.27)	1 - 5
	<b>Total (n = 77)</b>	<b>2.91 (1.25)</b>	<b>1 - 5</b>

**Confounding variables** Boys were more positive about themselves than girls ( $t(75) = -2.28, p = .03$ ).<sup>12</sup> This is in contrast to Verschueren et al. (1996), who found that girls were more positive than boys ( $M_{\text{boys}} = 3.28; M_{\text{girls}} = 3.93$ ). The girls in the present sample also scored significantly lower than the children in Verschueren et al.'s study (mean difference = 1.34; one sample  $t(33) = -5.08, p = .000$ ). The boys' scores were comparable to those found by Verschueren et al. (one-sample  $t(42) = .63, ns$ ). No gender differences were found in openness to admit imperfections. However, the boys in our sample were less open about their shortcomings than those in Verschueren et al. (1996; mean difference =  $-.57$ ; one-sample  $t = -2.96, p = .005$ ). PI ratings of Positiveness was significantly correlated with Verbal Competence ( $r(77) = .25, p = .02$ ). Children who were more positive about themselves were more verbally competent. There were no significant correlations of Positiveness or Openness with age or temperament.

**Relations between Positiveness and Openness** As in Verschueren et al.'s (1996) study, the Positiveness and Openness scales were unrelated ( $r(77) = .14, ns$ ). For boys, however, they were correlated,  $r(43) = .32, p = .04$ . Boys who were more positive about themselves admitted more shortcomings when directly asked, and boys who were more negative were less open. Correlations for boys and girls were not significantly different, however (Fisher's  $z = 1.50, p = .14$ ).

**Categories** Table 7 displays the percentages of children with Positive or Negative models of the self, Open or Perfect models of the self, and combinations of Positiveness and Openness. In accordance with the low ratings, a strikingly high number of children (53%) had a

<sup>12</sup> On average, girls gave 1.9 negative answers ( $SD = 1.9$ ) and boys 1.1 ( $SD = 1.5; t(75) = 1.89, p = .06$ ).

Negative model of the self. The distribution of Positive and Negative models of the self was significantly different for girls than for boys ( $\chi^2(1) = 5.07, p = .04$ ). The distribution for boys (58% Positive, 42% Negative) resembles the one found by Verschueren et al. (1996; 61% Positive, 39% Negative for the total group) but girls were more likely to be negative about themselves (32% positive, 68% negative). The distribution of Open and Perfect categories was similar to that found by Verschueren et al. (1996). Forty-seven percent of the children openly admitted flaws (cf. 52% in Verschueren et al.'s study), while 53% maintained they were perfect.

*Table 7*

Frequencies of positive/negative, open/perfect, and combined Puppet Interview categories

	<i>Girls</i> ( <i>n</i> = 34)	<i>Boys</i> ( <i>n</i> = 43)	Total ( <i>n</i> = 77)	$\chi^2$	<i>p</i>
<b>Positiveness</b>					
Positive	11 (32%)	25 (58%)	36 (47%)	5.07	.04
Negative	23 (68%)	18 (42%)	41 (53%)		
<b>Openness</b>					
Open	18 (53%)	18 (42%)	36 (47%)	.94	<i>ns</i>
Perfect	16 (47%)	25 (58%)	41 (53%)		
<b>Combinations</b>					
Positive Open	5 (15%)	12 (28%)	17 (22%)	7.27	.06
Positive Perfect	6 (18%)	13 (30%)	19 (25%)		
Negative Open	13 (38%)	6 (14%)	19 (25%)		
Negative Perfect	10 (29%)	12 (28%)	22 (29%)		

Children were distributed approximately evenly across combined categories: 21% were positive about the self, but admitted imperfections when directly probed (Positive Open), 25% were positive but did not admit flaws (Positive Perfect), 25% were negative and open about imperfections (Negative Open), and 29% were negative about

themselves on the more indirect items, but not the direct questions that probed for admitting imperfections (Negative Perfect). In comparison, in Verschueren et al.'s study these percentages were 34% Positive Open, 27% Positive Perfect, 18% Negative Open, and 21% Negative Perfect. A chi-square analysis comparing this distribution with ours was marginally significant ( $\chi^2 (3) = 7.38, p = .06$ ). Fewer children than expected were Positive Open and more than expected were Negative Open or Negative Perfect. Cassidy (1988) used only three categories and classified 35% of the children as positive (comparable to the Positive Open category), 25% as negative (cf. Negative Open), and 40% as perfect (corresponding to both Positive Perfect and Negative Perfect). Thus, in comparison to Cassidy (1988) and Verschueren et al. (1996), fewer children were classified as Positive Open and more as Negative Open. A chi-square analysis comparing the cell distributions of girls and boys was nearly significant ( $\chi^2 (3) = 7.27, p = .06$ ). Girls were underrepresented in the Positive categories and overrepresented in the Negative Open category.

**Summary of findings** In sum, our study found that girls were more negative about themselves than boys. This is in contrast with the findings of Verschueren et al. (1996), who found that girls were more positive than boys. Girls were also more negative than children in other studies were. In accordance with their lower ratings, a high percentage of girls (nearly 70%) were categorized as having a negative view of the self.

### **6.3 Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA)**

The PSPCSA (Harter & Pike, 1984) is a widely used measure of self-perceptions in children aged 4-7 years. It assesses perceptions of the self of young children in four domains: a) Cognitive Competence (6 items), b) Physical Competence (8 items), c) Peer Acceptance (7 items), and d) Maternal Acceptance (6 items). The items are accompanied by pictures. Answers are stated in a forced-choice format. An example from the Cognitive Competence subscale is, "This boy/girl [in this picture] is good at counting, but this boy/girl [in the other picture] is not very good at counting. Which boy/girl is most like you?" The child is asked to point at the picture of the child he or she thinks is most like him or her. Next, the interviewer asks, "Is the child on this picture a lot like you, or just a little?" The answers are rated on a 4-point scale. Higher ratings indicate higher perceived competence or acceptance. There are four different Dutch versions of the PSPCSA (Veerman & Swennenhuis, 1997). In the present study, the version developed by Van den Berg was used (Steinbusch & Streppel, 1985). Moderate stability was found for this version over a 4- to 6-week period (test-

retest correlations for the 4- to 5-year version ranged from .56 to .66). It has also been found to have good internal consistency for the Perceived Competence and Peer Acceptance scales; the Maternal Acceptance scale had an alpha lower than .70 (Veerman & Swennenhuis, 1997). In the present study, Cronbach's alphas were: a) .38 for Cognitive Competence; b) .64 for Physical Competence; c) .70 for Peer Acceptance; and d) .57 for Maternal Acceptance. Because the internal consistency for the cognitive and physical competence scales were so low, these were combined into one perceived competence scale. The alpha level on this scale (.72) was comparable to Harter and Pike's alpha on the combined competence scale (.76) for preschool and kindergarten children. The alpha for Peer Acceptance was comparable to that of Harter and Pike (.74). For Maternal Acceptance, they found a much higher alpha (.83) than found in the present study. This was concordant with other research with this version (Steinbusch & Streppel, 1985).

**Descriptive Data** Table 8 gives an overview of means and standard deviations on the Harter scales of Perceived Social Acceptance and Competence. In accordance to previous studies, means were quite high (Cassidy, 1988; Harter & Pike, 1984; Verschueren et al., 1996).

Table 8

Means, standard deviations, and ranges of scores on the Pictorial Scales of Perceived Competence and Social Acceptance

		Mean (SD)	Range
<b>Maternal Acceptance</b>	<i>Girls (n = 37)</i>	2.88 (.59)	1.5 - 3.8
	<i>Boys (n = 43)</i>	2.97 (.47)	2.2 - 4
	<b>Total (n = 80)</b>	<b>2.93 (.53)</b>	<b>1.5 - 4</b>
<b>Peer Acceptance</b>	<i>Girls (n = 37)</i>	2.89 (.56)	1.4 - 4
	<i>Boys (n = 43)</i>	3.00 (.54)	1.9 - 4
	<b>Total (n = 80)</b>	<b>2.95 (.55)</b>	<b>1.4 - 4</b>
<b>Cognitive Competence</b>	<i>Girls (n = 37)</i>	3.43 (.42)	2.7 - 4
	<i>Boys (n = 43)</i>	3.29 (.39)	2.3 - 4
	<b>Total (n = 80)</b>	<b>3.35 (.41)</b>	<b>2.3 - 4</b>
<b>Physical Competence</b>	<i>Girls (n = 37)</i>	3.44 (.47)	2.3 - 4
	<i>Boys (n = 43)</i>	3.30 (.44)	2.4 - 4
	<b>Total (n = 80)</b>	<b>3.57 (.45)</b>	<b>2.3 - 4</b>

**Confounding variables** No significant gender differences were found on the Harter scales, although girls tended to score higher on the Perceived Competence scales ( $t(78) = 1.70, p = .09$ ). Temperamental rhythmicity was correlated with Maternal Acceptance ( $r(77) = .24, p = .03$ ), Perceived Competence ( $r(77) = .26, p = .02$ ), and Peer Acceptance ( $r(77) = .21, p = .06$ ). Children with more regular daily patterns reported higher levels of acceptance by mother and (marginally) by peers. They also perceived themselves as more competent. The Harter scores were not correlated with child age or verbal competence.

**Summary of findings** In sum, girls in our study perceived themselves more negatively on the PI than boys, and more than children in previous studies. Boys, on the other hand, had lower security scores on a DSCT than girls. They also scored lower than children in other studies. Girls tended to perceive themselves as more competent than boys did. Children with more regular daily patterns rated themselves as better accepted by mother and (trend) peers, and as more competent on the PSPCSA.

#### **6.4 Interrelations between measures of subjective experience**

It was expected that the PI- and DSCT-scores would be related, since these are both measures of how children experience the self-in-relation (Cassidy, 1988). It was also expected that self-esteem and mother-child attachment representations would be related to Harter's scale of Maternal Acceptance. To test these relations, correlations between continuous data were computed. Table 9 gives an overview of correlations between and within measures of subjective experience. *T*-tests and ANOVAs were performed to test differences between PI-categories. Because there were gender differences in PI- and DSCT-scores, the analyses were done for boys and girls separately as well.

**Correlations** Security with mother and with father were significantly correlated ( $r(70) = .53, p = .000$ ). Children who were more secure with mother were also more secure with father. There were no significant correlations between PI Positiveness and attachment security for the group as a whole. For girls, however, positiveness of the self was positively correlated with attachment security to father ( $r(33) = .45, p = .008$ ). The difference with the correlation for boys ( $r(38) = -.10$ ) was significant (Fisher's  $z = 2.46, p = .01$ ). Girls who displayed more secure father-child attachment relationships were more positive about themselves in the PI, but boys were not. No relations were found between the Maternal Acceptance scale and Positiveness or mother-child security. For girls, Openness of the self was related to perceived Peer Acceptance ( $r(34) = .43, p = .01$ ). This was not the case for boys ( $r(43) = -.01$ ; Fisher's  $z = 2.04, p = .04$ ). Girls who admitted more flaws reported higher peer acceptance.



Table 9

Pearson intercorrelations between measures of Subjective Experience

<b>Total</b> ( <i>n</i> = 75-80)	1.	2.	3.	4.	5.	6.	7.
1. PI-positiveness	x	.14	.02	.12	-.05	.02	.13
2. PI-openness		x	.13	.02	-.06	.16	<b>.27*</b>
3. DSCT-mother			x	<b>.53**</b>	.09	.06	.08
4. DSCT-father				x	-.05	.09	.01
5. Maternal Acceptance					x	<b>.66**</b>	<b>.38**</b>
6. Peer Acceptance						x	<b>.50**</b>
7. Perceived Competence							x

<i>Girls</i> ( <i>n</i> = 37)	1.	2.	3.	4.	5.	6.	7.
1. PI-positiveness	x	-.03	.22	<b>.45**</b>	.02	.10	.19
2. PI-openness		x	.25	-.02	.21	<b>.43*</b>	<b>.34*</b>
3. DSCT-mother			x	<b>.50**</b>	.14	.09	.00
4. DSCT-father				x	-.09	.03	-.11
5. Maternal Acceptance					x	<b>.75**</b>	<b>.46**</b>
6. Peer Acceptance						x	<b>.53**</b>
7. Perceived Competence							x

<i>Boys</i> ( <i>n</i> = 43)	1.	2.	3.	4.	5.	6.	7.
1. PI-positiveness	x	<b>.32*</b>	-.02	-.10	-.14	-.07	.20
2. PI-openness		x	-.06	.02	<b>-.29<sup>+</sup></b>	-.01	.17
3. DSCT-mother			x	<b>.51**</b>	.07	.09	.07
4. DSCT-father				x	.03	.21	.09
5. Maternal Acceptance					x	<b>.56**</b>	<b>.34*</b>
6. Peer Acceptance						x	<b>.53**</b>
7. Perceived Competence							x

+  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$

**Comparisons between PI categories** To compare potential differences in PI categories, *t*-tests were carried out between Positive and Negative categories, and Open and Perfect categories. In addition, one-way ANOVAs with post-hoc Bonferroni comparisons were computed with the combined PI-categories as independent variables. Security and Harter scores were the dependent variables. Children who were open about their imperfections perceived themselves as slightly more competent ( $M = 3.45$ ) than children who did not admit their flaws ( $M = 3.28$ ;  $t(75) = 1.98$ ,  $p = .05$ ). This was mainly the case for children in the Negative Open category ( $M = 3.48$ ) in comparison to children in the Negative Perfect category ( $M = 3.16$ ;  $F(3, 73) = 3.03$ ,  $p = .04$ ). These differences appear mainly due to the girls' scores. Girls who were more open saw themselves as more competent ( $M = 3.59$ ) than girls who did not admit flaws ( $M = 3.29$ ;  $t(32) = 2.22$ ,  $p = .03$ ). In addition, more open girls also perceived themselves as better accepted by peers ( $M = 3.13$ ) than girls who saw themselves as perfect ( $M = 2.68$ ,  $t(32) = 2.77$ ,  $p = .009$ ). These differences were mainly found between the Negative Open and the Negative Perfect groups. Negative Open girls reported higher levels of Perceived Competence ( $M = 3.57$ ) than Negative Perfect girls ( $M = 3.13$ ,  $F(3, 30) = 3.48$ ,  $p = .03$ , Bonferroni  $p = .05$ ). Girls who were negative and open also reported higher Peer Acceptance ( $M = 3.12$ ) than girls with a Negative Perfect model ( $M = 2.56$ ,  $F(3, 30) = 3.12$ ,  $p = .04$ ; Bonferroni  $p = .055$ ). In both cases, girls with a Positive Open model had the highest scores on the PSPCSA. However, there were too few girls in this category to make the differences with the other categories significant ( $n = 5$ ). Thus, girls who were negative about themselves on the indirect PI-items and who admitted imperfections of themselves on the more direct PI questions were more positive about themselves on the direct Harter measure.

Boys with an Open model of self saw themselves as less accepted by mothers ( $M = 2.75$ ) than boys who had a Perfect model ( $M = 3.13$ ,  $t(41) = -2.79$ ,  $p = .008$ ). Boys who were Positive and Open perceived Maternal Acceptance as lower ( $M = 2.64$ ) than boys who were Positive Perfect ( $M = 3.16$ ,  $F(3, 39) = 3.45$ ,  $p = .03$ , Bonferroni  $p = .03$ ) or Negative Perfect ( $M = 3.10$ , Bonferroni  $p = .08$ ). Thus, boys who felt positive about themselves and who were able to admit imperfections rated acceptance by mother as lower than boys who did not admit imperfections. The low frequency of boys with a Negative and Open model made it difficult to test differences with this group ( $n = 6$ ).

**Summary of findings** In summary, the measures of subjective experience seemed to be differentially interrelated for boys and girls. Only for girls, there was a positive correlation between PI positiveness and security with father. Only for boys, the PI scales of Positiveness

and Openness were positively related. Girls with a Negative Open model of the self reported higher Peer Acceptance and Perceived Competence than did girls with a Negative Perfect model. Boys with a Positive Open model of self perceived lower Maternal Acceptance than boys with Perfect models of self did. These results suggest that measures of subjective experience might be differently related to boys' and girls' development.

## **Summary of Chapter 2**

Chapter 2 explained how the participants for the present study were recruited from the USDP, a large-scale longitudinal study on social development in elementary school children. Eighty children participated in the present study ( $M_{\text{age}} = 60$  months, 37 girls). They were of popular ( $n = 30$ ), average ( $n = 27$ ), or rejected ( $n = 23$ ) sociometric status. There was a high percentage of non-response, but this was not selective. Peer, teacher, and parent judgements of the children's behaviors provided a validation of the status groups. Sociometric status groups assessed by peer ratings or by peer nominations were similar. As expected, peers nominated rejected children as more aggressive and less prosocial than accepted children. Teachers also rated them as more aggressive. Popular children were rated as better able to concentrate and to be more task-oriented. Parents and children reported that popular children had more playmates than rejected children and they also agreed more on who those were. The only temperament difference was that rejected children were marginally more active than popular children. Otherwise, there were few differences in parent-reported emotional, behavioral, or health problems between the status groups. The only differences between parents across status groups was that fathers of average children felt more lonely than fathers of popular children. Most parents played with their children. Overall, mothers played more fantasy play, and fathers more physical play. Mothers indicated that they played more physical play with their sons. Fathers reported that they played more fantasy play with their daughters.

This chapter also gave an overview of the procedures and measures used in this study. We visited parents and children at home to videotape free play with a standard set of fantasy-eliciting toys. Of these recordings, 7 minutes were coded. Dyadic measures were formed of parent-child mutual responsiveness, shared positive emotions, total amounts of non-negative and negative control of parent and child, the balance of control between parent and child, and the dyadic play engagement of parent and child. In addition, measures of overall

balance and of shared fantasy play between parent and child were computed. Descriptive data of the proportions of mother-child and father-child interaction behaviors were reported. There were some relations between parent-child interaction and child temperament, mainly with activity level and approach-withdrawal. Relations between the parent-child interactions and peer relations will be further investigated in Chapters 3 and 4.

The children were interviewed at school to assess their subjective experience of self and others. Children completed doll stories about mother and father. We conducted a Puppet Interview to assess Positiveness and Openness of self. The mean ratings of security with mother and father and of positiveness of the self were quite low in this sample. This was related to gender differences. Boys were less secure with both parents than girls and also less than Verschueren et al. have found. Girls were more negative on the PI Positiveness scale than boys were, and also more than children in studies by Verschueren and colleagues. Security scores with mother and father were significantly correlated. Only for girls, the expected relation between positiveness of the self and attachment security (with father) was found. Girls who were open about imperfections (mainly combined with a negative sense of self) perceived higher Peer Acceptance and Competence than girls who maintained they were perfect. Boys who were open about imperfections (and positive about themselves) reported lower Maternal Acceptance than boys who claimed to be perfect. These findings suggest that measures of subjective experience might be differently related to boys' and girls' development. Relations between subjective experience and relations with parents and peers will be reviewed in Chapter 5 and investigated in Chapter 6.

# **Chapter 3**

## **Young children's social competence and parent-child interactions in various contexts: A review of studies**

This chapter gives an overview of studies that focus on links between specific parent-child interactive behaviors and young children's social functioning at school. I will review studies that observed parents and children in different contexts (i.e., naturalistic home situations, tasks and games, physical play, or free play). These studies vary in their unit of analysis. Some focus at the parent, some at the child, some at both, and some on the dyad as a whole. Related to this, there are differences in the directionality implied in these studies. Some consider parent-to-child effects, while others take a bidirectional approach. In this thesis, I assume that parents and children influence each other in bidirectional or transactional ways (Lollis & Kuczynski, 1997; Vyt & Van Aken, 1994). Dyadic interaction patterns in parent-child relationships that are more connected and have more room for autonomy are expected to be positively related to peer relations. Gender differences in linkages between parent and peer relationships will also be described.

### **1 Naturalistic home observations**

Naturalistic home observations of parents and children seem to be most suitable to give an accurate picture of how they interact in real life. However, the presence of an observer in the home may be experienced as intrusive, which may affect the outcomes of the study.

#### **1.1 Observer influences**

Russell, Russell, and Midwinter (1992) interviewed parents in 48 families with an oldest child aged 6 or 7 after a 1½ hour-long home observation. Eighty percent of the parents reported some influence of the presence of the two (female) observers in their homes. Fathers who were more influenced by the presence of the observers were less warm, affectionate, and child-centered toward their sons than fathers who reported less influence. They were *more* child-centered with their daughters. In addition, children of more-influenced fathers initiated more interactions with them than children of less influenced fathers did. Another study of observer influence did not find any observer effects on parents' behaviors during an hour-long videorecording of a family dinner (Boyum & Parke, 1995). Unlike the observers in Russell et al.'s study, however, the two female experimenters left the room after

they had installed video equipment. This may have made parents less self-aware than the parents in Russell et al.'s study may have been. Alternatively, the extensive interview method used by Russell et al. (1992) might have increased the likelihood that parents expressed possible influences. In Boyum and Parke's study, parents filled out a questionnaire about observer influence. A final explanation for the difference in outcomes is the structured nature of the dinnertime situation, which may have made it more easy for parents to act as usual. Nevertheless, the possibility of observer influence should be kept in mind, especially with regard to fathers' interaction behaviors with observers present.

## **1.2 Review of home observations**

The focus of Boyum and Parke's (1995) study was on parental affective expressions directed at the focal child or at the other parent during the family dinner. Fifty families of 5- to 7-year-old children were observed. Boyum and Parke found that fathers' attentive and positive affect (to their children as well as their wives) was related to children's prosocial and positive peer behaviors. Fathers who expressed less happy affect to their children and spouses had children who were more rejected by peers (rated by teachers as well as peers). Fathers' anger toward children was also related to rejection by peers. Mothers who directed more questions to their children had children who were more likely to be aggressive and rejected and less likely to be positive and prosocial. In addition, children were more likely to be aggressive and rejected when their mothers were more negative to their fathers. Boyum and Parke interpret their findings as supportive of a social learning model of emotional development. Indeed, the process of modeling may have played a role. However, this study did not observe the children's behaviors. Therefore it remains unclear what dyadic interaction patterns existed between parents and focal children. In addition, these findings may indicate more positive or negative group dynamics in the family that may have played a role in these children's relative success or problems with peers.

A series of home observation studies was conducted by Pettit, Dodge, Bates, and colleagues (Harrist, Pettit, Dodge, & Bates, 1994; McFayden-Ketchum, Bates, Dodge, & Pettit, 1996; Pettit, Harrist, Bates, & Dodge, 1991). Mothers and children were observed during two 2-hour home visits in the summer before the kindergarten year. The home observer made a detailed narrative record of all naturally occurring social interactions involving the target child. The transcripts were later coded. In these studies, the focus was mainly on the influence of maternal interaction behaviors on child behaviors with

peers. One study specifically created dyadic measures of mother-child interactions (Harrist et al., 1994).

A longitudinal investigation from this group (McFayden-Ketchum et al., 1996) used dyadic mother-child measures, although the focus was mainly on the mothers. Mother-child *coercion* was coded when the mother responded negatively after the child misbehaved. *Affection* consisted of positive or negative affective tone of the interaction and of the reaction of the mother to child excitement and to the child learning something new. The sample consisted of 165 mother-child dyads. Mother-child interaction behaviors were studied as predictors of aggressive behaviors from kindergarten to third grade. More aggression in kindergarten (as rated by teachers as well as peers) was related to more mother-child coercion. Interactions of aggressive children were less affectionate as well. An interesting gender difference was found, which will be discussed in Section 5.

Pettit et al. (1991) also focused on child aggression. They compared thirty 5-year-old children who were high, average, or low on the CBCL-aggression scale. Teachers and peers rated social behaviors. Social competence during the second half year of kindergarten was predicted by *maternal responsiveness* (i.e., affectively positive behavioral matching) before kindergarten. As in previous studies, Pettit et al. found that mothers' *negative matching* of children's negative behaviors predicted high levels of aggression with peers. The expected relation between maternal intrusiveness and children's social disengagement was not found.

Dyadic qualities of mother-child interactions in the same sample were studied by Harrist et al. (1994). They distinguished three interaction styles: (a) *positive synchrony* (the extent to which interactional episodes were extended, nonnegative, and connected); (b) *negative synchrony* (relatively extended, mutually focused, reciprocal interactions with a negative affective tone); (c) *nonsynchrony* (low in dyadic connectedness, imbalanced, noncontingent social exchanges, regard-less of affective tone). Positive synchrony and low nonsynchrony predicted social competence during the school year. Low levels of positive synchrony and high nonsynchrony and negative synchrony, on the other hand, predicted aggression and disengaged play. These findings indicate that dyadic patterns of mother-child interaction are related to children's social behaviors with peers. One finding even suggests that dyadic measures may be better predictors than individual ones. Although the expected relation between maternal intrusiveness and children's social disengagement was not found (Pettit et al., 1991), the dyadic measure of mother-child nonsynchrony *did* predict children's withdrawn behavior.

### **1.3 Conclusion home observations**

Studies that observed parents and children in the home suggest that interactions of socially competent children are more (mutually) responsive and less negative or incoherent than those of less competent children. Aggressive or rejected children seem to encounter more negative and coercive behaviors from mothers as well as from fathers (Boyum & Parke, 1995; Harrist et al., 1994; McFayden-Ketchum et al., 1996; Pettit et al., 1991). Withdrawn or disengaged children's interactions with mother show much nonsynchrony and negative synchrony in addition to low positive synchrony (Harrist et al., 1994). These studies suggest that socially competent children experience more connectedness and room for autonomy with their parents. Children who experienced more coercion, which implies less space to express their autonomy, were likely to be more aggressive. A lack of connectedness with mothers, expressed by higher nonsynchrony, was related to disengagement with peers. Dyadic patterns of mother-child nonsynchrony prior to kindergarten predicted withdrawn behavior during the kindergarten year (Harrist et al., 1994), while maternal intrusiveness by itself did not predict social disengagement (Pettit et al., 1991). In addition, a dyadic pattern of mother-child coercion before kindergarten started predicted aggressive behaviors until third grade (McFayden-Ketchum et al., 1996).

## **2 Tasks and games-with-rules**

Tasks and games are both characterized by goal-directedness as well as by clearly defined rules. The defining feature of a task is to accomplish a goal (e.g., to finish a puzzle). Games-with-rules are meant to be enjoyable. However, they are distinguished from play, because play has been defined as *autotelic*: enjoyable for its own sake (Rubin, Fein, & Vandenberg, 1983). Since games have goals, a feature they share with tasks, they can be situated somewhere between tasks and play.

A task situation mainly focuses on vertical interaction qualities, because usually the child is asked to complete a task that is too difficult to accomplish on his or her own. Therefore, the parent usually acts as teacher or helper. Relations between parent-child task behaviors and children's social competence and acceptance are expected, because the experience of receiving help and adequate control from parents is likely to be related to prosocial behaviors toward peers (Deković & Janssens, 1991). In a game, the goal for both parents and children is to win. However, because parents are more skilled than children in most areas, parents may have a more supervisory role as



well. Therefore, like task situations, game contexts can be regarded as mainly vertical. Because better accepted children have been found to be better able at balancing the competing goals of winning and maintaining the relationship with peers (Bierman & Welsh, 1997), relations between parent-child games and social competence are expected. It is likely that better accepted children and their parents are better able to balance autonomy (winning) and connectedness (mutually enjoying the game).

## **2.1 Review of task interactions**

Deković and Janssens (1991) asked mothers and fathers of 125 school-aged<sup>13</sup> children (6 to 11 years) to complete a puzzle-solving task with their children at home. They found several differences between parents of popular and unpopular children. Parents of popular children used more suggestions in stead of demands, while parents of unpopular children were more authoritarian (directive) in their guidance. Parents of popular children also gave more positive and less negative feedback. In addition, authoritative control, positive feedback, and support were related to children's prosocial behavior, which, in turn, was related to popularity. Deković and Janssens also found some interesting differences in the relative influence of mothers and fathers. Mothers influenced their children mainly through supportive behaviors and positive feedback (which heightened the chance of having a popular child). Father's influence, however, became more apparent through his negative behaviors (authoritarian behaviors and negative feedback), which increased the chance of having an unpopular child. Fathers' influence on sociometric status was also mediated by children's prosocial behavior (i.e., authoritarian fathers had less prosocial children and less prosocial children were less popular).

Patterson, Cohn, and Kao (1989) investigated the dimensions of warmth and control in a longitudinal study of 81 6-year-old children with their mothers. Mothers and children were observed prior to first grade in a combined observation context (5 minutes of free play and 5 minutes of a puzzle-solving task). Approximately 4 months later, sociometric status was assessed using peer nominations. In the spring of first grade, teachers rated the children's acting-out, shy-anxious, and socially competent behaviors. Patterson et al. compared 15 popular (mainly girls), 39 average, 17 neglected, and 10 rejected (all boys) children. Mother-child interaction behaviors were factor analyzed for

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<sup>13</sup> Although this sample is older than the target age group, I have included this study because the youngest children were close to the target age and Deković & Janssens report no age differences.

mother and child separately. Warmth consisted of sensitivity, responsiveness, and positive emotion. Control indicated how much each tried to direct the other's behavior, both verbally and nonverbally. Contrary to expectations, neither maternal control nor warmth was significantly related to children's sociometric status. Patterson and colleagues did find several interaction effects. Children whose mothers expressed little warmth acted out more and had more learning problems in first grade. In addition, the largest number of behavior problems was shown by rejected boys whose mothers were low on Warmth. Thus, maternal warmth seemed to serve as a protective factor against behavior problems, when children were rejected.

Denham, Renwick, and Holt (1991) found relations between mother-child interactions in a combination of play- and teaching tasks in 48 preschool children (mean age 44 months), and teacher-rated social and emotional child behaviors. Mothers' task orientedness predicted less sadness at school. Children's task orientedness and positive emotions predicted assertive behaviors. However, mothers' allowance of autonomy and positive emotion uniquely predicted child assertiveness when controlling for child behaviors. In addition, mother's pleasant structuring of the task buffered the child from sadness, irrespective of the child's own task orientedness. Some of the findings in this study were related to the child's gender. These are discussed in Section 5.

## **2.2 Review of game interactions**

Putallaz (1987) studied 42 first-grade children, aged 6 and 7 years, with their mothers. First, mother-child dyads were asked to play a word-naming game. Next, children engaged in free play with an unfamiliar peer, while mothers discussed issues of child social development with an unfamiliar mother. Putallaz found that popular children (peer-nominated) were less disagreeable and self-focused during mother-child play than rejected children were. In addition, they tried to influence mother in a positive way (for instance, using jokes), and they talked more than low-accepted children. Similarly, the mothers of children who were better accepted talked more and were more agreeable than mothers of less well-accepted children. In addition, these mothers expressed more feelings and opinions toward the unfamiliar mother. Mothers of children with a low sociometric status were more disagreeable and demanding, as their children were when playing with a peer. Putallaz also found relations between mother and child behaviors when they interacted together. Agreeable mothers had agreeable children. The more children talked, the more mothers talked. Mothers who focused on feelings had children who did likewise and disagreeable mothers had disagreeable children. This suggests

dyadic interaction patterns in which mothers and children influenced each other in a bidirectional way.

