

# **Chapter 7**

## General Conclusions and Discussion

The focus of this dissertation was problem behavior of early adolescents and the question in what way and to what degree the family context of the adolescent influences this behavior. The basis for our studies was an approach to problem behavior that puts fundamental goals at the center of attention. Although we did not study and analyze goals directly, we used goal-framing theory to derive testable hypotheses on variables and their relations under study. Goal-framing theory (Lindenberg, 2008) argues that cognitive and motivational processes need to be studied together because they are closely intertwined in the dynamics of goals. This theory makes use of insights from cognitive (social) psychology in combination with theories of needs. Goals have a strong influence on cognitive processes such as attention, memory, problem solving behavior, and the generation of emotions. Fundamental needs can create strong goals directed at their satisfaction. In early adolescence the need to belong and the need for autonomy are particularly strong. If the goal to satisfy these needs is facilitated, it will also facilitate the cognitive and emotional processes that lead towards need satisfaction. If, however, goal pursuit is thwarted, problems are likely to arise in the area of attention, problem solving ability, emotion regulation, and so on, causing externalizing or internalizing behavior or both. By focusing on the role that the family context plays in facilitating or thwarting these fundamental goals, we have a powerful handle on the generation of internalizing and externalizing behavior.

As a consequence of this approach, both facilitating and thwarting aspects need to be studied, also in their interaction. Under favorable conditions, the facilitating factors may buffer (at least partially) the negative effects of the thwarting factors. The family context is not the only influence on the achievement of need-related goals. There are also aspects of the child itself (such as temperament and stage of physical development) and there are friends and peers in general. They may interact in various ways with the influence of the family context. This logic underlies all the studies in this dissertation and it generated the structure of the book: from looking at family influences in interaction with child characteristics, all the way to considering interactions between family, peer, and child characteristics. In the following, we will summarize and discuss our findings with regard to these possible interactions and after that we will discuss the scientific and societal implications of our findings. We will end this discussion with some directions for future research.

### **The interaction between the family context and child characteristics**

The first study (chapter 2) was set out to examine the interplay between family factors and child temperament in explaining early adolescent psychopathology. In focusing on both externalizing and internalizing problems while controlling for each other we also classified our findings in domain specific, conditional, and generic risks and protective factors. We indeed found evidence for the interplay between the family and the child. That is, we found that the effects of family factors (parental behaviors and socio-economic status) were conditioned by temperamental characteristics of the child.

We argued that, via a vicious circle of thwarted goals (autonomy and belongingness) and the resulting aggressiveness, frustration would lead to externalizing problems, whereas fearfulness would lead, via thwarted goals (autonomy and belongingness) and the resulting withdrawal, to internalizing problems. Based on the domain-specific effect of frustration, we expected that interactions between frustration and family factors would be domain-specific as well. In line with this expectation, results showed that parental rejection enhanced whereas emotional warmth and SES buffered the effect of frustration on externalizing problems. In addition, we expected interactions between fearfulness and family factors to be domain-specific for internalizing problems because of the hypothesized domain-specific main effect of fearfulness. In line with this expectation, we found that parental rejection enhanced the risk effect of fearfulness, whereas SES buffered against this effect.

Surprisingly, despite its main effects on both internalizing and externalizing problems (thus being a generic risk factor), we found no interactions with parental overprotection. We argued that overprotection is most directly related to the need for autonomy, because parents who are overprotective are characterized by intrusive behavior and anxiety for the child's safety. This parental behavior would hinder a child's development of a sense of autonomy and independence. The need for autonomy is especially salient in adolescence because of other major changes like biological maturation. In a later study (chapter 6) we indeed found an interaction between biological maturation of the child and overprotective behavior of parents. Apparently, in this age group (early adolescence) biological maturation is more important than temperament for dealing with being overprotected in terms of behavioral adjustment. Another possibility is that looking at parental influence may mask different influences of fathers and

mothers who may cater to different needs. In the next study we examined these separate influences.

