Harsh or Inept Parenting
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Harsh or Inept Parenting,
Youth Characteristics and Later Adjustment
Abstract

Despite most parents’ good intentions to provide a warm, supportive environment in which the child can grow and develop socially appropriate behavior, they might occasionally act toward their child in a negative or even harsh way. Some do this more consistently than others. This dissertation examined the relationships between harsh or inept parenting and children’s characteristics in predicting various adjustment problems. The first aim of the dissertation was to examine if experienced harsh parental behavior is associated with adjustment problems for children from different cultures in a similar way. Study I showed that the effects of harsh parenting were very similar for children from different countries, but the magnitude of these effects differed. The second aim was to examine how parents and youths respond to each other over time. Studies II and III showed that youth characteristics influenced harsh or inept parenting and, to a lesser extent, parents’ behaviors could affect youth characteristics or behavior problems. The third aim of this dissertation concerns the role of child or youth characteristics in the link between harsh parenting and adjustment problems. Findings from Study II suggested that, youth characteristics might be responsible for both harsh parenting and problematic peer relationships, thus explaining the link between them. Studies IV and V showed that children’s early unmanageability increased the risk of having more adjustment problems later in life only for some children. The fourth aim was to examine how the early characteristics of children who experience physical punishment in the context of parenting behaviors that communicate negative emotions affect later adjustment. The findings from Studies IV and V suggest that only for some children, those who experience certain combinations of harsh parental behavior, is early unmanageability a risk factor for social adjustment problems. Overall, the studies in this dissertation provide insights into the roles of harsh or inept parenting and youth characteristics in the development of various adjustment problems. Even though parents’ negative behaviors may affect youth social adjustment, youth characteristics and behaviors can strongly contribute to their own adjustment and to harsh or inept parenting.

Keywords: adolescent adjustment, harsh parenting, inept parenting, reciprocal interactions, youth characteristics, early unmanageability
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List of studies

This dissertation is based on the following studies, which will be refereed to in the text by their Roman numerals.


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I Introduction

Harsh or inept parenting

To understand how children develop, one must consider the environments in which they develop. The earliest social environment for children is the family and the parent-child relations. It is probably safe to assume that most parents want to provide a warm, safe, and supportive environment in which their child can grow and develop socially appropriate behavior. Everyday experience, however, suggests that parents sometimes fail at this. There are probably few parents who can say that they have never behaved negatively or even harshly toward their child, but some do this much more than others. What effect negative treatment from parents has on a child’s development is, therefore, an obvious question to be answered. Perhaps a less obvious question is why some parents do this more than others. Although there are many possible answers, one might be found in the child him- or herself. When a child has a temper tantrum in public, for example, most bystanders feel some degree of irritation or anger, and they urgently want it to stop. These common emotional reactions provide a small glimpse into the daily experience of parents with temperamentally difficult children, and they suggest that harsh parenting might be partly a response to the individual child. The studies in this dissertation address both questions: How negative parenting affects development and what role children’s characteristics might play in evoking negative parenting.

Harsh or negative parenting can mean a variety of things. In the literature, harsh or negative parenting is often defined in terms of corporal punishment (Cohen, 1984; Gershoff, 2002 for a review; Straus & Field, 2003; Straus & Mathur, 1995). However, many parents do not use corporal punishment, partly because it is illegal in many countries. Instead of corporal punishment, parents use other behaviors that may cause psychological harm. These might include threatening the child, making the child feel guilty, or ignoring the child. Thus, what is considered harsh parenting can include yelling, frequent negative commands, name calling, overt expressions of anger, and physical threats and aggression (Arnold, O’Leary, Wolf, & Acker, 1993; Deater-Deckard & Dodge, 1997). In this dissertation, I define harsh parenting as physical punishment and verbal or nonverbal aggression, such as anger outbursts, threats, stony silences, or rejection, thus combining both aspects – the physical and the nonphysical.

The term “harsh parenting” has been used a lot in coercion theory (Patterson, 1982), and in this context it is considered as a form of “inept parenting”. Inept parenting does not
have to be harsh, but it can be. Generally, it includes coercive parent-child communication, dysfunctional disciplining practices, inconsistent control, harsh or violent physical punishment, negative attitudes and reasoning, limited use of praise, support, or warmth, and poor supervision and monitoring (Maccoby & Martin, 1983; Patterson, Reid, & Dishion, 1992; Reid, Patterson & Snyder, 2002; Robins & Rutter, 1990; Stoff, Breiling, & Maser, 1997). Harsh parenting and inept parenting are sometimes used synonymously. In my view, inept parenting behaviors such as poor supervision and inconsistent discipline are not harsh parenting practices, but are related in that they might co-occur with harsh parenting. They might be used for the same reasons (e.g., in response to a temperamentally difficult child), and they might have similar negative effects on children’s or adolescents’ development. I consider harsh parenting a form of inept parenting, and I am interested in harsh parenting specifically as well as inept parenting more generally.

In this dissertation, I focus on the role harsh or inept parenting plays in children’s and adolescents’ development. I consider both the effects harsh and inept parenting might have on children’s social development and how children’s behaviors or temperamental characteristics might bring about harsh or inept parenting. I focus on the role harsh or inept parenting plays in various aspects of adolescents’ social development in different cultures or contexts. Some of the major issues in this area are how harsh or inept parenting is related to social adjustment, how this link is affected by context, what role children’s own characteristics play, and how to put all these factors together.

Harsh or inept parenting and social adjustment

Some theoretical perspectives are founded on the idea that parenting practices determine children’s development and social adjustment. Most studies of parenting and child adjustment problems are based on what Hartup (1978) has termed the social mold model. This model associates family socialization processes with a mold into which the child is placed. Problematic parenting is assumed to affect child behavior and give rise to the development of later social adjustment problems. According to the social learning perspective, which lies within the social mold framework, if parents solve conflicts with their child in punitive, aggressive, or negative ways, the child may learn that this is an appropriate way to behave in society (Bandura, 1977). Because of this, children who experience harsh parenting or inept discipline may more often develop conduct problems, particularly aggressive behavior, and may have more adjustment problems. Although there may be many contributing factors in the development of adjustment problems, such as low
income, parental conflict, parental criminality, child temperament, and many others, harsh, inconsistent, inept parenting practices and behaviors are likely to affect children’s development and social adjustment.

