Chapter 1

General Introduction
When children develop externalizing problems, such as aggression, oppositional problems, destruction or theft, or internalizing problems, such as symptoms of anxiety or depression, these problems are likely to persist across childhood and into adolescence (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003) and even into adulthood (Hofstra, van der Ende, & Verhulst, 2000; Hofstra, van der Ende, & Verhulst, 2002; Newman, Moffitt, Caspi, Magdol, Silva et al., 1996). Many children will come to face such problems before they become adults as research has shown that by the age of 16, approximately 23% of children have experienced an externalizing disorder (conduct disorder or oppositional defiant disorder) and approximately 15% experienced an internalizing disorder, such as major depression or anxiety disorder (Costello et al., 2003). In fact, the low new-case incidence during young adulthood reported by Newman et al. (1996), suggests that most adult psychopathology finds its origin earlier in development.

In addition to the burden imposed on children’s functioning by the symptoms of the disorders themselves, childhood externalizing and internalizing problems may seriously hamper children’s developmental outcomes. Indeed, childhood psychopathological problems are associated with serious negative outcomes including poor academic adjustment (Coie, Lochman, Terry, & Hyman, 1992), school dropout (Ollendick, Weist, Borden, & Greene, 1992), unemployment and welfare dependency (Fergusson, John Horwood, & Ridder, 2005), convictions for crime (Jeglum-Bartusch, Lynam, Moffitt, & Silva, 1997), substance abuse (Reinherz, Giaconia, Hauf, Wasserman, & Paradis, 2000), suicide thoughts and attempt (Fergusson et al., 2005), and failing partner relations, teen pregnancies, and early parenthood (Fergusson et al., 2005). Given the stability of psychopathology problems and their associated negative outcomes, it seems of utmost importance to identify risk factors for the development of externalizing and internalizing problems that are likely sensitive to early preventive intervention. Experiencing social problems early in life is clearly a candidate factor. That is, social problems have been suggested to trigger the development of externalizing as well as internalizing problems (Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006), and can be targeted by early prevention and intervention programs (Greenberg, Domitrovich, & Bumbarger, 2001).

**Social Problems in School Aged Children**

Social problems in childhood encompass many aspects, such as being poorly appreciated or even rejected by the peer group, having trouble making friends or selecting
deviant friends, being a victim of bullying, but also being overly dependent on adults and displaying atypical social behavior (for an overview see Rubin, Bukowski, & Parker, 2006). Although research has been directed at the impact of overall social problems on children’s developmental outcomes, there is a long line of research aimed at specific forms of social problems. For instance, dating back to the 70’s and 80’s, research has focused on poor social preference or rejection among peers (Ladd, 1999). Other researchers have focused on bullying or victimization by peers (Hawker & Boultin, 2000), of which rejection has been shown to be a precursor (Teräsahjo & Salmivalli, 2003; van Lier & Koot, 2010). Thus, although children who experience social problems during childhood may experience various difficulties in their relations with peers, one of the central items of social problems is the poor acceptance, or rejection by mainstream peers. The present thesis will therefore, in addition to studying the impact of overall social problems, mainly focus on rejection from the peer group as an expression of social problems.

Whether a child is considered rejected from his or her peer group can be inferred from the child’s sociometric status. This status reflects the child’s social standing within the peer group or relative likeableness (Cillessen, Bukowski, & Haselager, 2000), as it is based on the degree to which a child is being liked or disliked by his peers. When children are liked by many peers and disliked by few, these children are considered having a popular sociometric status. In contrast, the lower end of a child’s relative likeableness is often used to indicate the degree to which a child is rejected by the peer group (Coie, Dodge, & Coppotelli, 1982).

Research has consistently shown peer rejection to be related to expressions of dysfunctional development in life, such as externalizing and internalizing problems. That is, children who are rejected by their peers are reported to show more externalizing behaviors such as aggression and disruptiveness than non-rejected children, as well as more internalizing symptoms such as depression and loneliness (Deater-Deckard, 2001; Parker et al., 2006). In fact, a number of longitudinal studies neatly demonstrated the impact of rejection on children psychopathology development. Keiley and colleagues (Keiley, Bates, Dodge, & Petit, 2000) assessed children from kindergarten to seventh grade and found that, compared to trajectories of externalizing problems or internalizing problems in non-rejected children, those of rejected children began at higher levels and remained stable or even increased more swiftly over time. Further, the few studies that had repeated assessments of peer social preference, externalizing problems and internalizing problems showed additive effects of peer rejection in explaining increases in externalizing
as well as internalizing problems over the kindergarten and elementary school period, even when pre-existing levels of these problems were accounted for (Ladd, 2006; Ladd & Troop-Gordon, 2003).