### **The interaction between factors within the family: father's and mother's parenting behaviors**

The second study (chapter 3) was set out to examine the interaction between factors within the family. Here, we focused on the simultaneous effects of father's and mother's parenting behaviors and on their interaction. Unlike the other interactions under study, we explicitly expected to find no interactions. We argued here that fathers and mothers cater to different needs of the child and that they are therefore not able to compensate for each other's (negative) behaviors. More specifically we theorized that the mother helps the child to avoid or control externalizing and internalizing problems by actively satisfying relatedness (belonging) needs. The father helps in this way by actively satisfying autonomy needs. The mother's provision of emotional warmth and not rejecting the child can thus be expected to be negatively associated with maladjustment, whereas overprotection by fathers can be expected to be positively associated with maladjustment.

Most of the previous research on fathering and child adjustment focused on fathering without controlling for mothering and found effects for father's parenting behaviors similar to those of mother's parenting behaviors. In our separate analyses where we ignored the behavior of the other parent we also found comparable effects for fathering and mothering on early adolescent externalizing and internalizing behavior. Thus, we found that father's and mother's rejection and overprotection were harmful for behavioral development in early adolescence whereas the provision of emotional warmth was protective. But given the high correlation between fathering and mothering, fathering is in part a proxy for mothering and vice-versa and thus analyzing them separately tells us nothing about their unique contributions.

The picture changed, however, when we examined the effects of fathering and mothering simultaneously. In these analyses we found that, unlike paternal rejection, maternal rejection was related to psychopathology. We also found that paternal but not maternal overprotection was related to psychopathology. Moreover, as expected, there were no significant interactions between parents' behaviors. These findings provide evidence for our theory about the different functions that mothers and fathers have for need satisfaction in early adolescents. In an explanation for the negative

association between paternal warmth and child problem behavior that is reported by other researchers (again, many of which not controlling for maternal behaviors) and by ourselves, we went a step further. From a different viewpoint, this 'protective' effect of paternal warmth may actually be a reactive parenting effect. That is, it may be the case that the negative association between paternal warmth and early adolescent psychopathology goes actually in the opposite direction, thus father's lack of warmth being a (negative) response to misbehavior. For mothers, the relation between emotional warmth and psychopathology was positive in the simultaneous analyses, thus indicating that mothers may react in a more positive way to child misbehavior. We reasoned here that fathers can be expected to withdraw emotional warmth as reaction to maladjustment of the child, whereas mothers respond less conditionally in their emotional warmth to behavior problems and thus can be expected to appear emotionally warmer to the child the more the father becomes cooler in the face of rising maladjustment. Additional analyses on parental responses to misbehavior provided support for this argument, in that fathers reacted with higher levels of guilt inducing and lower levels of problem solving through communication in general and to internalizing problems in particular.

### **The interaction between the family context and the peer context**

The third study (chapter 4) was set out to examine the interaction between the family and the peer context in explaining early adolescent psychopathology. This interaction was tested because peers, like parents, can be seen as socializing agents on which children increasingly rely for help, support, advice, and behavioral norms when they enter adolescence. In addition, peers can help children to gain a sense of belonging (in this case in the classroom). Therefore, depending on relationships with peers, factors within the family may influence the child in a more negative or positive way. That is, being rejected by parents may be less detrimental for a child's development when the child can gain a sense of being accepted and loved from its peers in the classroom and vice versa.

When we analyzed the family and peer context separately, thus ignoring each others influence, the results showed a similar pattern. In line with other research, we found that rejection was harmful for behavioral adjustment whereas acceptance helped the child to refrain from internalizing and externalizing behavior. The effects of acceptance and rejection changed

when we focused on the family and peer context simultaneously. In these analyses, the risk effect of peer rejection became smaller in relation to early adolescent externalizing problems and even disappeared in relation to early adolescent internalizing problems. In contrast to rejection, it was not parental acceptance but peer acceptance that remained strongly protective in association with early adolescent psychopathology. As an explanation for these results, we argued that parental rejection might be so hurtful because it contradicts the norm of receiving unconditional love and acceptance by parents. The findings of this study thus suggest that being rejected by the primary attachment figures, parents, is more detrimental for adolescents' adjustment than rejection by peers.