In a more recent study, Cassidy, Parke, Butkovsky, and Braungart (1992) observed 44 kindergarten and first-grade children (5 to 7 years old) while playing a game with both parents separately in a university playroom. The game was designed to elicit positive as well as negative emotions. It was controlled in such a way that the children won the first game, lost the next two, and won the last game. A *total expressiveness* score (positive plus negative expressions) was formed to examine links with children's peer-rated social acceptance. More expressiveness in the family (which was also assessed with a questionnaire) was expected to enhance children's understanding of emotions. Emotion understanding, in turn, was expected to influence peer relationships in positive ways (see Chapter 1, section 1.3). Cassidy et al. found that only fathers' overall expressiveness during the game predicted peer acceptance. They suggest that the influence of fathers' expressiveness in a playful, game-like situation may be greater than that of mothers. Contrary to expectations, the children's own expressiveness was *not* related to their social acceptance. However, there were interrelations between expressions of children and parents and between parents. Children were more positive with fathers when fathers were more positive and with mothers when mothers were more positive. In addition, children who were more positive (and less negative) with father were also more positive with mother. In this way, children who received more emotional expressions of fathers may have experienced more emotional expressions in the family as a whole. More positive emotions in the family may have led to more positive expectations of interactions with peers. However, as reported above, evidence of this was only found for fathers' expressions. Cassidy et al. found no support for their hypothesis that emotion expression in the family would enhance peer relations via the child's emotion understanding.

A series of elegantly constructed studies by LaFreniere and colleagues clearly show the relevance of a transactional framework (Dumas & LaFreniere, 1993; Dumas, LaFreniere, & Serketich, 1995; LaFreniere & Capuano, 1997). In these studies, mothers and children played the "Grocery Store Game." In this game, the child is asked to plan an efficient route through a miniature grocery store. This task aims at assessing "the capacity of the child for coordinating affect, cognition, and behavior, and for drawing upon the mother's assistance and support when needed" (LaFreniere & Capuano, 1997, p. 555). Interaction behaviors of both mothers and children were coded and analyzed in relation to the partner's behaviors.

Dumas and LaFreniere (1993) and Dumas et al. (1995) compared groups of socially competent,<sup>14</sup> aggressive, and anxious children and their mothers. Dumas and LaFreniere studied 30 children per group (mean age 49 months) with their own and with an unfamiliar mother. Dumas et al. focused on the "balance of control" in 126 dyads (mean age 50 months). In this study, control was defined as, "clearly stated commands, requests, or instructions with which the person could immediately comply or refuse to comply" (p. 106/107).

Both studies found that socially competent mother-child dyads were most positive and coherent. These dyads matched their behaviors to the other's preceding positive or aversive behavior. Within their positive interaction context, socially competent children and their mothers initiated a smaller proportion of control than aggressive or anxious dyads (.17 vs. .25 and .33, for mothers, and .09 vs. .18 and .20 for children). Most control attempts of competent dyads consisted of single control exchanges, as opposed to more coercive chains of control. They also complied most with single control attempts. With unfamiliar mothers, competent children were as positive and contingent as with their own mothers (although they only responded in positive ways to their own mothers' aversiveness). With unfamiliar children, mothers of socially competent children showed high levels of unconditional positive affect (Dumas & LaFreniere, 1993). In sum, the interactions of competent children and their mothers were mutually coherent and mother and child controlled each other in a predominantly positive way.

Aggressive children and their mothers were mainly incoherent. When their mothers were positive, children responded both in positive and antagonistic ways. The mothers failed to reciprocate positive affect of their children and responded in increasingly positive ways to child aversiveness. At the same time, they did not clearly respond to noncompliance. These mothers were also incoherent in their use of control, of which they used intermediate levels in comparison to mothers of competent and anxious children. Mothers were equally likely to control in positive and aversive ways and they did not distinguish between positive or aversive control of their children. Aggressive children tried to control their mothers more than competent children did, and they did so in less positive ways. Interestingly, mothers *always* complied with their children's coercive control, while the children refused to comply with one third of their mothers' coercive control. It appears that mothers of aggressive children let their children

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<sup>14</sup> As rated by teachers on the Preschool Socioaffective Profile (PSP)

"get away" with coercive control. In this way they appear to train their children to be coercive (Dumas et al., 1995). Interestingly, mothers of aggressive children *only* expressed an indiscriminate pattern of responding toward their own children. With unfamiliar children, these mothers responded in coherent ways, being positive after positive child behaviors (Dumas & LaFreniere, 1993).

Anxious children and their mothers were most aversive and controlling. Their negative interaction patterns were so pervasive that they interfered with task completion: anxious children did worse than all other children. These children responded negatively even when their mothers were positive. Mothers matched their children's aversiveness and did not show positive responses when their children complied with them. Mothers also tried to control their children more and in more negative ways than any other type of mothers. At the same time, they rarely complied with their children. Thus, in contrast to aggressive children, anxious children rarely seemed to "win" in their attempts to control (Dumas et al., 1995). If mothers did comply, it was mainly with aversive control of their children. Approximately half of the control attempts in anxious dyads were coercive control exchanges. In contrast to these negative and controlling patterns with their own children, mothers of anxious children were most *positively reciprocal* with unfamiliar children. In this way, they showed the largest difference between interactions with own versus unfamiliar children.

In a study that clearly highlights the power of a transactional approach, LaFreniere and Capuano (1997) attempted to change the negative and controlling interaction patterns of anxious dyads. They conducted an intervention study in a group of 42 anxious children (mean age 53 months) and their mothers. Half of the dyads were assigned to the treatment condition; half of them acted as controls. The intervention aimed at supporting the mothers, informing them about child development, and promoting sensitivity for their children's needs. Interactions during the Grocery Store Game were recorded before and after the treatment.

After the treatment, mothers in the experimental group gave more emotional support and used more appropriate control than mothers in the control group. The children were more positive with their mothers than before the treatment, and more so in comparison to the control children. A compelling finding was that anxious-withdrawn children also became significantly more socially competent with peers after the intervention. In addition, their anxious-withdrawn behaviors decreased, although not significantly so in comparison to the control group. The finding that these children's social competence with peers can improve by changing dyadic interaction processes with their mothers can be

seen as “...strong evidence for the potency of transactional processes underlying early affective disorders” (p. 560). It seems that it is not so much the individual child who is anxiously withdrawn, but more his or her dyadic relationship patterns (LaFreniere & Capuano, 1997).

### **2.3 Conclusion task and game contexts**

As in naturalistic home observations, parent-child interactions of more socially competent children in challenging task and game contexts were found to be more positive and coherent than those of less competent children. Less socially competent children and their parents were more controlling and incoherent. Again, these results suggest that more socially competent dyads show greater autonomy-within-connectedness. Some of the studies in this section found relations between social competence and features of the task setting. Parents of more socially competent children structured tasks in a positive way (Deković & Janssens, 1991; Denham et al., 1991). LaFreniere et al. (1995) observed that, “...competent dyads were almost dancing with each other in harmony, as they turned the grocery task into a game that gave them an opportunity to enjoy each other’s company” (p. 112). Still, competent dyads did not complete fewer grocery routes than other dyads. The controlling nature of the anxious dyads’ interactions suggests that they wanted to perform well. Paradoxically, this attitude may have made them even less successful than others were; anxious children completed fewer routes than any other group.

Various studies reviewed in this section showed that the interaction behaviors of mothers and children are closely interrelated. Putallaz (1987) and Cassidy et al. (1992) reported correlations between parent and child positive and negative interaction behaviors. The studies by Dumas, LaFreniere, and colleagues found that mothers and children respond to each other in similar ways. Furthermore, their studies clearly highlight that it is *dyadic* interaction patterns that relate to children's social competence. Aggressive and anxious dyads were able to interact in coherent or more positive ways, respectively, with different partners. This shows that interaction behaviors do not reside within individuals, but exist within the context of a relationship history. In addition, changing the coercive interaction patterns of anxious dyads caused changes in children’s social competence with peers (LaFreniere & Capuano, 1997). These findings are powerful indications of the transactional or bidirectional nature of mother-child interaction patterns.

### **3 Physical play**

Physical play procedures are used in the study of parent-peer linkages because, “successful parent-child physical play involves the regulation of affectively arousing stimulation - a process thought to be central to social competence” (Parke et al., 1989, p.75). Emotion expression, recognition, and regulation have been related to peer competence (Denham et al, 1991; Garner et al., 1994). More than in other contexts, parents and children are likely to express emotions during physical play. In addition, differences between popular and rejected children’s interaction behaviors with parents have been found to be more evident during physical play than during other types of play (Kerns & Barth, 1995). Physical play with fathers may be particularly relevant for the children's peer relationships (Parke & O'Neil, 1997), especially for boys. Males have been found to engage more in physical play than females (MacDonald & Parke, 1984). Questionnaire data of the present study indicate that fathers played more physical play than mothers and mothers played more physical play with sons than daughters (see Chapter 2, Section 4). In accordance with these gender differences, physical play studies have found differential parent-peer relations for boys and girls. These will be discussed in Section 5.

#### **3.1 Review of physical play studies**

MacDonald and Parke's (1984) classic study observed 27 3- to 4-year-old children at home, with mother and father separately. Parents were asked to play with their children “as they would normally do” for 10 minutes. Next, they were asked to play physical play for 10 minutes. Teachers rated the children's popularity and social adjustment at the nursery school. In addition, children played with three different peers. Children who were more popular played longer physical play. Their mothers were more directive and their fathers less directive than those of less popular children. In contrast, fathers’ directiveness was also related to more relaxed peer interactions. Better accepted children showed more positive affect during physical play with their parents. Children who expressed more positive affect with their fathers interacted in more harmonious ways with peers. This study also found several gender differences. These will be discussed in Section 5. In a later study, MacDonald (1987) only observed popular, rejected and neglected boys (12 in each group, age range 3 to 5 years). Consistent with the earlier study, he found that popular boys showed more positive affect and played more physical play than rejected boys. Rejected boys showed more avoidance and signs of overstimulation. Their parents were more directive than those of accepted boys.

More recently, Kerns and Barth (1995) investigated relations between parent-child physical play and peer competence in 54 children (mean age 44 months). Mothers of popular children used physical control attempts less often than mothers of less accepted children. Friendly children's mothers uttered fewer suggestions and responded more positively. Contrary to expectations, *father*-child physical play was virtually unrelated to peer competence. The only finding was that girls who were friendly and cooperative with peers used more suggestions and responded less negatively to fathers' initiations. More gender differences found in this study will be discussed in Section 5.

Isley and colleagues examined 116 children with a mean age of 66 months (Isley, O'Neil, & Parke, 1996, Isley, O'Neil, Clatfelter, Parke, 1999). Physical play interactions were videotaped in a university playroom during the kindergarten year. Peers rated and nominated children's sociometric status during kindergarten and first grade. The strongest predictor of social competence in first grade was parental expression of negative affect in same-gender dyads (Isley et al., 1996). In addition, more socially competent parent-child dyads expressed more positive affect in physical play (Isley et al., 1999). Isley et al. (1999) also found that children's positive affect mediated relations between parental positive expressions and children's social competence. Again, gender differences were found. Parental negative expressions were more strongly related to peer acceptance for boys (Isley et al., 1996). For girls, control behaviors seemed more important (see also Section 5).

Dyadic qualities of parent-child physical play were related to children's peer relations by Barth and Parke (1993). Forty-five children (mean age 63.5 months) were studied before as well as during the kindergarten year. A principal component analysis distinguished *child-leading* (questions, directives and structuring by child, questions and responses by mother), *control-resist* (mother dominates, child is negative), and *directing* (child is controlling and nonresponsive, mother is low on questions) mother-child interaction patterns. The two first father-child factors were similar to those of mother-child interactions. The third was characterized as *nondirective* (father is high on questions and low on directives).

Children adjusted better to school when they experienced fewer control-resist and child-directing patterns. Mother-child control-resist patterns were associated with hostile behaviors toward peers and with dependency on the teacher. The father-child control-resist pattern was related to less consideration with peers at the end of the semester. More directive children (with mother) were more hostile and less considerate with peers. Fathers who were nondirecting had children



who were less hostile with peers. Longer physical play with mothers was related to more consideration with peers and less dependence on teachers. It was also related to less hostility, especially for boys (see also Section 5). In addition, boys who played longer with fathers were less hostile. The child-leading factor predicted loneliness before kindergarten, extraversion at the beginning of the year (considered as positive adjustment), and dependency at the end of the semester. Thus, this factor appeared to show inconsistent associations with adjustment to school. However, this study showed that dyadic interaction patterns between parents and children predicted peer competence over a year's time.

Carson and Parke (1996) also focused on more dyadic patterns. They studied linkages between parent-child reciprocal negative affect and peer competence. For this purpose, they observed 41 children (aged 4 and 5 years), while playing the "hand game" with their parents. The goal of this game was to grab the other's hands, before he or she could pull them away. Observation codes were reduced to two categories: negative (pout-whine, anger, tease, mock, and boredom) and other. Not all dyads showed negative affect. Therefore, data of 31 mother-child and 24 father-child dyads were analyzed. Similar to Putallaz's (1987) and Cassidy et al.'s (1992) findings, parent and child behaviors were related. Parents who responded negatively to children's negativity had children who did likewise. Fathers who were more negatively reciprocal had children who were less prosocial than other children, according to teachers. These children were also more avoidant and verbally aggressive. If children responded more negatively to fathers' negative affect, they were likely to be more physically aggressive than other children. Peer competence was not related to negative affect sequences in mother-child dyads.

### **3.2 Conclusion physical play contexts**

Most studies using the physical play paradigm have found that socially competent and popular children engage in physically arousing play longer than children with low peer competence (Barth & Parke, 1993; MacDonald, 1987; MacDonald & Parke, 1984). This suggests that these dyads can remain longer connected with each other. These studies also found clear relations between peer competence and parent-child interaction behaviors, particularly affective expressions. Parents of socially competent children expressed more positive and less negative affect than parents of less socially competent children did (Barth & Parke, 1993; Carson & Parke, 1996; Isley et al., 1996; Kerns & Barth, 1995). Popular children showed more positive emotions themselves, while socially incompetent children showed more negative

affect (Barth & Parke, 1993; Carson & Parke, 1996; Isley et al., 1999; MacDonald, 1987; MacDonald & Parke, 1984). These patterns of play engagement and affective expressions suggest more connectedness in parent-child interactions of socially competent children.

Many physical play studies (Isley et al., 1996, 1999; Kerns & Barth, 1995; MacDonald, 1987; MacDonald & Parke, 1984) focused on individual as opposed to dyadic behaviors, mainly of the parents. Some suggest that children learn patterns of emotion expression from their parents via social learning processes such as modeling (Isley et al., 1996, 1999; MacDonald & Parke, 1984). However, it is likely that dyadic processes play a role as well. As Sroufe (1990) has suggested, children's emotions may be dyadically regulated with parents before they become more self-regulated. Two studies (Barth & Parke, 1993; Carson & Parke, 1996) found relations between dyadic measures of parent-child physical play and children's social competence. Both found that negative dyadic interaction patterns were associated with lower social competence. Carson and Parke (1996) only found this for father-child dyads. Physical play may be differentially related to peer competence for boys and girls, which will be further discussed in Section 5.

#### **4 Free play and Fantasy play**

Play is characterized by nonpurposefulness (Rubin et al., 1983), which makes it an activity in which the child is free to do what he or she wants. Pretend play, in particular, is an important activity for children, especially between 3 and 6 years of age (Rubin et al., 1983). This type of play gives opportunities to make discoveries about the self and the surrounding world (Bretherton, 1989; Mead, 1934; Fein, 1981; Wolf, 1990). In relation to social competence, mainly the capacity to share fantasy play seems relevant. The duration and quality of shared pretend play with peers have been related to children's popularity in the classroom (Connolly & Doyle, 1984; Fein, 1981). Complex interaction skills are required to initiate shared fantasy play. For example, the child needs to acknowledge the pretend nature of communications and to negotiate pretend ideas (Doyle, Doehring, Tessier, de Lorimier, & Shapiro, 1992). An important unique function of pretend play appears to be mastery of powerful emotions (Bretherton, 1989). De Lorimier, Doyle, and Tessier (1995) found that dyadic pretend play of 4- and 6-year-old girls was more complex, mutually responsive, and emotionally invested than other types of dyadic interactions. De Lorimier et al.'s findings, "substantiate the claim that social pretense is a vehicle for the practice and consolidation of socially

mature behaviors. In comparison to nonpretend play, social processes in the pretend context were characterized by modulated affect and by the achievement of a sophisticated form of *interdependence* between play partners" (p. 509/510, emphasis added). Because of the linkages between social competence and pretend play with peers, it can be expected that more competent children also play more pretend play with their parents during free play.

#### **4.1 Review of fantasy play studies**

Although relations between parent-child fantasy play and peer relations can be expected, they have rarely been studied. An exception is the study by Goudena and Vermeulen (1997), who investigated this hypothesis in a small sample of 7 popular (peer-rated) and 7 unpopular children (ages 54-80 months). Mothers and children were observed while playing with fantasy-eliciting toys. Congruent with other studies, mothers of popular children showed more positive and less negative behaviors than mothers of unpopular children. However, popular and unpopular children or mothers did not differ in the amount and quality of fantasy play. There are several explanations for this lack of findings, one of which is the small sample size. Goudena and Vermeulen further suggest that rejected children may be able to engage in fantasy play with a more competent partner, but have difficulties to do so with peers. Another possible explanation for the lack of findings in this study is that it might specifically be the capacity to engage in *social* fantasy play that is characteristic of socially competent children. This possibility will be investigated in the present study (see Chapter 4).

#### **4.2 Review of free play studies**

Black & Logan (1995) observed 43 preschool children aged 24 to 60 months, who were popular, rejected, neglected, or controversial (according to teachers), with their mother, father, and with three familiar peers during free play. Parents of popular children spoke less long than other parents did, and their utterances were more relevant in relation to those of their children. Popular children participated more in cohesive discourse than other children did, and their parents gave them opportunities to start such episodes more than other parents did. Parents of rejected children, on the other hand, more often used turns that were irrelevant for their children. They also used more demands and closed requests than parents of popular children. These parents often responded noncontingently or not at all to their children's requests. Children's interactions with peers mirrored parent-child interaction patterns. Rejected children spoke longer, interrupted peers more, and responded in more noncontingent ways than other children

did. They also used more demands and fewer suggestions when playing with peers, and they explained themselves less. Black and Logan conclude that "responsive communication in parent-child interaction, both in turn-taking style and utterance type, is related to children's more responsive communication patterns and higher sociometric status in the peer group" (p. 267).

Mize and her colleagues also observed parents and children in free play contexts (Lindsey et al., 1997; Mize & Lindsey, August 1996; Pettit et al., 1998). Lindsey et al. (1997) used both individual and dyadic measures of parent-child interactions in a sample of 35 children (aged 45 to 76 months) and their parents. Dyads were observed in a laboratory playroom, equipped with various play materials. Parents' and children's play initiations and the partner's responses were coded. In addition, a detailed rating system was used to code parent-child interactional synchrony. This coding system reflected the extent to which parent and child shared the same focus, reflected one another's affect, were equally involved in an activity, and were mutually influential and responsive. Children who were better accepted by peers and their mothers shared more synchrony. More synchrony with father was related to social competence as rated by teachers. Peer acceptance was also related to *mutual compliance* with both parents. This measure reflected "the balance of parent-to-child and child-to-parent play initiation-comply sequences" (p. 529). It was composed of individual initiation and compliance scores. To test if the individual or the dyadic measures were stronger predictors of the peer competence, Lindsey et al. also investigated relations with dyadic measures while controlling for individual scores. Mother-child compliance still predicted peer acceptance when controlling for individual initiation levels, but not when controlling for individual compliance scores. Thus, either mothers' or children's individual compliance seemed more strongly related to peer acceptance. Father-child mutual compliance, however, remained related to peer acceptance after controlling for individual levels of initiation and compliance. Lindsey et al. conclude that this suggests that, "father-child play bears special significance for young children" (p. 534).

Pettit et al. (1998) studied 36 families of 45-to-76-month-old children. These investigators compared three different interaction contexts: parent-child free play, involvement in child-peer play, and social coaching in hypothetical social-problem situations. Here, only results pertaining to play will be reviewed. More dyadic play involvement of mothers (demonstrating an interest in child's play, or playing together with child) was related to peer-rated sociometric status. Fathers' dyadic play involvement predicted higher teacher

ratings of social skillfulness, but only for boys. More popular children's fathers were more involved in child-peer play, but their mothers were less involved. Because of the small sample size, Pettit et al. see their study as exploratory. Nevertheless, this is one of the first studies to suggest potentially different roles of different socialization contexts.

#### **4.3 Conclusion free play and fantasy play context**

Studies observing parents and children during free play again suggest that more socially competent children experience autonomy-within-connectedness. Popular children and their parents interacted in more mutually responsive, relevant, and coherent ways than rejected dyads did (Black & Logan, 1995; Lindsey et al., 1997). Rejected parent-child dyads used more irrelevant turns, responded more often in a noncontingent way, and used more demands instead of suggestions (Black & Logan, 1995). These incoherent patterns are reminiscent of the incoherence found by Dumas and LaFreniere (1993) and Dumas et al. (1995) in dyads of aggressive children and mothers during a game. The detailed results from Black and Logan's study suggest that rejected children and their parents have difficulties to remain connected to what is important for the other. At the same time, they appear to have problems with expressing autonomy, since they use more control. The finding that children interacted in similar ways with parents and peers suggests that dyadic parent-child interaction patterns are related to peer acceptance via dyadic interaction patterns with peers (Black & Logan, 1995). Lindsey et al. (1997) found explicit evidence for dyadic processes. They found relations between parent-child synchrony and peer acceptance, suggesting that the interactions of better accepted children were more horizontal than those of less well-accepted children. In addition, better accepted children and parents were more mutually compliant with each others' initiatives. For father-child dyads, this result remained significant after controlling for individual levels of compliance and initiations, leading Lindsey et al. to conclude that father-child play may be especially significant for children's social acceptance.

Sociometric status has also been linked to parents' involvement in play (Pettit et al., 1998), although fathers' play involvement was only related to boys' social skillfulness. Relations between social acceptance and parent-child fantasy play have only been studied in one very small-scale study (Goudena & Vermeulen, 1997). No relations were found, possibly because these investigators did not look at shared play. The present study will investigate links between parent-child shared fantasy play and peer acceptance in Chapter 4.

## **5 Gender differences**

Several studies have found gender differences in home, task, and physical play situations. This section will describe differences between mothers and fathers, and boys and girls.

### **5.1 Differences between mothers and fathers**

Of the 12 studies that included fathers, 11 found differences in the way mother-child and father-child interactions were linked to peer competence. Two of these only found relations of peer competence with father-child emotion expressions during arousing games and not with mother-child expressions (Carson & Parke, 1996; Cassidy et al., 1992). Fathers may express more emotions in a playful context than in other situations. Their behaviors in such a context may be of more influence (Cassidy et al., 1992). Kerns and Barth (1995), however, found almost no relations with father-child physical play. Some studies suggest that connectedness might be especially relevant in the interaction with mother, while room for autonomy plays a larger role in the interactions with father (Boyum & Parke, 1995; Carson & Parke, 1996; Isley et al., 1996). Deković and Janssens (1991), for instance, found that peer acceptance was positively related to mothers' support and negatively to fathers' negative and controlling behaviors. On the other hand, several studies that only observed mothers found that maternal coercive control is related to less optimal peer relations as well (Dumas & LaFreniere, 1993; Dumas et al., 1995; Putallaz, 1987).

### **5.2 Differences between boys and girls**

Relations between peer acceptance and parent-child interactions have also been found to be different for girls and boys. This has been mainly found in the home (Boyum and Parke, 1995), during task (Denham et al., 1990) and physical play contexts (Isley et al., 1996, 1999; Kerns & Barth, 1995; MacDonald & Parke, 1984). Gender differences seem to center mainly on the expressions of emotions and control.

Girls' successful peer relations have been related to mothers' expression of positive as well as negative emotions (Boyum & Parke, 1995; Kerns & Barth, 1995). Boyum and Parke suggest that for girls it might be more important to receive particular (positive or negative) emotional expressions, while for boys receiving attention may be more important than the way in which it is expressed. Other studies, however, suggest that negative emotions are more detrimental for boys' than for girls' peer acceptance (Isley et al., 1996; Kerns & Barth, 1995). Isley et al. (1996) found that parental negative affect was more strongly

related to peer acceptance for boys. Fathers' negative affect was related to boys' rejection and mother's positive affect to boys' acceptance (Isley et al., 1996). The suggestion that relations between fathers' negative expressions and directiveness to boys' peer rejection seem to be particularly strong (Isley et al., 1999) may be related to the nature of the context. Possibly, physical play has a different meaning for boys and girls. Males have been found to be engaged more in physical play, while females played longer with objects (MacDonald & Parke, 1984). Potentially, fathers' and boys' physical play is more arousing than mothers' and girls' play (Cassidy et al., 1992). Father-son play might also be more competitive. In such a context, fathers' negative expressions and directive control attempts may have a dysregulating impact.

Physical play with girls has been related to *shorter* play bouts for more popular girls and their mothers in one study (Kerns & Barth, 1995). It is possible that these girls took more initiative with their mothers to stop such bouts of arousing play, which would be an indication of better affect regulation and of more autonomy in these girls. Kerns and Barth found that more popular girls (and their mothers) were more directive than less well accepted girls. Various other physical play studies have also found that directiveness in mother-daughter interactions is related to popularity in girls (Isley et al., 1996; MacDonald & Parke, 1984), while directiveness is generally related to *lower* social competence and acceptance. In line with this, Denham et al. (1990) showed that maternal allowance of autonomy during a task made a positive contribution to girls' but not to boys' positive social behaviors. Allowing autonomy *without* giving support, however, was related to more sadness in girls. The authors suggest that girls may feel rejected by mother when they experience autonomy without support. McFayden-Ketchum et al.'s findings (1996) also suggest relations between maternal control behaviors and girls' internalizing behaviors. They found that maternal coercion predicted a *decrease* in girls' aggression from kindergarten to third grade, while it predicted an *increase* in aggression for boys. This may be partly explained by lower initial levels of aggression of girls but it is also possible that girls tend to internalize more than boys, in response to coercion. Females may have a greater tendency to internalize parental control, while males tend to oppose parental control (Kochanska, 1997). An intriguing long-term study by Kremen and Block (1998) supports this suggestion. They found that maternal hostility and paternal uninvolvedness in a task interaction with 5-year-old boys were related to higher undercontrol in young men at 18 and 23 years of age. These adolescents had a relatively low threshold for expressing impulses and

thus were more likely to be aggressive. On the other hand, more parental control and restraint of 5-year-old girls' expressiveness was related to a relatively high threshold for impulse expression (i.e., ego overcontrol) in females. The authors suggest that for women, "having been watched closely, they now watched themselves" (p. 1072).

More (non-coercive) control in mother-girl interactions may also be positive for girls' social competence, because girls are reported to be more focused on relatedness than on autonomy-enhancing behaviors from a young age on (e.g., Robinson, Little, & Biringen, 1993). As they are entering the social world of peers, it may be that it is important to develop their autonomy. In peer relationships, it is important to maintain a balance between autonomy and relatedness to others. For boys, who tend to emphasize autonomy more than relatedness, it may be more important to develop their relationship-enhancing behaviors (like the expression of positive emotions). These suggestions are speculative, however. Many studies have not reported gender differences. To date, the nature of potential differences between mother-daughter, mother-son, father-daughter, and father-son dyads, is not clear (Russell & Saebel, 1997). Therefore, gender differences will be explored in the present study.

### **Summary of Chapter 3**

In this Chapter, studies were reviewed to illustrate linkages between parent-child interactions in various contexts and children's peer relations. Most studies found that positive peer relations are associated with mutual responsiveness, the expression of positive emotions, and control strategies that are not demanding or negative. Poor peer relations have been related to nonresponsiveness as well as to high levels of negative affect and control. Thus, more socially competent children seem to experience more autonomy-within-connectedness with their parents, while less competent children may experience rejection and a lack of autonomy (cf. Baumrind, 1989). The value of the use of a *dyadic approach* was shown by several studies. For instance, while Pettit et al. (1991) did not find the expected relation between withdrawal and maternal intrusiveness, Harrist et al. (1994) did find connections between withdrawn behaviors and dyadic nonsynchrony in the same sample. McFayden-Ketchum et al.'s (1996) measure of mother-child coercion, characterized by mother's negative reaction to child misbehavior, predicted changes in children's aggressive behaviors even three years after the observation. LaFreniere and Capuano's (1997) intervention study shows that changing the coercive dyadic interaction pattern in anxious dyads resulted in an increase in



children's social competence. In Chapter 4, I will present a study that investigates relations between children's peer acceptance and dyadic measures of parent-child interactions during fantasy play. Better accepted children and their parents are expected to show more horizontal interactions, in which the child may experience autonomy-within-connectedness. Furthermore, more popular dyads are expected to engage in more fantasy play. Potential gender differences will be explored.



## **Chapter 4**

### **Peer acceptance in 4- and 5-year-old children and fantasy play interactions with father and with mother: The present study**

This chapter presents results from a study that investigated 4- to 5-year-olds' peer acceptance in relation to dyadic interaction behaviors with mother and father in a free play situation. The **first research question** was whether children's peer acceptance is related to parent-child interaction behaviors. It was hypothesized that better accepted children would interact in more horizontal ways, expressing both more connectedness and more autonomy.

Interactions that show connectedness and room for autonomy may give children an opportunity for learning how to interact with peers in a balanced way. Behaviors that expressed connectedness in the present study (i.e., mutual responsiveness, shared positive emotions, and dyadic engagement in play) all indicate a movement *toward others*. The capacity to do this is a hallmark of popular children (Newcomb et al., 1993). It was expected that better accepted children and their parents would show more interaction behaviors indicative of connectedness. Rejected children, on the other hand, were expected to interact in less mutually responsive and more controlling ways, which indicate movements *away from* or *against others* (Horney, 1945, in Newcomb et al., 1993). Relations of children's peer acceptance with a measure of overall balance were also explored; this measure was seen as an index of autonomy-within-connectedness.

The **second research question** in this chapter was whether peer acceptance is related to parent-child shared *fantasy play*. Peer interaction studies have found that the amount and quality of social fantasy play are higher among popular than among rejected children (Connolly & Doyle, 1984; Fein, 1981; Rubin & Maioni, 1975). The only study that has tried to relate parent-child fantasy utterances to children's social competence did not find any differences in the amount and quality of fantasy play of popular and rejected children with their mothers (Goudena & Vermeulen, 1997). However, the sample was small (only 14 children). In addition, relations between peer acceptance and social mother-child fantasy play were not investigated. Based on peer interaction studies, therefore, it is expected that the amount of parent-child *shared* fantasy play will be positively related to children's peer acceptance.

*Third*, main and interaction effects of child gender will be explored in the analyses. There were no specific hypotheses about gender, because findings from previous studies were inconsistent (see Chapter 3). These questions will be answered first for mother-child interactions (section 2A). Next, I will explore them for father-child interactions (section 2B).

## **1 Method**

A brief summary of procedures and methods will be provided in this section. For a complete description of subject selection and recruitment, video recording, and coding procedures, the reader is referred to Chapter 2 (Section 5). Descriptive data of parent-child interaction measures, interrelations between the specific interaction behaviors as well as relations with potential confounding variables can also be found in Chapter 2.