Thus, social problems, such as peer rejection, may influence the development of psychopathological problems. As social problems may be a target of early screening or prevention effort, studying the role of social problems in externalizing and internalizing problem development can yield valuable information in the early detection and prevention of psychopathological problems. The studies reported in this thesis aimed to provide such information by examining (1) the significance of kindergarten social problems in the development of externalizing and internalizing problems, (2) the role of social problems in pathways to psychopathological problems in early childhood, and (3) factors that possibly contribute to the development of social problems in early childhood. To explain the rationale behind the specific research questions of this thesis, theories and empirical evidence on the importance of children’s kindergarten social experiences - such as peer rejection -, and important unresolved issues regarding such social problems and their role in the development of externalizing and internalizing problems will be discussed.

**Entrance into Kindergarten: A Social Challenge**

Although social problems with peers may have an impact on children’s development throughout childhood and adolescence, the transition to kindergarten may mark a particularly sensitive period in studying the impact of peers on children’s development. Starting kindergarten, children move away a significant part of the weekdays from their familiar preschool environment encompassing their homes and sometimes daycare settings, into the new kindergarten classroom setting. Besides the more obvious new academic demands, kindergarten introduces a whole new social context in which children have to manage themselves in a group of mostly unfamiliar peers (Ladd & Price, 1987). Therefore, their social resources are being challenged as well. For instance, as Ladd, Herald, and Kochel (2006) point out, the social ecology of kindergarten differs from preschool or daycare on a number of aspects. First, in contrast to home or day-care, children now have to manage themselves in homogenous age groups which increases the pressure to succeed among equals. Second, interaction with peers increases because the adult-to-peer ratio usually is smaller in kindergarten than it is at home or at daycare. For example, Rubin et al. (2006) point out that approximately 10 percent of the social
interactions of 2-year-olds involve peers, whereas the comparable figure for children after transitioning into school is more than 30 percent.

Thus, with the entrance into kindergarten peers start to play an increasing role in children’s social life. It is therefore not surprising that during this phase forming and maintaining fulfilling peer relations is an important developmental task for children (Masten & Coatsworth, 1998). However, research has repeatedly shown that not all children succeed this task as approximately 10%-15% become (chronically) rejected by their peers (Deater-Deckard, 2001; Rubin et al., 2006). Being rejected from the mainstream peer group has the immediate effect that it denies children opportunities which are essential for adaptive development (Hartup, 1992). For instance, acceptance within a peer group provides children with a sense of inclusion and belongingness (Hartup, 1992). The peer group is furthermore perceived to constitute an important developmental context for children in which they can acquire a wide range of behaviors, skills, attitudes, and experiences that influence their life span adaptation (Rubin et al., 2006). Thus, children who are rejected from the peer group not only are threatened in their need to belong (Baumeister & Leary, 2000), they furthermore miss out on the valuable learning opportunities the peer group may offer.

Apart from immediately knifing off children’s opportunities for social interaction with mainstream peers, a rejected peer status has been found difficult to change and to easily become stable (Brendgen, Vitaro, Bukowski, Doyle, & Markiewicz, 2001). This might be explained by the finding that once a child is rejected by the peer group, his or her reputation is likely to become a better predictor of subsequent rejection than the child’s actual behavior (Denham & Holt, 1993; Dodge, 1983). For instance, Dodge (1983) showed that when a popular and a rejected child display the same behavior, the rejected one is responded to less positively by the peer group. Thus, when children become rejected early during formal schooling, such as in kindergarten, they may end up becoming chronically rejected in later school years. As a consequence, these children may be detained from the positive impact that mainstream peers can have on children’s development throughout the school period.