Moving to the results on the interaction between the two contexts, we examined whether potential harm effects in terms of behavioral or psychological maladjustment as a result of rejection in one context can be overcome by being accepted in another context. This then would suggest that parent and peer relationships are interchangeable to a certain degree. The findings showed that parental acceptance could not buffer peer rejection. This again might be explained by the absence of a main effect of parental acceptance in the simultaneous analyses, possibly because being accepted by parents is perceived as normative or because parent and peer acceptance correlate, so that parental acceptance is mediated by peer acceptance. Peer acceptance, on the other hand, was able to buffer the effects of parental rejection. But despite the buffering role of peer acceptance, parental rejection still had a big impact on early adolescent externalizing and internalizing problems. Thus, peer acceptance can buffer parental rejection only to a small degree. We can conclude from this that being rejected by parents is harmful for early adolescent adjustment under all the conditions tested in this study.

### **The interaction between the family context and the context of dyadic friendships**

Not all peers are alike. Building on the previous study, in this study (chapter 5) we focused on the interaction between the family and friendship context. In contrast to the previous study that focused on relationships with peers as defined by the larger peer group (i.e., the classroom), here we focused on the relationship with the best friend. Relationship quality can have an important influence on the satisfaction of fundamental needs. We were interested in two possible ways that experiences in these relationship contexts

may interact. On the one hand, adolescents may have similar relationship experiences across the two contexts. Thus having high (or low) quality relationships with parents and friends may strengthen positive (or negative) effects on adolescents' adjustment as compared to having a high (or low) quality relationship in one context only. On the other hand, adolescents may have different experiences across the two contexts. Thus having a high quality relationship in one context may buffer the negative effect on adolescents' adjustment resulting from a low quality relationship in the other context.

Our results on the main effects of parental and friend relationship qualities showed that perceived support from parents was associated with better adjustment in early adolescence, whereas conflict with parents predicted higher levels of adolescents' depressed mood. In line with the results from the previous chapter, negative indicators for relationship quality (conflict) had more predictive value for adjustment in adolescence than the positive indicators (support). This also highlights the importance of treating positive and negative relationship quality as separate constructs and of examining their effects simultaneously. Similar to the results on parent-child relationship quality, we also found that support from friends was associated with lower levels of adolescent depressed mood whereas conflict with friends predicted more rule-breaking behavior, even after controlling for parent-child relationship qualities. Again in line with the previous chapter, the findings of this study suggest that parent-child relationship qualities are of greater importance than friendship qualities especially for developing depressed mood.

The results regarding to the interaction between the family and friendship context showed that the protective effect of friendship support on depressed mood was strengthened by high levels of perceived parental acceptance. In other words, adolescents were least likely to have depressed mood when they had high quality relationships with both parents and friends. There was no such strengthening (negative) effect on adjustment when having consistently low quality (high on conflict) relationships with parents and friends. A reason for this might be a ceiling effect: the high main effects for conflict in parent-child relationships and in friendships may not be further enhanced.

Interactions with regard to different experiences across the two relationship contexts showed that conflict with parents was related to more rule-breaking behavior for adolescents with low quality friendships, but not for those with high quality friendships. This implies that friendships can compensate some aspects of the parent-child relationship, in terms of their

provision of help and support. In addition, it was found that more friendship conflict was related to higher levels of depressed mood for adolescents with parents low in support but not for those high on parental support. Thus, unlike the previous chapter here we found evidence that the relationship with parents can buffer some (negative) aspects of peer relationships. An explanation might be that being rejected by a best friend still leaves possible relationships with peers open, whereas being rejected by the larger peer group leaves few or no alternatives and therefore is particularly detrimental for mental health.