Consistent with the social mold framework, or social learning theory, harsh or inept parenting behavior is related to a number of social adjustment problems. One category of social adjustment problems that has been linked to harsh or inept parenting comprises externalizing problems. Various cross-sectional and longitudinal studies have suggested that lack of parental involvement, poor acceptance, low responsiveness, lack of supervision, harsh and inconsistent punishment, physical punishment, and insufficient rewarding of behavior are related to higher levels, or increased risk, of the development of externalizing behaviors during childhood and adolescence (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Garstein & Fagot, 2003; Haapasalo & Tremblay, 1994; Knutson, DeGarmo, Koeppl, & Reid, 2005; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; Larzelere & Kuhn, 2005; Loeber & Dishion, 1983; Paoulucci & Violato, 2004; Pettit, Laird, Dodge, Bates, & Criss, 2001; Rothbaum & Weisz, 1994; Straus, Sugarman, & Giles- Sims, 1997; Wakschlag & Hans, 1999; Weiss, Dodge, Bates, & Pettit, 1992). Thus, parents’ harsh or inept behavior has been found to be related to externalizing problems during childhood and adolescence.

Another category of social adjustment problems that has been linked to harsh or inept parenting is internalizing problems. There is less information about how negative behaviors in the family affect internalizing problems, but negative, harsh parenting or corporal punishment, parental rejection and parental hostility have been associated in several cross-sectional studies with lower self-esteem (Hertz & Gullone, 1999; Straus, 1996a), a greater probability of depression (Muris, Schmidt, Lambrichs, & Meesters, 2001; Richter, 1994, Straus, 1996b), anxiety (Gruner, Muris, & Merckelbach, 1999; Van Brakel, Muris, Bögel, Thomassen, 2006), and other internalizing problems and behaviors in childhood and adolescence (e.g., Messer & Beidel, 1994). Even though there is a lack of longitudinal evidence, parents’ harsh or inept behavior is cross-sectionally related to various negative behaviors and internalizing problems during childhood and adolescence.

Problems in peer relationships have also been linked to harsh or inept parenting, although this link is less well established than the link between externalizing problems and harsh or inept parenting. By the time of adolescence, peers become more important than parents as confidants and providers of emotional support, thus suggesting that an important aspect of social adjustment is the ability to develop and keep relationships with other people – starting with peer relations, and followed by romantic relations. Studies in this area have mainly dealt with peer relationships among young children. However, a few
studies have linked negative behaviors in the family or harsh parental behaviors to peer relationships during adolescence or early adulthood. Negative or inept parenting behaviors, such as love withdrawal, harsh discipline, strictness, and verbal and symbolic aggression, have been linked in cross-sectional and longitudinal studies to poor quality in children’s and adolescents’ peer relationships, antisocial or aggressive activities in relation to peers, antisocial activities with peers, or increases in aggressive or aversive behaviors toward peers, peer rejection, and having trouble-making friends (e.g., Carson, & Parke, 1996; Deković & Meeus, 1997; Engels, Decovic, & Meeus, 2002; Fuligni & Eccles, 1993; Lansford, Criss, Pettit, Dodge, & Bates, 2003; McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996; Paley, Conger, & Harold; 2000; Vissing, Straus, Gelles, & Harrop, 1991). Thus, it seems that children and adolescents who experience negative parental behaviors have various problems in relationships with their peers as well as in their behaviors.

The history of child upbringing might also have long-term consequences in romantic or marital relationships (Andrews, Foster, Capaldi, & Hops, 2000; Capaldi & Clark, 1998; Flouri & Buchanan, 2002; Franz, McClelland, & Weineberger, 1991; Linder & Collins, 2005). In longitudinal studies, parent-child closeness, poor parenting practices, such as monitoring and discipline, or aversive communication in adolescence has been associated with the quality of relationships with a partner in midlife (Flouri & Buchanan, 2002) or with the physical aggression toward a partner in young adulthood (Andrews, Foster, Capaldi, & Hops, 2000; Capaldi & Clark, 1998). It has also been found that adults who have experienced harsh or inept parenting or physical punishment are not satisfied with their relationships or do not have positive perceptions of current romantic partners (Colman & Widom, 2004; Finkelhor, Hotaling, Lewis, & Smith, 1989; Fleming, Mullen, Sobthorpe, & Bammer, 1999) or have trouble maintaining intimate or romantic relationships (Colman & Widom, 2004; Felitti, 1991; Fleming et al., 1999). Thus, negative or harsh parental behavior, especially during late childhood and adolescence, might have long-term consequences for the child’s future relationships.

It seems safe to conclude that harsh or inept parental behavior is related to various children’s social adjustment problems. The studies cited above, however, are mainly based on North American samples. The question remains if the same conclusion can be drawn from samples outside North America. There are not many studies that have explored culture, which could be defined as all the behaviors, ways of life, and beliefs of a population that are passed down from generation to generation (Merriam Webster online dictionary), or ethnic group, defined as a certain population of people whose members identify with each other, classed according to common racial, national, tribal, religious,
linguistic, or cultural background (Merriam-Webster online dictionary) in the effects of harsh parenting on adjustment problems. Existing studies have mainly examined the effects of physical punishment on externalizing behaviors (e.g., Deater-Deckard et al., 1996; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Gunnoe & Mariner, 1997; Lansford et al., 2004; Lansford et al., 2005; McLeod, Kruttschnitt, & Dornfield, 1994; Rowe, Vazsonyi, & Flannery, 1994; Spiker, Larson, Lewis, Keller, & Gilchirist, 1999). Although existing studies present mixed results, they suggest that physical punishment may be used in some cultures or ethnic groups more than in others, for example, among African Americans or among families in Kenya (Deater-Deckard et al., 1996; Lansford et al., 2005). Also, physical punishment seems to increase the externalizing problems or affect the academic achievement of European American children, but not African American children (Deater-Deckard et al., 1996; Lansford et al., 2004). However, it is still not known if other forms of harsh or inept parenting, such as shouting at or ignoring the child, have different consequences for adjustment in cultures outside North America.

To summarize, adolescents who experience harsh, inept, or negative parenting are at greater risk of a range of maladaptive behavioral outcomes. There is much variability, however, and many with this increased risk are normally adjusted. Some children seem to be able to accept or ignore parents’ harsh or inept behaviors such as angry outbursts, for example, and adjust themselves. Consequently, these children might even forget that their parents are angry at them, and behave and feel in similar ways to children who do not experience parents’ habitual angry outbursts. However, other children may start to be more anxious, unwilling to be open with their parents, and afraid of conflicts with their peers. The question is why some children who experience negative parenting do not have problems later in life while others do. The previous research, mentioned above, leaves this question unanswered.