Because of their poor social status, rejected children are furthermore vulnerable for experiencing additional peer related difficulty. That is, becoming rejected by peers indicates that a child is disliked by the peer group, and this may result in chronic peer victimization reflecting continued harmful behaviors that peers enact towards a child (Morrow, Hubbard, Rubin, & McAuliffe, 2008; van Lier & Koot, 2010). Peer rejection has
indeed been found a prerequisite for becoming the target of peer victimization. For instance, Buhs and Ladd (2006) suggest that acquiring such a status in kindergarten may signal to the peer group it is legitimate to take the exclusion of the rejected individual a step further resulting in actual victimization. Similarly, Teräsahjo and Salmivalli (2003) suggest that unpopular, rejected children may become a victim of peer retribution because the aggressors’ behavior toward these children is justified by the reasoning that they ‘get what they deserve’. Additionally, rejected children may have difficulties in forming friendships (Pedersen, Vitaro, Barker, & Borge, 2007; van Lier & Koot, 2010), and these friendships are often of low quality (Bagwell, Coie, Terry, & Lochman, 2000; Brendgen, Little, & Krappmann, 2000). Thus, initial rejection experiences of children may knife off children’s opportunities for adaptive social development, and likely result in prolonged rejection experiences and in a cascade of increasingly difficult social relational experiences. It may therefore not come as a surprise that peer rejection and the evoked poor experiences with peers result in the already mentioned development of externalizing and even internalizing problems (van Lier & Koot, 2010).

The Development of Kindergarten Peer Relationships: Social and Emotional Skills

Given the significance of children’s early peer experiences for their future well-being and the fact that a child’s social reputation becomes stable swiftly, it is important to identify and examine factors which possibly contribute to the successful development of children’s peer relations at this early stage. To explain the development of positive social relationships several researchers have theorized on the importance of children’s social and emotional skills (Halberstadt, Denham, & Dunsmore, 2001; Hay, Payne, & Chadwick, 2004). Specifically, prosocial skills, such as being helpful and paying attention to the needs of others, and emotional skills, such as understanding one’s own and others’ emotions, and being able to display and regulate emotions in age appropriate ways, are thought to facilitate social interaction with peers and to contribute to establishing positive peer relations. Deficits in these skills, on the other hand, are reasoned to contribute to the emergence of problematic peer relationships such as low social preference (rejection) among peers.

Indeed, in accordance with these theoretical assumptions, empirical research has shown longitudinal associations between the lack of social and emotional skills and a child’s social status in the peer group. Social skills, often expressed as prosocial behavior, are found to be linked with positive peer relations (Coie & Kupersmidt, 1983; Dodge,
Empirical evidence furthermore underscores the importance of emotional skills in forming and maintaining positive peer relations. Several studies have shown that emotion regulation and emotion understanding are linked with children’s peer relations in the classroom (Eisenberg, Fabes, Guthrie, & Reiser, 2000; Eisenberg, Liew, & Pidada, 2004; Eisenberg, Pidada, & Liew, 2001; Maszk, Eisenberg, & Guthrie, 1999; Miller, Fine, Kiely Gouley, Seifer, Dickstein et al., 2006; Miller, Gouley, Seifer, Zakriski, Eguia et al., 2005).

Important Questions

In summary, children who are rejected by their peers are reported to show more externalizing behaviors, such as aggression and disruptiveness than non-rejected children, as well as more internalizing symptoms, such as depression and loneliness (Deater-Deckard, 2001; Parker et al., 2006). With the transition into kindergarten, becoming accepted into the peer group becomes a prominent developmental task (Masten & Coatsworth, 1998). Children without sufficient social-emotional skills at school entry are likely to fail this task and become rejected by their peers instead. These children then are at risk of staying rejected on a more permanent base, as initial social reputations become stable swiftly (Brendgen et al., 2001).

Despite this knowledge base, a number of important questions still need to be addressed to further pave the way for the development and implementation of programs aimed at the early identification and effective prevention of peer social problems into the regular education curriculum. In this thesis, four key questions are addressed.

1. What is the significance of kindergarten social problems in the development of psychopathological problems in childhood and adolescence? Despite previous research, the role of kindergarten social problems in predicting externalizing and internalizing problems covering multiple developmental periods (i.e., childhood and adolescence) and the role of peer rejection in explaining the co-occurrence of externalizing and internalizing problems is largely unknown. This knowledge is however essential for knowing the potential impact that effective prevention of kindergarten social problems may accomplish.

2. Do we need to account for kindergarten social problems when trying to understand the pathway from emotional skills to psychopathological problems? Several scholars theorized that children’s emotional skills underlie their successful peer relational development, thereby indirectly linking to the development of externalizing problems. However, this pathway has not been longitudinally tested across kindergarten, a period in
which this pathway may originate and therefore for the first time starts to exert its influence on children’s behavioral development.