### **The interaction between the family context, peer context, and child characteristics**

In our final study (chapter 6) we looked at the three contexts under study by focusing on how parental behaviors are related to problematic behavior in early adolescents under different conditions. The conditions are thus being shaped by child characteristics and peer characteristics. We tested whether low parental supervision (unsupervised time spending outside the home, here called 'unsupervised wandering') was associated with more antisocial behavior for children with antisocial friends, as compared to children whose friends are low on antisocial behavior. We also tested whether overprotective behavior by parents led to higher levels of problem behavior for children who are ahead in their biological maturation relative to their peers, as compared to children who are on time or late in maturation. We argued here that those who mature early would have a greater need for autonomy, thus using biological maturation as a proxy for adolescents' need for autonomy. In the analyses we controlled for parental knowledge which can be seen as a proxy for the quality of parent-child relationship because having knowledge about children's whereabouts results from activities by both parents and children.

We argued that engagement in antisocial behavior is at least in part an answer of adolescents to blocked access to adult privileges such as autonomy and independence (Agnew, 2003). The goal of autonomy should be especially salient for early-maturing adolescents, because the experienced maturity gap (i.e., physically mature but no access to adult privileges) is largest for those who feel more adult but do not feel they have access to roles respected by adults. In line with this, parental overprotection was positively related to antisocial behavior in early adolescence only for early maturers. In

addition, we argued that the goal to realize a sense of belonging is likely to create a high priority in adolescents for spending time and hanging around with their peers. When this happens without supervision, it may lead to antisocial behavior, particularly when they associate with antisocial friends. In line with this we found that having antisocial friends strengthened the relation between unsupervised wandering and engagement in antisocial behavior. Thus, lack of supervision and overprotection are not always or in the same way related to antisocial behavior. The findings point to a potential misfit between protective parents and adolescents who are striving for autonomy.

### **Scientific implications**

The scientific relevance of this project lies primarily in furthering the knowledge about the influence of family characteristics on two different kinds of problem behavior (internalizing and externalizing problem behavior) and the interplay of multiple determinants within different contexts. With a main focus on the family, we tried to specify its influence on early adolescent problem behavior by investigating the conditioning role of child and peer characteristics.

Researchers give different answers to the question how big the influence of parents on children is. Harris (1998) argues that parents only have a limited influence on the socio-emotional and behavioral development of their children. According to her it is mainly the result of children's nature, such as their intelligence and temperament. Harris states that the influence of the environment is limited. Furthermore, she argues that peers instead of parents are the most influential persons in a child's environment. Maccoby (2000) argues against that by stating that parents do have an important influence on their children. She refers to numerous cross-sectional and longitudinal studies and experimental interventions that show that parents can directly affect the behavior of their children. She agrees with the proposition that nature is important for the chances of children, but she states also that there is a continuing interplay between nature and nurture. For example, the reaction of parents, teachers, and peers to intelligent children differs from the reaction to less intelligent children. If intelligent children receive more affection, status, or stimulation from their environment, the environment will have an amplifying effect on the natural differences (Rutter, Giller, & Hagell, 1998).

The results of the studies reported in this dissertation seem to agree with the latter view on child development. Focusing on the role of need-

related goals made it possible to show the considerable strength of the family influence and the complex interactions of that influence with peers and child characteristics. Importantly many patterns changed when different influences were looked at simultaneously. Although there is most likely a bidirectional relation between parental behavior and child behavior, we found that parents can have a direct effect on the behavior of their children even though these effects were conditioned by child and peer characteristics. More specifically, the existing direct effects of parental behavior differed in magnitude among children with regard to their temperament, biological maturation, and peer characteristics. Among the parental behaviors, parental rejection is seemingly the most harmful for children's development. Parental rejection, and then in particular maternal rejection, forms a generic risk for psychopathology. In addition, the negative effect of parental rejection was greater for children with a frustrated temperament in relation to externalizing problems, and for children with a fearful temperament in relation to internalizing problems. Further, parental rejection could only be partly buffered by social acceptance from peers.