**Harsh or inept parenting and the other parents’ behaviors**

Harsh or inept parental behavior is associated with various children’s problems in the future, but it seems to be associated with problems for some children but not for others. What might influence whether or not children who experience harsh or inept parental behavior will have adjustment problems later in life? Harsh or inept parenting behaviors might be perceived differently by children, and might have different effects on their development if they take place along with behaviors that communicate warmth, support, and love rather than those that communicate coldness, worry, or rejection (Deater-Deckard
et al., 1996; Lansford et al., 2004). Specifically, it might be that other behaviors, in the context of which harsh parenting occurs are more important than the harsh parenting, per se, in predicting effects on children’s development. However, the recently suggested idea that the effects of harsh or inept parenting could be dependent, in part, on the combination of harsh or inept parenting and other negative or positive parenting behaviors, is not yet very well developed in research.

Ideas about the influence of other parenting behaviors on the consequences of harsh or inept parenting have been developed in cross-ethnic-group studies showing that spanking by parents seems to increase children’s externalizing problems among European American but not African American children (Deater-Deckard et al., 1996; Lansford et al., 2004). It has been speculated that African American parents tend to use physical punishment in the context of other behaviors that communicate love, whereas European American parents tend to use it in the context of other behaviors that communicate rejection. Hence, what children experience as harsh parenting might depend on what they know about their parents’ feelings, attitudes, and intentions. It has been suggested that physical discipline is unrelated to children’s externalizing problems, such as aggression or delinquency, after parental behaviors like rejection or low warmth and involvement, which are associated with physical discipline, have been taken into account (Lansford et al., 2005; Larzelere, Klein, Schumm, & Alibrando, 1989; Rohner, Bourque, & Elordi, 1996; Simons, Johnson, & Conger, 1994). For example, in some cross-sectional studies, physical punishment was linked to maladjustment when it was perceived as rejection (Rohner et al., 1996), or when it was perceived as not normative behavior in the cultural setting (Lansford et al., 2005). Evidence from a longitudinal study suggests that spanking is associated with an increase in behavior problems over time when mothers are not supportive; the pattern was found to hold for European American, African American and Hispanic American children, despite the fact that African American children were more likely to be spanked and spanked more frequently than the others (McLoyd & Smith, 2002). Thus, the relations between physical punishment and behavioral problems are not related to race or ethnicity, but to other behaviors that co-occur with spanking. Other parental behaviors may change or influence the effects of physical punishment on later problem behaviors, thus suggesting that the effects of one parental behavior might be affected by other parental behaviors. Consequently, adequate assessment of the effects of physical discipline on children’s development may require taking into account other positive or negative parenting behaviors in the context of which harsh or inept parenting occurs.
Children’s characteristics and social adjustment

Many studies in the literature on harsh or inept parenting tend to neglect the child’s role, but children’s characteristics may be an important factor in social adjustment. This idea is well developed in temperament research, where temperamental traits are viewed as early-emerging individual differences that shape the course of personality development, and both its healthy and problematic outcomes (Rutter, 1987). In this view, temperament is an early form of personality, which becomes elaborated over time into the stable behavioral dispositions (e.g., Caspi, 2000) that influence adjustment. In this way, early characteristics of the child can be related to later adjustment.

It is easy to imagine that a child who is aggressive or hyperactive will have various behavioral problems in kindergarten, at school, and even later in life. Evidence from temperament research suggests that a child who is temperamentally prone to anger, aggression or opposition has more behavioral and externalizing problems later in life (e.g., Bates, 1989; Bates, Pettit, Dodge, & Ridge, 1998; Caspi, 2000; Caspi, Henry, McGree, Moffitt, & Silva, 1995; Caspi, Moffitt, Newman, & Silva, 1996; Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, et al., 1997; Guerin, Gottfried, & Thomas, 1997; Henry, Caspi, Moffitt, & Silva, 1996; Leve, Kim, & Pears, 2005; Morris, Silk, Steinberg, Sessa, Avenevoli, & Essex, 2002; Stoolmiller, 2001; White, Moffitt, Caspi, Bartusch, Needles, & Stouthamer-Loeber, 1994). For example, lack of self-control in childhood, or impulsivity, has been found to be related to externalizing problems in later childhood and adolescence (Caspi et al., 1995; Schwartz, Snidman, & Kagan, 1996; Shaw, Owens, Giovannelli, & Winslow, 2001). Thus, children who are temperamentally prone to anger, aggression or opposition may have conduct problems or be more delinquent later in life. But problem behavior is only one indicator of poor social adjustment. The question is whether or not these children have more problems in their relationships with others.

A number of youth personality traits, or externalizing and internalizing characteristics, have been connected with changes over time in the quality of adolescents’ and young adults’ social relationships. Characteristics that have predicted changes in relationship quality are personality traits, such as extraversion, shyness, neuroticism, or agreeableness (Asendorpf & Wilpers, 1998; Neyer & Asendorpf, 2001), and internalizing problems, such as depressed mood (Nolan, Flynn, & Garber, 2003; Prinstein, Borelli, Cheah, Simon, & Aikins, 2005; Stice, Ragan, & Randall, 2004) or self-esteem (Neyer & Asendorpf, 2001). Thus, youth personality traits and characteristics may affect youth relationships. There is also evidence that later romantic relationships can be affected by early childhood characteristics or personality traits. Even children’s temperament and
behavior styles at age 3 or childhood tantrums have been linked to experiences in relationships at age 21 (Newman, Caspi, Moffitt, & Silva, 1997) and divorce at age 40 (Caspi, Elder, & Bem, 1987). Empirical evidence also suggests that negative emotionality, neuroticism, or aggressiveness during childhood, adolescence, or adulthood could have long term effects on romantic or marital relationships (e.g., Bouchard, Lussier, & Sabourin, 1999; Blum & Mehrabian, 1999; Donnellan, Conger, & Bryan, 2004; Huston & Houts, 1998; Kinnunen & Pulkkinen, 2003; Watson, Hubbard, & Wiese, 2000). Taken together, a variety of children’s and youths’ characteristics are important components of later social adjustment, and these characteristics seem to affect peer relationships concurrently and romantic relationships later in life.