### **1.1 Summary of procedures**

A group of 80 children with a mean age of 60 months (37 girls) participated in the study. The children were selected based on their peer-rated sociometric status. Thirty popular, 27 average, and 23 rejected children were observed at home, once with their mother and once with their father. All of the mothers and 74 of the fathers collaborated. We videotaped parent-child dyads for 15 minutes, while playing with a set of toys brought by the two experimenters. The videorecordings were coded for 7 minutes, in every 10-second episode. Coding categories were combined to form dyadic measures of the interaction: 1. mutual responsiveness; 2. shared positive emotions; 3. balance of control; 4. total non-negative control; 5. total negative control; 6. dyadic play engagement. In addition, a measure of overall balance was formed, in which parent and child were mutually responsive, shared a balance of control, and were both engaged in play. Thus, during episodes of balance, parent and child had a mutual focus about which they shared at least 3 verbal turns, neither parent nor child tried to influence the other more than the other, and both were engaged in play. In addition, a measure of shared fantasy play was formed. This measure entailed the proportion of episodes in which parent and child were both engaged in fantasy play and mutually responsive (i.e., they shared at least 3 verbal turns while playing fantasy play). This can be seen as a conservative measure of shared fantasy play, because mother and child might have shared fantasy even when one of them was merely watching the other play in a pretend mode.

## 1.2 Overview of analyses

The continuous standardized peer ratings of likability were used as an index of peer acceptance in all analyses. This was done to be able to test interaction effects of gender and in uni- and multivariate analyses of variance. In these analyses, gender was treated as a fixed variable, with continuous peer acceptance ratings as a covariable. Investigating gender x peer acceptance effects with the categorical sociometric status groups would have resulted in too few cases per cell (e.g., there were only 8 dyads of rejected girls with fathers). Parent-child interaction variables (i.e., mutual responsiveness, shared positive emotions, balance of control, total non-negative control, negative control, and dyadic play engagement) were entered as the dependent variables in the MANOVAs. Univariate analyses were done to test effects of gender and peer acceptance effects on overall balance as well as shared fantasy play.

## 2 Results

The results will be discussed separately for the mother-child and father-child interactions. For research question 1 and 2, Pearson correlations are reported first for the group as a whole as well as for both genders separately. Next, I present MANOVAs and ANOVAs in which main and interaction effects of peer acceptance and gender on parent-child variables are reported. These analyses will be repeated with potential covariables (i.e., age, and temperament variables) that were related to the parent-child interaction variables (see Chapter 2).

### A. Mother-child interactions

#### 1. *Is peer acceptance related to dyadic mother-child behaviors?*

**Correlations** Table 1 reports Pearson correlations between dyadic mother-child variables and peer acceptance. Peer acceptance was significantly correlated with shared positive emotions ( $r(80) = .23, p = .04$ ), the balance of (non-negative) control ( $r(80) = .25, p = .03$ ), and dyadic play engagement ( $r(80) = .26, p = .02$ ). Children who were more popular among peers shared more smiling and laughter with mother and they also showed a higher balance of control. Thus, in the interactions of less well-accepted children, mothers were relatively more controlling than mothers of better accepted children. Finally, children who were better accepted were also more often simultaneously engaged in play with their mothers.

Contrary to expectations, peer acceptance was not correlated with mutual responsiveness or with the amount of control in mother-child interactions. There was a correlation between peer acceptance and overall balance in the mother-child interaction ( $r(80) = .22, p = .05$ ), however. The interactions of more popular children with their mothers tended to be more balanced (i.e., mutually responsive with a balance of control and dyadic play engagement).

*Table 1*

Correlations between peer acceptance and mother-child interaction behaviors

<b>Mother-Child Interaction Behaviors</b>	<b>Peer Acceptance</b>		
	<i>Girls</i>	<i>Boys</i>	Total
Mutual responsiveness	-.17	-.05	-.06
Shared positive	.16	<b>.29<sup>+</sup></b>	<b>.23<sup>*</sup></b>
Balance of control	<b>.39<sup>*</sup></b>	.11	<b>.25<sup>*</sup></b>
Total non-negative control	-.02	-.09	-.04
Negative control	<b>-.20<sup>+</sup></b>	-.10	-.13
Dyadic play engagement	<b>.32<sup>+</sup></b>	.23	<b>.26<sup>*</sup></b>
Shared fantasy play	.27	.09	.19
Balance	.26	.17	<b>.22<sup>+</sup></b>

<sup>+</sup>  $p < .10$ , <sup>\*</sup>  $p < .05$

**Analysis of Variance** A MANOVA explored potential main and interaction effects of gender and peer acceptance on mother-child mutual responsiveness, shared positive emotions, balance of control, non-negative control, negative control, and dyadic play engagement. This analysis showed a significant main effect of peer acceptance ( $F(6, 71) = 2.95, p = .01$ ). Univariate effects were found on mother-child balance of control ( $F(3, 79) = 5.93, p = .02$ ) and dyadic play engagement ( $F(3, 79) = 6.21, p = .02$ ). The effect of peer acceptance on shared positive emotions just failed to reach significance ( $F(3, 79) = 3.76, p = .06$ ). This remained the same when controlling for child age (a correlate of shared positive emotions). There were no interaction effects of gender x peer acceptance on the mother-child variables.

An ANOVA showed a significant main effect of peer acceptance on the proportion of total balance ( $F(3, 76) = 4.17, p = .045$ ). Better accepted children and their mothers showed more balance in their interactions than less accepted children.

**Confounding variables** Because mother-child balance had been found to be related to the child's activity level and approach-withdrawal (see Chapter 2), the analysis was repeated while controlling for these temperament variables. The effect of peer acceptance on mother-child balance was not significant anymore when controlling for activity level ( $F(4, 72) = 2.39, p = .13$ ). When controlling for children's tendency to approach (versus withdraw from) novel situations, there still was a marginal effect of peer acceptance on mother-child balance ( $F(4, 72) = 2.93, p = .09$ ). Thus, with more active or withdrawn children, peer acceptance was not related to balance between mother and child.

## *2. Is peer acceptance related to mother-child shared fantasy play?*

**Correlations** The correlation between peer acceptance and proportion of shared fantasy play with mother was nonsignificant for both genders (see Table 1).

**Analysis of Variance** A univariate ANOVA showed a tendency for better accepted children to play more fantasy play with their mothers ( $F(3, 79) = 3.27, p = .08$ ). No main or interaction effects of gender were found.

**Summary of findings** In interactions of better accepted children and their mothers, there was a higher balance of control and more dyadic play engagement. Better accepted children and their mothers also tended to share more positive emotions. In addition, they showed a higher proportion of overall balance: interactions that were characterized by mutual responsiveness, balance of control, and dyadic play engagement. However, when children were more active or less inclined to approach novel situations, mother-child balance was not related to peer acceptance. These results provide some indications that the interactions of more popular children with their mothers were more horizontal. Interactions of better accepted children with their mothers seemed more connected than those of less accepted children.

## B. Father-child interactions

### 1. Is peer acceptance related to dyadic father-child interaction behaviors?

**Correlations** Table 2 presents Pearson correlations between peer acceptance and father-child interaction measures. Peer acceptance was negatively correlated with the total amount of non-negative ( $r(74) = -.26, p = .03$ ) as well as negative control ( $r(74) = -.27, p = .02$ ). The more control in father-child interactions, the less accepted the child was. Peer acceptance was not related to father-child mutual responsiveness, shared positive emotions, or balance of control. There was a significant correlation between peer acceptance and dyadic play engagement ( $r(33) = .39, p = .03$ ), but only for girls. Better accepted girls and their fathers were more often simultaneously engaged in play. Father-child balance was marginally correlated with peer acceptance ( $r(74) = .21, p = .08$ ). For girls, however, the correlation was significant ( $r(33) = .44, p = .01$ ). Better accepted girls showed more episodes that were characterized by balance between father and daughter.

Table 2

Pearson correlations between peer acceptance and dyadic measures of father-child interactions

Father-Child Interaction Behaviors	Peer Acceptance		
	Girls	Boys	Total
Mutual responsiveness	.16	-.09	0
Shared positive	.04	-.15	-.10
Balance of control	.08	-.09	.10
Total non-negative control	-.17	<b>-.33*</b>	<b>-.26*</b>
Negative control	<b>-.38*</b>	-.20	<b>-.27*</b>
Dyadic play engagement	<b>.39*</b>	-.01	.19
Shared fantasy play	<b>.38*</b>	-.09	.14
Balance	<b>.44*</b>	.06	<b>.21<sup>+</sup></b>

<sup>+</sup>  $p < .10$ , \*  $p < .05$



**Analysis of Variance** A MANOVA was conducted to investigate main and interaction effects of peer acceptance and gender on father-child mutual responsiveness, shared positive emotions, balance of control, total control, and dyadic play engagement. I decided to use one measure of father-child control (non-negative and negative summed), because the pattern of correlations was similar, the number of variables were reduced, and the means for negative control were very low (see Chapter 2, Table 4). Thus, total control between father and child consisted of gentle, firm, and negative control and correlated  $-.30$  ( $p(74) = .009$ ) with peer acceptance (for girls:  $r(33) = -.26$ , *ns*; for boys:  $r(41) = -.35$ ,  $p = .02$ ).

The MANOVA found a main effect of peer acceptance ( $F(5, 66) = 2.56$ ,  $p = .04$ ). Univariate tests showed that peer acceptance had an effect on the total amount of control ( $F(3, 70) = 7.01$ ,  $p = .01$ ). More control was used in interactions of more rejected children and their fathers. The main effect of peer acceptance on father-child play engagement was marginally significant ( $F(3, 70) = 3.47$ ,  $p = .07$ ) and so was the interaction of peer acceptance  $\times$  gender ( $F(3, 70) = 3.82$ ,  $p = .06$ ). Children who were better accepted by peers and their fathers tended to be more often simultaneously engaged in play. This was mainly the case for father-daughter dyads ( $M_{\text{popular girls}} = .52$ ,  $M_{\text{average girls}} = .42$ ,  $M_{\text{rejected girls}} = .36$ ).

An ANOVA tested main and interaction effects of gender and peer acceptance on the proportion of father-child balance. An effect of peer acceptance was found ( $F(3, 70) = 3.98$ ,  $p = .05$ ). More popular children and their fathers shared more episodes of overall balance.

**Confounding variables** Because more control was used in father-child dyads of temperamentally more active and less task-oriented children, the MANOVA was repeated two times, while controlling for these variables (see Chapter 2). The univariate main effect of peer acceptance on total father-child control remained significant in both analyses ( $F(4, 66) = 4.63$ ,  $p = .04$  after controlling for activity level;  $F(4, 66) = 7.03$ ,  $p = .01$  after controlling for task-orientedness). Regardless of the child's activity level or task-orientedness, more control between father and child was related to lower peer acceptance. Father-child balance was related to less withdrawal from novelty (see Chapter 2). Therefore, the ANOVA was repeated with approach-withdrawal as an additional covariable. The main effect of peer acceptance remained significant,  $F(4, 66) = 5.32$ ,  $p = .02$ .

## 2. Is peer acceptance related to father-child shared fantasy play?

**Correlations** Peer acceptance was not significantly correlated with shared fantasy play for the total group but it was for girls ( $r(33) = .42$ ,  $p = .02$ , see Table 2). Better accepted girls and their fathers shared more fantasy play. Boys' peer acceptance was not significantly related to shared fantasy play.

**Analysis of variance** A univariate ANOVA showed that the interaction effect of peer acceptance x gender was significant ( $F(3, 70) = 4.90$ ,  $p = .03$ ). There were no main effects of peer acceptance or gender.

**Confounding variables** Since father-child shared fantasy play was related to the child's approach of novelty, the ANOVA was repeated while controlling for approach-withdrawal. The gender x peer acceptance effect remained significant  $F(4, 66) = 5.39$ ,  $p = .02$ . The effect of peer acceptance became marginal,  $F(4, 66) = 3.24$ ,  $p = .08$ . Thus, children who tended to approach novel people and situations and who shared more fantasy play with their fathers, tended to be better accepted by their peers.

**Summary of findings** Children's peer acceptance was negatively related to father-child control. More control was used in the interactions of less well accepted children, irrespective of the child's activity level and task-orientedness. There also was a relation between peer acceptance and overall balance. Better accepted children and their fathers shared more episodes in which father and child were mutually responsive, shared control, and were both engaged in play. This was irrespective of the child's approach-withdrawal tendencies. Some relations between peer acceptance and play behaviors were found, mainly for girls. More popular children were more often simultaneously engaged in play with father, especially girls. Better accepted girls and their fathers shared more fantasy play, but this was not found for boys.

## 3 Discussion

The first aim of this chapter was to relate 5-year-olds' peer acceptance to dyadic measures that reflected connectedness and autonomy during parent-child play interaction. Some of the expected relations were found, but the results suggest that the relative roles of connectedness and autonomy may be different in mother-child and father-child interactions. Peer acceptance was positively related to balance of control, dyadic play engagement, and (marginally) shared positive emotions with mother. It was negatively related to the total amount of control in the interaction with father. A similar difference

between mother-child and father-child associations with peer competence was also reported in some previous studies (Boyum & Parke, 1995; Carson & Parke, 1996; Deković & Janssens, 1991; Isley et al., 1996). Higher levels of peer acceptance were also related to more overall balance with both parents, but the association with mother-child balance was not significant anymore after controlling for the child's activity level. The second aim of the study was to investigate relations between peer acceptance and shared fantasy play between parents and children. It was found that better accepted girls engaged in more shared fantasy play with father. Peer acceptance was marginally related to shared fantasy play with mother. Unexpectedly, no relations were found with mutual responsiveness with mother and father, a more verbal measure of connectedness.

### **3.1 Peer acceptance and dyadic mother-child behaviors**

The interactions between mothers and children who were better accepted by peers were characterized by a higher balance of control, more dyadic play engagement, and a tendency to share more positive emotions. These findings suggest that the interactions of more popular children with their mothers were more connected and had more room for autonomy than those of less well-accepted children. The higher dyadic play engagement and the tendency to share more positive emotions were indications that the interactions of mothers and better accepted children were more connected. Higher peer acceptance has been related to maternal involvement in children's activities in physical play (Barth & Parke, 1993; MacDonald & Parke, 1984), free play (Pettit et al., 1998), and task situations (Denham et al., 1991). Dumas et al. (1995) noted that socially competent children and mothers turned their task into a mutually enjoyable game, which suggests that these dyads are able to create feelings of connectedness during their mutual activities. According to a study with toddlers, it is relatively rare that parents act as co-players in their children's play (Russell, August 1996). Parents who did so, usually combined this role with a child-centered facilitative role. The experience of interacting with peer-like parents may promote play with peers, especially when parents combine their co-player role with a helpful, facilitative role. Alternatively, children who are better able to engage in dyadic play with peers may also be better able to engage their mothers in play.

Another indication for more connectedness in dyads of better accepted children was the finding that more popular children and their mothers tended to share more positive affect. This result is in line with previous studies that investigated dyadic measures of affective expressions (Dumas & LaFreniere, 1993; Dumas et al., 1995). It is also

consistent with studies that found more positive expressions by better accepted children or their mothers separately (Denham et al., 1991; Goudena & Vermeulen, 1997; Isley et al., 1999; Kerns & Barth, 1995). From a functionalist perspective, the expression of positive emotions can be seen as operating to maintain ongoing behavior. According to Campos, Campos, and Barrett, (1989), "The joyful person is likely to keep up what he is *doing*, and he or she is simultaneously *signaling* to others to keep up their interaction with the individual" (p. 395, emphasis in the original). Thus, when two people express joy toward each other, they are increasing the likelihood that both their own and the other's behaviors will continue. In this way, shared positive emotions may increase the motivation to continue the ongoing interaction. Sharing smiling and laughter with mother may heighten the chance of continued play engagement and enjoyment. It will most likely give the child a feeling of being accepted and acknowledged. This may also make the child more open and responsive to maternal suggestions (Kochanska, 1997). Potentially, the sharing of positive expressions around the age of 5 reflects a relationship history of dyadic positive expressions that enhance feelings of connectedness and diminish feelings of negativity between mother and child. This may facilitate interactions with peers, by making children more open and receptive. In this study, the relation between peer acceptance and shared positive emotions was only marginal. This may be because of the way we coded positive emotions. We only coded smiles and laughs as positive, which may have led to an underestimation of actual relations between affective climate and peer acceptance. The affective climate may be characterized by other positive behaviors, such as eye contact, intonation, etc., and we did not code these features. Also, we did not look at the specific meaning of smiling and laughter in the context in which it occurred. In this age group, children may smile out of joy, shyness, embarrassment, or they may laugh in a mocking way. Nevertheless, our finding does seem meaningful. It is in the expected direction and converges with previous studies.

More room for autonomy in the interactions of better accepted children was suggested by a higher balance of control. Mothers tried to control relatively more than children when children were more rejected. This finding is in line with the study of Dumas et al. (1995), who found that socially competent children and their mothers influenced each other in reciprocal ways. Although equal levels of control between parents and children are likely to be dysfunctional (Russell et al., 1998), they might be appropriate in a play context. After all, children are more expert at playing than their parents. It can be expected that children are more directive in an activity that is "on their terrain,"

because it is likely that they are more emotionally invested in such an activity. Possibly, children who are successful in their interactions with peers have had more experience with sharing control with their mothers in peer-like interaction settings. Such experience may heighten the child's feelings of autonomy and competence in co-controlling interactions with others (Lewis, 1981; Russell, August 1996). This experience may also make children more assertive. One study has indeed found that children whose mothers allowed them more autonomy were more assertive with peers in preschool (Denham et al., 1991).

Better accepted children and their mothers also showed more balance in their interactions, suggesting more autonomy-within-connectedness. They more often shared their focus of attention and were more often actively involved with each other. Similarly, Harrist et al. (1994) found that more mother-child synchrony before kindergarten predicted higher social competence and lower aggression. In addition, Lindsey et al. (1997) found that more popular children and their mothers were more synchronous in their free play interactions. Their construct of synchrony is very similar to the construct of balance in the present study (i.e., mutual responsiveness, shared affect, and equal involvement in the activity). It appears that better accepted children interact in more horizontal ways with their mothers (Russell et al., 1998). After controlling for the child's activity level, however, the association between peer acceptance and mother-child balance was not significant anymore. More active children shared less balanced episodes with their mothers; they were also more likely to be rejected (see Chapter 2). It is possible that it is harder to entertain horizontal and connected interactions with more active children, both for mothers and for peers. These children may have difficulty keeping their attention focus on the interaction.

### **3.2 Peer acceptance and dyadic father-child behaviors**

In father-child interactions, balance of control was not related to peer acceptance. The total amount of control *was*, however. The more control father and child tried to exert over one another, the less accepted the child was by peers (regardless of the child's activity level and task-orientedness). Numerous other studies have found relations between lower social competence and the expression of control in father-child interactions (Barth & Parke, 1993; Boyum & Parke, 1995; Deković & Janssens, 1991; Isley et al., 1996; MacDonald, 1987; MacDonald & Parke, 1984). In the present study, the control used in the father-child interactions was mainly positive or neutral. However, when the total amount of control between father and child surpasses a

certain level, it may be experienced as coercive. When experienced repeatedly, such a pattern may interfere with the development of autonomy. The child may learn that he or she does not have much influence on others' and he or she might become either less assertive or more aggressive with peers.

There were not many indications of more connectedness in the interactions of better accepted children and their fathers. However, they did share more balanced episodes, in which both were mutually responsive, shared control, and were engaged in play. This suggests more autonomy-within-connectedness in the father-child interactions of better accepted children. This finding is similar to Lindsey et al. (1997), who found that more synchrony in father-child play interactions was related to 5-year-olds' social competence. It suggests that better accepted children might have more horizontal play interactions with fathers as well as with mothers. Balance with fathers remained significantly related to peer acceptance after controlling for the child's approach-withdrawal. Another indication of more connectedness of more popular children with fathers was that they tended to be longer engaged in play together. This was especially the case for girls. This gender pattern is different from that found in other studies, which may be related to the play context in the present study, which was designed to elicit fantasy play. Gender differences will be discussed further in Section 3.4.

### **3.3 Peer acceptance and parent-child shared fantasy play**

The present study was specifically aimed at studying the activity of parent-child *fantasy* play in relation to children's peer acceptance. Because popular children have been found to share more fantasy play with peers (Connolly & Doyle, 1984; Rubin et al., 1983; Rubin & Maioni, 1975), they were expected to engage in more shared pretend play with parents as well. This expectation was partially confirmed. Better accepted girls shared significantly more fantasy play with their fathers than less accepted girls. In addition, there was a trend that more popular children played more fantasy play with mothers.

Only one previous study examined differences between popular and rejected children and their mothers during fantasy play. They found that the quality and quantity of fantasy play did not differ between groups (Goudena & Vermeulen, 1997). The authors suggest that rejected children may be capable of similar levels of fantasy play as popular children, but only with the guidance of a more capable partner. The present study found relations between peer acceptance and dyadic measures of *shared* fantasy play with parents. To engage in shared fantasy play, it is necessary to take the other's perspective, take

initiative, be responsive, and to negotiate play themes and potential conflicts. This is a dyadic process in which each play partner's contributions are important. Both autonomy and connectedness are expressed. Studies with younger children show that toddlers' play with mother is more sustained, complex, and diverse than solo play is (e.g., Fiese, 1990; Haight, Masiello, Dickson, Huckleby, & Black, 1994; Youngblade & Dunn, 1995). According to Dunn (1997), the interaction behaviors between mothers and children are increasing similar between 2 and 5 years of age. She found that there were significant differences in playful positive moves between mother and child between 2 and 4 years, but at age 5 mothers and children acted similarly. Dunn concludes, "there was an increase in the equity of balance between mother and child" (p. 570). This suggests that play interactions of mothers and children become more horizontal over development and that balance during play at age 5 might be normative (Russell et al., 1998). Possibly, rejected children and their mothers do not achieve this change in their play.

### **3.4 Gender differences**

Peer acceptance was related to play engagement with mother for children of both genders. Father-child play was only related to girls' acceptance. Other studies have found relations between play engagement of both parents and *boys'* social competence (Barth & Parke, 1995; MacDonald & Parke, 1984; Pettit et al., 1998). However, most of these observed parents and children during physical play. Pettit et al. observed them in a free play situation, but in a playroom context. This may have elicited more varied play than in the present study. In the present study, the observation context and play activity may have been more suitable for girls than boys. Girls prefer more quiet play indoors with only one playmate. Boys tend to play in larger groups outdoors and to use more space (Rubin et al., 1983). Furthermore, boys' play styles tend to be more aggressive, while those of girls tend to be more nurturant and social (Golombok & Fivush, 1994). When playing pretend play, girls have been found to prefer playing house or other more sedentary types of pretend play. Boys, on the other hand, more often enact themes that go together with more physical movement (e.g., playing superhero) and aggression (Fein, 1981; Werebe & Baudonnière, 1991). Boys' pretend play may result in rough-and-tumble play (Connolly, Doyle, & Ceschin, 1983; Golombok & Fivush, 1994; Rubin et al., 1983).

It seems likely that fathers and mothers play in different ways as well. Adults encourage more active motor play in boys, while they engage in more face-to-face interaction with girls, starting in infancy

(Golombok & Fivush, 1994; Rubin et al., 1983). Fathers have been found to play more physical play than mothers do, especially with their sons (MacDonald & Parke, 1984; Power & Parke, 1982). MacDonald and Parke (1984) reported that women and girls engaged in more toy-mediated pretend play. Fathers have also been found to encourage gender-specific play in their children and discourage cross-gender play more than mothers do (Golombok & Fivush, 1994). In the present study, fathers reported playing more physical play and less fantasy with their children. In addition, they indicated that they played more fantasy play with daughters than with their sons, while mothers played more physical play with sons than with daughters (see Chapter 2).

### **3.5 Mother-child and father-child interactions**

The finding that mother-child behaviors were *positively* related to peer acceptance while father-child behaviors were *negatively* related to it is similar to conclusions by Deković and Janssens (1991). In their study, maternal support and positive feedback during a puzzle-solving task was related to popularity, while paternal control and negative feedback were related to rejection. Isley et al. (1996) found that fathers' expressions of negative affect during physical play contributed uniquely to kindergartners' peer acceptance, after controlling for mothers' affect and control. Possibly, fathers' control has more impact than mothers' does. An indication for this suggestion is Lindsey et al.'s (1997) finding that children were more compliant with fathers than with mothers. Fathers' control is often expressed in a more powerful way (through fathers' deeper voice, larger body, etc.). In addition, fathers usually spend less time with their children than mothers do in modern Western societies (Lamb, 1998). The latter was found in the present study as well (see Chapter 2). Possibly, fathers are proportionally more controlling than mothers during the briefer time they spend with their children, which may heighten the impact of the control. In the present study, fathers were observed to be more controlling than mothers were (individual scores) and fathers and children tried to control each other more than mothers and children did (see Chapter 2). Second, it is possible that mother-child and father-child behaviors interact and have an additional influence on children's peer acceptance. In our sample, mother-child and father-child play behaviors were related (see Chapter 2). More popular children not only experienced more balance in play with mothers but also with fathers. Girls who played more with mother also played more with father. Third, father-child and mother-child behavior patterns may be differentially related to domains of child development. It has been suggested, for example, that father-child relationships are more strongly related to social competence, while



mother-child relationships may be more related to variables such as self-esteem (Verschuere & Marcoen, 1999).

Thus, relationships with fathers and with mothers may have different meanings for children and they may be related to peer acceptance in different ways. However, more research is needed to investigate this, especially since *mother*-child negative affect and/or control have also been related to poorer peer relations as well (Barth & Parke, 1993; Dumas & LaFreniere, 1993; Harrist et al., 1994; Putallaz, 1987). In addition, *father*-child positive interactions have been related to higher social competence (Cassidy et al., 1992; Isley et al., 1999).

### **Summary of Chapter 4**

In Chapter 4, a study of direct linkages between peer acceptance and parent-child fantasy play interactions was presented. Better accepted children and their mothers were more often dyadically engaged in play and tended to share more positive emotions. This was interpreted as a sign of more connectedness. In addition, these dyads showed a higher balance of control, which was seen as a sign of more room for autonomy. Peer acceptance was also related to mother-child balance, but not after controlling for the child's activity level. Father-child control was related to less acceptance by peers. Controlling father-child interactions may have a negative impact on the development of autonomy. Indications of more connectedness in the interactions of better accepted children with fathers were that they showed more balance and more dyadic play engagement. Specially, fathers and better accepted girls shared more fantasy play. The fantasy play context used in this study may have been more suitable for females. Better accepted children tended to engage in more fantasy play with mother as well. To share fantasy, sophisticated capacities of connecting and expressing autonomy are required.

The findings suggest that parent-child interactions of better accepted children were more horizontal and showed more connectedness and room for autonomy. Such patterns may be based on the history of the parent-child relationship. Around the entry to kindergarten, it may be adaptive if there are moments in which parents and children interact in peer-like ways. Such interactions may facilitate children's interactions with peers. Possibly, such balance does not arise in some parent-child relationships, making it harder for some children to engage in horizontal peer interactions. Parent-child relationships may also affect how the child feels and thinks about self and others and this subjective experience may influence peer relations. These hypotheses will now be explored, in Chapters 5 and 6.



## **Chapter 5**

### **Parent-child relationships, subjective experience of self and others, and social competence: A review of studies**

Chapter 5 explores the possibility that the child's subjective experience of self and others mediates the relation between parent-child and peer relationships. Assumptions are that children develop an experience of the self-in-relation in the relationship with parents and that this subjective experience will be related to the quality of peer relations. I expect that children will develop a positive and flexible experience of themselves when they experience autonomy-in-connectedness in dyadic interactions with parents. A positive and flexible sense of self-in-relation is expected to facilitate peer interactions and to heighten the chance of being accepted by peers.

Assumptions about the self-in-relation derive from theories that emphasize the inherent social nature of the self (Baldwin, 1899/1973; Bowlby, 1973; Bretherton, 1990, 1991; Cassidy, 1990; James, 1890/1950; Mead, 1934; Sroufe, 1990; Stern, 1985; Sullivan, 1953; Winnicott, 1971). Notwithstanding the widely shared assumptions of relations between real relationships and the experience of relationships, surprisingly little research has investigated these relations. Theory and research that has been done mainly comes from an attachment perspective. Observed attachment security has been related to peer relations (Erickson, Sroufe, & Egeland, 1985) and to representations of attachment and the self (e.g., Cassidy, 1988). Representations of attachment and the self have been related to characteristics of peer relations (e.g., Verschueren, Marcoen, & Schoefs, 1996). One study has investigated children's views of *peer* relations as potential mediators between attachment and friendships (Cassidy, Kirsh, Scolton, & Parke, 1996). However, the role of "internal working models" of attachment and the self have not been directly investigated as mediators. Chapter 6 will empirically explore subjective experience of parent-child relationships and of the self as a mediator. Because the study is cross-sectional, causal linkages cannot be shown. Nonetheless, this study hopes to show that relations exist between relationships with mother and with father, subjective experience, and peer relations. This can be a step towards greater understanding of family-peer linkages.

In Chapter 5, I will first consider the concept of subjective experience and its assessment in young children. Second, I will briefly outline how subjective experience may be related to the parent-child relationships and the self. Third, I will review some empirical evidence for this.

Fourth, possible relations between subjective experience and peer competence will be considered. Finally, I will review some studies that consider representations of peer relations as mediators between parent and peer relationships. The studies reviewed mainly apply to preschool or kindergarten children (ages 3 to 7 years). In some cases, I will describe some studies with older children, when certain research questions have not been explored with younger ones.

## **1 Subjective experience in young children**

As stated in Chapter 1, I prefer to use the expression "subjective experience" to concepts such as "representations" and "internal working models." First, it emphasizes the child's unique point of view. Second, it underscores the importance of emotions together with cognitions. Third, it highlights the experiential versus the rational. Finally, it seems relatively unattached to certain theoretical notions and underlying belief systems.

In Section 2, I will further consider attachment theoretical ideas and the role of working models. Now, I will first discuss the role of the dimensions of autonomy and connectedness for subjective experience of relationships and the self. Second, I will describe two types of knowledge about the self in relation: experiential and rational knowledge (Epstein, 1991; Stern, 1985). Third, I will consider ways of measurement of subjective experience of self and others in young children.

### **1.1 Connectedness and autonomy in subjective experience**

Connectedness and autonomy are two dimensions believed to be essential for subjective experience of self and relationships (Pipp, 1990). We are necessarily differentiated from others since birth, because we live in separate bodies (Butterworth, 1990; Fogel, 1993; Pipp, 1990; Stern, 1985). On the other hand, we could not survive without others. Although the self is both differentiated (autonomous) and connected from infancy onward (Stern, 1985), the forms in which autonomy and connectedness manifest themselves will change with development. Between 3 and 5 years of age, new forms of autonomy arise that remain embedded in connectedness with caregivers (Emde & Buchsbaum, 1990; Pipp, 1990). In their attachment relationships, children become "goal-corrected partners" (Bowlby, 1973/1991; Waters, Kondo-Ikemura, Posada, & Richters, 1991). They also become increasingly able to interact in horizontal ways with their parents (Russell, Pettit, & Mize, 1998; see also Chapter 3). In addition, they initiate relationships outside of the family, while staying firmly rooted in the relationships

with parents. Repeated experience of participation in mutually responsive and positive parent-child interactions may give the child the subjective experience that he is accepted and loved (i.e., basically connected). Parent-child relationships that are not overly controlling may make the child feel that he is an independent self who is able to influence others (i.e., autonomous).