3. Do kindergarten social and emotional skills operate as underlying factors in the development of social problems? Although this has been theorized, evidence on the causal role of social and emotional skills as underlying factors of peer social preference development is incomplete. We used a preventive intervention study aimed at fostering social and emotional skills to test for the role of such social and emotional skills in the development of peer social preference in kindergarten and first grade elementary school.

4. Does the development of social problems and its role in the development of psychopathology differ for boys and girls? It is essential for prevention policy to know whether the influence of peer relations is similar for boys and girls as differences with respect to sex may imply that programs aiming to change them need to be made sex specific, or allocated only to boys or girls.

Question 1: What is the Significance of Kindergarten Social Problems in the Development of Psychopathological Problems in Childhood and Adolescence?

To study the significance of kindergarten social problems in the development of externalizing and internalizing problems, two topics will be addressed in this thesis, namely the long-term predictive value of kindergarten social problems, and the role of social problems in the co-occurrence of externalizing and internalizing in early childhood.

With respect to the first topic, quite some longitudinal research has been directed at the role of social problems – or related constructs – in the development of externalizing and internalizing problems (Bornstein, Hahn, & Haynes, 2010; Burt, Obradovic, Long, & Masten, 2008; Burt & Roisman, 2010; Hofstra et al., 2002; Ladd, 2006; Mesman, Bongers, & Koot, 2001; Sturaro, van Lier, Cuijpers, & Koot, 2011). Despite the importance of these studies, the conclusions drawn from them are limited as these studies either (a) did not include kindergarten and had a follow-up period that covered multiple developmental periods (Ladd, 2006; Sturaro et al., 2011), (b) focused on social competences rather than on social problems per se (Bornstein et al., 2010; Burt et al., 2008; Burt & Roisman, 2010), or (c) had methodological limitations, in that they were not able to control for the continuity of and concurrent links between each construct, which may have inflated the reported results (Hofstra et al., 2002; Mesman et al., 2001). Given the described significance of the kindergarten period in children’s social development, knowing whether such kindergarten social problems indeed predict the development of externalizing and
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internalizing problems covering multiple developmental periods is essential for allocation of resources for prevention, as it directly points to the necessity and possible health gain of effective prevention allocated at kindergarten social problems.

Therefore, in Chapter 2, we will address the question on the importance of kindergarten social problems by examining the role of kindergarten social problems in the prediction of the development of clinically elevated levels of externalizing and internalizing problems covering a period from childhood to late adolescence. A multiple measurement design including parallel assessments of each construct was used, making it possible to examine the influence of social problems on the development of externalizing and internalizing problems above and beyond the continuity of and concurrent links between social problems, externalizing problems, and internalizing problems.

In Chapter 3 we focus on the co-occurrence between externalizing and internalizing problems. Besides predicting behavioral and emotional problems separately, peer rejection (as studied in Chapter 3) might furthermore explain why children with problems of externalizing nature start to develop symptoms of internalizing problems (Deater-Deckard, 2001c; Rubin et al., 2006).

Research indicates that externalizing problems frequently co-occur with internalizing problems. For instance, average correlations of approximately .50 between externalizing problems and internalizing problems in children from the general population have been found across countries (Achenbach & Rescorla, 2001; Verhulst, van der Ende, & Koot, 1996; Verhulst, van der Ende, & Koot, 1997). In search of the reasons for the co-occurrence of such seemingly different forms of psychopathology, it has been proposed that one set of problems (e.g. externalizing) may create a context in which other sets of problems (e.g. internalizing) may develop (Caron & Rutter, 1991). In fact, in their failure model, Patterson and Capaldi (1990) proposed a directional path in which externalizing problems lead to internalizing problems. Specifically, according to this model, childhood externalizing problems diminish children’s chances of success in establishing satisfying relations with peers and increase their chances of negative peer experiences, such as peer rejection. As experiences of rejection may signal a failure to succeed in a essential developmental domain (social development), may jeopardize the described ‘need to belong’ (Baumeister & Leary, 1995) and may become internalized into negative self perceptions (Cole, 1991; Cole, Jacquez, & Maschman, 2001; Cole, Martin, & Powers, 1997; Masten & Coatsworth, 1998), rejected children become at risk for developing internalizing problems.
Knowing whether peer rejection not only predicts externalizing and internalizing problem development, but also may explain their co-occurrence is essential. In contrast to externalizing problems, internalizing problems may first emerge during the early elementary school period and increase thereafter (Bongers, Koot, van der Ende, & Verhulst, 2003). If peer rejection explains the co-occurrence, this may signal not only the significance of peer rejection as an effective intervention tool for psychopathology in general, it may also imply that fostering peer relations may prevent a wide range of psychopathology, or diminish the possible influence of childhood externalizing behavior on the onset of internalizing problems.