Characteristics of the child might also determine whether the experience of harsh or inept parenting results in later adjustment problems. Findings from a recent study suggest that the link between physical discipline and later problem behavior is moderated by early childhood problems and other positive or negative parenting behaviors or attitudes (Lau, Litrownik, Newton, Black, & Everson, 2006). In this study, for both African Americans and European Americans, physical discipline was related to subsequent child externalizing problems when children had behavior problems at an early age. Although the authors did not test the combination of early externalizing problems, parental discipline and warm parental attitudes in predicting later externalizing problems, they suggested that physical discipline might be particularly damaging when used with children who already have various behavior problems. Thus, the results of the study suggest not only that physical disciplines may cause social adjustment problems, but also that children’s characteristics and parents’ attitudes and other behaviors, are important factors in this link. Thus, the effects of negative parenting on later adjustment may be affected by the child’s earlier behaviors, but the combined effects on adjustment of early problem behaviors, parental discipline, and other parental behaviors remains unclear.

To summarize then, as well as other positive or negative parents’ behaviors that could communicate love or rejection, there is another independent factor – children’s characteristics – that may be related to later adjustment problems. Hence, negative parenting, children’s characteristics and later social adjustment are related. Some theoretical perspectives assume that parents’ behaviors and children’s characteristics are related to each other because the child’s own earlier behavior shows continuity with later problem behavior and might also evoke physical discipline or negative parenting along the way (Belsky, 1997; Lytton, 1997). In this way of reasoning, it is obvious that harsh or inept parenting and children’s characteristics affect each other.
Directions of effects between negative parenting and children’s characteristics

Certain children’s characteristics may create more problems later in life than others – not only problems with peer relationships or relationships with romantic partners, but also in relationships with parents. Parents, like all other human beings, react to the people around them. Given that parents spend a lot of time with their children, it is natural to assume that parents and children will react to each other and affect each other’s behaviors. Negative or coercive behaviors on the part of parents may be evoked by child problem behavior, and then may strengthen child behavioral tendencies (Lytton, 1990). Theoretical perspectives that assume bidirectional relations between parents and children allow the development of social adjustment problems to be thought of as an ongoing and changing process, involving interaction between children and their parents (Bell, 1968; Sameroff & Mackenzie, 2003). For example, coercion theory, which is well-known to place an emphasis on reciprocal influences between parents and children, assumes that certain problem behaviors in children elicit ineffective or harsh parenting behaviors to which children tend to react by escalating their own problem behaviors (Patterson, 1986; Patterson et al., 1992; Snyder & Patterson, 1995). Eventually, parents back down, leaving the child rewarded for his or her behavior. Thus, it seems that parents and children may affect each other, starting at a very early age and extending through adolescence.

In the vast body of research on parenting and child or adolescent development, only a small proportion of studies have adopted a bidirectional approach (Crouter & Booth, 2003). This is because, in many studies, parental and family factors have been regarded as some of the most important environmental influences on a child’s development. In many negative-parenting studies causality resides only with parents, and the child effect was not considered. It was over 30 years ago that Bell (1968) proposed that child qualities influence the harshness of parental discipline and conflicts in the parent-child relationship, but this view has been echoed more recently by temperament researchers (Lytton, 1990; Putnam, Sanson, & Rothbart, 2002; Rothbart & Bates, 1998). Numerous experimental and longitudinal studies have shown that adults react negatively to various types of children’s externalizing problems (e.g., Anderson, Lytton, & Romney, 1986; Buss, 1981; Dix, Ruble, Gruson, & Nixon, 1986; Huh, Tristan, Wade, & Stice, 2006; Mulhern & Passman, 1981; Passman & Blackwelder, 1981). Studies in the behavior genetic tradition have shown that children at genetic risk of antisocial behavior are more likely to experience corporal punishment and negative control (Jaffee, Caspi, Moffitt, Polo-Tomas, Price, & Taylor, 2004; O’Connor, Deater-Deckard, Fulker, Rutter, & Plomin, 1998). Although there is less
research on adolescents, the findings that exist suggest that antisocial or externalizing behavior can affect parenting in negative ways (Ge, Conger, Cadoret, Neiderhiser, Yates, Troughton, & Stewart, 1996). It appears that youth behavior evokes harsh parenting in adoptive parents (Ge et al., 1996). Thus, children’s and adolescents’ behavior and externalizing problems may evoke negative parenting, but the question is whether many other children’s and youths’ characteristics may also evoke negative parental behavior.

Although obvious externalizing children’s and youth problem behaviors may affect parents’ behaviors, youth internalizing problems may also affect parents’ behaviors. There are only a few studies examining the relationship between youth internalizing problems and negative, inept parental behaviors, but there is some evidence that negative parental behaviors might be partly a reaction to youths’ internalizing problems. For example, youths’ depression and anxiety may evoke changes in parents’ negative control (O’Connor et al., 1998), or increase parents’ psychological control over time (Rogers, Buchanan, & Winchell, 2003). Thus, parents react to youth depression and anxiety, but it is not clear whether parents react to other youth internalizing problems, such as low self-esteem or fears of various kinds.

Empirical evidence suggests that children may evoke certain parents’ behaviors, but the question is whether parents’ behaviors have an effect on children’s later behaviors, or whether it is possible to talk about bidirectional relations. Bidirectional effects between parents and children have been examined mostly in empirical research on children’s and adolescents’ engagement in antisocial or delinquent behaviors. There is good evidence for bidirectional effects between childhood problem behaviors and negative, inept parents’ reactions (e.g., Cohen & Brook, 1998; Hastings & Rubin, 1999; Kandel & Wu, 1998; Kochanska, 1998; Maccoby & Jacklin, 1983; Mink & Nihira, 1986; Snyder, Cramer, Afrank, & Patterson, 2005; Stice & Barrera, 1995). Even at a very early age, the troublesome behavior of 12-months-old boys leads to mothers backing off, which in turn leads to greater difficulties at 18 months (Maccoby & Jacklin, 1983). Given that, in early childhood, parents and children affect each others’ behavior, it is safe also to assume that, during adolescence, when a lot of teenagers engage in risky behavior, parents and children will affect each others’ behavior. There is evidence of reciprocity in negative affect or hostile behaviors between parents and adolescents (Carlson & Parke, 1996; Conger & Ge, 1999; Eisenberg et al., 1997; Kim, Conger, Elder, & Lorenz, 2001). There are also bidirectional relations between adolescents’ disruptive and inflexible problem-solving behaviors and their parents’ hostile, coercive, inconsistent parenting strategies (Reuter & Conger, 1998), and between parental conflict-negativity and adolescents’ antisocial
behavior (e.g., Neiderhiser, Reiss, Hetherington, & Plomin, 1999). Parents react to adolescents’ behavior and adolescents react to parents’ behavior. Even though it has been suggested that parents react negatively to youths’ externalizing problems and youth react negatively to certain behaviors on the part of their parents, there is still the question of what kinds of relationships can be found between negative or inept parenting practices and other youth characteristics (such as internalizing problems).