### **1.2 Experiential and rational knowledge**

Knowledge about how the self relates to others is believed to be partly rational, but to a much larger extent experiential (Epstein, 1991; Lewis, 1991; Stern, 1985). Experiential and rational knowledge have also been described as "knowledge by acquaintance" and "knowledge by description" (James, 1890/1950) and as "sensorimotor" and "representational knowledge" (Lewis, 1991; Pipp, 1990).<sup>15</sup> Experiential knowledge is highly affect-laden, especially when interpersonal issues are concerned (Emde et al., 1991; Epstein, 1991). It develops through repeated experiences, even in preverbal infants (Fogel, 1993; Neisser, 1993; Stern, 1985). Rational, conceptual knowledge, on the other hand, is knowledge *about* events that is more conscious (Epstein, 1991; Stern, 1985). Epstein proposes that the experiential system influences our day-to-day living most, although we are usually not aware of it. In contrast, most of the research on how people perceive themselves focuses on representational or rational self-concepts (Harter, 1983, 1998; Pipp, 1990). Because it is more analytic and symbolic, conceptual knowledge depends more on the child's developmental level (Pipp, 1990). While older children and adults are able to express their subjective experiences in words, with younger children this has been questioned.

### **1.3 Problems of measurement in young children**

Children below 7 or 8 years are traditionally considered too young to take distance from themselves, view themselves from a different point of view, and provide global judgements of themselves (Harter, 1983, 1990; Van der Meulen, 1994). In addition, young children are considered unable to think in psychological terms about themselves and their relationships (Bretherton, Prentiss, & Ridgeway, 1990; Harter, 1983, 1990; Van der Meulen, 1994). Harter does not deny that young children may have a sense of self-worth or self-esteem. However, she claims that, "... young children do not have a *verbalizable concept* of their self-worth, as tapped by self-report measures" (Harter, 1990, p.303,

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<sup>15</sup> Differences between these concepts exist, but it is beyond the scope of this dissertation to discuss them.

emphasis added). With such direct self-report measures (e.g., when asked, "Who are you?"), young children tend to give very concrete answers. These are focused on behavioral or physical characteristics, e.g. "I can run very fast" (Eder, 1990; Harter, 1983, 1990; Van der Meulen, 1994).

Recently, this view is being questioned (Bretherton, 1990, 1991; Bretherton et al., 1990; Cassidy, 1990; Verschueren et al., 1996). Direct interview methods may be less suitable for young children (Stone & Lemanek, 1990). In discussing knowledge about family relationships, Bretherton and her colleagues argue, "... when [preschool] children are observed in highly supported (scaffolded) situations, they seem quite knowledgeable" (p. 87). Guiding questions and supporting materials such as dolls, props, and pictures, "...tend to elicit nascent, still fragile understandings, emphasizing *what the child knows*, rather than what he or she does not know" (p. 87, emphasis added).

Researchers are also challenging the assumption that young children are not capable of commenting on their feelings of self-worth (Cassidy, 1990; Eder, 1990; Van der Meulen, 1995; Verschueren & Goudena, April 1999; Verschueren, Marcoen, & Schoefs 1996). Rebecca Eder (1990), for instance, has developed a puppet interview that presents children with pairs of statements of how they may see themselves. Even 3.5-year-olds were able to choose from these statements in ways that reflected underlying psychological constructs. Answers were reasonably stable over a one-month period and individual differences were found between the children. Eder concludes, "...it is suggested that these children possessed an elaborate self-concept enabling them to recognize behaviors and emotions as being consistent or inconsistent with their self-concept" (p. 861).

The "language" of symbolic play seems more suitable for young children than a purely verbal mode of communication. Pretend play can be an arena for the mastery of the communication of meaning (Bretherton, 1989; Fein, 1989; Göncü, 1993; Rubin, Bukowksi, & Parker, 1998). Furthermore, Cramer and Skidd (1992) cite several studies showing that fantasy expressions of young children reflected aspects of their subjective experience of the real world and that they were related to actual behaviors. A preschooler or kindergartner may still be in the process of developing decentration skills, but already adopt different perspectives toward the self in pretend play (Mead, 1934; Watson, 1990). For these reasons, it seems likely that the child is able to express him- or herself in more complex ways during symbolic play than during literal conversations.

#### **1.4 Subjective experience of parent-child relationships**

Attachment researchers have developed several playful methods to assess representations of the attachment relationship and the self. Most of these are based on "projective" techniques using pictures and dolls (Cassidy, 1988; Main, Kaplan, & Cassidy, 1985). The Separation Anxiety Test (SAT), for instance, consists of a series of pictures portraying mild to severe separations (e.g., the parents are going on a trip) that can be used with 4- to 7-year-old children (Main et al., 1985). Two questions are asked about each picture, namely, "What would a child do?" and "How would a child feel?" In the present study, a Doll Story Completion Task (DSCT) was used to assess subjective experience of the parent-child relationship (see Chapter 2). Doll story completion tasks use small dolls and props with which the child can enact attachment or other themes (Bretherton, Oppenheim, & Prentiss, 1990; Bretherton, Ridgeway, & Cassidy, 1990; Cassidy, 1988; Emde & Buchsbaum, 1990). Although the content of the stories and the exact procedures may differ, this type of methods has several features in common. First, the experimenter plays out the beginning of a story with a certain theme. Then, the child is asked to complete this story ("What happens next?"). Probes are used to elicit child responses. Usually, these probes are quite unstructured and merely intended to encourage the child to elaborate (e.g., the child's response is merely repeated). The DSCT seems suitable to assess representations of attachment for children between approximately 3 and 7 years. Some studies have found age differences in the complexity of story enactments and in how children respond to different stories (Bretherton, Prentiss, & Ridgeway, 1990; George & Solomon, August 1996). However, young children have been shown able to enact coherent stories that are assumed to present their experience of the relationship with their parents. Moreover, meaningful relations with observed attachment and other expected variables have been found (see the next Sections).

#### **1.5 Subjective experience of the self in young children**

Because of the assumption that young children are not capable of communicating their global self-esteem, there are not many research instruments to assess young children's views of themselves. Since young children "exude" a sense of overall self-esteem (Harter, 1990), self-esteem in young children has been measured by observing its behavioral expressions, such as initiative, preference for challenge, social approach, and coping skills (Fuchs-Beauchamp, 1996). However, this does not inform us about the children's point of view. Harter has also developed the Pictorial Scales of Perceived Competence and Social Acceptance (PSPCSA, Harter & Pike, 1984, see Chapter 2, Section 6).

This measure assesses self-perceptions in the domains of cognitive and physical competence and social acceptance by mother and peers. Since it has long been one of the only instruments able to measure young children's perceptions of themselves, the PSPCSA has been used in many studies (e.g., Cassidy, 1988; Cramer & Skidd, 1992; Verschueren et al., 1996). However, this instrument does not assess children's global self-esteem.

A measure that aims at assessing global self-worth in 5- to 7-year-old children is Cassidy's (1988) Puppet Interview (PI). The PI is used in the present study as well (see Chapter 2, Section 6). The PI has been developed from the perspective of attachment theory. In this interview, the experimenter asks questions about the child to a puppet on the child's hand. The underlying assumption is that the child will reveal how he or she believes a "generalized other" sees him or her. This, in turn, is believed to be a reflection of the child's own feelings of self-worth. Cassidy (1988) has found reasonable test-retest stability over a period of one month (see Chapter 2). Karine Verschueren and her colleagues have translated the PI into Dutch (Verschueren, Schoefs, & Marcoen, 1994; Verschueren et al., 1996). In addition, these researchers adapted Cassidy's coding system so that it became possible to investigate the dimensions of Positiveness of self and Openness to imperfections independently. The rating scales for Openness and Positiveness were independent in Verschueren et al.'s (1996) study, suggesting they can indeed be seen as two dimensions. This was expected, because it may be appropriate for young children to deny any negative characteristics when directly probed (Harter, 1983, 1990; Verschueren et al., 1996). Both Verschueren and colleagues and Cassidy have found various expected relations between self-esteem as assessed with the PI and (both observed and representational) attachment security and with peer competence. These will be described in the following sections.

### **1.6 Interrelations between measures of self**

Both Cassidy and Verschueren have investigated interrelations between young children's subjective experience of the self, as assessed with different instruments. Both researchers have used a DSCT. They also used the PI, the PSPCSA, and a Harter-type scale of global self-esteem.<sup>16</sup> Because Verschueren and her colleagues used their adapted coding system of the PI, they were able to investigate the dimensions of Positiveness and Openness of the self separately (Verschueren et al.,

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<sup>16</sup> Verschueren used the newly developed Pictorial Self-Evaluation Scale (Verschueren et al., 1996).



1996; Verschueren & Marcoen, August 1996; Verschueren & Marcoen, 1999).

**PI and DSCT** Relations between PI and doll story procedures are expected because they are both measures of the "self in relation." As Cassidy stated, dolls story tasks can be seen as measures of "the mental representation of the self in relation to attachment" (Cassidy, 1988). In Cassidy's (1988) study with 6-year-olds ( $n = 52$ ), a story completion task was the only representational measure related to the PI. Cassidy used six story stems. They were about emotionally charged mother-child interactions, conflict with mother, and conflict or threat from outside the family. Children who represented their attachment relationship with mother as more secure (and themselves as more worthy of their mother's attention and care) were more positive about themselves.

Verschueren et al. (1996; Verschueren & Marcoen, 1999) also found relations between PI and a DSCT. Verschueren et al. (1996, Study 2) found that representations of attachment security with mother were highly correlated with positiveness of self ( $r = .54, p < .001$ ) in a group of 50 kindergartners. They found no relations with openness of admitting imperfections. Combinations of the Positiveness and Openness dimensions, however, showed that *all* of the children with a Negative Perfect model of the self ( $n = 9$ ) were classified as insecure. Children who were negative about themselves but did not directly admit flaws portrayed insecure relationships with mother. Secure children were most likely to have a Positive PI classification that was either Open or Perfect.

A later study (Verschueren & Marcoen, 1999) again found that representations of mother-child attachment security predicted positiveness of the self on the PI. Father-child security, on the other hand, predicted higher behavioral self-esteem. The authors suggest that mother-child and father-child attachment relationships might be important for different domains of child functioning. The more intimate relationship with mother may be more related to the child's inner feelings, while the father-child relationship is potentially more important for outer presentations of the self. Also, the behavioral self-esteem scale tends to focus on school-related activities and may therefore be more related to cognitive functioning than to attachment security. The relation between PI Positiveness and representations of attachment has also been found in a study using the SAT (Verschueren & Marcoen, August 1996).

**PI and Harter measures** The PI is expected to be related to Harter' scale of global self-esteem (for school-aged children), since these measures attempt to measure similar constructs. Relations are also

expected with the Social Acceptance scales of the PSPCSA but not specifically with the Perceived Competence scales, since the PI is a measure of the self-in-relation. In her study with 6-year-olds, Cassidy (1988) did not find any relations between the PI and the Harter measures. The Harter measures themselves were interrelated. Children with higher global self-esteem rated themselves higher on the PSPCSA. Verschueren et al. (1996, Study 1) did find that 5-year-olds ( $n = 95$ ) with a positive working model of the self showed higher global self-esteem than children who were negative about themselves. Openness to admit imperfections was related to *lower* reported self-esteem. Thus, children who were more positive about the self and less open about their shortcomings on the PI showed higher global self-esteem on a direct measure. Children with a positive model of the self on the PI also perceived themselves as more competent than children with a negative sense of self and they showed more behavioral self-esteem according to teachers. Similar to Cassidy (1988), there were no relations between positiveness of self and Perceived Acceptance. An interesting finding emerged, however, when the Positiveness and Openness scales of the PI were combined. Verschueren et al. found that children with Negative Perfect PI-classifications reported *higher* levels of Maternal Acceptance than children with a positive model of self. In contrast, children with a Negative Open model showed *lower* levels of Maternal Acceptance than positive children did. This suggests that children who are negative but who do not admit negative characteristics of the self may be defensive in response to direct questions.

**DSCT and Harter measures** Doll story tasks (about mother-child) are expected to be related to the Maternal Acceptance scale, since they both try to measure the child's perceptions of mothers' acceptance of the child. The other PSPCSA-scales are not necessarily expected to be related to DSCTs, because they pertain to different domains of the child's experiential world. In Cassidy's (1988) study, only marginal relations between security ratings on a DSCT and the Harter scales emerged. Verschueren and Marcoen (1999) found that secure representations of attachment to mother were related to higher levels of Perceived Competence but the expected relation to Perceived Acceptance was not found. There were no relations between representations of attachment to father and the PSPCSA. Thus, it appears that the DSCT and the PSPCSA measure different constructs.

In conclusion, theoretically expected relations between representational measures of attachment security and self-esteem have been found. In general, stronger relations were found between representations of attachment security and positiveness of self on the PI, than between these measures and more direct assessments of the self. As

Cassidy (1988) suggests, the DSCT and the PI may tap similar aspects of the self in relation to others. Not many relations were found between PI and DSCT and Harter's more direct measures. Verschueren and Marcoen (1999) suggest that Harter's PSPCSA may tap domains of self-representation that are not specifically related to attachment security. Furthermore, the direct nature of the PSPCSA may lead to defensive responses. Verschueren et al. (1996) found some indications for this interpretation, when they compared the Harter scales to the PI. Children who saw themselves as negative but perfect, when directly asked to admit shortcomings, perceived Maternal Acceptance as higher than children who were positive about themselves on the PI. This suggests that defensive processes may be at work in these children. Since children with a Negative and Perfect model of the self also enacted insecure attachment stories, Verschueren et al. suggest that these children may have two dissociated working models of attachment (Bowlby, 1973/1991). One of these may be accessible to consciousness and represent a "good" mother, while the other one represents the mother as unavailable and unresponsive (Verschueren et al., 1996).

## **2 Parent-child relationships and subjective experience of self and others**

In this section, I will first describe ideas from attachment theory about self development. Second, I will review studies that have related observed attachment security to children's subjective experience of the self. Third, I will explore which specific parent-child interaction behaviors may be related to self development.

### **2.1 Attachment and subjective experience**

Attachment theory is a theory of relationships rather than self development. A core assumption, however, is that feelings of self-worth arise in the relationship with significant others (Bretherton, 1990, 1991, 1993; Bowlby, 1973/1991; Cassidy, 1990; Sroufe, 1990). Thus, it is expected that children will develop an autonomous self when they feel connected to their parents. Attachment researchers assume that internal working models of attachment relationships and of the self develop from infancy on (Bretherton, 1990, 1991, 1993; Bowlby, 1969/1991, 1973/1991; Cassidy, 1990). Such models are defined as dynamic representations of relationships and the self, containing both affective and cognitive components (Cassidy, 1990; Sroufe, 1990). Working models of the attachment relationship function to predict and interpret the attachment figure's behaviors and whereabouts and to plan one's own behaviors accordingly. In this way, they are adaptive to

the "set goal" of proximity to the caregiver. Whereas physical proximity promoted security in the preverbal infant (since this promoted survival in the "environment of evolutionary adaptedness"), internal working models can provide a secure base from which to explore in later life (Bowlby, 1969/1991, 1973/1991). Bowlby describes it as follows:

Starting, we may suppose, towards the end of his first year, and probably especially actively during his second and third when he acquires the powerful and extraordinary gift of language, a child is busy constructing working models of how the physical world may be expected to behave, how his mother and other significant persons may be expected to behave, how he himself may be expected to behave, and how each interacts with all the others. (1969/1991, p. 354)

The key feature of the child's *working model of the self* is how acceptable or unacceptable he or she is in the eyes of his attachment figures (see Chapter 1, Section 3.4). In this way, working models of attachment and the self are mutually interdependent. Feelings of security in the parent-child attachment relationship should be related to a positive sense of self. The message that a secure child gets is that he or she is basically accepted (connected to others) and valued as an autonomous person.

## **2.2 Patterns of attachment relationships and the self**

With development, the self is increasingly independent from *particular* attachment relationships (Bretherton, 1990, 1991, 1993; Cassidy, 1990). According to Sroufe (1990; Sroufe & Fleeson, 1986), attachment relationships are dyadic systems that regulate affect and maintain behavioral organization during stress. Dyadic organization is expected to lead to self-regulation. The emphasis on *organization*, as opposed to emphasizing particular behaviors, is one of the main strengths of attachment theory. Specific behaviors in parent-child communication may change with development but their communication *patterns* and their relative rigidity or flow appear to remain similar (Bretherton, 1990, 1991; Cassidy, 1988; Main et al., 1985). Sroufe (Erickson et al., 1985; Elicker et al., 1992; Sroufe & Fleeson, 1986), a major proponent of the organizational perspective, suggests various ways in which attachment relationship patterns can develop into corresponding organizations of the self (Sroufe, 1990).

When reunited after a brief separation in the Strange Situation procedure (Ainsworth, Blehar, Waters, & Wall, 1978), *secure* infants seek proximity to the caregiver (Main et al. (1985). When distressed, they are easily comforted and willing to explore again. These infants seem to ex-

perience a balance between feeling connected with their caregiver, yet autonomous to explore. In addition, they appear able to move between connectedness and autonomy in fluid ways, which will be apparent in their subjective experience of themselves as well. *Avoidant* babies show less overt distress than other infants do, but there are indications from physiological measures that they are, in fact, distressed.<sup>17</sup> They avoid their attachment figure upon reunion and tend to focus more on objects than on the attachment figure. Thus, these infants appear too focused on autonomy, at the cost of feeling isolated. According to Sroufe (1990), avoidance is likely to be related to working models of the attachment figure as unavailable when needed and of the self as unworthy and unable to achieve care. *Ambivalent* infants are generally most distressed and hard to comfort, even after prolonged contact with the caregiver. The prolonged activation of their attachment system interferes with their exploration of the environment. They seem too focused on connectedness, at the cost of their autonomy. Sroufe (1990) suggests that ambivalent infants may develop working models of the caregiver as unavailable and of the self as ineffective and weak. A fourth attachment category is characterized by *disorganization*. In contrast to the three patterns mentioned above, disorganized infants have no coherent tactic to handle the distress derived from separation. They may alternate between contradictory patterns (such as approach and avoidance) or display odd or atypical behaviors.

According to Main et al. (1985), secure and insecure types of attachment reflect different types of internal working models that guide not only feelings and behavior, but also attention, memory, and cognitions related to attachment. In other words, "What was initially expressed dyadically through the organization of movement was later<sup>18</sup> predictably expressed both dyadically and individually through the organization of language. Maintenance of the security implicit in early relationship structures transcended their modality of expression" (Main et al., 1985, p. 93).

### **2.3 Observed attachment patterns and subjective experience**

Several studies have found relations between observed attachment security and representations of attachment between 4 and 6 years of age. In response to the SAT-pictures, securely attached children

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<sup>17</sup> However, some psychophysiological research suggests that a subgroup of avoidant (day-care) infants might actually (behaviorally as well as physiologically) be less distressed by the Strange Situation than other infants (Verweij-Tijsterman, 1996).

<sup>18</sup> That is, at age 6, during reunions and in responses on representational measures.

generally respond in open and coherent ways (Main et al., 1985; Shouldice & Stevenson-Hinde, 1992; Slough & Greenberg, 1990). They are open about emotions that might come up and have some ideas of what they might do. They show self-reliance during mild hypothetical separations and reliance on others during more prolonged ones. Thus, these children seem to feel autonomous and at the same time able to trust in others' availability. Insecure children are generally more avoidant or defensive when confronted with the separation themes. They may reply that they do not know what the child in the pictures might do or feel or they may provide violent solutions to the problem. Main et al. (1985) found no relations between attachment security with father in infancy and SAT responses at age 6.

Doll story completion procedures have been related to observed attachment security as well. Similar organizations of *observed* attachment behaviors and communication *about* attachment-related themes have been found (Bretherton, 1990; Main et al., 1985). *Security* appears to be related to open, mutually responsive communication patterns and open and coherent communication *about* attachment issues, even if negative emotions and conflict are involved. This suggests the experience of autonomy-within-connectedness, in a relatively open and flowing way. Avoidant children have a tendency to distance themselves from the attachment figure and from any attachment-related issues, especially if they may evoke negative emotions around themes such as separation and rejection. At the same time, they tend to idealize their relationship. As Sroufe (1990) has suggested, these children may feel unworthy of care. This may be too threatening to communicate about. The ambivalent pattern is characterized by ambivalence between seeking proximity and distance in infancy, and later by a preoccupation with conflictual attachment issues. Finally, disorganized attachment lacks a coherent strategy to deal with attachment issues. Disorganization has been related to hostile, bizarre, and incoherent stories (Cassidy, 1988).

Cassidy (1988) found that secure children were likely to show a generally positive view of the self on the PI, while at the same time realistically admitting flaws. Another group insisted they were perfect in every way. Cassidy ascribed this finding to young children's tendency to view themselves in overly positive ways. Children who were rated as more secure also scored higher on Harter's Global Self-esteem scale, suggesting that this scale can be used with young children. Unexpectedly, more secure children did *not* perceive their mothers as more accepting on the PSPCSA. Children who avoided mother upon reunion were likely to present themselves as perfect and to deny negative characteristics. Insecure-controlling children (a pattern that

has been related to disorganization in infancy), on the other hand, tended to be negative about themselves. Ambivalent children saw themselves as either negative or perfect, but not as positive. Thus, Cassidy's study gives some indications that development of the self is related to the quality of attachment relationships.

#### **2.4 Interaction behaviors and subjective experience**

Attachment research has mainly focused on the quality of the parent-child attachment relationship, a rather global construct. Few studies have studied *specific* parent-child interaction behaviors in relation to subjective experience of self and relationships. Both theoretically and empirically, attachment security is linked to children's representations of secure parent-child relationships and to positive feelings about the self. Therefore, attachment studies can be seen as providing indirect evidence of relations between specific interaction behaviors and measures of subjective experience. In this section, I will first give an overview of studies that examined relations between attachment security and specific parenting behaviors. Second, some studies will be reviewed that have related specific parent-child behaviors to children's feelings of self-worth.

***Parent-child interaction behaviors and attachment security*** A meta-analysis of 66 studies by De Wolff and Van IJzendoorn (1997) showed relations between attachment and behaviors indicative of connectedness. Security was moderately related to mothers' sensitive responsiveness (classically assumed to be a major determinant of secure attachment) and emotional support. Furthermore, there were strong relations between attachment security and *dyadic* measures of mother-child mutual responsiveness or synchronicity. Dyadic interaction patterns of emotion regulation were also related to attachment in a German study cited by Bretherton (1990: Escher-Graeb & Grossmann, 1983). Parents of avoidantly attached children tended to join their 12- to 18-month-old infant in free play *only* when the infant was in a positive mood. The parents withdrew when the children expressed negative feelings. Similarly, avoidant infants communicated with their caregivers only when they were in a positive mood. They sought no contact when they were distressed. Parents of secure children quietly watched their infants play as long as they seemed content, but joined in as soon as the infant showed distress. These babies never stayed away from the mother or father when experiencing negative emotional expressions (Grossmann, Grossmann, & Schwan, 1986, in Bretherton, 1990). These results converge with Sroufe's (1990) suggestion that secure attachment relationships dyadically regulate the infant's emotions. Avoidant infants seem to need

to regulate their negative emotions by themselves. They may not develop the “capacity to be alone in the presence of someone” (Winnicott, 1971/1991), which is crucial for healthy self development. Main et al. (1985) also suggest different patterns of regulation in various attachment relationship patterns. They report that the parents of secure infants do not try to focus their children's attention, either at themselves or at the environment. Parents of avoidant children tend to focus their children's attention to objects. Parents of ambivalent and disorganized children focus on feelings and on themselves.

Cassidy, Berlin, and Belsky (April, 1990) studied somewhat older children. They found that 3-year-olds ( $n = 60$ ) who were secure with their mothers (measured contemporaneously) showed more positive affect, less negative affect, fewer transgressions, and less disobedience during free play than insecure children. Avoidant children were less positive and more disobedient. A second study investigated 100 three-year-olds who had been observed in the Strange Situation as infants (Youngblade & Belsky, 1992). Parent-child free play and task interactions were observed at 3 years. Unexpectedly, no relations were found between attachment security and dyadic factors of “parent-child positive” (parental positive affect and non-intrusive control and child compliance) and “parent-child negative” (parental negative affect and intrusiveness and child negative affect and disobedience). Although their sample was not high-risk, Youngblade and Belsky suggest there might have been changes in the parent-child relationship that accounted for the lack of connections. Another explanation is that the factor-analyzed parent-child variables did not reflect dyadic qualities of the relationship to the extent that attachment quality did. A third study by Belsky and colleagues, did find relations between infant attachment and parent-child interaction behaviors, even 9 years later (Freitag, Belsky, Grossmann, Grossmann, & Scheuerer-English, 1996). Freitag et al. focused on dimensions of connectedness or individuality in 10-year-old children and parents during a family interaction task at home ( $n = 40$ ). Children who had been secure as infants and their mothers showed more expressions of connectedness (such as support and validation) relative to expressions of individuality. The mothers showed fewer expressions of separateness, such as directives and disagreements. Thus, it appears that a more secure attachment history was related to more connectedness and room for autonomy. With fathers, a different pattern emerged. Fathers of secure infants showed *less* connectedness relative to individuality. Possibly, autonomy is a more important theme of a secure relationship with father. It is, of course, difficult to disentangle early relationship experience with later



ones, in studies like these. Likely, these consistencies were found because of stability in interaction patterns over time (Thompson, 1991).

Kerns and Barth's (1995) study suggests that autonomy might be relatively more important in father-child relationships of 4-year-olds as well. Fathers ( $n = 54$ ) of more securely attached children (assessed with a Q-sort method) were more directive during physical play than those of less secure children and secure children used more suggestions. This suggests that both fathers and children tried to control each other more during play. Secure children and their fathers thus seemed more assertive while remaining connected in play. An indication of connectedness was that secure children also tended to show more positive responses with their fathers. Children who were secure with mother played longer with her, which may be an indication of more connectedness. Secure and insecure 3- and 4-year-olds have also been observed with their mothers in a task situation ( $n = 78$ , Stevenson-Hinde & Shouldice, 1995) and during a grocery store game with their own and with an unfamiliar mother ( $n = 37$ , Moss, Gosselin, Parent, Rousseau, & Dumont, 1997). In these studies, mothers of securely attached children provided more support to help their children and they were more sensitive for what their children could do independently. Mothers of insecure children in Moss et al.'s study tended to assume more responsibility for the task. In Stevenson-Hinde and Shouldice's study, mothers of avoidant children seemed less involved: they monitored and planned least of all mothers. Mothers of controlling children were less supportive, enjoyed the task less, and provided a less sensitive framework for their children than other groups. This suggests less connectedness in the interactions of insecure children. In addition, insecure children seemed more dependent and less autonomous than secure children did. Moss et al. (1997) found that secure children shared more responsibility for solving the problem, both with their own and with the unfamiliar mother. They performed better with the strange mother than did insecure children. Interestingly, strange mothers varied their interaction behaviors according to the child's attachment status (which was, of course, unknown to them). They maintained higher meta-cognitive levels with secure children and expected less from insecure children. Apparently, securely attached children seemed more independent and competent to these mothers.

***Parent-child interaction behaviors and experience of self*** Few studies directly investigated relations between specific parent-child interaction behaviors and child self-esteem. For lack of studies with preschool and kindergarten children, I will briefly review two studies with preadolescent children. Coopersmith (1967) studied the self-

esteem of 10-11-year-old boys in relation to parenting behaviors (assessed via mother-report). The results suggest that boys with high self-esteem experience acceptance by parents, which suggests more connectedness. They are also likely to experience clearly defined limits and parental respect for the child's autonomy within these limits. In addition, boys with high self-esteem had parents with high self-esteem. Low self-esteem was associated with parental rejection, which means a lack of connectedness and at the same time a denial of the child's autonomous self. In addition, low-esteem boys experienced unclear limit setting and disrespect, which may have impeded the development of autonomy. In line with this, low self-esteem boys felt more helpless, anxious, and isolated than boys with high self-esteem did.

Loeb, Horst, and Horton (1980) did an observational study with a group of 9- to 11-year-old boys and girls who had high or low self-esteem, with their mothers and fathers. Children with high self-esteem experienced more family involvement while they engaged in a Rorschach task together. Their families (especially mothers) agreed much more than families of children with low self-esteem. In addition, girls with high self-esteem had parents who did not give many verbal directives and their fathers gave them contingent rewards during a block-building task in the home, while the child was blindfolded (and thus needed parental assistance). High self-esteem girls had fathers who both agreed *and* disagreed more during the family interaction than fathers of low self-esteem girls. For boys, mothers' verbal directiveness was related to high self-esteem, while contingent rewards from fathers were related to low self-esteem. Boys with low self-esteem had fathers who disagreed more than any other group of fathers did. Children with low self-esteem were found to have physically directive fathers.

These findings seem in agreement with expectations from attachment theory. Both of these studies with preadolescent children suggest that the dimensions of autonomy and connectedness are relevant for children's self-esteem. Positive self-esteem seems to be related to a better balance between feeling accepted by the parents, while being granted autonomy within limits. Low self-esteem appears related to a lack of parental acceptance and feelings of isolation. At the same time, children with low self-esteem seem to lack experiences of respect for their autonomy in the relationship with their parents. Several gender differences were found in Loeb et al.'s (1980) study. It appears that the dimension of connectedness might be more important for girls' self-esteem, while issues of autonomy might be more important for boys. Loeb et al. also suggest that cross-gender relationships at this age might be more comfortable, while same-gender relationships might be more problematic.

In conclusion, young children who are observed to be secure with their parents, as well as older children with high self-esteem, seem to experience more connectedness and room for autonomy. Parents of securely attached children are available for their children when they need them, while letting them explore independently when possible. This gives the child the opportunity to be alone in someone's presence (Winnicott, 1971/1991). In line with this, securely attached children seem more autonomous and are at the same time able to ask for help if needed. Insecure children, on the other hand, are often found to be more dependent and less able to ask for help. In dyads of insecurely attached children, mothers have been found to be intrusive or uninvolved. Insecure dyads seem to have less of a balance between autonomy and connectedness. Insecure children may not feel sufficiently accepted to develop their autonomy. Studies that included both fathers and mothers have suggested that connectedness might be a more important theme in the relationship with mother, relative to autonomy. With father, autonomy might be more important, relative to connectedness. This would be similar to some findings of direct parent-peer linkages (Boyum & Parke, 1995; Carson & Parke, 1996; Isley et al., 1996; see Chapter 3).

## **2 Subjective experience of self and others and peer competence**

In this section, I will review studies that have linked subjective experience of self and others to children's peer relations. In school-aged children, peer rejection has been related to a more negative experience of the self, the family, and peers (Rudolph, Hammen, & Burge, 1995). Furthermore, peers reacted more negatively to children with more negative views of self and others. Perceived warmth with mother has been related to higher self-worth and to friendships that are perceived as warmer and less conflictual (Stocker, 1994).

Some studies suggest that subjective experience plays a role in the peer relations of young children as well. Cassidy and Asher (1992), for instance, showed that 5- to 7-year-olds who were rejected by peers were more lonely than children who were accepted. This suggests that young rejected children have a more negative subjective experience of the self in relation to others than children who are accepted by peers. However, not many studies have investigated the role of subjective experience in young children's peer relations. Because attachment theory assumes that children's internal working models of their attachment relationships will be related to peer relations, attachment studies can be seen as indirect evidence for the role of subjective experience. In this

Section, I will review some studies that related attachment security to peer competence. In addition, studies will be reviewed that have related representations of self and attachment to peer competence.