Therefore, in Chapter 3 we aim to explore whether the development of conduct problems (as an expression of externalizing problems) in children becomes linked to the development of depressive symptoms (as an expression of internalizing problems) because conduct problems evoke experiences of peer rejection, which in turn increase the risk of developing depressive symptoms (a cascade effect).

**Question 2: Do We Need to Account for Kindergarten Social Problems when Trying to Understand the Pathway from Emotional Skills to Psychopathological Problems?**

Our second question on the significance of peer relations in the development of children will focus on their possible mediating role between children’s emotional competences and the development of conduct problems. Poorly developed emotional competences have been found to be associated with the development of conduct problems (Arsenio, Cooperman, & Lover, 2000; Bohnert, Crnic, & Lim, 2003; Calkins & Dedmon, 2000; Cook, Greenberg, & Kusché, 1994; Eisenberg & Fabes, 1994; Eisenberg, Fabes, Guthrie, Murphy, Maszk et al., 1996; Shields & Cicchetti, 1998). However, the pathway through which such poor emotional competences lead to the development of conduct problems already in kindergarten are largely unknown. In this regard, children’s development of (poor) relations with peers may be an important factor in this pathway (Trentacosta & Fine, 2010). Indeed, emotional skills are theorized to be one of the central aspects contributing to the formation of positive peer relationships, and research has shown that several aspects of emotional competence are linked with children’s social status in the classroom (Eisenberg et al., 2000; Eisenberg et al., 2004; Eisenberg et al, 2001; Maszk et al., 1999; Miller et al., 2006; Miller et al., 2005). For example, Miller et al. (2005) showed that limitations in emotion recognition were predictive of peer rejection in kindergarten and first grade. Similarly, Maszk et al. (1999) showed that children entering kindergarten
with poor emotional skills, as indicated by elevated emotionality, were more likely to become rejected after two semesters.

Given the predictive links from childhood peer rejection to the development of conduct problems (Ladd, 2006; Ladd & Troop-Gordon, 2003), it's plausible, yet untested that poor peer social preference may act as a connecting factor in the link between children’s emotional competences and their actual development of conduct problems. Information on this issue is essential for the content of effective prevention programs. It would suggest that such programs may be most effective when including multiple components. Such a program may be aimed at (1) fostering emotional skills, possibly through focusing specifically on children in need of support, in addition at (2) children’s social relations, a component that is likely aimed at the class as a whole.

Therefore, in Chapter 4, we explored to what extent the development of children’s emotional competence from kindergarten to first grade is linked with the development of conduct problems, and whether this link is mediated by the simultaneous development of their classroom peer relations.

**Question 3: Do Kindergarten Social and Emotional Skills Operate as Underlying Factors in the Development of Social Problems?**

The previous two questions address the significance of early social relations in the psychopathology development of children. However, in addition to this, children’s social development, and particularly children’s development of satisfying relations with peers is a developmental task in its own, especially if these relations are demonstrated to have a significant effect on the development of psychopathology. Therefore, we will also focus on factors that may contribute to successful early social relational development of children.

In concordance with theoretical notions (Halberstadt et al., 2001), previous studies addressing this question demonstrated longitudinal associations between children’s social and emotional skills and later peer social preference or rejection (Coie & Kupersmidt, 1983; Dodge, 1983; Eisenberg et al., 2000; Eisenberg et al., 2004; Eisenberg et al., 2001; Ladd et al., 1988; Maszk et al., 1999; Miller et al., 2006; Miller et al., 2005; Vitaro et al., 1990). For example, in a study by Vitaro et al. (1990) the stability of peer rejection from kindergarten to grade 1 was predicted by children’s low levels of prosocial behavior. Moreover, Maszk et al. (1999) showed that children who entered kindergarten with poor emotion regulation skills, as indicated by elevated levels of emotionality, were more likely to become rejected after two semesters.
Despite the importance of these studies, our knowledge on the causal role of social and emotional skills in the development of social preference among peers is, however, still limited. A unique approach in furthering our knowledge on factors contributing to the development of peer social preference is trying to manipulate the factors that are assumed to underlie this development through the use of (preventive) intervention programs (Cicchetti & Hinshaw, 2002). If changes in both types of skills induced by such programs would lead to subsequent changes in peer social preference this would provide unique evidence for the role of both in the development of peer relations. Given the likely pivotal role that early social relations have in children’s lives, this will thus provide valuable information on how such initial positive peer relational development may be fostered. In Chapter 5, we therefore studied whether stimulating the development of children’s social and emotional skills through an intervention program, Promoting Alternative Thinking Strategies (PATHS; Kusché & Greenberg, 1994), results in improved social preference of children within their classroom.