Taken together then, the findings concerning children’s and adolescents’ problem behaviors and harsh or negative parenting give reasons to expect that children’s and youths’ various characteristics and behaviors influence parents’ use of commands, discipline, and punishment; certain behaviors on the part of parents can later affect children’s or youths’ behaviors. Given that parents may respond to other youth characteristics that have not been considered in previous studies, there is also the question of how parents and youths respond to each other over time. For example, depressed mood is often accompanied by lethargy and lack of motivation. Thus, youths in a depressed mood may have trouble getting up for school in the morning or attending to responsibilities such as homework or household chores. Research suggests that parents are often unaware of youths’ depressed mood (Mesman & Koot, 2000). Under these conditions, behaviors such as lethargy, lack of motivation, and trouble getting out of bed can evoke angry outbursts; the longer the duration of depressed mood, the more habitual parents’ angry outbursts may become. Similarly, youths with internalizing problems, such as low self-esteem, which often co-occurs with depressed mood, are probably not very proactive about trying new things or taking on responsibilities. Parents might, out of frustration or disappointment, resort to angry outbursts or rejection, which can affect children’s self-esteem or generate sadness in the long run, which suggests that parents and youth do respond to each other. Thus, there may well be other child and youth characteristics that parents respond to that have not been considered in previous studies.

Combining harsh or inept parenting practices and children's characteristics in the prediction of later social adjustment

Children with certain characteristics might be predisposed to develop various adjustment problems later in life, but the ways their parents handle them can make such development more or less likely. It is reasonable to suppose that children’s behavior evokes the very parenting behavior that ends up contributing to the shaping of their development (e.g., Bates et al., 1998; Leve et al., 2005; Stoolmiller, 2001). Harsh or inept parenting might strengthen temperamental predispositions to develop aggressive conduct problems.
To test this idea, researchers have applied the concept of moderation, which suggests that among children who are, say, temperamentally anger-prone and oppositional, courses of development might differ substantially between those who experience harsh or inept parenting and those who do not. Some studies have reported tests for moderation by investigating interactions between children’s characteristics and harsh or inept parenting in the prediction of later behavior problems. Although many researchers have proposed that children’s adjustment is predicted by interaction between parenting and temperament (e.g., Lerner & Lerner, 1994), few studies have tested this interaction directly. Thus, it is assumed that children’s characteristics and parents’ behaviors are tightly related to each other and may both affect later adjustment problems. But the question is which children’s characteristics can be related to harsh or inept parent behavior and also affect later adjustment.

It is reasonable to suppose that an angry or aggressive child will experience more negative parenting than other children and may have more problems later in life. On the whole, children with a difficult temperament are more likely than other children to develop behavior problems under adverse family conditions, which include unclear family rules, low consensus between parents, parental inconsistency, maternal rejection, inconsistent discipline, and harsh discipline (e.g., Colden, Lochman, & Wells, 1997; Lengua, Wolchik, Sandler, & West, 2000). When difficult temperament is accompanied by harsh parental behavior or poor mother-child relationships, problem behavior increases substantially (Leve et al., 2005). Although child temperament and parents’ behavior, or a combination of the two, are important determinants of later social adjustment problems, there is scant evidence for interaction between harsh parenting and child’s temperament. For example, one early study failed to find an interaction between under-controlled temperament before age 3 and harsh parenting at age 3 in predicting criminal convictions by age 18 (Henry et al., 1996). Also, it has been found that hyperactivity and mother-child interaction are equal predictors of peer relationship problems, but that the interaction between them is not (Hinshaw, Zupan, Simmel, Nigg, & Melnick, 1997; Keown & Woodward, 2006). The findings were that preschool boys, age 4-5 or 6-12, with hyperactive behavior problems were less accepted by their peers, and that hyperactivity and the quality of early mother-child interactions both made unique contributions to the development of peer relationship difficulties. Both these studies, however, were cross-sectional, and both considered only preadolescent boys. Even though some results suggest that the combination of parenting and temperament is an important aspect of the prediction of children’s adjustment, the findings remain mixed.
Why is it that the results of the different studies do not form a clear picture? At present, there is some empirical evidence for the importance of interactions between child characteristics and parenting in the prediction of child problem behavior (Van Leeuwen, Mervielde, Braet, & Bosmans, 2004). Studies that have looked at interactions between child characteristics and negative parental behavior vary with regard to: (a) gender, that is, only boys (e.g., Anderson et al., 1986; Belsky et al., 1998; Colder et al., 1997; Stoolmiller, 2001) or both genders (e.g., Bates et al., 1998); (b) age, that is, preschool (e.g., Paterson & Sanson, 1999; Rubin et al., 1993), school-age (e.g., Lengua et al., 2000; Stoolmiller, 2001; Wootton, Frick, Shelton, & Silverthorn, 1997), or adolescent (e.g., Carlo, Roesch, & Melby, 1998; or (c) design, that is, cross-sectional or longitudinal (e.g., Bates et al., 1998; Belsky, Hsieh, & Crnic, 1998; Rubin, Burgess, Dwyer, & Hastings, 2003; Stoolmiller, 2001). These studies differ also in how parental behavior and child temperament have been assessed. For example, the measures of temperament are either not very early (e.g., Stoolmiller, 2001; Leve et al., 2005) or are solely or partly retrospective judgments of early temperament (Bates et al., 1998; Henry et al., 1996). It would be desirable to see the effect tested using prospective measures of early temperament. One further reason why results presented by different studies are mixed is that it is notoriously difficult to predict and find interaction effects (for discussions of this, see McClelland & Judd, 1993; Stoolmiller, 2001). Therefore, some studies have taken another approach, that of grouping analyses, or of adopting a person-centered approach, to test the effects of harsh or inept parenting (Bates et al., 1998; Stoolmiller, 2001). These studies suggest that children with a difficult temperament are in danger of unfavorable outcomes when they are exposed to negative parenting or parental control.