### **3.1 Attachment and observations of peer competence**

Attachment theory assumes that early relationship patterns influence later relationships. Sroufe (1990) has proposed that dyadic relationship organizations develop into personality organizations, which will influence the organization of future relationships. "The child moves toward or away from certain experiences, engages environmental challenges and opportunities in certain ways, and interprets experience, all guided by working models of self and other" (Sroufe, 1990, p. 296).

Sroufe and his colleagues have intensively investigated linkages between parent-child attachment and later peer relationships (Elicker, Englund, & Sroufe, 1992; Erickson, Sroufe, & Egeland, 1985; Sroufe & Fleeson, 1986; Sroufe et al., 1984). In the longitudinal Minnesota Project, this group assessed attachment security with mother at 12 and 18 months in a high-risk group. Children's peer relations were investigated in preschool and even until preadolescence. Elicker et al. (1992) cite several studies in which early attachment security was linked to preschool peer competence and ego-resiliency (flexible and persistent responses during problem situations). Secure infants were later observed to be more socially competent, agentic, and to show more positive affect and less negative affect with peers. Sroufe, Schork, Motti, Lawroski, and LaFreniere (1984) have shown that especially expressions of negative affect were (negatively) correlated with peer acceptance in preschool. In addition, children with a secure history have been found to be more empathic with peers, more reciprocal in their interactions, and better at conflict resolution. Children from the Minnesota Project who had been insecure were prone to victimization in the preschool. The children doing the victimization were likely to have had avoidant histories. Avoidant children also have been found to be "anti-empathic" (i.e., to deliberately upset their peers). Furthermore, insecure children tended to be more dependent on their teachers. The Minnesota group did a follow-up study with 47 children at age 11 (Elicker et al., 1992) and found that children who had been secure as infants were more competent and spent more time with peers. They also showed more self-esteem than children with an insecure attachment history did. They spent less time with adults only or in isolation and were more socially skilled. These children also had more friends and these were likely to have had a secure history themselves.

At preschool age, children with similar attachment histories seemed to evoke similar reactions from others as well. For instance, children tended to choose their seats more often next to children who had a similar attachment history (Erickson et al., 1985). In addition, teachers secure children in age-appropriate ways, being warm and having high expectations of them. Teachers were warm but controlling toward children with an ambivalent attachment history. With avoidant children, on the other hand, they were controlling and low in warmth. They were the *only* group of children toward whom teachers were aggressive. These findings suggest that children somehow elicit particular feedback from others, which then supports his or her style of adaptation (Elicker et al., 1992). In this way, dyadic patterns seemed to be kept alive and to perpetuate themselves.

Some cross-sectional studies have found gender differences in links between attachment and peer competence. Turner (1991) found that 4-year-old boys who were insecure with mother were more aggressive and controlling with peers than secure boys were. In contrast, insecure girls were *less* assertive and controlling than secure children. They were more dependent and showed more positive and compliant behaviors. This suggests that insecure girls mainly had problems with autonomy. Kerns and Barth (1995) found no relations between attachment to mother (assessed by the Q-sort method) and 4-year-olds girls' peer competence. Attachment to mother was related to boys' popularity. More secure boys were more popular. In addition, both boys' and girls' security with father was related to more friendly-cooperative behaviors with peers. Like Kerns and Barth (1995), Cohn (1990) also failed to find relations between (observed) attachment security at age 6 and girls' peer competence. Similar to Turner (1991), Cohn found that insecure boys were less well liked, more aggressive and less socially competent and had more behavior problems than secure boys.

These studies suggest that children who feel secure and accepted in the relationship with their parents feel more connected and independent than insecure children do. They are more likely to be accepted by and competent with peers. Children who are insecure may feel rejected by their parents and are more often rejected by peers and less socially competent. Elicker et al.'s (1992) longitudinal data suggest that children will somehow elicit responses from others that will perpetuate their relationship histories. Possibly, secure children expect that a sense of connectedness is possible in new relationships. At the same time, they are likely to be sufficiently autonomous to initiate and maintain relationships with peers. Some studies (e.g., Turner, 1991) suggest that these patterns may differ per gender. For boys, insecurity

may be related to a relative lack of connectedness, while insecure girls seem to lack autonomy relatively more.

### **3.2 Subjective experience and peer competence**

Relatively few studies have explored relations between young children's experience of themselves and the relationships with their peers. One study by Oppenheim, Emde, and Warren (1997) administered the MacArthur Story Stem Battery (Bretherton, Oppenheim, & Prentiss, 1990) to 51 children at 4 and 5 years of age. They investigated relations between young children's views of the relationship with mother and behavior problems. This study was included in this review because behavior problems, mainly externalizing ones, have been linked to problematic peer relations (Newcomb et al., 1993). Oppenheim et al. found that children who enacted more positive mother-child interactions with more discipline themes showed fewer behavior problems. This suggests more autonomy within clearly defined limits (Coopersmith, 1967), embedded within connectedness. Externalizing behaviors were related to more negative representations of the mother-child relationship.

Verschueren and Marcoen (1999) found relations between representations of attachment and teacher-rated popularity in 80 five-year-olds. Security with both mother and father predicted teacher-rated social competence. However, Verschueren and Marcoen found that father-child attachment predicted peer competence most clearly. It not only predicted a composite measure of peer competence, but also anxious and withdrawn behaviors and adjustment to school. Attachment to mother, on the other hand, was more strongly related to the affective experience of the self as assessed by the PI. Verschueren and Marcoen suggest that fathers may play a more important role in children's exploration of the outer world, while mothers may be more important for inner feelings of worthiness. In an earlier study, Verschueren et al. (1996, Study 1) related the 5-year-olds positiveness of self ( $n = 95$ ) to teacher-rated peer competence. Kindergartners with a more positive representation of self were better accepted by their peers. Teachers perceived these children as more cognitively and physically competent and better adjusted to the stresses of school than children with a negative working model of the self.

In sum, these studies found that children who felt more positive about their relationships with parents and about themselves were more likely to be socially competent and popular among peers. Children who felt negatively about themselves tended to be less competent and to have more behavior problems. In the next section, relations between

parent-child relationships, subjective experience, and peer relations will be explored.

#### **4. Subjective experience as a mediator?**

Studies reviewed in this chapter have shown relations between parent-child relationships and children's perceptions of parent-child relationships and of the self, which have been related to peer competence in other studies. This suggests that subjective experience of self and others may mediate relations between parent-child and peer relationships. In other words, the way the child feels and thinks about the relationship with the parents may be more important in explaining links with peer relations than particular parent-child interaction behaviors per se. A mediating role of subjective experience of parent-child relationships and of the self in young children has not yet been studied directly. One study with adolescents has found partial evidence for a mediating role of the self-concept in adolescents between mother-reported acceptance of the child and self-reported peer relationships (Deković & Meeus, 1997). Although self-concept is focused on thoughts about the self, rather than feelings, this study provided some indications for mediating links in older children. Now, I will first review some studies that found relations between attachment, representational measures, and peer relations. Second, I will consider some studies that investigated representations of peer relations as mediators.

##### **4.1 Attachment, subjective experience, and peer relations**

Gunilla Bohlin (August 1996) did a study in Sweden, which may come closest to testing mediating effects of representations of attachment. Bohlin studied 91 children, aged 8- and 9-years. She found that children who had been secure as infants showed more secure and self-reliant responses to the SAT than did children who had been avoidant. Parents and teachers judged children with a secure attachment history as more socially competent and less withdrawn than insecure children. In addition, secure children interacted with peers in more positive ways. More secure attachment representations in the SAT were related to more social competence, less withdrawal, and more positive peer interactions. Secure children may have a basic sense of connectedness, both with parents and with peers. At the same time, they appear more autonomous and independent.

Two German studies have found relations between attachment security and children's views of peer relations. Suess, Grossmann, and Sroufe (1992) found that 5-year-olds who had been securely attached

as infants were more likely to attribute positive intentions to ambiguous peer situations presented as pictures. Their answers were rated as more competent as well. Insecure children tended to attribute more hostility to peers. Similar results were obtained when the responses on the attribution task were related to attachment security at age 6 (Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994). Again, secure children showed the most appropriate attributions. Avoidant and disorganized children were more likely to project aggression in the pictured peer interactions. Hostile attributions to peers have been related to peer rejection (Asher et al., 1994; Dodge & Price, 1994). These findings can be seen as suggestive of a mediating role of representations of peer relations. In the next section, I will review studies that have directly investigated representations (of peer relations) as mediators between parent and peer relations.

#### **4.2 Subjective experience of peer relations as a mediator**

Various mediators have been proposed from a social-cognitive perspective, such as attributions of hostile intent and social cognitions. Although they come from a different background than the attachment perspective, I will review them because the assumptions are similar (i.e., that family interaction patterns influence expectations and that these will influence peer relations). Pettit, Dodge, and Brown (1988) tested a mediating assumption in 64 high-risk 4- and 5-year-olds. Children responded to vignettes of peer provocation and ambiguous peer intent and to a social problem-solving test. Their mothers were interviewed about parenting practices and perceptions. Rejected children had experienced a history of more aggression in the family and were likely to show more aggressive solutions in the peer stories. Social problem-solving patterns were found to mediate relations between early experience and social competence. When controlled for social-problem solving, the relations between early family experience and social competence was no longer significant. Similarly, another investigation from the same group found that social-cognitive measures served as mediators between mother-child interactions and child aggressiveness (Pettit, Harrist, Bates, & Dodge, 1991). More responsive and involved and less coercive mother-child interactions were related to higher social competence. More coercive and intrusive interaction patterns were related to more aggression with peers. As expected, aggressive children found it easier to imagine an aggressive response to a hypothetical conflict with a peer than did non-aggressive children. Children who experienced more positive family involvement found it more difficult to imagine an aggressive response. Unexpectedly, they also found it hard to imagine a socially competent response. Pettit et al. interpret this as



an indication that socially competent children acknowledge the inherent difficulty of resolving social conflicts. Thus, after controlling for social-cognitive measures, observed mother-child interaction behaviors (maternal responsiveness, involvement, and intrusiveness) no longer predicted social competence. It appeared to be children's cognitions that were more important in predicting their peer competence.

Cassidy, Kirsh, Scolton, and Parke (1996) attempted to combine part of Dodge's model with an attachment theoretical approach. However, they did not test attachment representations as potential mediators. In Study 2, Cassidy et al. studied relations between attachment and reciprocal friendships in 33 children aged 5 to 7 years. Representations of peers in ambiguous situations were tested as a potential mediator between attachment security (assessed in a separation-reunion procedure) and the number of reciprocal positive sociometric (friendship) nominations. As expected, attachment security predicted representations of peers. Secure children were likely to represent the peer as someone who likes others, is sensitive to others, and regrets what happened (in an ambiguous situation). Securely attached children saw the peer's intention as more positive than insecurely attached children did. Attachment also predicted reciprocal friendships in a regression analysis. This effect was attenuated after controlling for peer representations, which is an indication for a mediating effect of peer representations. Cassidy et al. also found some links between 9- to 11-year-old children's attachment, peer representations, and peer competence.

In summary, these studies provide some evidence for the hypothesis that children's subjective experience of their relationships mediates relations between their actual relationships with parents and peers. Relationships with parents no longer predicted competence with peers when children's social-cognitive skills were taken into account, although the results were not very strong. Pettit and colleagues (1991) suggest that the types of peer representations assessed may still be in a "state of flux" (p. 399) at this age. They argue it might have been more advantageous to assess broader aspects of representations of social experiences, such as internal working models of attachment relationships. Cassidy et al. (1992) focused on observations of attachment, but somewhat unexpectedly, on representations of peer relations. They interpret their assessments as representations of self at the same time. "Whether the peer likes the participant and is regretful about hurting the participant may say as much about the likableness of the child ("I am someone who is liked") as about the peer." (p. 898). This may be the case. However, considering the expectations of attachment theory that

representations of *parent-child* relationships foster expectations of peer (and other) relationships, the question arises why Cassidy et al. did not focus on attachment representations in stead. In the next chapter, a study will be presented that will investigate links between parent and peer relations via subjective experience of parent-child relationships and the self.

## **Summary of Chapter 5**

In summary, this chapter explored links between parent-child relationships, children's experience of these relationships and of the self, and their peer relations. Because of a dearth of research instruments and the theoretical assumption that young children lack a global sense of self, relations between young children's subjective experience and their relationships have rarely been studied. The studies that have been done, came mainly from an attachment perspective. Within attachment theory, various playful measures have been developed for the study of young children's subjective experience of the parent-child relationship and the self. Two of these were used in this dissertation (i.e., doll story completion procedures and Cassidy's Puppet Interview, see also Chapters 2 and 6). Attachment theory assumes that children develop internal working models of the attachment relationship and (complementary to this) of the self. These models are assumed to be of influence to later relationships, such as with peers. In this dissertation, I prefer to use the term "subjective experience" to indicate how the child feels and thinks about the self in relation and to emphasize emotional and experiential perspectives.

Although it is difficult to disentangle the relative roles of earlier and later development, relations have been found between infant attachment security and later peer relations. Secure children have been found to be better accepted by peers and more socially competent. Children with an insecure history have been found to be more aggressive and dependent. Observed attachment security has also been related to representations of security. Secure children can openly discuss positive and negative emotions and portray parents as available and the self as loved and accepted. They are also likely to have a more positive sense of self, although not many studies have been done in this area. Similarly, few studies investigated links between specific parent-child interaction behaviors and subjective experience. Studies with older children and those investigating parent-child interactions in relation to attachment suggest that more expressions of connectedness and more room for autonomy in parent-child interactions may be related both to secure attachment relationships and to higher self-

esteem. Positive representations of self and attachment have been also been related to more positive peer relations.

A mediating role of subjective experience of the self-in-relation has not been studied directly. Some studies, mainly from a social learning perspective, tested representations of peer relations as potential mediators. They found some evidence for a mediating role of social cognitions as mediators between characteristics of parent-child and child-peer relations. In the next chapter, I will present a study in which I investigated relations between mother-child and father-child interactions during free play, subjective experience of self and relationships with both parents, and peer acceptance. Subjective experience of self and parent-child relationships will be investigated as a mediator between parent and peer relationships.



## **Chapter 6**

### **Parent-child interaction, subjective experience of self and others, and peer acceptance: The present study**

Previous chapters suggested that the interactions of better accepted children reflect more connectedness and autonomy and a better balance between these two. In Chapter 4, it was found that mothers and children who were better accepted by peers were more often *dyadically engaged in play* and tended to *share more positive emotions*. In addition, better accepted children had a *higher balance of control* with mother and they experienced *less control* in the interaction with father. Relations were also found between peer acceptance and overall *balance* between children and both their mothers and fathers. One way in which such dyadic interaction patterns may transfer to peer relations is via learning processes. A more indirect way will be explored in the present chapter. This chapter investigates whether young children's subjective experience of themselves and their parents functions as a mediator between characteristics of parent-child play interaction and peer acceptance.

The **first research question** was whether parent-child interactions would be related to subjective experience of parent-child relationships and the self. The literature reviewed in Chapter 5 suggests that expressions of connectedness and room for autonomy within parent-child relationships foster views of the parents as available and responsive and of the self as valuable and worthy of care and attention. Therefore, I hypothesized that indications of connectedness (mutual responsiveness, shared positive emotions, and dyadic play engagement) would be related to a more positive experience of the self and the parent-child relationship. A higher balance of control and lower levels of control were also expected to be related to more positive subjective experience, because they suggest more room for the child's autonomy.

The **second research question** was whether subjective experience would be related to peer acceptance. Since the focus is on how the self is experienced in relation, it is expected that the child's experience of the self will be related to peer acceptance as well. The **third research question** is whether subjective experience mediates relations between parent-child interactions and peer acceptance. It is assumed that children will initiate and try to maintain peer relationships differently if they experience their own role in relationships differently. If a child has had repeated experiences with interaction sequences in which the parent nearly always takes control, it is likely that the child will start

feeling unable to control others. At the same time, he or she may feel not valued for being an autonomous person. Such experiences can then make it more difficult to engage in autonomous behaviors with peers. Assumptions like these come in large part from attachment theory. They have not often been tested empirically. There is some evidence, however, that more secure and mutually responsive parent-child relationships are related to more positive representations of those relationships. Such representations have been linked to peer competence (see Chapter 5). Since this study is cross-sectional, it should be considered as an exploration of these hypothesized relations. Because it is unclear if gender might influence such relations, main and interaction effects of gender will be explored.

## **1 Method**

I will first give a brief summary of procedures and methods in this Section. For a complete description of subject selection and recruitment, video recording, and coding procedures, the reader is referred to Chapter 2 (Section 5). Descriptive data of parent-child interaction measures, interrelations between the specific interaction behaviors, and relations with potential confounding variables can also be found in Chapter 2.

### **1.1 Summary of procedures**

Eighty children with a mean age of 60 months (37 girls) participated. They were selected based on their peer-rated sociometric status (30 popular, 27 average, and 23 rejected children). Children were observed at home, once with their mother and once with their father ( $n = 74$ ), during free play. The following codes were used (for every 10-second episode of 7 minutes of interaction): 1. mutual responsiveness; 2. shared positive emotions; 3. balance of control; 4. total non-negative control; 5. total negative control; 6. dyadic play engagement. In addition, a measure of *balance* was formed, in which parent and child were mutually responsive, shared a balance of control, and were both engaged in play.

The children were interviewed at school to assess their subjective experience in several sessions. The Pictorial Scales of Perceived Competence and Social Acceptance (PSPCSA, Harter & Pike, 1984) were presented first. In the same session, we administered the Puppet Interview (PI, Cassidy, 1988; Verschueren, Schoefs, & Marcoen, 1994). In the next two sessions, we administered a Doll Story Completion Task (DSCT, Verschueren & Marcoen, 1994) to assess subjective experience of the relationship with mother and father, separately.

## 1.2 Overview of analyses

Continuous measures were used for all analyses. For research questions 1 and 2, I first performed Pearson correlations for the group as a whole, and for boys and girls separately. Then, uni- and multivariate analyses of variance were carried out. Measures of subjective experience were the dependent variables. For research question 1, gender was entered as a fixed independent variable and the parent-child variables as covariables (i.e., mutual responsiveness, shared positive emotions, dyadic play engagement, balance of control, and non-negative and negative control). Separate analyses were conducted for mother-child and father-child variables and for the subjective experience measures (PI, DSCT, and PSPCSA). Results are reported for each of the subjective experience measures separately. For research question 2, gender was again entered as a fixed variable and peer acceptance as covariable. Main and interaction effects of gender and peer acceptance on measures of subjective experience (entered simultaneously as dependent variables) were tested.

A main aim of this study was to investigate whether subjective experience of self and others served as a mediator between parent-child interaction behaviors and children's peer acceptance. To test for mediating effects, correlational analyses were performed first. Then, a series of regression analyses were conducted using the variables that were intercorrelated. According to Baron and Kenny (1986) three criteria have to be met in order to test mediation:

1. Variations in the independent variable account for variations in the mediator variable (path *a*). In the present study, the parent-child interaction variables were expected to predict subjective experience of self and others.
2. Variations in the mediator account for variation in the dependent variable (path *b*). In this study, subjective experience of self and relationships was expected to predict peer acceptance.
3. When Paths *a* and *b* are controlled, a previously significant relation between the independent and dependent variable (path *c*) is no longer significant. Thus, parent-child behaviors were expected to predict peer acceptance (see Chapter 4). However, it is expected that these relations will not be significant anymore after controlling for subjective experience.

## 2 Results

Correlations between measures of subjective experience and parent-child variables are reported in Table 1. For every research question, the correlations will be reported first. For research question 1 and 2, I will then present multi- or univariate analyses of variance. Research question 3 will be answered with a series of regression analyses.

### 1. *Is parent-child interaction related to subjective experience of self and others?*

Results will first be presented for the DSCT about mother- and father-relationships, then for the PI Positiveness and Openness scales, and finally for the Harter scales. (M)ANOVAs will be presented first for the mother-child interaction variables and then for the father-child variables. Mother-child security on the DSCT was only analyzed with respect to mother-child interaction behaviors; the same was done with father-child security scores. MANOVAs were repeated to test for a possible confounding effect of verbal competence, which had been found to be related to PI Positiveness (see Chapter 2). Effects of child age and temperament variables were controlled when they had been found to be related to parent-child variables.

### **Doll Story Completion Task**

Children who played more secure mother-child stories shared more positive emotions ( $r(74) = .28, p = .02$ ). For the father-child attachment stories, only one marginally significant correlation was found. Children who represented the relationship with father as more secure tended to share more positive emotions with father ( $r(67) = .22, p = .08$ ). No relations were found with any other parent-child variables.

#### **A. Mother-child interaction and mother-child attachment stories**

In a univariate analysis, the only significant effect on mother-child attachment was made by mother-child shared positive emotions ( $F(13, 60) = 4.92, p = .03$ ). Children who shared more smiling and laughter with their mothers were more secure with them. There were no interaction effects with gender. These results remained the same when controlling for child age and for rhythmicity (regularity of daily patterns). When controlling for rhythmicity, the effect of gender also became significant ( $F(14, 57) = 7.32, p = .009$ ). As was reported in Chapter 2, girls scored higher on the DSCT than boys did.

An ANOVA showed a marginal interaction effect of gender x mother-child balance ( $F(3, 70) = 3.09, p = .08$ ). A scatterplot showed that girls who experience more balance with mother tend to perceive mother as



more available, while boys tend to see her as less available. After controlling for the child's activity level (that was related to mother-child balance, see Chapter 2), this interaction effect was nearly significant ( $F(4, 67) = 3.96, p = .05$ ).

### **B. Father-child interaction and father-child attachment stories**

The univariate analysis revealed a nearly significant effect of shared positive emotions with father on security with father ( $F(13, 53) = 3.84, p = .055$ ). Children who shared more positive emotions with father tended to be more secure with him. No significant interaction effects with gender were found. The effect of shared positive emotions on security with father became somewhat less when temperament ratings of approach-withdrawal were taken into account ( $F(14, 50) = 3.06, p = .09$ ). With children who tended to withdraw from novelty, positive emotions and father-child security were less strongly related.

### **Puppet Interview**

**Positiveness** of the self was significantly correlated with shared positive emotions with mother ( $r(77) = .27, p = .02$ ). This correlation was higher for girls ( $r_{\text{girls}}(34) = .46, p = .006$ ;  $r_{\text{boys}}(43) = .18, ns$ ), which is remarkable given their lower scores (and therefore, lower variability) on the Positiveness scale. Positiveness of the self was also significantly related to shared positive emotions with father ( $r(72) = .31, p = .008$ ). Children who shared more smiling and laughter with their mothers and fathers during free play interaction were more positive (and less negative) about themselves during the PI. Also as expected, there was a negative correlation between positiveness of self and negative control in the mother-child interaction ( $r(77) = -.24, p = .04$ ). Children who were more negative (less positive) about themselves expressed more negative control with mothers. There were no significant correlations between positiveness of self and parent-child mutual responsiveness, control, or play behaviors for the group as a whole. However, positiveness of self was *positively* correlated with non-negative control in the interaction with father for girls ( $r(31) = .49, p = .005$ ) and *negatively* for boys ( $r(41) = -.35, p = .03$ ). The more positive girls were about themselves, the more control they and their fathers exerted. However, boys were more positive about themselves when less control was expressed in their interactions with father. For boys, there also was a marginal correlation between Positiveness and father-son balance ( $r(41) = .26, p = .099$ ). Boys who shared more balanced episodes with fathers tended to be more positive about themselves.

**Openness** in admitting flaws was mainly related to father-child interaction measures. The only mother-child variables related to Openness were dyadic play engagement ( $r(77) = .25, p = .03$ ) and

overall balance ( $r(77) = .26, p = .02$ ). Openness was also correlated with father-child mutual responsiveness ( $r(72) = .23, p = .05$ ) and balance ( $r(72) = .25, p = .04$ ). In addition, it was marginally related to dyadic play engagement ( $r(72) = .21, p = .08$ ) and negative control in the interaction with father ( $r(72) = -.22, p = .06$ ). This suggests that children who admitted more shortcomings about themselves were longer simultaneously engaged in play and experienced more balance with both parents. They were also more mutually responsive with their fathers. In addition, less negative control was expressed in the father-child interactions of children who were more open about their shortcomings. Some correlations were different for boys and girls. Boys were more open about themselves when they experienced more mutual responsiveness with fathers ( $r(41) = .47, p = .002$ ) than girls ( $r(31) = -.16, ns$ ). Boys who were more open about their shortcomings also tended to have a higher balance in control with their fathers ( $r(41) = .29, p = .07$ ), but girls did not ( $r(31) = -.20, ns$ ). More open boys also shared more balanced episodes with their fathers ( $r(41) = .31, p = .049$ ). Girls who were more open shared more balance with their mothers ( $r(34) = .42, p = .01$ ).

#### **A. Mother-child interaction and Positiveness and Openness of self**

A main effect on the PI-scales was found for shared positive emotions ( $F(2, 63) = 4.29, p = .02$ ). There were trends of a main effect of negative control ( $F(2, 63) = 2.87, p = .06$ ) and dyadic play engagement ( $F(2, 63) = 3.05, p = .055$ ). No main or interaction effects of gender were found. The univariate results showed that children who shared more positive emotions with their mothers were more positive about themselves ( $F(12, 64) = 7.47, p = .008$ ). More negative control in the interaction with mother was related to a more negative view of the self ( $F(12, 64) = 5.69, p = .02$ ). A univariate effect of dyadic play engagement was found on openness to admit imperfections ( $F(12, 64) = 6.19, p = .02$ ). Children whose mothers were more often simultaneously involved in play with them were more open about their imperfections. The MANOVA was repeated with child age as a covariable and this did not change the results. Similarly, when verbal competence was entered as covariable, the results remained significant. A MANOVA with mother-child balance and gender as predictors showed no main or interaction effects on either Positiveness or Openness.

Table 1a

Pearson correlations between peer acceptance, subjective experience and mother-child interactions<sup>19</sup>

<b>Mother-Child</b>	PI Pos	PI Open	DSCT Mo	MA	PA	PC	Peer Acc
Mutual responsiveness	.09	.11	.08	-.09	.13	-.07	.06
Shared positive	<b>.27*</b>	.18	<b>.28*</b>	-.09	.01	.06	<b>.23*</b>
Balance of control	.15	-.06	.17	-.08	-.07	-.07	<b>.25*</b>
Total control	.12	.05	.01	-.07	-.08	-.07	-.04
Negative control	<b>-.24*</b>	.14	-.03	.09	<b>.28*</b>	<b>.23*</b>	-.13
Dyadic play engagement	.08	<b>.25*</b>	.18	-.08	-.10	.00	<b>.26*</b>
Balance	.06	<b>.26*</b>	.10	-.09	-.09	.04	<b>.22*</b>
Peer Acceptance	.06	.09	<b>.32*</b>	-.18	<b>-.20+</b>	-.12	x

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$

Table 1b

Pearson correlations between peer acceptance, subjective experience and father-child interactions

<b>Father-Child</b>	PI Pos	PI Open	DSCT Fa	MA	PA	PC	Peer Acc
Mutual responsiveness	.10	<b>.23*</b>	.00	-.13	-.10	-.10	.01
Shared positive	<b>.31**</b>	.04	<b>.22+</b>	-.05	.02	.01	.10
Balance of control	.02	.10	-.07	-.04	.16	.03	.09
Total control	-.04	.00	-.05	.02	-.08	.04	<b>-.26*</b>
Negative control	-.18	<b>-.22+</b>	-.10	-.03	-.11	-.04	<b>-.27*</b>
Dyadic play engagement	.11	.21+	.05	.01	-.01	.13	.19
Balance	.09	<b>.25*</b>	.07	-.06	.00	-.05	<b>.21+</b>
Peer Acceptance	.06	.09	<b>.30*</b>	-.18	<b>-.20+</b>	-.12	x

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$

<sup>19</sup> Abbreviations: PI Pos = Puppet Interview Positiveness, PI Open = Puppet Interview Openness, DSCT Mo/Fa = Story Completion Task Mother/Father, MA = Maternal Acceptance scale, PA = Peer Acceptance scale, PC = Perceived Competence, Peer Acc. = peer acceptance.

Table 2a

Pearson correlations between peer acceptance, subjective experience and mother-child interactions for boys and girls separately

<b>Mother-Daughter</b>	PI Pos.	PI Open	DSCT Mo.	MA	PA	PC	Peer Acc.
Mutual responsiveness	.11	.11	.27	-.10	-.03	-.07	.17
Shared positive	<b>.46**</b>	.17	<b>.32<sup>+</sup></b>	.10	.27	.16	.16
Balance of control	.13	-.16	.27	-.12	-.15	-.10	<b>.39*</b>
Total control	.15	-.15	.16	-.15	-.23	-.19	.02
Negative control	-.19	.22	-.11	.07	<b>.36*</b>	.20	-.20
Dyadic play engagement	-.04	<b>.35*</b>	<b>.31<sup>+</sup></b>	-.14	<b>-.28<sup>+</sup></b>	-.10	<b>.32<sup>+</sup></b>
Balance	-.03	<b>.42*</b>	.22	-.12	-.12	.03	.26
Peer Acceptance	.01	.12	<b>.47**</b>	<b>-.30<sup>+</sup></b>	-.26	-.22	x

<b>Mother-Son</b>	PI Pos.	PI Open	DSCT Mo.	MA	PA	PC	Peer Acc.
Mutual responsiveness	.10	.11	-.19	-.08	-.07	-.09	-.05
Shared positive	.18	.17	.18	<b>-.31*</b>	-.22	-.07	<b>.29<sup>+</sup></b>
Balance of control	.24	.00	-.03	-.01	.04	.09	.11
Total control	.10	.16	-.12	.01	.03	.01	-.09
Negative control	<b>-.26<sup>+</sup></b>	-.02	-.04	.22	<b>.28<sup>+</sup></b>	.21	-.10
Dyadic play engagement	.16	.19	.07	-.04	.06	.13	.23
Balance	<b>.26<sup>+</sup></b>	.06	-.22	-.02	-.03	.00	.17
Peer Acceptance	.14	.05	.13	-.06	-.14	-.06	x

<sup>+</sup>  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$

Table 2b

Pearson correlations between peer acceptance, subjective experience and father-child interactions for boys and girls separately

<b>Father-Daughter</b>	PI Pos.	PI Open.	DSCT Fa	MA	PA	PC	Peer Acc.
Mutual responsiveness	.03	-.17	.08	-.22	-.27	-.27	.16
Shared positive	<b>.40*</b>	-.11	.28	.19	.11	-.01	.04
Balance of control	-.02	-.20	-.01	-.26	-.06	-.06	.08
Total control	<b>.49**</b>	.16	.12	-.02	-.13	.01	-.17
Negative control	-.09	-.29	-.25	.13	-.06	-.01	<b>-.38*</b>
Dyadic play engagement	.16	<b>.33+</b>	.15	.04	-.04	.07	<b>.39*</b>
Balance	.20	.16	.22	-.01	.02	-.02	<b>.44*</b>
Peer Acceptance	.01	.12	<b>.39*</b>	<b>-.30+</b>	-.26	-.22	x

<b>Father-Son</b>	PI Pos.	PI Open.	DSCT Fa	MA	PA	PC	Peer Acc.
Mutual responsiveness	.13	<b>.47**</b>	-.04	-.08	.00	.04	-.09
Shared positive	.26	.18	.18	<b>-.32*</b>	-.07	.03	.15
Balance of control	.06	<b>.29+</b>	-.16	.17	<b>.34*</b>	.10	.09
Total control	<b>-.35*</b>	-.09	-.20	.06	-.04	.04	<b>-.33*</b>
Negative control	-.18	-.22	.02	-.19	-.12	-.15	-.20
Dyadic play engagement	.09	.09	-.12	-.02	.03	.20	-.01
Balance	.03	<b>.31*</b>	-.07	-.11	-.03	-.06	.06
Peer Acceptance	.14	.05	.17	-.06	-.14	-.06	x

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$

## **B. Father-child interaction and Positiveness and Openness of self**

In the father-child MANOVAs, main effects were found for gender ( $F(2, 57) = 7.27, p = .001$ ) and shared positive emotions ( $F(2, 57) = 6.51, p = .003$ ). A trend emerged for negative control ( $F(2, 57) = 2.62, p = .08$ ). Girls were less positive on the PI than boys ( $F(13, 58) = 11.59, p = .001$ ), as was reported in Chapter 2. A more positive sense of self was related to more shared positive emotions with father ( $F(13, 58) = 11.37, p = .001$ ). There were marginal univariate effects of negative control ( $F(13, 58) = 4.67, p = .05$ ) and dyadic play engagement ( $F(13, 58) = 3.54, p = .07$ ) on Openness. Children who were more open about imperfections tended to experience less negative control and more dyadic play involvement with father.