Question 4: Does the Development of Social Problems and its Role in the Development of Psychopathology Differ for Boys and Girls?

A final question addressed in this thesis is whether the developmental links as addressed in questions 1 – 3 apply to both boys and girls. While sex differences in levels of internalizing problems at young age remain somewhat unclear, elementary school-aged boys are likely to have higher levels of externalizing problems than girls (Bongers et al., 2003; Moffitt, Caspi, Rutter, & Silva, 2001), and higher levels of social problems than girls, in that they are more likely to experience peer rejection than girls (Coie et al., 1982; Moffitt et al., 2001). Girls on the other hand are more likely to display better social (Denham, Zahn-Waxler, Cummings, & Iannotti, 1991) as well as emotional skills (Cook et al., 1994; Eisenberg et al., 2000) than boys.

However, despite these level differences, the question at hand is whether the influence of peer social problems on children’s developmental pathways are different for boys and girls. Peer rejection is thought to influence boys’ externalizing problems more negatively than girls’ (DeRosier, Kupersmidt, & Patterson, 1994; Moffitt et al., 2001). In contrast, negative peer experiences are theorized to be more strongly linked with internalizing problems for girls (Crick & Zahn-Waxler, 2003), possibly because they are more focused on having harmonious peer relationships. Unfortunately, this question has not yet been answered, or even systematically studied (Deater-Deckard, 2001). Knowing
whether the influence of social rejection is similar for boys’ and girls’ developmental pathways is essential as different pathways with respect to sex may imply that prevention and intervention effort should be directed only to boys or girls, or tailored to the specific needs of boys and girls. In this thesis we aimed to contribute to the knowledge on sex differences in association between social and emotional skills, social problems and externalizing and internalizing problems by testing whether the associations as studied in Chapters 2 to 5 applied to both boys and girls.

**Design**

To address the questions outlined above, two longitudinal datasets were used. Table 1.1 presents an overview of the designs, samples, and measures. The study described in Chapter 2 is based on a longitudinal dataset including 396 children from the general Dutch population followed from age 5 to 18 years. Parent reports were used to assess children’s psychopathological problems and age 18 years social problems, while social problems at 5 and 10 years were assessed through teacher reports.

The studies described in Chapters 3, 4, and 5 are based on a longitudinal study, in which 323 children were followed from age 5 years to age 7 years. Approximately half of the children in this sample received a preventive intervention aimed at fostering social and emotional competences (PATHS). In this study peer nominations were used to assess children’s sociometric status as well as their aggressive behavior, while teachers reported on children’s psychopathological problems as well as their social and emotional skills and the children themselves completed a task measuring their emotional awareness.
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Structure of the Thesis

In Chapter 2, we examined whether having social problems in kindergarten affects the development of clinically elevated levels of externalizing and internalizing problems from childhood to late adolescence, above and beyond the stability of and concurrent links between such problems. In Chapter 3, we examined whether conduct problems in early school-aged children predict the development of depressive symptoms because of a cascade effect in which conduct problems evoke experiences of peer rejection, which in turn increase the risk of developing depressive symptoms. In Chapter 4, we tested whether the development of emotional competence from kindergarten to the end of first grade is associated with the development of conduct problems, and if so, whether this developmental link is mediated by changes in experiences of peer social preference. In Chapter 5, we studied whether stimulating the development of children’s social and emotional skills through an intervention program (PATHS) results in improved social preference of children within their classroom. Finally, in Chapter 6, the main findings and conclusions of the four studies in this thesis are discussed, as well as implications for research and prevention, and recommendations for future research.
References


Chapter 1


General Introduction