The question is whether older children with certain characteristics are also in danger of having more problems later in life when they too are exposed to harsh or inept parental behavior. Given that temperament is thought of as the foundation of later personality (Caspi & Silva, 1995; Eisenberg, Fabes, Guthrie, & Reiser, 2000), it follows that researchers interested in older children or adolescents will look at the interplay between temperament or personality and harsh or negative parenting in explaining later adjustment. It has been suggested that ignoring personality-environment interactions and considering only main effects can lead to spurious predictions of problem behavior (Van Leeuwen et al., 2004). While the main effects of child temperament and parental behavior on child problem behavior have been quite well documented in past research, there is not much evidence in the literature about the effects of personality and harsh or inept parenting on adjustment problems (Akse, Hale III, Engels, Raaijmakers, & Meeus, 2004; Andrews, Foster, Capaldi,
Hops, 2000; Barber, 1992; Capaldi & Clark, 1998; Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Donnellan, Larsen-Rife, & Conger, 2005; Kim, Conger, Elder, & Lorenz, 2001; O’Connor & Dvorak, 2001; Prinzie, Onghena, Hellinckx, Grietens, Ghesquière, & Colpin, 2003; Van Leeuwen et al., 2004). For example, negative parental control or coercive parental behavior has been found to be more related to externalizing behavior for under-controllers, characterized by low scores on conscientiousness and benevolence, than for other children. However, negative parental control influences internalizing behavior for introverted children (Prinzie et al., 2003; Van Leeuwen et al., 2004), thus suggesting that children with different personality traits may develop different problems when they experience negative parenting. Thus, negative or inept parental behavior might affect some children more than others.

Negative parenting practices and children’s characteristics can be combined in various ways in the prediction of later social adjustment. Some researchers have tested the idea of moderation, which suggests that among children who are, for example, temperamentally anger-prone and oppositional, the course of development might be very different for those who experience negative or inept parenting than for those who do not. But other researchers have combined parents’ behaviors, child characteristics, and later social adjustment in a different way. The researchers who have tested mediation models assume either that parents’ behaviors mediate the link between children’s problem behaviors and adjustment problems or that children’s behaviors mediate the link between parents’ behavior and adjustment (e.g., Capaldi & Clark, 1998; Clark & Ladd, 2000; Engels et al., 2002; Simons, Chao, Conger, & Elder, 2001). Researchers testing the idea of equal predictors assume that parents’ behaviors and child’s characteristics or personality traits equally predict adjustment problems (e.g., Donnellan, Larsen-Rife, & Conger, 2005; Hinshaw et al., 1997; Keown & Woodward, 2006). Thus, there are several ways of combining parents’ behavior, child characteristics and later social adjustment, each of which has its own advantages and disadvantages. In one way or another, parents’ and children’s behaviors are related to each other and may affect later social adjustment.

Taken together, children or adolescents with a difficult temperament or personality traits are particularly in danger of developing various problems when they are exposed to negative parenting or parental control. Temperament or personality studies suggest that children’s characteristics and harsh or inept parenting are related in predicting later adjustment problems, but these studies have some limitations and raise new questions. For example, one question is how very early temperament, various personality traits, and characteristics such as internalizing problems may be related to harsh or inept parenting in
predicting adjustment problems and the quality of peer or romantic relationships. One of the limitations of temperament studies is that the measures of temperament are either not very early or are solely or partly retrospective judgments of early temperament. Another potential limitation is the use of single aspects of parenting; combinations of harsh parenting behaviors and other behavior that could communicate love or rejection may be more important than single aspects in the prediction of adjustment problems (Deater-Deckard et al., 1996; Lansford et al., 2004). A further question is how children or adolescents with certain characteristics and who experience different combinations of parents’ behaviors (e.g., physical punishment in the context of behaviors that communicate either acceptance or rejection) will behave later in life. Previous studies have not answered this question.

To summarize, previous research leaves several questions unanswered concerning harsh or inept parenting and the consequences of experienced harsh or inept parenting. One question is whether experienced harsh or inept parenting is associated with various adjustment problems for children from different cultures in a similar way. From the literature, it seems clear that cultural expectations have a lot to do with whether children perceive parenting behaviors as harsh, and consequently, whether harsh parenting undermines their adjustment. Most of the research, however, has been performed in North America. Thus, studies are needed that investigate the links between harsh parenting and adjustment in cultures outside North America. A second unanswered question concerns how parents and youths respond to each other over time. Some research findings suggest that parents react to adolescents’ behaviors, and adolescents react to parents’ behaviors. However, studies examining bidirectional relations between inept parental behaviors and adolescent behaviors have mostly concerned youth externalizing problems. Thus, studies are needed that examine the links between inept parenting and various youth characteristics. A third unanswered question is whether the link between harsh or inept parenting and adjustment problems is affected by child and youth characteristics? From some research findings, it seems that harsh or inept parenting, various adjustment problems, and children’s or youths’ characteristics are related; consequently, it is not a simple matter of parents affecting child or adolescent behaviors. To some degree, harsh or inept parenting may be a response to a child’s characteristics. Thus, studies are needed that investigate the links between harsh or inept parenting and adjustment that include children’s characteristics. And finally, there is the question of the ways in which the earlier characteristics of children who experience physical punishment in the context of other behaviors that could communicate negative or positive emotions affect later behavior or
relationships. Previous research suggests that other parental behaviors, in the context of which harsh parenting occurs, may change or influence the effects of physical punishment on later adjustment problems. However, there are only a few studies that include other parental behaviors when examining the impact of physical punishment on problem behavior. Consequently, studies are needed to examine the effects of different combinations of parenting behaviors on various adjustment problems. Thus, several questions remain unanswered concerning harsh or inept parenting and why harsh or inept parenting is linked to various outcomes. This dissertation focuses on these unanswered questions.

The aim of this dissertation

The main aim of this dissertation is better to understand the relationships between harsh or inept parenting and children’s characteristics in the prediction of adjustment problems later in life. It consists of four studies. Study I examines the child-reported incidence of emotional and physical aggression in countries that have not been reported upon in the existing literature; it also investigates the relationship between child-experienced harsh parenting and psychosocial symptoms during adolescence. Study II examines whether links between harsh parenting and adolescents’ peer relationship quality might be explained by youths’ internalizing problems and psychopathy-like personality traits. There was an examination of whether youth characteristics may influence harsh parenting, and also interfere with peer relationships, thus explaining the link between harsh or inept parenting and the quality of peer relationships. Since there is evidence that youths with characteristics like depression might perceive their friendships or friends’ behaviors toward them differently from their friends (Daley & Hammen, 2002), an additional investigation was made of whether the results can be verified using peers’ independent reports of relationship quality. Study III examines how parents and youths respond to each other over time, and also tests gender differences. Additional analyses of the mechanisms underlying the links between youth behaviors and inept parental behaviors were investigated. Studies IV and V examine various combinations of harsh parenting behaviors and model their relations to early temperament unmanageability and adolescent problem behaviors or romantic relationships quality in adulthood. These studies examine how distinct patterns of physical discipline and discordant relationships relate to early unmanageable temperament and later conduct problems, norm violations, and romantic relationship quality. They also consider how, apart from these links, early unmanageability
relates to later conduct problems and norm violations or the quality of romantic relationships in adulthood. The following research questions were posed:

1) Is experienced harsh parental behavior associated with adjustment problems for children from different cultures in a similar way? (Study I)

2) How do parents and youths respond to each other over time? (Study II, Study III)

3) Is the link between harsh or inept parenting and adjustment problems affected by child and youth characteristics? (Study II, Study III, Study IV, Study V)

4) How do the early characteristics of children who experience physical punishment in the context of other behaviors that communicate negative emotions affect later behavior? (Study IV, Study V)
II Method

Participants and procedure

Sample 1

The sample for Study I included school students 10-14 years of age in 4th to 7th grade from several Baltic and Eastern European countries, such as Latvia, Lithuania, Macedonia, and Moldova. Children from 4th grade were mostly 10-11 years old, and those from 7th grade mostly 13-14 years-old. Any child younger than 10 years or older than 14 years was excluded from the study. The primary purpose of the study was to evaluate relationships between emotional and physical aggression and psychosocial symptoms in several countries where such a type of investigation had not been conducted before. Data collection took place in the 4th and 7th grade classrooms during the school day, and was performed according to the same procedure by each country’s research team. Participants included 297 children from Latvia, 300 children from Lithuania, 302 children from Macedonia, and 246 children from Moldova. The data were collected during the spring of 1998 in Latvia, the spring of 1999 in Lithuania, and the spring of 2000 in Macedonia and Moldova. Data collection within each country took place in two large-city schools, two medium-city schools, and two small-city or rural schools. The cities and schools were randomly chosen from different regions of each country, with the stipulation that the children attending any selected school would be fluent in the major national language. Such a stipulation was made since the questionnaires for this initial study had been translated into the national languages of each country, namely Latvian, Lithuanian, Macedonian, and Moldovan. Consequently, the ethnic composition of each sample was primarily Latvian, Lithuanian, Macedonian, and Moldovan – greater than 90% in each case.

Since research ethics committees did not exist in the four countries involved in this study, the research team consulted with epidemiological researchers from the United States with regard to the most appropriate strategy for guaranteeing that the rights of the subjects would be respected. Permission to conduct the study was first received from local authorities and school boards. Parents then received information that a study was taking place concerning adolescents’ thoughts, feelings and relationships, and that the study was voluntary and confidential. If parents objected to their child’s participation, they were asked to inform their research team. In fact, several parents from each location did so, and their children were excluded from the study. Children were told that they would be asked to fill in a questionnaire regarding their thoughts, feelings, and relationships, and were informed that participation in the study was voluntary, completely confidential, and anonymous.
After the questionnaires had been filled-in, the children were given the contact information of research team members if they wished to discuss any issues or questions concerning the study.

Sample 2

This sample was used in Studies II and III. The data were from a five-year longitudinal study that took place in one community in central Sweden. This community has a population of about 26,000. The unemployment rate is similar to that in Sweden as a whole (6%). The mean income is somewhat lower than the rest of the country (214,000 Swedish Crowns per year compared with 223,000 for the rest of the country). Twelve percent of the inhabitants in the community have a foreign background. The data collection started in the fall of 2001. The primary purpose of the longitudinal study was to understand the joint roles of parents, peers, and individual characteristics in the development of adolescent adjustment problems and criminality.

All students in grades 4 through 12 (roughly, ages 10 to 18) were invited to participate in the study each year. One new cohort came into the study each year (those entering the 4th grade) and one cohort left the study (those who graduated from high school the year before). Every second year, parents of children participating in the study received a questionnaire in the mail, and they participated by filling it in and returning it. Only parents of 4th through 10th graders were asked to participate, however, because many youths in 11th and 12th grades would have reached the legal age of independence in Sweden (18), were living on their own, or both. We targeted all youths in the community so that when youths named peers who were important to them, those peers were also in the study and had self-reported on their own behaviors or relationships. In this way, data on peers’ behaviors or relationships were independent of the youths who named them and not affected by the youths’ own perceptions and biases, which might have inflated similarity (e.g., Iannotti, Bush, & Weinfurt, 1996).

Youths were recruited in their classrooms during school hours. They were told what kind of questions would be included in the questionnaires and how long it would take to fill them in. They were informed that participation was voluntary and that, if they chose not to participate, they were free to do something else instead. They were assured that if they did participate, their answers would not be revealed to their parents, teachers, the police, or anyone else. Parents were informed about the study in advance, in meetings held in the community and by mail. Some parents did not want their children to participate in the study (1%). Parents were also told that they could withdraw their child from the study at any time
they chose. Thus, youths participated if they voluntarily chose to do so and if their parents did not object to their participation. They filled in the questionnaires during regular school hours in sessions administered by trained research assistants. Teachers were not present. Youths were not paid for their participation, but for each of the classes in grades 4 through to 6 we made a contribution to the class fund, and for each of the classes in grades 7 through to 12 we arranged a lottery with movie tickets as prizes; all those who stayed in the room, whether they filled in a questionnaire or not, were eligible for the lottery.

Study II used data from participants who were in 7th through 9th grades (ages 13-15) at the first of two survey waves (Time 1). Because these analyses involved close peer relationships, the sample was limited to those who participated at both time points and had reported having a close peer at Time 1 and Time 2, and also had reported on a relationship with a close peer at Times 1 and 2. Study III used data from parents’ reports from Times 1 and 3 for youths who were in grades 4 through 8 at Time 1 (ages 10 through 14), so that both youths and their parents participated at two time points.

Sample 3

The sample used for Studies IV and V was based on data from a longitudinal study of Swedish children and their parents that was started in the mid-1950s by researchers at the Clinic for the Study of Children’s Development and Health at the Karolinska Hospital, Stockholm. The study was part of an international investigation organized by the Centre International de l’Enfance in Paris. Every fourth pregnant woman who registered at the Solna Prenatal Clinic (in a suburb of Stockholm) from April 1955 to April 1958 was invited to participate in a long-term pediatric study (in Sweden, all pregnant women receive regular care at prenatal clinics). Only 3% of those who were asked refused to join the study. Of the 198 mothers agreeing to participate, 6 withdrew due to abortion, and 4 due to infant death during delivery, and a further 5 were excluded due to the premature infant’s low birth weight (under 2,000 grams). A pilot group comprising 29 children and their mothers were contacted either before or after birth, and were added to the study. Since 98.5% of mothers give birth to children in Sweden, invitation to participate to those mothers after birth does not automatically suggest a selection effect, but a selection effect is likely due to differences in mothers’ willingness to cooperate. In this way, 183 children from the Solna Antenatal Clinic (103 boys and 80 girls) and 29 children from the pilot group made up the 212 children (122 boys and 90 girls) who took part in the study. During 1956-1957, there were 52.1% male births in Solna compared with 51.6% in Sweden as a whole. A t-test, conducted by Karlberg and colleagues (1968), did not show any significant percentage
difference. This indicates that the distribution of boys versus girls did not differ by more than might have been expected by chance.