Multivariate interaction effects were found of gender x non-negative control ( $F(2, 57) = 10.04, p = .000$ ) and mutual responsiveness ( $F(2, 57) = 5.67, p = .006$ ). A highly significant univariate effect of gender x non-negative control was found on Positiveness ( $F(13, 58) = 18.10, p = .000$ ). More control with father was related to a more *negative* view of self in boys but a more *positive* one in girls. A significant univariate effect was found of gender x mutual responsiveness on Openness ( $F(13, 58) = 11.53, p = .001$ ). Boys who more openly admitted imperfections were more often mutually responsive with their fathers ( $M_{\text{"open" boys}} = .43$ ) than were boys who saw themselves as perfect ( $M_{\text{"perfect" boys}} = .30, t(39) = 2.93, p = .006$ ). Girls who were more open, however, were less mutually responsive with fathers ( $M = .31$ ) than girls who claimed they were perfect ( $M = .39, t(29) = -2.04, p = .05$ ).

There were some additional marginal interaction effects on PI-Openness of gender x shared positive effect ( $F(13, 58) = 3.86, p = .05$ ), non-negative control ( $F(13, 58) = 3.72, p = .06$ ), and balance of control ( $F(13, 58) = 3.13, p = .08$ ). Inspection of scatter plots showed that boys who were more open about imperfections tended to share more positive emotions and balance of control with their fathers and to experience less non-negative control. For girls, Openness tended to be related to less shared positive emotions and more control.

The MANOVA was repeated while controlling for verbal competence and also for child activity level and task orientedness. The results did not change after controlling for verbal competence and activity level. When controlling for the task orientedness of the child, the univariate interaction effect of gender x non-negative control became significant ( $F(14, 55) = 4.82, p = .03$ ). More control between father and child was related to less openness in boys and more openness in girls. A separate MANOVA of father-child balance and gender showed no significant multivariate relations with Positiveness or Openness, but did show a univariate trend of father-child balance on PI Openness ( $F(3, 68) =$

3.68,  $p = .06$ ). Children who shared more balance with father tended to be more open about their imperfections. This marginal effect remained when controlling for approach-withdrawal ( $F(4, 65) = 3.09, p = .08$ ).

### **Perceived Competence and Social Acceptance**

There were not many significant correlations between parent-child interaction variables and Harter's PSCPSA. Those that were found were unexpected. Perceived Peer Acceptance and Competence were positively correlated with negative control in the interaction with mother ( $r(80) = .28, p = .01$  and  $r(80) = .23, p = .045$ , respectively). Children who expressed more negative control with mother perceived themselves as *more* accepted by peers and as *more* competent than children who were less negative. The Maternal Acceptance scale was not related to any of the parent-child measures. For boys, however, unexpected negative correlations were with shared positive emotions with mother ( $r(43) = -.31, p = .04$ ) and father ( $r(41) = -.32, p = .04$ ). Boys who shared more positive expressions with their parents reported feeling *less* accepted by mother. There were no relations with mother- or father-child balance.

#### **A. Mother-child interaction and the PSCPSA**

In the MANOVAs, the scales of Maternal Acceptance, Peer Acceptance, and (Cognitive and Physical) Competence were the dependent variables, gender was a fixed variable and the parent-child interaction variables were treated as covariables. Main and interaction effects were tested. There was a significant main effect of negative control in the interaction with mother ( $F(3, 64) = 3.10, p = .03$ ). This effect was found for perceived Peer Acceptance ( $F(13, 66) = 9.03, p = .004$ ) and marginally for Perceived Competence ( $F(13, 66) = 3.32, p = .07$ ). More negative control in the interaction with mother was related to *higher* levels of Peer Acceptance and Perceived Competence. The marginal effect on Perceived Competence disappeared after controlling for rhythmicity. Univariate interaction effects were found for gender x shared positive emotions on the Peer Acceptance ( $F(13, 66) = 5.50, p = .02$ ) and Maternal Acceptance scales ( $F(13, 66) = 3.82, p = .055$ ). Girls who shared more positive emotions with mother reported feeling better accepted by peers, but boys reported feeling *less* accepted. Boys who shared more positive emotions with mother also tended to perceive themselves as less accepted by mother on the Harter scale than boys who shared less positive emotions. The MANOVA was repeated with rhythmicity as a covariable, because this temperament variable had been found to be correlated with all the Harter scales (see Chapter 2). The effect on Maternal Acceptance became significant after controlling for rhythmicity ( $F(14, 62) = 4.09, p = .047$ ).

## **B. Father-child interaction and the PSPCSA**

No significant relations were found between father-child interaction and perceived Maternal and Peer Acceptance, and Perceived Competence.

In sum, subjective experience of both self and attachment relationships was mainly related to sharing positive emotions, both with father and with mother. Children who were more positive about themselves and their relationships with mother and father shared more positive emotions with both parents. More negative control in the interaction with mother was related to a more negative sense of self, but only marginally. Interestingly, more control with father was related to a more positive sense of self for girls but a more negative one for boys. Gender differences were also found for the Openness scale of the PI. Relations with Openness were mainly found for father-boy interactions. More open boys were more mutually responsive and had a higher balance of control with fathers. More open children of both genders were more dyadically engaged in play with mother. Few relations were found with the Harter scales. The only expected result was the finding that girls who shared more positive emotions with mother felt better accepted by peers. On the contrary, boys who were sharing more positive emotions with mother reported feeling less well-accepted. In addition, negative control was related to feeling better accepted by peers.

### *2. Is subjective experience of self and others related to peer acceptance?*

Tables 1 and 2 show Pearson correlations between measures of subjective experience and peer acceptance. As expected, security with both mother and father was related to higher peer acceptance ( $r(74) = .32, p = .006$  for the mother-child stories;  $r(73) = .30, p = .01$  for the father-child stories). Unexpectedly, no relations were found between PI Positiveness and peer acceptance. Children who were more positive about themselves were *not* more likely to be better accepted by peers. Also, there were no relations between openness about the self's imperfections and peer acceptance. For the Harter scales, only one trend was found and it was in the unexpected direction. Better accepted children tended to report feeling *less* accepted by peers ( $r(80) = -.20, p = .07$ ). When both genders were analyzed separately, it was found that girls' attachment scores were significantly correlated with their peer acceptance (mother-girl:  $r(33) = .47, p = .006$ ; father-girl:  $r(35) = .39, p = .02$ ), but boys' were not (mother-boy:  $r(41) = .13, ns$ ; father-boy:  $r(41) = .17, ns$ ).



Multivariate analyses were carried out to test main and interaction effects of peer acceptance and gender on all the measures of subjective experience (entered simultaneously). Main effects were found of peer acceptance ( $F(7, 60) = 2.85, p = .01$ ) and gender ( $F(7, 60) = 2.75, p = .02$ ). Univariate main effects of peer acceptance were found on mother-child attachment ( $F(3, 66) = 4.65, p = .004$ ) and father-child attachment ( $F(3, 66) = 6.85, p = .011$ ). Children who were better accepted by peers saw their mothers and their fathers as more available when needed. There were marginal effects on the scales of perceived Peer Acceptance ( $F(3, 66) = 3.67, p = .06$ ), Maternal Acceptance ( $F(3, 66) = 2.86, p = .095$ ) and Perceived Competence ( $F(3, 66) = 3.09, p = .08$ ). Better accepted children showed a tendency to report feeling *less* accepted by mother and peers and less competent than less accepted children.

Main effects of gender were found on Positiveness of the self ( $F(3, 66) = 4.29, p = .042$ ), attachment to mother ( $F(3, 66) = 6.02, p = .02$ ), and marginally on Perceived Competence ( $F(3, 66) = 2.82, p = .098$ ). As reported in Chapter 2, girls scored lower on PI Positiveness but higher on the story completions about mother-child relationships and Perceived Competence (trend). There was a significant univariate interaction effect of gender x peer acceptance ( $F(3, 66) = 2.26, p = .04$ ) on mother-child attachment and (marginally) on Maternal Acceptance ( $F(3, 66) = 3.15, p = .08$ ). Better accepted girls felt more secure with mother but they tended to report *lower* levels of Maternal Acceptance on the Harter scales.

The analysis was repeated when controlling for rhythmicity, because this had been found to be related to mother-child attachment stories and to the Harter scales. Main effects of peer acceptance did not change. However, the effect of gender on PI Positiveness became marginal ( $F(4, 63) = 2.97, p = .09$ ) and the effect of gender on Perceived Competence now became significant  $F(4, 63) = 4.34, p = .04$ ). Thus, when the child's regularity was taken into account, girls were not significantly more negative about themselves but they did perceive themselves as more competent. In addition, interaction effects of gender ceased to be significant. The MANOVA was also repeated while controlling for approach-withdrawal, a correlate of father-child attachment. The marginal effects of peer acceptance on Maternal Acceptance and Perceived Competence disappeared, but otherwise results did not change.

**To summarize**, only a few relations were found between peer acceptance and measures of subjective experience. Contrary to expectations, better accepted children were *not* more positive about

themselves than less accepted ones. However, children who were more popular represented their attachment relationships to mother and to father as more secure. In the case of mother-child attachment, there were main and interaction effects of gender: better accepted girls represented the relationship with their mothers as more secure. Only trends were found with respect to the Harter's scales of Perceived Acceptance and Competence. Better accepted children tended to feel less accepted by mother and peers, and less competent than more rejected children.

### 3. *Subjective experience of self and others: a mediator?*

Only one subjective experience measure was correlated both with peer acceptance and with parent-child interaction, namely mother-child attachment stories. This variable is therefore the only potential mediator between mother-child shared positive emotions and children's peer acceptance. Because there were no significant interaction effect between gender and mother-child variables on the attachment stories, I did not analyze genders separately.

#### *Step 1:*

*Does "mother-child shared positive" predict "attachment to mother"?*

In the first regression analysis, shared positive emotions with mother was entered as the predictor and attachment to mother as the dependent variable. Shared positive emotions significantly predicted security of attachment to mother ( $F(1, 72) = 6.24, p = .02, R^2 = .08$ ). The Beta for shared positive emotions was .28 ( $p = .02$ ). This analysis was repeated when controlling for child age, since age was positively correlated with shared positive emotions (see Chapter 2). When age was entered in the first step and shared positive emotions in the second, the latter still predicted attachment security with mother ( $\beta = .28, p = .02$ ). The analysis was also repeated with rhythmicity in the first step. Again, the Beta for shared positive emotions remained significant (.27,  $p = .02$ ).

#### *Step 2:*

*Does "attachment to mother" predict "peer acceptance"?*

In the second regression equation, security with mother was entered as the only predictor and peer acceptance was the dependent variable. In this analysis, 10% variance was explained ( $F(1, 72) = 8.16, p = .006, \beta_{\text{mother-child attachment}} = .32, p = .006$ ).

*Step 3:*

*Does “mother-child attachment” mediate the relation between “shared positive” and “peer acceptance”?*

In order to show a mediating effect, a previously significant relation between shared positive emotions and peer acceptance should cease to exist (Baron & Kenny, 1986). First, a regression analysis was performed to test whether shared positive emotions indeed predicted peer acceptance. The percentage of explained variance was 5% ( $F(1, 78) = 4.46, p = .04$ ) and the Beta was .23. The Beta remained significant when child age was entered in the first step of the analysis. Controlling for activity level, the Beta for shared positive became slightly lower (.21,  $p = .056$ ). To test for mediation, a hierarchical regression analysis was conducted next, with peer acceptance as the dependent variable. “Mother-child attachment” was entered first and “mother-child shared positive” second. No extra variance was explained by “shared positive emotions” ( $F$ -change = .53, *ns*). Thus, shared positive emotions no longer predicted peer acceptance when subjective experience of attachment to mother was controlled for ( $\beta_{\text{shared positive}} = .09, ns$ ;  $\beta_{\text{mother-child attachment}} = .30, p = .01$ ). The results remained basically the same when controlling for age, rhythmicity and activity level.

In sum, it can be concluded that subjective experience of mother-child attachment mediated the relation between shared positive emotions in mother-child play and peer acceptance. Shared positive emotions with mother no longer predicted peer acceptance when controlling for mother-child attachment security. This finding was unrelated to the child's age, rhythmicity and activity level.

### **3 Discussion**

In this chapter, relations between parent-child interaction behaviors, subjective experience of self and parents, and peer acceptance were investigated. Hypotheses were that more connectedness and autonomy in the parent-child interactions would be related to a more positive experience of self and parent-child relationships. This was expected to be related to higher peer acceptance. The main hypothesis was that subjective experience of self and others would function as a mediator between characteristics of parent-child interactions and peer acceptance.

#### **3.1 Parent-child interactions and subjective experience**

Subjective experience was mainly related to expressions of connectedness. As expected, shared positive emotions with both

parents were related to a more positive experience of the parent-child relationship and of the self. Children who shared more smiling and laughter with mother and father presented more coherent story completions in which the child was more accepted and valued and the parent was emotionally available. They also felt more positive about the self outside of specific relationships. These findings are consistent with studies with (pre)adolescents suggest that greater parental acceptance is related to higher self-esteem (Coopersmith, 1967; Deković & Meeus, 1997; Loeb, Horst, & Horton, 1980). Because of its nonverbal nature, parents and children engage in episodes of shared affect since early infancy. Therefore, it may be that sharing positive affect at kindergarten age has a long history in the relationship. Kochanska (1997) found relations between mutual cooperation and shared positive emotions with mother and 2- to 4-year-olds' internalization of maternal values and rules. Possibly, shared positive affect in mother-child relationships make it easier for the child to incorporate positive evaluations the mother has of the child. For the child, shared emotions may indicate an acknowledgement of his or her existence as an autonomous person, who is accepted and loved.

Oppenheim and colleagues showed that the way in which children and their mothers co-construct attachment narratives is related to the way children enact such narratives by themselves (e.g., Oppenheim, Nir, Warren, & Emde, 1995, in Oppenheim & Waters, 1995). When mother-child dyads constructed narratives that were more coherent, children completed doll stories that were more coherent and had more prosocial and fewer aggressive themes. In addition, attachment stories have been related to observed attachment security (Bretherton, Ridgeway, & Cassidy, 1990; Cassidy, 1988). These studies suggest that more connectedness between mother and child is related to story enactments of the relationship in which the relationships is portrayed as more connected.

An alternative explanation would be that temperamentally more positive children are more likely to be positive with their parents and more positive about themselves and their parents. However, a more or less positive mood assessed by a temperament scale was not related to shared positive emotions with parents, subjective experience of self and parents, and peer acceptance (Chapter 2). In addition, controlling for other temperament variables (rhythmicity, task orientedness, and activity level) generally did not alter the results. Only the relation between shared positive emotions with father and security with father became somewhat less strong, when the child's tendency to approach or withdraw from novelty was taken into account.

There were no specific hypotheses about openness in admitting shortcomings of the self, because it had been suggested that it might be appropriate for children of this age to claim that they are perfect (Verschueren et al., 1996). However, some meaningful relations between openness and parent-child interaction behaviors were found. Openness was related to more dyadic play engagement with mothers and (marginally) with fathers, and to less negative control with fathers. By engaging in their children's play, parents act in more peer-like ways and show that they have an interest in the child's activities. Such active involvement may make foster children's confidence that they can express their negative sides without being rejected. The use of negative control in the interactions with fathers, on the other hand, is likely to discourage children to talk openly about negative sides of themselves. Boys who more openly admitted flaws were more mutually responsive and they tended to share more positive emotions. Boys who more openly admitted imperfections tended to experience less non-negative control and to have a higher balance of control with their fathers. This implies more connectedness and more room for autonomy in father-son dyads of boys who admitted more shortcomings of themselves. These findings suggest that fathers may play an important role in boys' self-acceptance. If their fathers are more positive, responsive, and involved, boys may feel more comfortable to admit their negative characteristics and less afraid of being rejected if they do.

Interestingly, non-negative control with father played a differential role in boys' and girls' senses of self. More control in the interaction with father was related to a more *positive* view of the self for girls but to a more *negative* representation of the self for boys. For girls it seems to be positive if they and their fathers exert more control over one another.<sup>20</sup> Potentially, girls are already stronger in establishing connectedness at a young age (Kochanska, 1997; Robinson et al., 1993). Exerting control might enhance their sense of autonomy. Baumrind (1989) found some evidence for this when she found that parenting styles using firm control were related to more self-assertiveness in girls, but not in boys. For boys, a high amount of control may be experienced as negative. It is possible that more control between boys and fathers indicates more competitiveness, even if the control in itself is not negative. In Chapter 4, more control with father was found to be related to more peer rejection. In other studies, control has been related to peer rejection, for boys especially (e.g., Isley et al.,

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<sup>20</sup> Multivariate analyses with individual measures of control show significant interaction effects of gender with both father's ( $F(5,72) = 8.25, p = .005$ ) and child's control ( $F(5,72) = 7.08, p = .01$ ).

1996, 1999). Possibly, too much control with father affects boys' sense of autonomy and makes them feel inadequate and negative about themselves. A study with preadolescents found that fathers' disagreements in a family interaction task were mainly related to boys' low self-esteem (Loeb et al., 1980). Loeb et al. conclude that the father-son relationship might be more conflictual, at least in preadolescence. Possibly, such a pattern starts at kindergarten age when gender patterns start to emerge more clearly. Boys at this age may try to compete for their place in the peer group. Boys who feel less autonomous in more controlling father-son relationships may compensate for this by being more aggressive with peers.

In contrast to the meaningful pattern of findings for the PI and the story completion method, the results for the Harter scales were almost all unexpected. An expected finding was that girls who shared positive emotions with mother reported higher Peer Acceptance (but not higher Maternal Acceptance). For boys, however, more shared positive emotions with mother were related to *lower* levels of reported Maternal Acceptance and Peer acceptance. Further, more negative control with mother was related to *higher* Perceived Competence and Peer Acceptance for the total group. In sum, higher scores on the Harter scales were related to less positive and more negative mother-child interactions. Children might respond in defensive ways to Harter and Pike's measure, as has been suggested by Verschueren et al. (1996). The PSPCSA is very direct, and it seems more obvious what the "right" or more desirable answers are. Another indication for the "defensiveness" explanation is that more popular children tended to judge themselves as being *less* accepted by their mother and by peers than more rejected children. Recently, the developmental and cross-cultural appropriateness of the PSPCSA have been questioned (Fantuzzo, McDermott, Manz, Hampton, & Burdick, 1996). In a group of African American urban Head Start children, Fantuzzo et al. found a different factor structure of the PSPCSA than Harter and Pike did. In addition, most children were found to lack the cognitive capacities required for the assessment (such as understanding quantity concepts). Thus, even though Fantuzzo et al. studied a high-risk sample, their study shows that it is unclear how developmentally appropriate the PSPCSA is.

Contrary to expectations, mother- or father-child mutual responsiveness showed almost no relations to subjective experience of the self. Possibly, this measure was too verbal and may not have grasped relevant dyadic dimensions of connectedness.

### 3.2 Subjective experience and peer acceptance

In line with the hypothesis, better accepted children enacted story completions that were more secure than those of less well-accepted children. They represented mothers and fathers as more available when needed and they enacted more interactions between parent and child. This suggests that children who feel more accepted by their parents are more accepted by their peers. These findings are in accordance with those by Verschueren and colleagues (Verschueren et al., 1996; Verschueren & Marcoen, 1999). As Sroufe (1990) suggests, children who have experienced a relationship history of interacting with responsive parents may have more positive expectations of relationships with others in general. The self in such relationships seems to be experienced as positive, valued, and worthy of attention.

Unexpectedly, no relations were found between PI and peer acceptance. Verschueren and her colleagues have found that children who were more positive about the self in the PI were rated by teachers as more popular, competent, and better adjusted to school (Verschueren et al., 1996). In a more recent investigation, they even showed longitudinal relations between self-worth as assessed by the PI at age 5 and girls' popularity at age 8 (Verschueren, Marcoen, & Buyck, July 1998). In this last study, same-sex peers rated children's likability. Therefore, the lack of convergence between the present findings and those of Verschueren and colleagues are probably not attributable to using different raters of children's popularity.

A possible explanation for these differences is that the present study used extreme sociometric status groups.<sup>21</sup> In clinically referred children, it has not consistently been found that they were negative about the self, as would be expected (Veerman, 1992). Since rejected children are at risk for behavior problems, maybe similar processes play a role (Newcomb, Bukowski, & Pattee, 1993). One possibility is that rejected children may evaluate themselves in more positive ways than their peers evaluate them, which could point at defensiveness. An indication for this is that less well accepted children tended to perceive themselves as *more* accepted by mother and by peers and as more competent than better accepted children. Thus, while both better and less well accepted children might rate themselves in positive ways, this "positiveness" may have different meanings. Rejected children may also be less able to judge their own capacities in comparison to other children. Self-perceptions of rejected children have been found to diverge most from other people's perspectives on these children. Newcomb et al. (1993), for instance, report that rejected children are

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<sup>21</sup> Karine Verschueren is acknowledged for this suggestion.

rated as more aggressive than other children but do not see *themselves* as more aggressive than others do. In the present study, they agreed less with their parents on who the child's friends were than popular children and their parents (see Chapter 2). There also may be gender differences in these processes (Veerman, 1992, see Section 3).

Another factor that may have influenced the lack of findings in the present study is the low PI-scores, especially for girls (see Chapter 2). One explanation for this is that girls may be more sensitive for how others view them. A post-hoc indication for this is that better accepted girls reported more people who liked them ( $M_{\text{popular}} = 2.92$ ) than less well-accepted girls did ( $M_{\text{rejected}} = 1.13$ ;  $F(3, 72) = 4.87$ ,  $p = .03$ ), on a PI-item that asked the child to name people who like him or her. Boys who were better accepted by peers named *fewer* people who liked them than more rejected boys did. In addition, several other findings concerning relations between subjective experience and parent-child interactions were in the expected direction for girls, and not for boys. Girls who shared positive emotions with mother reported feeling better accepted by peers. Girls who were more positive about themselves shared more positive emotions with fathers and also portrayed more positive father-child relationships.

Finally, we visited 80 children in a total of 32 classrooms while Verschueren et al.'s (1996) 95 subjects came from only five different classrooms. In addition, there were six different interviewers. They were all trained, of course, but it is inevitable that each had her own style and that some were better in making children feel at ease than others. Thus, there was probably more variation in the way the interviews were conducted in the present study. Especially with young children, this may have affected the results.

### **3.3 Subjective experience of self and others: a mediator?**

To my knowledge, the present study is the first to directly show a mediating effect of attachment representations between observed parent-child interactions and peer acceptance. Children who shared more positive emotions with their mothers were more popular among peers, but this relation became nonsignificant when the security of attachment to mother was taken into account. Thus, it appears that the way the child *experiences* the relationship with the mother is more influential than mother-child interaction behaviors per se. As suggested above, shared positive emotions between parent and child may elicit strong feelings of connectedness and feeling valued as a person in a relationship. Such feelings may influence expectations of future relationships (Sroufe, 1990). However, shared positive emotions may



not necessarily be positively related to future relationships when the child does not interpret them as a sign of being accepted and valued.

The evidence for mediation of subjective experience was limited, however. The only potential path was from mother-child shared positive emotions via mother-child attachment to peer acceptance. In addition, this model could explain only 10% of the variance in peer acceptance. The lack of clear findings can be explained in different ways. First, as Baron and Kenny point out (1986), the mediator should be measured without measurement error, which is virtually impossible when measuring internal psychological constructs. In this study, scores on the Puppet Interview and story completion method were generally low. On the Harter measure, they tended to be high. When there is low variability in the mediator variable, it cannot account for large variations in the variable to be predicted. There also were gender differences on the Puppet Interview and the story completions. The low scores for girls on the Puppet Interview and for boys on the story completion task reduced the variability in the scores, and thus the chance of finding differences.

The low ratings on the PI have been discussed above. The low security scores on the story completions were also surprising. Verschueren and Marcoen (1999) point to the fact that in children of preschool and kindergarten age low proportions of secure children are often found. They cite percentages as low as 26% (Solomon, George & De Jong, 1995), 42% Cassidy (1988), and 47.5% (Wartner, Grossmann, Fremmer-Bombik & Suess, 1994, al cited in Verschueren & Marcoen, 1999; see also Gloger-Tippelt (1998, July): 39% secure). Possibly, representational measures of attachment are not as valid for assessing attachment security as the infant strange situation (Solomon & George, 1999; Verschueren & Marcoen, 1999). Representational assessments may also measure other constructs except attachment security, for instance, the capacity for fantasy play. Indeed, mean rating scores for attachment security to mother were significantly correlated to the percentage of time the child played fantasy play with mother ( $r(74) = .26, p = .02$ ) and father ( $r(69) = .29, p = .02$ ). Thus, there were some connections with the capacity to pretend play, although they were not very strong. Doll story completion tasks may be less valid for boys in particular, because it might be more difficult for them to play with dolls and props than for girls (who are more used to this type of play). However, gender differences have not consistently been found in other studies.

A second explanation for the relative lack of mediational findings is that subjective experience of the self and of others does not yet play a role in the formation of new relationship with peers for children this

young. It might be that, as Harter claims, young children are not yet capable of taking enough distance of themselves to judge themselves and then to let their actions be guided by their self models. However, this interpretation seems unlikely in light of Verschueren et al.'s (1996; Verschueren & Marcoen, 1999) and of meaningful relations with parent-child variables in the present study. Third, it is possible that stronger connections between parent-child interactions and subjective experience would have been found when parents and children would have been observed in attachment situations. The play context we used to observe parent-child interactions was not particularly suitable to find connections with feelings of self-worth. Since attachment interactions center around issues of basic security or insecurity, an attachment-related interaction context could have been more conducive to behaviors relevant for the child's self.

To conclude, the present study was among the first to show relations between children's sense of themselves and their parents, and actual parent-child interaction behaviors. Generally speaking, more connectedness in the interaction with parents, as expressed by shared positive emotions, were related to more positive feelings about the self. In addition, an interesting interaction effect of gender and father-child control was found. More control was related to a more positive self for girls, and a more negative self for boys. Unexpectedly, the positiveness of the self was not related to peer acceptance. However, attachment to mother was. It also mediated the relation between shared positive emotions with mother and peer acceptance. This suggests that the way the child subjectively experiences the self in relation to parents plays a role of some significance in the way he or she relates to peers.

## **Summary of Chapter 6**

To summarize, the study presented in this chapter investigated relations between dyadic parent-child interactions, subjective experience of parent-child relationships and the self, and peer acceptance. It was expected that more connectedness and room for autonomy in parent-child interactions would be related to a more positive experience of parent-child relationships and the self. Interaction effects with child gender were explored. It was found that shared positive emotions, with mother and with father, were related to a more positive sense of self and parent-child relationships. These findings were interpreted as an indication that the sharing of positive emotions with parents gives children a sense of connectedness and of being valued as an autonomous person at the same time. Father-child control played a different role for boys and girls. More control was

associated with a more negative sense of self for boys and a more positive one for girls. In addition, father-child behaviors were related to more openness, mainly for boys. Relations with the PSPCSA were mainly unexpected.

Second, a more positive experience of self and parent-child relationships was expected to be related to peer acceptance, which was also tested with MANOVAs. More secure stories about mother-child and father-child relationships were related to higher acceptance by peers. Third, it was expected that subjective experience would function as a mediator between parent and peer relations. This was tested with a series of regression analyses. Only one mediation path was possible on the basis of intercorrelations between variables. Mother-child attachment representations were found to mediate the relation between shared positive emotions with mother and peer acceptance.



## **Chapter 7**

### **Epilogue**

This dissertation investigated connections between parent-child and peer relationships. Rejected children have been found to be at risk to contemporaneous and later difficulties, especially when rejection is more stable (see Chapter 1, Section 1). They are likely, for instance, to be more aggressive, to have more academic problems, and to be more lonely than other children (Asher, Erdley, & Gabriel, 1994; Parker & Asher, 1987; Rubin, Bukowski, & Parker, 1998). Previous research has found that children who are prosocial yet self-assertive are likely to become accepted by peers. Children who are aggressive without being prosocial are likely to become rejected (Denham & Holt, 1993; Ladd, Price, & Hart, 1988).

Relations have been found between the way in which children interact with their parents and characteristics of their social competence with peers (see Chapter 3). As Parke and O'Neil (1997, 1999) suggested, there may be both direct and indirect connections between parent and peer relationships. Children may learn dyadic interaction patterns in relationships with parents. However, the way the child thinks and feels about the relationships with the parents may be more important than particular behaviors per se. In this study, 80 4- to 5-year-old children of varying sociometric status participated. They were observed with their mothers and fathers during dyadic fantasy play at home. In addition, they were interviewed at school to assess their subjective experience of their parents and themselves.

Connectedness and autonomy were themes throughout this thesis. They are two frequently distinguished dimensions (Baxter, 1988; Connell & Wellborn, 1991; Emde & Buchsbaum, 1990; Pipp, 1990; Rose-Krasnor, 1997) that appear fundamental to the understanding of human relationships and the self. The dimensions of connectedness and autonomy appear very well suitable for trying to integrate findings from the literature on parent-peer linkages (Clark & Ladd, 2000). Such an attempt was made in this dissertation. In the Epilogue, I will first summarize the findings and discuss them in light of the dimensions of connectedness and autonomy. I will also consider gender differences and some methodological issues. Second, mediating linkages will be discussed. Third, I will critically reconsider concepts related to subjective experience in light of underlying (mechanistic or organic) worldviews. Fourth, I will propose a dynamic perspective on relations between parent-child relationships, subjective experience of the self-in-relation, and peer relations. Finally, I will make some suggestions for future research.

## **1 Parent-peer linkages: connectedness and autonomy**

Relations between dyadic parent-child measures, subjective experience, and peer acceptance will be reviewed first (Section 1). Second, I will discuss mediating links between parent and peer relationships via the child's subjective experience (Section 2). I hypothesized that children in mutually responsive and positive parent-child interactions would perceive their parents as more available and themselves as more accepted and valued. Such perceptions are likely to influence expectations the child has of relationships with peers, as suggested by attachment theory (Elicker et al., 1992; Sroufe & Fleeson, 1986).