By using goal-framing theory we were able to theorize about the direction of effects and about the absence or presence of interactions between the variables under study. We did this by focusing on factors that may help or thwart the pursuit of the goals that are highly salient in early adolescence, which are satisfying the need to belong and the need for autonomy. On the whole, our findings were generally in line with our hypotheses derived from this approach and they therefore strengthen our confidence in the reasoning behind the results. All in all, we can conclude that the goal-framing approach to the study of problem behavior in adolescents proved to be fruitful.

### **Societal Implications**

The societal significance of this project is substantial, because of the combination of problem behavior with determinants from the social and psychological domain and a solid focus on the family. Politicians often question the way parents raise their children and the way families function. In discussions about delinquent adolescents, some politicians have suggested to make parents responsible for the behavior of their children. The assumption is then that poor supervision and inconsistent discipline affect to a large extent the delinquency of adolescents. Not only delinquency but also other forms of

problem behavior are often related to family characteristics, such as depressive symptoms and lack of social skills.

The aim of this project was to investigate the influence of family relations on problematic behavior of adolescents, but, more importantly, to examine whether characteristics of the child and its peers may amplify or reduce the effects of family factors. We did this by focusing on the microsystem consisting of the family context, peer context, and child characteristics. In this way, we were able to shed some light on the potential risk and protective factors in the different contexts for the development of problematic behavior that may be taken into account in intervention and prevention programs. The inclusion of different outcomes has facilitated our understanding of common risk factors for problem behavior. Moreover, we can inform about potential risk-amplifying and risk-buffering factors that may influence the size of the (negative) effect of family factors on the behavioral development of early adolescents. Therefore, the findings of this research project on the interplay of the multiple determinants and their underlying mechanisms are valuable for policy makers, health and social service and may help to develop adequate interventions.

On the whole, our findings support a more integral approach to intervention. Children's problem behavior should be approached in the context of the whole family, but because of the interrelation with both parental and peer influences, individual problem behavior should actually be approached in the combined context of family and peers. Interventions based on our results regarding peer influence may include primary prevention. We can argue that social skills training and school support and counseling should explicitly acknowledge the important role of classmates and/or best friends in their intervention. For example, instead of only targeting the neglected, socially inept child itself, the school can also set up a class-based intervention that includes increasing awareness of the consequences of being neglected, rejected, ostracized, or bullied.

Intervention with regard to parents should be informed by the fact that, as we found, parental rejection is particularly harmful for children with regard to problem behavior. Peers can buffer parental rejection only in a limited way. For this reason, parenting skills training should especially target the prevention of rejection (which is even more important than providing the child with parental acceptance, affection, and warmth). In addition, parenting skills training may target the controlling behavior of the parent as well. We found that overprotective behavior by parents may actually lead to an increase,

instead of a decrease, in antisocial behavior, especially for children who are ahead in their biological maturation. These children in particular have a strong need for autonomy. Being overly protective is counterproductive. Parents should be aware of the fact that by increasing age, children yearn for more independence, and parents can learn to deliberate with their children about the spaces for autonomy, the (house) rules and obligations, so that the child gets a sense of responsibility along with increasing autonomy. Also, it is important to explicitly involve both parents in the intervention, as fathers and mothers each have a substantial yet differential influence on children's development.

Lastly, because we found that early childhood problem behavior is strongly related to later behavioral problems, an important focus of intervention should be the early detection of impaired mental health and social development. Already in kindergarten, caretakers can compare children to their peers in their play and interactions with others. The types of play or social skills that are lacking or inadequately developed may be stimulated by the caretaker, both at kindergarten and at home.

### **Directions for future research**

Although the findings of the studies reported in this dissertation provide an answer to our main questions, they also set a stage for new questions. Based on this and on some limitations of our own studies, we will give suggestions for the focus of future research in the area of the family context and behavioral adjustment.