The present study was one of the first to find links between directly observed parent-child behaviors, subjective experience of parent-child relationships and the self, and peer acceptance. Moreover, it also appears to be the first to find some evidence for a mediating role of the child's experience of attachment relationships (Mize, Pettit, & Meece, 2000). I will now review the findings and discuss them in light of the dimensions of autonomy and connectedness.

### **1.1 Direct relations between parent-child interactions and peer acceptance**

The parent-child interactions of better accepted children showed more connectedness and room for autonomy. Connectedness in the interactions of better accepted children was shown by more active dyadic play engagement both in mother- and father-child dyads and by a tendency to share more positive emotions with mothers. More active parental play involvement with better accepted children has been found in studies of physical play (Barth & Parke, 1993; MacDonald, 1987; MacDonald & Parke, 1984) and in free play (Pettit, Brown, Mize, & Lindsey, 1998). By actively engaging in play, parents may communicate that they value what their child is attending to. The finding that mothers and better accepted children tended to share more positive emotions agrees with previous studies as well (e.g., Isley et al., 1999; Kerns & Barth, 1995), although only few used dyadic measures (Dumas & LaFreniere, 1993; Dumas et al., 1995). It may be especially *shared* positive emotions that are significant in enhancing feelings of connectedness (Kochanska, 1997; Sroufe, Egeland, & Carlson, 1999).

Better accepted children also experienced more overall balance in the interactions with their mothers and fathers, which can be seen as an indication of more autonomy-within-connectedness. This measure reflected dyadic play engagement while being mutually responsive and

sharing a balance of control. In addition, better accepted children and their mothers tended to share more fantasy play. For girls, shared fantasy play with father was significantly related to their peer acceptance. This study is among the first to show relations between parent-child fantasy play and peer acceptance. The results are similar to the recent findings of Lindsey and Mize (2000), who found that 5-year-old girls who were engaged in more joint pretend play with mother were better liked by peers. Joint pretend play with father was related to teacher-rated social competence. It may be especially dyadically *shared* fantasy play that is related to children's peer competence. The possibility to share pretend play with parents provides children with opportunities to learn how to share what other people have in their minds, to dyadically regulate emotions, and to mutually construct new meaning.

The finding that more popular children and their mothers shared a higher balance of control suggests that there was room for both the child's and the mother's expressions of autonomy. The mother was relatively more controlling than the child in interactions of less accepted children. This result is similar to that of Dumas et al. (1995), who showed that mothers and socially competent children had a better balance of control than less competent dyads. These findings can be seen as a confirmation of the assumption that better accepted children's interactions with parents (at least with mothers) are more horizontal, or peer-like, than dyads of less well accepted children (Russell et al., 1998). Children who share control with their mothers may learn that they can mutually shape interactions with a partner in balanced ways. They may learn that they themselves are autonomous agents. At the same time, they are likely to develop respect for the autonomy of their play partners. In father-child interactions, more control was associated with lower peer acceptance. This is similar to previous findings (Barth & Parke, 1995; Deković & Janssens, 1991; MacDonald & Parke, 1984). It is possible that more control in father-child interactions makes the interaction more coercive, even when the control in itself is not negative. From the perspective of connectedness and autonomy, the child may feel less respected as an individual and it may give him or her a sense of being unable to adequately influence a play partner. Since fathers are traditionally seen as play partners, the resolution of conflict with them as play partners may be particularly powerful for children to learn conflict resolution strategies with peers.

At kindergarten age, children are capable of taking more initiative and being more independent from their parents than they were before. According to Dunn (1997), "there was an increase in the equity of balance between mother and child" (p. 570) in playful interactions

between 2 and 5 years of age. This suggests that play interactions of mothers and children may become more horizontal over development. Thus, even though the relationship between mother and child may be mainly vertical, relatively more mother-child balance during play at age 5 might be normative (Russell et al., 1998). It is possible that rejected children and their mothers have not achieved this developmental change in their play. With fathers, balance in play may be even more important as they are more often seen as play partners (Isley et al., 1996; Lindsey et al., 1997; MacDonald & Parke, 1984). The present study adds to the evidence that more control in interactions with fathers is related to poorer peer relations.

### **1.2 Parent-child interactions and subjective experience**

Shared positive emotions were the most important dyadic behaviors related to subjective experience of parent-child relationships and the self. Children who shared more smiling and laughter with parents showed more reciprocity between a parent and child doll in response to emotion eliciting story stems. The parent was enacted as being more available and the self as more accepted and cared for. Shared positive emotions both with mother and with father were also related to a more positive sense of the self as assessed by Cassidy's (1988) Puppet Interview (PI). A recent study by Clark and Symons (2000) found that positiveness of the self, assessed by the PI at age 5, was related to more secure mother-child attachment as observed in the home (with a Q-sort method). This finding disappeared, however, when controlling for the child's age (ranging from 66-81 months); older children were more positive about themselves. Clark and Symons also showed relations between concurrent attachment security and openness at age 5. More secure children were more open about their shortcomings.

In the present study, I had no specific hypotheses about openness to admit imperfections of the self. It has been suggested that it may be age-appropriate for young children to deny negative characteristics (Cassidy, 1988; Harter, 1990; Verschueren et al., 1996). Nevertheless, some meaningful relations with parent-child behaviors were found. Children who more openly admitted negative characteristics of themselves were more often simultaneously involved in play with their mothers and fathers. These findings suggest that parent-child connectedness makes it easier for children to admit imperfections. By engaging in their children's play, parents act in more peer-like ways and show that they have an interest in the child's activities (Russell et al., 1998). Such active involvement may foster children's confidence that they can express their negative sides without being rejected. This suggests that active involvement of parents may also facilitate



disclosure of the child's self. In addition, children who experienced more negative control with fathers saw themselves as more perfect. Potential feelings of rejection in the form of coercive control exchanges with fathers may make it more threatening to admit imperfections. The findings suggest that fathers may play an important role in the child's self-acceptance, especially for boys.

Father-son connectedness was important for boys' openness about imperfections. Boys who more openly admitted flaws were more mutually responsive and tended to share more positive emotions with their fathers. They also tended to experience less non-negative control and to have a higher balance of control with their fathers. If their fathers are more positive, responsive, and involved, boys may feel more comfortable to admit their negative characteristics and less afraid of being rejected if they do. It is noteworthy that this was the only significant finding concerning mutual responsiveness, the sharing of verbal turns. Possibly, boys who were more disclosing about the self's imperfections had a history of more verbal communication with their father that gave these boys more opportunities for the verbal expression of feelings. Gender-related links were also found between father-child control and positiveness on the PI (see Section 1. 4).

The findings suggest that feelings of connectedness might be more important for the development of a positive subjective experience of the self than experiences of autonomy, as is predicted by attachment theory (Cassidy, 1990; Sroufe, 1990). With fathers, the expression of autonomy may be relatively more significant. In addition, the dimensions of connectedness and autonomy may have different meanings for boys and girls. It appears that especially a sense of (verbal) connectedness and room for control in interactions with father may foster boys' capacity to realistically admit flaws. The relations between parent-child interaction behaviors and openness of the self are remarkable, since it has been suggested that it might be adequate for young children to see themselves as perfect (Cassidy, 1988; Harter, 1983, 1998; Verschueren et al., 1996). These findings suggest that young children's capability of admitting negative sides to themselves is meaningfully related to parent-child interaction behaviors.

### **1.3 Subjective experience and peer acceptance**

The only relation between subjective experience and peer acceptance was that children who felt more secure with their mothers and with their fathers were better accepted by peers. This finding is in line with other studies (Easterbrooks & Abeles, April 1999; Oppenheim, Emde, & Warren, 1997; Verschueren et al., 1996; Verschueren & Marcoen, 1999). It is also congruent with predictions by attachment theory

(Sroufe & Fleeson, 1986). Children who presented parents as more available and responsive may have had a basic sense of connectedness that also made them expect peers to be basically supportive. At the same time, they may have felt more autonomous in their ability to obtain others' attention and more worthy of receiving it.

It was surprising that better accepted children were *not* more positive about the self in the Puppet Interview than less accepted children were. Since children's views of the self-in-relation to parents were related to peer acceptance, relations with self-esteem independent of a *particular* relationship would have been expected. In addition, Verschueren et al. (1996) did find that children who were more positive about themselves were better accepted by peers. However, they studied an aselect sample, whereas the present study selected subsamples of popular, average, and rejected children. For several reasons, it is possible that children who are rejected respond in different ways to instruments that ask for an evaluation of themselves than accepted children do. First, rejected children may be more defensive. This may be so, because they feel that others judge them negatively. They may report self-esteem that is as high as that of popular children but this may mask negative feelings about the self. An indication for the defensiveness interpretation is that children who were less well accepted perceived themselves as *more* accepted and competent on the Harter scales than better accepted children did. Second, rejected children may also be less able to judge their own capacities in comparison to other children. Self-perceptions of rejected children have been found to diverge most from other people's perspectives on them. Newcomb et al. (1993), for instance, report that rejected children are rated as more aggressive than other children but do not see *themselves* as more aggressive than others. In the present study, rejected children and their parents agreed less on who the child's friends were than popular children and their parents did. Third, rejected children may have felt less at ease with the interviewer or more restless in the interview situation. As reported in Chapter 2, teachers rated rejected children as less able to concentrate and less task-oriented than popular children were. There also may be gender differences in these processes (Veerman, 1992).

#### **1.4 Methodological issues**

As reviewed above, several interesting relations were found between parent-child interactions, subjective experience, and peer acceptance. However, most of these were moderate and several expected relations were not found. Potential explanations may lie in issues of measure-

ment. Therefore, I will briefly review the way the constructs in this study were operationalized.

**Peer acceptance** The children were selected based on their socio-metric status with peers. This was done, because rejection by peers has been related to various developmental problems (Coie, 1990; Parker & Asher, 1987; Rubin et al., 1998). For further analyses, continuous ratings of peer acceptance were used. Thus, children with higher ratings were more accepted and children with lower ratings were more rejected by peers. A potential problem with the constructs of peer acceptance and rejection is that they are both individual *and* group phenomena (Rubin et al., 1998). Usually, they are used as individual measures. Group processes are usually not taken into account. For the present study, it may have been informative to know how isolated or connected the child was with other children in subgroups in the classroom. In addition, it was assumed that successful peer relations would be characterized by more horizontal interactions. However, in peer groups, issues of hierarchy also play a role and it would be relevant to know how relatively horizontal or vertical the relationships of the children in this study were. Is more balance with parents related to more balance with peers, for instance? Another issue in the measurement of peer acceptance and rejection is that the rejected group has been found to be quite heterogeneous (Cillessen, Van IJzendoorn, Van Lieshout, & Hartup, 1992; Rubin et al., 1998). Rejected children are often aggressive, but they may also be withdrawn or show a combination of behaviors (Newcomb et al., 1993). Relations between parent-child relationships, subjective experience, and peer acceptance may be different for subgroups of rejected children. It is conceivable, for instance, that aggressive-rejected children may be more defensive about negative self-worth than withdrawn children may be.

**Dyadic parent-child measures** Several issues may have played a role in coding the parent-child interactions. First, because parents and children influence each other in bidirectional ways (Lollis & Kuczynski, 1997; Russell et al., 1998), I created dyadic measures of parent-child interaction behaviors. Dyadic measures say something about the meaning of behaviors relative to those of the interaction partner. However, it is difficult to operationalize dyadic processes. In the present study, dyadic measures were composed of individual behaviors. The only category that was directly coded in the dyad was mutual responsiveness, but this code also used individual behaviors ("turns") in the decision rules. It is conceivable that some results may have been more clear when behaviors would have been coded as dyadic from the start. Second, codes were given per 10-second episode. This may have led to an underestimation of the occurrence of certain behaviors. Mutual

responsiveness, for instance, was only coded when parent and child shared three turns in an episode. When the third followed in the next episode, this was not coded as mutually responsive. Third, intuitive impressions suggested that some dyads showed a flowing pattern of interacting, with play themes that recurred throughout the session and were elaborated upon by both parent and child. Other dyads seemed to show less coherence and more sudden theme transitions. Such overarching patterns were not coded. The combined measure of parent-child balance showed some of these processes, but in an indirect way. Nevertheless, the present study does give some indications for the relevancy of certain dyadic behaviors, such as shared positive emotions and balance of control. Furthermore, significant relations were found with measures of peer acceptance and subjective experience.

**Measures of subjective experience** Playful measures of self-perceptions, as used in the present study, yield evidence that young children *can* communicate about themselves in coherent ways, contrary to previous beliefs (Harter, 1990). Young children's self-esteem and other self-perceptions have recently been found to be stable over a time span of 3 years (Cassidy, April 1999; Measelle, Ablow, Cowan, & Cowan, 1998). Verschueren et al. (July 1998) found that positiveness of the self at age 5 was related to observed self-esteem and to children's perceptions of social acceptance, physical appearance, and global self-esteem at age 8. Nonetheless, questions remain about "projective" techniques such as the doll story procedures and Cassidy's PI (Solomon & George, 1999). Verbal competence, the capacity for fantasy play, willingness to cooperate with an experimenter, the context in which the child is interviewed, may all have impact on what is measured. Children's responses may reflect views about a friend or a TV character rather than the self (Cassidy, 1990). In addition, the assumption of the PI that the child will reveal how an "unspecified other" will view the self may not be valid for all children (Cassidy, April 1999).

In the present study, some children appeared to be engaged in the task, to enjoy the procedures, and to indirectly show their view of themselves via the puppet. After a question about themselves, some of them even turned the hand puppet toward themselves, saying [as the puppet], "I don't know. I will ask her." Others were losing themselves in fantasy play with the hand puppet, which for them may have been a separate character that said relatively little about themselves. Such children would have the doll be hungry, tired, walk away, etc. These may be signs of avoidance of the questions, or, alternatively, of the creation of a fantasy world not being directly related to evaluation of the self. Yet another group was less interested or seemed to have difficulty understanding some of the questions. Thus, there seems to be a large

diversity in how children responded and it is important to further investigate factors that may influence responses. In addition, it might be useful to take the children's nonverbal behaviors during the interview more into account.

In the story completion task, many children could be characterized as "avoidant." Were they really avoiding the relationship themes? Were they wary of the interviewers? The data needed to be collected by different interviewers in a relatively brief time, which may have influenced the richness of play, as suggested by Kelsay et al. (April 1999). In their large-scale study ( $n = 624$ ), research assistants interviewed the children, while clinicians were the interviewers in previous studies (e.g., Bretherton, Ridgeway, & Cassidy, 1990). It is inevitable that research assistants have varying ranges of capabilities in making children feel at ease and in engaging them in play, even though they were all trained. In addition, a quiet space can be hard to find in overcrowded school buildings; an additional factor that may have influenced the data.

In sum, much is still unclear about the measurement of young children's subjective experience. In addition, different processes may play a role in the assessment of boys and girls and of children of varying sociometric status. Nonetheless, the findings of this study appear meaningful. In addition, some of the children's answers clearly showed that they did not only talk about concrete behavioral characteristics of themselves. Many mentioned relational characteristics as examples of good and bad sides of themselves (e.g., "He [the child] always gives me [the hand puppet] food" or "She hits her mom"). Some children even showed a fundamental awareness of their own existence by expressing worries about dying. Thus, stating that they can only talk about their physical possessions, looks, and behaviors appears to be an oversimplification of young children's experiential world.

## **2 Parent-peer linkages: mediating effects**

A special focus of this dissertation was to investigate young children's subjective experience of themselves and their relationships with parents as potential mediators between parent-child and peer relations. Shared positive emotions between mother and child no longer predicted peer acceptance after controlling for subjective experience of the mother-child relationship. This finding was unrelated to the child's age and temperamental characteristics. Consequently, it can be concluded that subjective experience of the mother-child relationship

mediated the relation between observed mother-child behaviors and peer acceptance. To my knowledge, the present study is the first to show direct evidence for attachment representations as a mediator (see Mize, Pettit, & Meece, 2000, for an overview of mediation studies). It suggests that children's own subjective experience of the self-in-representation to parents plays a significant role in his or her peer relationships. This is a valuable finding and it suggests that it is important to take into account how young children think and feel about themselves and their relationships.

This finding is a partial confirmation of the hypothesis that experiences with responsive and available caregivers will foster more positive later relationships by way of positive expectations based on earlier relationships (Bowlby, 1973/1991; Bretherton, 1990, 1991, 1993; Main, Kaplan, & Cassidy, 1985; Sroufe, 1990). A recent study demonstrated a partial mediation effect of doll story moral-affiliative and conflictual themes between maltreatment and externalizing behavior problems (Toth, Cicchetti, Macfie, Rogosch, & Maughan, 2000). As in other studies, however, the confirmation of the mediation hypothesis was only partial. The proportion of explained variance was low (only 10%) and only one potential mediating path was found.

As Mize et al. (2000) point out, there are various problems with the "mediating hypothesis." Mediators are often not clearly specified. In some studies, they are very broad, in others they may be too narrow. As was the case in the present study, sample sizes are often small and statistical power is low. A mediation path may also be moderated by other variables, such as gender. Furthermore, the mediator should be measured without measurement error, which is virtually impossible when measuring internal psychological constructs (Baron & Kenny, 1986). In this study, there was little variation in scores of subjective experience. In addition, gender differences were found that made the chance of finding significant relations smaller (see also Section 1.4). Another factor might be that parents and children were observed during free play, while the story themes were about emotional availability of parents. Children's views of parental availability and of the worthiness of the self might be more strongly related to observations in attachment situations. As is amply highlighted in the recent *Handbook of Attachment*, the attachment behavioral system is specifically aimed at protecting children from potential dangers (Cassidy, 1999; Marvin & Britner, 1999). Its nature and function are different from those of other behavioral systems, such as the "exploratory" and "sociable" systems, which may be more activated during free play. At the same time, since the attachment system provides a secure base from which to explore, it is also related to the

exploratory and sociable systems (Cassidy, 1999). Relations have been found between security of attachment and interactions during free play and task contexts (De Wolff & Van IJzendoorn, 1997). In the first two years of life, secure infants have been found to show more *positive affect* during shared tasks with mothers and more *affective sharing* during free play (Kobak, 1999; Thompson, 1999). Sharing positive emotions during play may express a basic sense of connectedness that is an indication of more security in the parent-child relationship. This may explain why they were particularly related to more positive experience of self and parents in the present study.

### **3 Parent-peer linkages: gender differences**

The gender differences found in this study suggest that connectedness and autonomy might play different roles in boys' and girls' peer acceptance and subjective experience of the self. For girls, more consistent interrelations were found between connectedness in parent-child interactions, experience of parent-child relationships and of the self, and peer acceptance. For boys, especially father-child control seemed (negatively) related to both their peer acceptance and their positiveness. More control with father was related to a more *negative* view of self in boys. However, it was related to a more *positive* sense of self in girls. It is possible that girls who experienced more control from father and who expressed more control themselves felt more autonomous. These girls may feel more challenged to take initiative and taken more seriously as a competent person. Girls may already be stronger in the relational (connectedness) domain from a young age on (Kochanska, 1997; Robinson et al., 1993). Therefore, it might be more important to challenge their autonomy as they enter the world of peers. For boys, more control with father may be experienced as limiting their autonomy. When they experience a controlling relationship with a powerful other that they cannot compete with, boys may feel helpless and more negative about themselves. In addition, fathers have been found to be more reinforcing of gender-appropriate activities in their children (Golombok & Fivush, 1994). The control they used with daughters may have been more supportive of the fantasy play activity, while for boys it might have been more constraining.

Possibly, this play context was more suitable for girls. Shared fantasy play with father was related to peer acceptance, only for girls. Fathers in the present study reported that they played more fantasy play with daughters than with sons, while mothers did not differ in the amount of fantasy play between boys and girls. Girls also scored higher on a story

completion procedure about parent-child relationships. This may be partially explained by the doll play nature of this procedure. Boys may not feel as comfortable in such a context as girls do. Not all previous studies have found gender differences (Bretherton, Ridgeway, & Cassidy, 1990; Cassidy 1988; Verschueren & Marcoen, 1999). However, those that did find differences have also found that girls showed more connectedness than boys did. Verschueren et al. (1996) showed that girls presented the relationship with mother as more secure than boys. Cramer and Skidd (1992) found that girls played more affiliation and fewer intrusion themes. In a very large-scale study (Kelsay, Von Kitzling, Emde, & Schmitz, April 1999), girls ( $n = 316$ ) also played more themes related to affection and fewer aggressive themes than did boys ( $n = 308$ ), and girls' stories were more coherent. Since coherence and themes of connectedness indicated higher scores in our coding system, these findings confirm the present gender differences.

It is possible that girls are better at expressing their subjective experience of self and others in doll play (Kelsay et al., April 1999; Verschueren et al., 1996). Alternatively, girls may experience themselves differently than boys do. Differences in fantasy play between boys and girls are not consistently found. However, it has been found that girls tend to play more about relationship themes (connectedness), while boys play more themes that express autonomy (Fein, 1989; Rubin, Fein, & Vandenberg, 1983). Preschool girls also have been found to show more connectedness in the interactions with their mothers (Kochanska, 1997; Robinson et al., 1993), and to internalize mothers' values and rules more than boys do (Kochanska, 1997). Kindergarten aged girls have been found to become more controlling of their own impulses in response to maternal overcontrol and hostility, while boys became less self-controlling and more aggressive (Kremen & Block, 1998; McFayden-Ketchum, Bates, Dodge, & Pettit, 1996).

In the present study, girls expressed more negative feelings about the self on the PI than boys did. They were also more negative than was found in other studies (Verschueren et al., 1996). This was striking, especially since Verschueren and colleagues found that girls were *more* positive than boys were. More in line with our findings, Measelle et al. (1998) found that girls were more likely than boys to report depressed-anxious feelings. This suggests that even at a young age, girls may be more prone to internalizing problems. Alternatively, girls are better able at expressing negative feelings about the self than boys are. It is possible that girls are more conscious of themselves and more sensitive to others' opinions, in contrast to boys. Some post-hoc indications could be found in support of this suggestion. For instance, for girls,



relations between connectedness expressed with mother, enacted in story completions, and as indicated by peer acceptance, appeared to be more coherent. The relation between mother-child security and peer acceptance was significant for girls, but not for boys. In addition, girls who shared more positive emotions with mothers showed higher perceived peer acceptance on the more direct Harter scales. This would be expected if shared enjoyment fosters positive expectations from other relationships.

On the other hand, boys who shared more positive emotions with mother perceived themselves as *less* accepted by peers as well as by mothers. This suggests that boys who shared less positive expressions with their mothers may have been more defensive. Boys who reported that their mothers accepted them better on the Harter scale were *less* open about negative sides of themselves on the PI. Boys who *did* more openly admit their imperfections were engaged in interactions with fathers that showed more connectedness and room for autonomy. More balanced father-child relationships may facilitate boys' acknowledgement and acceptance of negative sides of themselves. In addition, such father-son relationships may also make boys feel more positive about themselves: more shared positive emotions and less control with father were also related to PI positiveness in boys.

In general, the present study suggests that the expected relations between shared positive emotions, attachment security, and peer acceptance were stronger for girls. The finding that there were more coherent and expected interrelations for girls was also found in other studies (De Roos, 1995; Harel, Scher, Tirosh, & Jaffe, April 1999; Kochanska, 1997; Verschueren et al., July 1998). Some, however, found more relations for boys (Cohn, 1990; Kerns & Barth, 1995). It is possible that different relations exist between parent-child relationships, subjective experience of the self, and peer relations, for boys and girls. This may be related to parent gender as well.

#### **4 Parent-peer linkages: early and later relationships**

This dissertation attempted both to *describe* and to *explain* potential ways in which parent and peer relationships may be related. Some relations were found between contemporaneous parent-child fantasy play interactions and peer acceptance. Subjective experience of parent-child relationships as a mediator was suggested as an explanation for parent-peer connections. This explanation was based on the idea that earlier relationships influence later ones. However, since the present study was cross-sectional, causal linkages cannot be proven. Some

evidence for subjective experience as a mediating process was found but it was only modest. As discussed above, this may be partly due to measurement issues. These may have led to an underestimation of "real" relations. However, it is also important to critically review underlying assumptions, as will be done in this section.

#### **4.1 Early and later relationships**

The suggestion that early parent-child relationships have an influence on later social functioning seems intuitively appealing. However, relations between early attachment and later peer relationships are not always found (e.g., De Roos, 1995). If they are found, alternative explanations are possible. Child temperament, for instance, may also explain why some children are sociable with both parents and peers, while others are not (Lamb & Nash, 1989). In addition, links with early relationship patterns may rely more on the stability of caregiving circumstances than on early experiences per se (Thompson, 1991, 1999).

This in itself is not in contradiction with predictions from attachment theory, however (Bowlby, 1969/1991, 1973/1991; Sroufe et al., 1999). Relationships are open to change, although they are expected to be increasingly more difficult to change because they tend to perpetuate themselves. As Sroufe and others have found, children with certain attachment histories tend to attract particular reactions from others (Elicker et al., 1992; Moss et al., 1998; Sroufe et al., 1999). Sroufe and his colleagues propose "Early experience *frames*, but is also transformed by, later experience" (p. 1, emphasis added). Thus, both early and later experience are important. However, early experiences may have special significance. "Because they are preverbal, they are not accessible to verbal recall and may be less readily modified by subsequent experience" (p. 6). In addition, "A basic sense of emotional connectedness, confidence regarding the availability of others, and feelings of self-worth may be the legacy of infancy" (p. 6).

#### **4.2 Concepts of self-in-relation**

Interest in the self, "stems from the idea that self-related beliefs and feelings play a key role in development" (Cassidy, 1990, p. 87). However, there is divergence on the concepts used to indicate thoughts and feelings about the self. The literature on self-esteem appears to be based in large part on conceptual cognitions (e.g., Harter, 1983, 1990, 1998). In contrast, a growing amount of work suggests that even newborns have a sense of themselves (Butterworth, 1990; Fogel, 1995; Rochat, 1995; Stern, 1985), reflecting experiential knowledge of the self (Epstein, 1991). Bowlby preferred the term "internal working models" to

static concepts such as "map" or "image" (1973/1991). However, much is still unclear about the exact nature of this notion (Bretherton & Munholland, 1999; Main, 1999).

### **4.3 Two underlying worldviews**

Mechanistic and organic metaphors are two basically different perspectives underlying psychological research (Fogel, 1993; Overton & Horowitz, 1991; Parke et al., 1994). Mechanistic metaphors represent their object of study as essentially isolated, static, and passive. Examples of theories based on this worldview are social learning and social cognitive approaches. Because the "inside" and "outside" are assumed to be initially separate, these approaches have generated concepts such as "representations" and "mediators" to explain how they may become connected. Parents give their children input. Children then process this information, which can lead to certain output. Unidirectional approaches to parent-child interactions can be seen as reflecting mechanistic views because they assume influence from one individual to another.

Organic metaphors, on the other hand, reflect an inherently active, relational, and dialectic domain of study that possesses some initial organization (Overton & Horowitz, 1991). Examples of such approaches are attachment and other object relation theories, and dynamic systems theories. These assume that the individual is fundamentally related from the start. In addition, such approaches look for meaningful organizations of behaviors. Attachment classifications, for example, exist of *patterns* of relating. Behaviors may change, but relational patterns remain organized in similar ways throughout development (Main et al., 1985; Sroufe, 1990; Sroufe & Fleeson, 1986). Parke et al. (1994) state that, "The 1990s clearly belong to the organismically oriented theories - a return to our roots" (p. 16). While this may be so, underlying mechanistic metaphors often remain implicit in research. This may lead to the usage of contradictory modes of explanation within theoretical frameworks, as will be discussed next.

In her attempts to clarify the concept, Bretherton (1990, 1991, 1993) for instance, has adopted ideas from cognitive theories that reflect underlying *mechanistic* metaphors (Overton & Horowitz, 1991). In addition, the origins of the concept itself may also derive from more mechanistic worldviews. Bretherton often cites Craik, who can be considered the "father" of the concept. He has described the internal working model as "'a small-scale model' of external reality and of its own possible actions" that an organism has "within its head" (Craik, 1943, cited in Bretherton & Munholland, 1999, p. 90/91). This model

is then expected to foresee potential problems, help compare possibilities and react more competently in new situations.

Such a conception, however, does not seem to agree with the organic, relational point of view of attachment theory. It suggests some "thing" in the head that is somehow built-in by experience and then can be drawn upon for future reference. Working models seem to be conceptualized as generalized memories that are put in storage until needed (Fogel, 1993). As such, "Participation in the current situation is viewed as a separate faculty from the faculty of remembering such situations" (Fogel, 1993, p.128). Furthermore, there is the danger of a homunculus explanation. Based on her work with adults, Main (1999) recently suggested, "... in some circumstances the term 'internal working model of ...' is misleading and unwarranted. The phrase inevitably implies a homunculus, the possessor of the model or set of models" (p. 877). But how might early relationships affect later ones, then?

#### **4.4 A case example**

To explore how early experience might be related to later peer relations, consider the following real-life case example,

In the nursery school one day, several children were dancing to recorded music, a lively and inviting scene. [...] One child (RA) approached another and asked to dance. The child said no, and RA withdrew to a corner and sulked. Another child (RT) entered, approached a potential partner, and also was turned down. RT, however, skipped on to another child and was successful in soliciting a partner the second time (Sroufe, 1990, p. 299).

The second child in this example had a history of secure attachment in infancy. The first child had been insecure. He "experienced intense rejection and cut himself off from further opportunities to disconfirm his model of himself as unworthy" (Sroufe, 1990, p. 299). But how did these children's models "work"? The working model idea suggests that behaviors can be planned based on previous experiences. However, both children may have had similar expectations *before* they approached the peer, since they both asked someone to dance. Mary Main (1999) points out that attachment patterns are likely to be related to subtle nonverbal behaviors and to many physiological processes (such as the release of hormones, activation of certain brain structures, left-right hemisphere dominance). All of these may be part of patterns that arise in new situations.

A possible scenario is that RT may have approached her agemates in a relaxed way with a smile on her face, while RA approached the peer with his gaze averted, slumped shoulders, and uncertain movements. This may have made it more likely that his peer rejected him. After the rejection, RA may put his head down and slumped his shoulders even more. His heartbeat may have been accelerated and his breathing may have become more shallow. As part of this pattern, memories of previous rejection may have been "re-presented" to him. However, these thoughts and memories would arise along with the ongoing experiences in the present. They may be accompanied by expectations based on similar experiences. Thoughts may have come up that emphasized RA's failure and unworthiness. In the next section, I will propose an alternative way of looking at relations between early and later relationships that is based in large part on experiential, participatory, or implicit knowledge (Epstein, 1991; Fogel, 1993; Stern, 1998).

## **5 Parent-peer linkages: dynamically changing processes**

In this section, I wish to propose an alternative view on parent-peer linkages that is consistent with an organic worldview. Furthermore, the proposed perspective may be able to explain relations between parent and peer relationships by also accounting for the role of subjective experience of the self. Dimensions of connectedness and autonomy are still considered to be fundamental. In addition, the dimension of fixedness versus flow also plays an important role.

I suggest that it will be fruitful to adopt a dynamic systems approach in explaining parent-peer linkages. The study of parent-peer linkages is concerned with the level of the individual child, the level of parent-child dyads, and the level of peer groups. Individuals, dyads, and groups may all be seen as open systems that are dynamically interrelated (Fogel, 1993; Granic, 2000; Sroufe, 1990). By seeing parent-child dyads as dynamic systems it becomes better possible to study change in the parent-child relationship that may be relevant for peer relations. For instance, it is possible that not all mother-child dyads develop toward more balance in their mutual play (Dunn, 1997). There may be a point of bifurcation in the development of the parent-child dyad around which developmental pathways may diverge in ways that make peer acceptance more or less likely (Granic, 2000).

The "Dyadic Consciousness hypothesis" (Tronick, 1998) seems very useful. In this view, individuals are seen as self-organizing systems that create their own states of consciousness (states of brain-organization). Individual states of awareness can be expanded in creative interaction

with another human being. It is attractive to do so, because the organization in the dyadic state of consciousness is more complex and coherent. "At this moment of forming a dyadic state of consciousness, and for the duration of existence, there must be something akin to a powerful experience of fulfillment *as one paradoxically becomes larger than oneself*" (Tronick, 1998, p. 296, emphasis added). This is paradoxical, because a dyadic state of consciousness requires a temporary merging of the self with another system. In adolescents and adults, such experiences of losing oneself in the flow of an activity or interaction with another human being, have been found to be maximally fulfilling (Csikszentmihalyi, 1990). They have been found to lead to greater complexity of the self.

For a further understanding of the role of subjective experience, the framework of Winnicott (1971/1991) may also be insightful. Winnicott's concept of a "potential space" between the individual and the environment seems similar to the dyadic states of consciousness. The potential space is a psychologically experienced space. It is potentially limitless, depending on the extent to which the child or adult is creatively relating to the world. Winnicott assumes that the potential space starts arising in the second half of the first year, when the infant starts to develop a more autonomous self out of the connectedness with mother. If all goes well, the mother lets the baby explore when he wants but she is available to be found by him again. In this way, the baby develops trust in the availability of the caregiver. Because the baby can be relaxed, he can move freely toward relatively more autonomy or connectedness. He experiences himself usually as relaxed and creatively discovering the world, his relationships and himself. In such a relaxed way of relating to the world, the paradoxical question of being either separate or connected need not arise. Whenever a child is questioning whether she is liked by others and if they are available to her, there is no creative play, and no potential space in which she can relate to others and discover herself.

Thus, in co-regulated dyadic parent-child interactions (Fogel, 1993), a child may move in and out of dyadic states of consciousness. In this way, he may move between relative connectedness and autonomy. When the movement between connectedness and autonomous exploration happens in a fluid and relaxed way, the potential space that arises because of the increasing separation from the mother may be filled up by creativity most of the time. In this way, the child continues to discover the self. The question about the availability of the mother and the self's worthiness of attention does not arise, because no loneliness is experienced. The child will naturally move forward and

enter interactions with peers when opportunities arise. Now, he may engage in dyadic or group states of consciousness with his peers in creative shared play. In this way, he may develop an increasingly complex organization of the self.

Children who are rejected by peers have been found to have difficulties becoming part of larger dyadic and group systems, for instance entering an ongoing interaction of two peers (Hazen & Black, 1989; Putallaz & Gottman, 1981). Popular children accomplish this by sharing the frame of reference of the other children. In this way, they gradually make themselves part of the ongoing system. Rejected children, on the other hand, attempt to direct attention away from the group process and to themselves. This may be interpreted as a fear of losing their autonomous selves. Paradoxically, however, such failures of becoming part of a larger organization may deny them chances of becoming more autonomous selves. Interestingly, Putallaz and Gottman found that both rejected *and* popular children's entry attempts were rejected by their peers at times. It seems likely that the popular children do not *feel* rejected because they can continue to creatively relate to the world and experience a potential space. Rejected children, on the other hand, may experience rejection and isolation. They may feel basically separate from others and unable to fill up the potential space between self and other with creative play. Their individual system (self) is not able to become more complex and organized because of the lack of sharing states of consciousness with others. Quite possibly, rejected children have not enough experience being part of a larger, coherent system in parent-child dyads or within the family group to be able to enter into such shared states. They may be afraid of temporarily giving themselves up to merge with others because they may be afraid that they cannot move back to being themselves.

Parent-child interactions of less socially competent children have been found to lack dyadic organization (Black & Logan, 1995; Dumas & LaFreniere, 1993). The creative, dance-like quality that has been observed in the interactions of more socially competent children (Dumas & LaFreniere, 1993), on the other hand, seems to be based on mutual trust and relaxation. Even tasks can be turned into playful games. In this case, the potential space between parent and child is filled up with creativity and the question of connectedness or separateness is not asked.

## **Future directions**

This study has found meaningful relations between parent-child fantasy play interactions, subjective experience, and peer acceptance. It is part of a growing number of studies that suggest differences in how relationships with mothers and fathers may be related to children's social development. Father-child interactions appeared especially important for boys.

Future studies should continue to include fathers as well as mothers to investigate further if mother-child and father-child relationships are differentially related to children's peer relations and subjective experience of themselves. In addition, the present study suggested that these relationships may have different meanings for boys and girls. Related to this is the role of the context. This study is one of the first to investigate the role of parent-child fantasy play in peer acceptance. This context may be better suited to study girls' development. To learn what different contexts may afford, studies should compare various contexts in the same study, as has already been done by some (Pettit et al., 1998). More work needs to be done on how to conceptualize parent-child interactions in dyadic ways and on ways of measurement, as well. As Granic (2000) has proposed to move the study of parent-child relationships "beyond bidirectionality." Dynamic systems approaches seem promising in trying to establish such a move. Relatedly, it seems important to move beyond dyads and to study family systems processes. Even though parents are not peers, it may be that the child's position in the peer group resembles his or her position in the family group with parents and siblings. Indications have been found that interactions in the family are related to peer competence, even if the child is not directly involved (e.g., Boyum & Parke, 1995).

An implication of this and other recent studies concerning subjective experience is that research and clinical practice should pay attention to young children's own perceptions of themselves. Further studies need to continue efforts to develop and further validate methods of subjective experience of young children. This study also suggested that it might be possible that subjective experience plays a different role in various subgroups of children. Boys and girls may respond differently to the measures and so may children of extreme sociometric status groups. Even within the rejected group, differences are expected. For instance, aggressive-rejected children may be more defensive about their shortcomings on direct measures, while withdrawn children may describe themselves more readily in negative terms, even at a young age. Future work needs to pay more attention to how early



relationships, the child's sense of self, and later relationships may be related. Dynamic systems perspectives, in combination with insights from object relation and attachment approaches appear promising to help unravel the mystery of how earlier relationship experiences may influence later ones.



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## Summary

This dissertation is about peer acceptance, parent-child fantasy play interactions, and subjective experience of the self-in-relation. Chapter 1 presents underlying ideas. A central assumption is that better accepted children are more capable of autonomy-within-connectedness. Previous research has shown that popular children are prosocial in their interactions with peers, but at the same time self-assertive. Rejected children tend to be aggressive or to withdraw. At the same time, they are less prosocial than accepted children. They seem to have difficulties with being an autonomous person and simultaneously feeling connected with others.

Previous studies have found that socially competent children and their parents are more mutually responsive and try to control each other less than less competent children and parents. Specific hypotheses in this dissertation are: 1a) that better accepted children and their parents show more connectedness (more mutual responsiveness, shared positive emotions, and engagement in play) and more room for autonomy (a higher balance of control and less total control); 1b) that better accepted children share more fantasy play with their parents; 2) that better accepted children have a more positive experience of themselves and the relationship with their parents; and 3) that subjective experience of self and parent-child relationships functions as a mediator between parent-child interactions and peer acceptance.

The present thesis assumes that parent and child mutually influence each other (bidirectionally). Therefore, the dyad is the unit of analysis. Because peer relations are mainly based on equality, it is plausible that "horizontal" aspects of the parent-child relationship are related to peer acceptance. Expectations about *indirect* linkages between parent-child relationships and peer relations are based on ideas about "the social self" (e.g., Baldwin, 1899/1973; Mead, 1934/1974) and ideas from attachment theory (Bowlby, 1973/1991; Bretherton, 1991, 1993). Chapter 1 emphasizes that these processes are embedded within a complex interplay between genetic factors, relationships within the family (e.g., with siblings), and the family's relations to the wider social context.

Chapter 2 discusses sampling procedures, methods, and other procedures. Eighty kindergartners with a mean age of 60 months and their mothers and fathers ( $n = 74$ ) participated in the study. The children were popular ( $n = 30$ ), average ( $n = 27$ ), or rejected ( $n = 23$ ) by their peers. As expected, peers and teachers rated rejected children as

more aggressive than they rated accepted children. Rejected children were also judged to be less prosocial. In comparison to rejected children, teachers rated popular children as better liked by peers. Parents, and children themselves, indicated that popular children had more playmates than rejected children. These findings are consistent with the literature about sociometric status group differences.

Four parent-child behaviors were coded in 7 minutes of interaction, videotaped in the children's home (De Koeyer, 1998; Colwell, Mize, & Lindsey, 1998): 1. mutual responsiveness; 2. positive expressions; 3. control behaviors; 4. play behaviors. The latter three categories were combined in dyadic measures: shared positive emotions, balance of control between parent and child, total proportion of negative and non-negative control, and proportion of time in which both parent and child were actively engaged in play. In addition, a measure of overall *balance* was created (parent and child are mutually responsive, have a balance in control, and are both playing). To test whether better accepted children and their parents were more often engaged in fantasy play together, a measure of *shared fantasy play* was made (parent and child are mutually responsive, and are both engaged in fantasy play).

Subjective experience was assessed with three measures. Firstly, a Doll Story Completion Task was administered (Verschuere & Marcoen, 1994). In this procedure, the experimenter presents the beginning of a story that is completed by the child, using dolls and props. The quality of the representation of the mother-child relationship was related to that of the father-child relationship. The stories played by girls presented parent-child relationships as more positive than those played by boys. Secondly, a Puppet Interview was conducted (Cassidy, 1988; Verschuere, Schoefs, & Marcoen, 1994). This procedure assesses the positiveness or negativeness of the self and the openness with which the child admits imperfections of the self. Girls were more negative than boys were, which was unexpected because they were *more* positive about parent-child relationships. Only for girls, security (with father) was related to a positive sense of self. Girls who experienced the relationship with father as more positive were more positive about the self. A third measure of subjective experience consisted of the Pictorial Scales of Perceived Competence and Acceptance (Harter & Pike, 1984). Perceived competence and acceptance were not related to the other measures of subjective experience.

Chapters 3 and 4 are concerned with direct linkages between parent-child interactions and peer relations. Chapter 3 is a literature review. Peer competence is found to be related to mutual responsiveness, positive expressions, and shared engagement in activities (in naturalistic, task, and play contexts). Parent-child interactions of

socially incompetent and rejected children are more likely to be coercive and negative. Some studies report gender differences. Negative emotions and control in father-child interactions appear mainly linked to rejection in boys. Control between mothers and daughters has been linked to *higher* instead of lower social competence.

Chapter 4 presents the results of the present study. Better accepted children and their *mothers* showed a higher balance in control and tended to smile and laugh more together. They were more likely to be simultaneously engaged in play. Mothers and better accepted children were marginally more likely to share fantasy play. More control in the *father*-child interactions was related to lower peer acceptance. Better accepted girls and their fathers were more often dyadically engaged in play, and shared more fantasy play, than less well-accepted girls and fathers. These findings were not dependent on the child's age or temperament characteristics, such as activity level. They are consistent with the expectation that the interactions of better accepted children are more horizontal or "peer-like." Possibly, these children have had more experience with dyadic interactions in which interaction partners have an equal role.

Chapters 5 and 6 discuss the assumption that subjective experience of the self and the relationships with parents plays a mediating role between parent and peer relations. Potentially, the way children *experience* the self in relationships is more important than objective observations of their interactions. The literature review in Chapter 5 indicates that parent-child interactions of securely attached children are more (mutually) responsive than those of children in an insecure attachment relationship. In addition, securely attached children represent their attachment figure as more available and responsive, and the self as more positive and accepted. Both secure attachment and positive representations of attachment and the self have been related to higher social competence.

Relations between parent-child interactions, representations of self and attachment relationships, and peer acceptance, are reported in Chapter 6. Children who shared more positive expressions with their parents presented the relationship with both parents as more positive. They were also more positive about themselves. Children may have felt more accepted by their parents when they shared more positive emotions. A positive sense of self was also connected to the amount of control with father. The direction of this relation depended on the child's gender. More control with father was linked to a more *negative* sense of self for boys, but a more *positive* sense of self for girls. Because girls tend to be more directed toward connectedness from a young age on, maybe it is more important to them to develop their autonomy at

kindergarten age. Control between fathers and sons may be more likely to become competitive, which may make boys feel less accepted. An indication for this interpretation is that boys were more open about their shortcomings when interactions with father were more mutually responsive, less controlling, and had a better balance in control.

Children who presented their relationships with parents as more secure were better accepted by peers. The connections (especially with father-child security) were stronger for girls. Contrary to expectations better accepted children were not more positive about themselves. Possibly, children in different sociometric status groups respond differently to the Puppet Interview. Rejected children may be more defensive, for instance. An indication for this is that less well-accepted children saw themselves as *better* accepted in response to the more direct questions on the Harter Peer Acceptance scale.

Regression analyses showed that the representation of the mother-child relationship mediated the relation between shared positive emotions and peer acceptance. Controlling for security with mother, peer acceptance was no longer related with shared positive emotions. The proportion of explained variance was low, which may be related to the low variability in scores on the story completion task. Furthermore, it is important to realize that peer acceptance or rejection is related to many other factors. Nevertheless, this study offers one of the first indications that the meaning the child gives to relationships may be more important than specific behaviors.

In Chapter 7, the findings are discussed and suggestions are made for future research. The present study found indications for more connectedness and room for autonomy in interactions of better accepted children. Connectedness seems to be relatively more important in mother-child interactions, while room for autonomy appears to be a more important theme in interactions with fathers. Children who showed more connectedness with parents showed more autonomy-within-connectedness in their representations of parent-child relationships, which was related to higher peer acceptance. The results were significant, but moderate. This may be explained, in part, by the measures that were used. Both the Puppet Interview and story completion procedures are relatively new and need further study of their reliability and validity. A conceptual problem is that notions about internal working models and other mediating mechanisms are based on a mechanistic worldview that assumes essential isolation and fixedness. This can cause problems in attempts to explain connections between relationships from an organic point of view, which assumes basic relatedness and changeability.

I propose to apply a dynamic systems approach, combined with Tronick's (1998) and Winnicott's (1971/1991) ideas, to this field of research. Individuals, dyads, and groups can be seen as open systems that change continually and can merge with larger systems. Tronick suggests that more complex organizations of the self are possible in creative interactions with parents. In co-regulated interactions, the individual self can temporarily become part of a dyadic state of consciousness. The ability to do so is paradoxical: it suggests that the self becomes more complex, when it is temporarily relinquished. According to Winnicott, such a paradox can exist because of the subjective experience of a "potential space" that can arise when the child is able to interact creatively with the world (both people and objects). This ability emerges from relaxation, based on the trust that others are available but at the same time that there is room to be alone. The child may move between individual, dyadic, and larger states of consciousness, and in this way engage in peer interactions more easily. In this potential space, the question of autonomy and connectedness need not be asked.



## Samenvatting

Dit proefschrift gaat over verbanden tussen acceptatie door leeftijdsgenootjes, ouder-kind fantasiespel-interacties, en subjectieve beleving van het zelf-in-relatie. Hoofdstuk 1 presenteert de achterliggende ideeën. Een centrale veronderstelling is dat beter geaccepteerde kinderen beter in staat zijn tot autonomie-in-verbondenheid. Eerder onderzoek heeft aangetoond dat populaire kinderen prosociaal zijn in de omgang met leeftijdsgenootjes, maar tegelijkertijd voor hun eigen belangen op kunnen komen. Afgewezen kinderen neigen er naar om agressief te zijn of om zich terug te trekken. Tegelijkertijd zijn ze minder prosociaal dan geaccepteerde kinderen. Zij lijken moeite te hebben een autonoom persoon te zijn en zich tegelijkertijd verbonden te voelen met anderen.

In eerder onderzoek is gevonden dat sociaal competente kinderen en hun ouders meer wederkerig responsief zijn en elkaar minder proberen te controleren dan minder competente kinderen en ouders. Specifieke hypothesen in dit proefschrift zijn: 1a) beter geaccepteerde kinderen en hun ouders tonen meer verbondenheid (in de vorm van wederkerigheid, gedeelde positieve emoties, en betrokkenheid bij spel) en meer ruimte voor autonomie (in de vorm van een betere balans in controle en minder totale controle); 1b) beter geaccepteerde kinderen en hun ouders spelen samen meer fantasiespe; 2) beter geaccepteerde kinderen hebben een meer positieve beleving van zichzelf en van de relatie met hun ouders; 3) subjectieve beleving van zelf en ouder-kind relatie fungeert als mediator tussen ouder-kind interactie-gedrag en acceptatie door leeftijdgenoten.

Dit proefschrift gaat ervan uit dat ouder en kind elkaar wederzijds (bidirectioneel) beïnvloeden. Vandaar dat de dyade als geheel bestudeerd wordt. Aangezien relaties met leeftijdgenoten vooral gebaseerd zijn op gelijkwaardigheid, is het plausibel dat juist "horizontale" aspecten in de ouder-kind relatie samenhangen met acceptatie door leeftijdgenoten. Verwachtingen met betrekking tot *indirecte* verbanden tussen ouder-kind relaties en relaties met leeftijdgenoten zijn gestoeld op ideeën over "het sociale zelf" (o.a., Baldwin, 1899/1973; Mead, 1934/1974) en ideeën uit de gehechtheidstheorie (Bowlby, 1973/1991; Bretherton, 1991, 1993). In Hoofdstuk 1 wordt benadrukt dat deze processen ingebed zijn in een complexe wisselwerking tussen genetische aanleg van het kind, relaties binnen het gezin (zoals met broertjes en zusjes), en relaties van het gezin met de grotere sociale context.

Hoofdstuk 2 bespreekt de wijze waarop de steekproef werd getrokken, de methoden, en de procedures. Tachtig kleuters met een gemiddelde leeftijd van 60 maanden en hun moeders en vaders ( $n = 74$ ) namen deel aan het onderzoek. De kleuters waren van populaire ( $n = 30$ ), gemiddelde ( $n = 27$ ), of afgewezen ( $n = 23$ ) sociometrische status (zoals beoordeeld door klasgenootjes). Zoals verwacht vonden leeftijdgenootjes en leerkrachten dat afgewezen kinderen meer agressief waren dan geaccepteerde kinderen. Ook werden ze als minder prosociaal beoordeeld. In vergelijking met afgewezen kinderen werden populaire kinderen als meer geliefd gezien door leerkrachten. Ouders, en de kinderen zelf, gaven aan dat populaire kinderen meer speelkameraadjes hadden dan afgewezen kinderen. Deze bevindingen komen overeen met de literatuur over verschillen tussen sociometrische statusgroepen.

Vier ouder-kindgedragingen werden gecodeerd in 7 minuten video-opnamen, gemaakt tijdens ouder-kind fantasiespel bij de kinderen thuis (De Koeyer, 1998; Colwell, Mize, & Lindsey, 1998): 1. wederkerigheid; 2. positieve emotionele uitingen; 3. controle-gedrag; 4. spelgedrag. De laatste drie categorieën werden gecombineerd tot dyadische maten: gedeelde positieve emoties, balans van controle tussen ouder en kind, totale proportie negatieve en niet-negatieve controle, en proportie tijd waarin zowel ouder als kind actief bij het spel betrokken waren. Bovendien werd een maat van algehele *balans* gecreëerd (ouder en kind zijn wederkerig responsief waren, hebben een balans in controle, en zijn beiden aan het spelen). Om te toetsen of beter geaccepteerde kinderen en hun ouders vaker samen fantasiespel spelen, werd een maat voor *gedeeld fantasiespel* gevormd (ouder en kind zijn wederkerig responsief en spelen allebei fantasiespel).

Subjectieve beleving werd gemeten met drie verschillende instrumenten. Ten eerste een Test met Gehechtheidsverhalen, waarin het begin van een verhaaltje wordt verteld waarna de kinderen dit verhaal verder spelen met speelgoed (Verschueren & Marcoen, 1994). De kwaliteit van de representatie van de moeder-kind relatie hing samen met die van de vader-kind relatie. De verhalen die meisjes uitspeelden toonden een meer positieve voorstelling van ouder-kind relaties dan die van jongens. Ten tweede werd het Handpop Interview afgenomen (Cassidy, 1988; (Verschueren, Schoefs, & Marcoen, 1994). Dit instrument meet positieve of negatieve beleving van het zelf en de openheid waarmee onvolkomenheden worden toegegeven. Meisjes waren meer negatief over zichzelf dan jongens, wat onverwacht is gezien de bevinding dat ze de relatie met hun ouders als positiever beleefden. Wel werd - alleen voor meisjes - een positief verband gevonden tussen veiligheid met vader en een positieve zelfbeleving. Meisjes die de relatie



met vader als meer positief beleefden waren meer positief over zichzelf. Een derde maat voor subjectieve beleving waren de Plaatjesschalen voor Waargenomen Competentie en Sociale Acceptatie (Harter & Pike, 1984). Er waren geen verbanden tussen waargenomen competentie en acceptatie en de overige subjectieve belevingsmaten.

Hoofdstuk 3 en 4 gaan over directe verbanden tussen ouder-kind interacties en relaties met leeftijdgenoten. Hoofdstuk 3 is een overzicht van de literatuur. Competentie met leeftijdgenoten blijkt samen te hangen met wederkerigheid, positieve expressies, en gedeelde betrokkenheid bij de activiteit in interacties met ouders (in naturalistische, taak-of spelsituaties). Ouder-kind interacties van sociaal incompetent en afgewezen kinderen hebben vaker een dwingende en negatieve toon. Soms worden geslachtsverschillen gevonden. Vooral negatieve emoties en controle in vader-zoon interacties zouden samenhangen met afwijzing van jongens. Controle tussen meisjes en hun moeders is in verband gebracht met *hogere* in plaats van lagere sociale competentie.

In Hoofdstuk 4 worden de resultaten van het huidige onderzoek gepresenteerd. Beter geaccepteerde kinderen en hun *moeders* hadden een hogere balans in controle en neigden ertoe om vaker samen te lachen en glimlachen. Ze waren vaker tegelijkertijd actief betrokken bij spel. Er was een trend dat beter geaccepteerde kinderen en hun moeders meer fantasiespel speelden. Hoe meer controle werd uitgeoefend in de interactie met *vader* hoe minder goed geaccepteerd het kind was op school. Beter geaccepteerde meisjes en hun vaders waren vaker tegelijkertijd aan het spelen dan minder geaccepteerde meisjes en vaders. Ze speelden vaker fantasiespel. Deze resultaten waren niet afhankelijk van leeftijd of temperamentskenmerken zoals activiteitsniveau. Ze komen overeen met de verwachting dat interacties van populaire kinderen en hun ouders meer horizontaal zijn en meer lijken op interacties met leeftijdgenoten. Mogelijk hebben deze kinderen meer ervaring met dyadische interacties, waarin interactiepartners een gelijkwaardige rol hebben.

Hoofdstuk 5 en 6 gaan over de veronderstelling dat subjectieve beleving van zichzelf en de relatie met de ouders een mediërende rol speelt tussen ouder-kind relaties en relaties met leeftijdgenoten. Mogelijk is het belangrijker hoe het kind zichzelf in relaties *beleeft* dan hoe interacties letterlijk verlopen. Het literatuuroverzicht in Hoofdstuk 5 geeft aan dat ouder-kind interacties van veilig gehechte kinderen meer (wederzijds) responsief zijn dan die van kinderen in een onveilige gehechtsrelatie. Verder stellen veilig gehechte kinderen hun gehechtheidsfiguur vaker voor als beschikbaar en responsief, en zichzelf als positief en geaccepteerd. Zowel veilige gehechtheid als positieve

representaties van relaties en van zichzelf zijn in verband gebracht met grotere sociale competentie.

Verbanden tussen ouder-kind interacties, representaties van zelf en gehechtheidsrelaties, en acceptatie door leeftijdgenoten worden gerapporteerd in Hoofdstuk 6. Kinderen die meer positieve emotionele expressies deelden met hun ouders stelden de relatie met beide ouders voor als positiever en ze hadden een positiever zelfbeeld. Kinderen voelen zich misschien meer geaccepteerd door hun ouders, wanneer ze meer positieve emoties delen. Een positieve beleving van het zelf was ook gerelateerd aan de hoeveelheid controle in de interactie met vader. De richting van dit verband was afhankelijk van de sekse van het kind. Meer controle tussen vader en kind hing samen met een *negatiever* zelfbeeld bij jongens, maar een *positiever* zelfbeeld bij meisjes. Omdat meisjes van jongsafaan in het algemeen meer gericht zijn op verbondenheid, is het voor hen misschien belangrijk om hun autonomie te ontwikkelen in de kleuterleeftijd. Controle tussen vaders en jongens wordt mogelijk eerder competitief, waardoor jongens zich misschien minder geaccepteerd voelen. Een aanwijzing voor deze interpretatie is dat jongens meer open waren over hun onvolkomenheden wanneer de interactie met vader gekenmerkt werd door meer wederkerigheid, minder controle, en een betere balans in controle.

Kinderen die de relaties met moeder en vader voorstelden als veiliger werden beter geaccepteerd door leeftijdgenootjes. De verbanden (vooral met vader-kind gehechtheid) waren sterker voor meisjes. Tegen de verwachtingen in waren beter geaccepteerde kinderen niet positiever over zichzelf dan minder geaccepteerde kinderen. Het is mogelijk dat kinderen in de verschillende sociometrische statusgroepen verschillend reageren op het Handpop Interview. Afgewezen kinderen zouden bijvoorbeeld meer defensief kunnen zijn. Een aanwijzing hiervoor is dat minder goed geaccepteerde kinderen zichzelf als *beter* geaccepteerd zagen op de meer directe plaatjesschaal van Harter en Pike (1984).

Uit opeenvolgende regressie-analyses bleek dat de kwaliteit van de representatie van de moeder-kind relatie een mediërende functie vervult tussen gedeelde positieve emoties en acceptatie door leeftijdgenoten. Wanneer gecontroleerd werd voor de veiligheid van de gehechtheidsrelatie, hing acceptatie door leeftijdgenoten niet meer samen met gedeelde positieve emoties. De hoeveelheid verklaarde variantie was klein, wat deels samen zou kunnen hangen met de lage variatie in scores op de gehechtheidsverhalen. Ook is het belangrijk om te beseffen dat vele andere factoren samenhangen met de mate van acceptatie of afwijzing door leeftijdgenoten. Toch biedt dit onderzoek een van de eerste aanwijzingen dat de betekenis die het kind aan zijn of haar

relaties geeft mogelijk belangrijker is dan specifieke gedragingen op zichzelf.

In Hoofdstuk 7 wordt een kritische terugblik op het onderwerp gegeven. Tevens wordt een blik op toekomstig onderzoek geworpen. In dit onderzoek werden aanwijzingen gevonden voor meer verbondenheid en ruimte voor autonomie in de interacties van beter geaccepteerde kinderen. Verbondenheid lijkt belangrijker te zijn in interacties met moeders, terwijl ruimte voor autonomie een belangrijker thema lijkt in vader-kind interacties. Kinderen die meer verbondenheid met beide ouders lieten zien in hun interacties toonden een grotere autonomie-in-verbondenheid in hun representaties van ouder-kind relaties, wat weer gerelateerd was aan meer acceptatie door leeftijdgenoten. De verbanden waren significant, maar bescheiden. Dit kan deels te maken hebben met de gebruikte methoden. Zowel het Handpop Interview als Gehechtheidsverhalen zijn relatief nieuw, en meer onderzoek is nodig om hun betrouwbaarheid en validiteit te toetsen. Een conceptueel probleem is dat ideeën over interne werkmodellen en andere mediatiemechanismen gestoeld zijn op een mechanistisch wereldbeeld, dat uitgaat van wezenlijke isolatie en onveranderlijkheid. Dit kan een probleem opleveren bij het verklaren van verbanden tussen relaties vanuit een organisch perspectief, dat uitgaat van basale verbondenheid en veranderlijkheid.

Ik stel voor om een dynamische systeembenadering toe te passen op dit onderzoeksterrein, in combinatie met ideeën van Tronick (1998) en Winnicott (1971/1991). Individuen, dyades, en groepen kunnen worden gezien als open systemen die continue veranderen en op kunnen gaan in grotere systemen. Tronick suggereert dat een meer complexe organisatie van het zelf mogelijk is in creatieve interacties met ouders. In "co-regulated" interacties kan het individuele zelf tijdelijk opgaan in een dyadische bewustzijnsorganisatie. Het vermogen om dit te doen is paradoxaal: het veronderstelt dat het zelf meer complex wordt wanneer het tijdelijk wordt opgegeven. Volgens Winnicott kan een dergelijke paradox bestaan vanwege de subjectieve ervaring van een "mogelijke ruimte." Deze kan ontstaan wanneer het kind in staat is op creatieve wijze om te gaan met de wereld (zowel mensen als objecten). Dit vermogen vloeit voort uit ontspanning, gebaseerd op het vertrouwen dat anderen beschikbaar zijn, maar dat er tegelijkertijd ruimte is om alleen te zijn. Het kind kan zich bewegen tussen individuele, dyadische, en grotere organisaties van bewustzijn, waardoor hij zich makkelijker kan begeven in interacties met leeftijdgenoten. In deze mogelijke ruimte is de vraag naar autonomie en verbondenheid niet van belang.



## **Curriculum Vitae**

Ilse de Koeyer is geboren op 12 oktober 1965 in Terneuzen, Zeeuws-Vlaanderen. In 1985 behaalde zij haar VWO-diploma aan het Zeldenrustcollege te Terneuzen en begon ze de opleiding Psychologie aan de Vrije Universiteit Amsterdam. In 1991 studeerde ze af in de Kinder- en Jeugdpsychologie. Haar scriptie-onderzoek betrof de stabiliteit van de Vreemde Situatie wanneer de hartslag van de kinderen wordt gemeten, en de validiteit van deze methode voor baby's die een kinderdagverblijf bezoeken. Aan dit onderzoek bleef ze nog enige jaren verbonden als onderzoeksassistente. Van januari 1995 tot mei 1999 was Ilse verbonden als AIO aan de Vakgroep Pedagogiek, Universiteit Utrecht. Thans is zij werkzaam als onderzoekscoördinator bij Dr. Alan Fogel, aan de vakgroep Ontwikkelingspsychologie van de Universiteit van Utah in Salt Lake City, in de Verenigde Staten.

Ilse de Koeyer was born October 12, 1965 in Terneuzen, the Netherlands. She completed her high school education at the Zeldenrustcollege in Terneuzen and started the study of Psychology at the Free University of Amsterdam in 1985. She specialized in Child-and Adolescent Psychology. In 1991, she graduated with a Master's degree. Her thesis was about the stability of the Strange Situation when concurrently measuring the infants' heart rate and about the validity of this method for infants who visit a day care center. She remained affiliated with this study for several more years as a research assistant. From January 1995 until May 1999, Ilse was a graduate student in Educational Sciences at Utrecht University, where she conducted this dissertation study. At present, she is the assistant research director in the Infant Psychology Lab, headed by Dr. Alan Fogel, at the University of Utah, Salt Lake City.