Firstly, as a result of our research design throughout this dissertation, we cannot make hard statements about causality. Although we consequently used outcomes from a later time point than the predictors, there is still a possibility that the findings may point to a reversed causality. As has been said before, parental behavior and child behavior are likely influencing and reinforcing each other over time. In order to state whether something is a cause rather than a consequences, one should have a research design that allows for testing cross-lagged paths between the characteristics under study. Thus, in this case, it would be very interesting to have data on the family context (and other characteristics of the microsystem) and problematic behavior of children at multiple time points, in so that all possible directions of the relations between the characteristics can be tested and controlled for. Unfortunately, the datasets that were used for this dissertation did not allow

for these analyses, because most of our predictors were measured at one time point only. As a verification and maybe also qualification of our findings, future research might do well to study cross-lagged relations between family factors, other microsystem characteristics, and problematic behavior. This may help us to understand, for example, differences between active and reactive parenting effects that were hypothesized in one of our studies (chapter 3) but which could not be tested directly. Here we argued that, as a reason for the absence of an effect of mothers' emotional warmth on child externalizing behavior once paternal warmth was controlled for, there might be two effects going against each other. On the one hand, (perceived) emotional warmth by the mother prevents the escalation of externalizing behavior. On the other hand, once externalizing behavior is escalating, the mother's response is experienced as emotionally warm (in comparison to the cooling of the father). Obviously, this interpretation can only be tested with longitudinal data on both child behavior and parental behavior. The same reasoning goes for our findings with regard to the interaction between parental and peer acceptance and rejection (chapter 4). We found that when a child is being rejected by either parents or peers, it will develop problem behavior. But because of this heightened problem behavior the child may become less likeable and is thus being rejected even more, ultimately developing rejection-sensitivity and more problem behavior. Testing for this assumption again asks for longitudinal data that allows us to analyze cross-lagged paths between acceptance/rejection and behavior.

Secondly, in our studies in which we looked at interactions between the family context and the peer context (chapters 4 and 6) we made use of information on peers within the school context (classroom). Therefore, information on social acceptance and rejection and antisocial behaviors of friends concerned only the in-school peers (classmates). However, going back to chapter 6, unsupervised wandering (hanging around on street with friends) is likely to occur with both in-school and out-of-school peers. In other words, we might have missed out on a possibly important part of the friend network by which adolescents are (negatively) influenced. Friendship networks outside the school have been found to be important in explaining problem behavior (Kiesner, Poulin, & Nicotra, 2003). These friends are more likely to be risk factors for adolescents' adjustment, because out-of-school friends are more heterogeneous in age, gender, and behavior. Future research should thus include the influence of out-of-school friends (e.g., acceptance, rejection, antisocial behavior) on problematic behavior of adolescents.

Thirdly, it would be interesting to see how family factors interact with other aspects within the microsystem when adolescents develop into young adults. In chapter 4 we found that being rejected by parents is already so detrimental for adolescents' behavioral adjustment that this negative effect could only be partly buffered by peer acceptance and not noticeably exacerbated by peer rejection. This might change when peers and other significant others become increasingly more important. Whereas the peer group as defined by the classroom plays a considerable role in adolescence, in young adulthood important peers could be colleagues at the work floor and romantic partners. The next step for future research then would be to see how the simultaneous effects of parents and peers affect outcomes in late adolescence and young adulthood. Thus, future research into child and adolescent maladjustment should focus on interactions between various relationship contexts, because with increasing age some relationship contexts may become relatively more important than others. For instance, can a high quality relationship with the romantic partner compensate for a low quality relationship with parents? The Netherland Kinship Panel Study (NKPS) may be especially valuable here to study the relations between family factors, peer characteristics, and behavioral adjustment in (early) adulthood. The NKPS dataset contains among others a great deal of variables in the family context over multiple generations, with the anchor participants being at least 18 years old.

Finally, we used goal-framing theory to derive hypotheses on the direction of the effects and their interactions throughout this dissertation. We had, however, no data on goals and thus could not analyze the effects of goal pursuit and need satisfaction directly. For a deeper understanding of the mechanism involved in the protective and risk effects, as well as buffering and risk-enhancing effects, it would be desirable to investigate more directly the possibly inhibiting or reinforcing effects of characteristics of the microsystem on a child's ability to pursue certain goals.