Comparisons on parents’ socioeconomic status, age, and marital status, as well as on sibling order and children’s gestational age and birth weight, have shown the sample to be representative of children in Swedish urban communities (see Karlberg, Klackenberg, Engström, Klackenberg-Larsson, Lichtenstein, Stensson, & Svennberg, 1968; Stattin & Klackenberg-Larsson, 1990). Extensive information about the participants has been collected over the years by means of somatic registers, medical examinations, interviews, inventories, ratings, objective tests, sociometric methods, and projective techniques. On each data collection occasion, the aim of the collection was to map the participants’ somatic, psychological, and social development.

Children and their parents were examined four times with equal spacing (every three months) during their first year, twice (every six months) during the second year, and annually (close to their birthdays) thereafter up to the age of 18. Collections of data were also performed at the average ages of 21, 25, and 35 years. Up to the age of 18, in order to control for differences in chronological age, all subjects were tested as closely as possible to their birthdays: below one year, ± 2 weeks; and, from 18 months on, ± 4 weeks. When the participants were 25 years-old, 85% participated in the data collection. When they were approximately 35 years-old, over 90% participated in the data collection.

**Measures**

Table 1 shows the measures used in each study.
Table 1. *The measures that were used in five studies*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Study I</th>
<th>Study II</th>
<th>Study III</th>
<th>Study IV</th>
<th>Study V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harsh or inept parenting</td>
<td>Emotional aggression; Physical aggression (CTS, Straus, 1995)</td>
<td>Negative parenting practices</td>
<td>Parents’ “gut-level” reactions</td>
<td>Discordant relationships (Statin &amp; Klackenberg, 1992)</td>
<td>Discordant relationships (Statin &amp; Klackenberg, 1992)</td>
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<td></td>
<td></td>
<td></td>
<td>Monitoring efforts (Kerr &amp; Statin, 2000)</td>
<td>Striking; Beating (Statin, Janson, Klackenberg-Larsson, &amp; Magnusson, 1995)</td>
<td>Striking; Beating (Statin, Janson, Klackenberg-Larsson, &amp; Magnusson, 1995)</td>
</tr>
<tr>
<td>Social adjustment</td>
<td>Psychosocial symptoms</td>
<td>Relationships with peers</td>
<td>Problem behaviors</td>
<td>Problem behaviors</td>
<td>Relationships with partner</td>
</tr>
<tr>
<td></td>
<td>Depression; Anxiety; Anger; Dissociation; Posttraumatic stress (TSCC, Briere, 1995)</td>
<td>Very important peers</td>
<td>Delinquency</td>
<td>Conduct problems (Statin, Janson, Klackenberg-Larsson, &amp; Magnusson, 1995)</td>
<td>Relationships quality</td>
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<td></td>
<td>Sexual concern (ASCQ, Hussey &amp; Singer, 1993)</td>
<td>Support and trust in relationships with peers; Conflicts in relationships with peers (FQQ, Parker &amp; Asher, 1993)</td>
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</tr>
<tr>
<td>Characteristics</td>
<td>Adolescence</td>
<td>Adolescence</td>
<td>Childhood</td>
<td>Childhood</td>
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<tr>
<td></td>
<td>Psychopathy-like personality traits (YPI, Andershed, Kerr, Statin, &amp; Levander, 2002)</td>
<td>Delinquency</td>
<td>Early unmanageability (Statin, Janson, Klackenberg-Larsson, &amp; Magnusson, 1995)</td>
<td>Early unmanageability (Statin, Janson, Klackenberg-Larsson, &amp; Magnusson, 1995)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internalizing problems (Nurmi, 1993; Radloff, 1977; Rosenberg, 1979)</td>
<td>Negative behavior in the family</td>
<td>Youth’s warmth and closedness</td>
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<td></td>
</tr>
</tbody>
</table>
Harsh or Inept Parenting
Studies I, II, III, IV, and V featured several aspects of harsh parenting – harsh, negative parenting practices, such as anger outbursts, coldness-rejection, or discordant mother-child relationships, and corporal punishment, such as striking, beating, or physical aggression – or inept parenting, i.e., parents’ behaviors that might underlie negative parenting practices, such as worry, distrust, or monitoring.

Emotional or Psychological Aggression
For the measure of emotional or psychological aggression, or what was termed abuse in Study I, the Conflict Tactics Scale (CTS) by Straus (1995) was used. This widely utilized scale assesses the extent of emotional abuse or aggression a child reports on having experienced within the past year. The stem statement for all the items was: “Please indicate how often your parents did each of these things in the past year.” The original scale was modified for the study, with several items added to the emotional abuse, aggression scale (e.g., “tried to make you feel guilty”). The rating of the items was changed to a 5-point Likert scale (never 1 to always 5). The final version included 23 items (together with physical aggression items). Two initial questions asked the child to report on positive parental behaviors. Emotional abuse, psychological aggression (11 items) was assessed with items such as “insulted you,” “tried to make you feel guilty,” “made you feel like you were a bad person,” and “sulked or refused to talk about an issue.” Alpha reliability estimates, based on the present samples in each of the four countries, ranged from .79 to .83 for the emotional abuse, aggression scales.

Negative Parenting Practices
To measure some aspects of harsh parenting, described in Study II as negative parenting practices (including angry outbursts and coldness-rejection), youths’ responses to 11 statements about how their parents typically responded to wrongdoing were used. There were three response options, ranging from “never” to “most often”. There were 5 items for angry outbursts and 6 items for coldness-rejection, and youths responded to each item for their mother and father separately. For these analyses, the mean of angry outbursts and coldness-rejection was used. Also, because reports for mothers’ and fathers’ behaviors were substantially correlated ($r (580) = .68, p < .01$ and $r (582) = .62, p < .01$ for angry outbursts and coldness-rejection, respectively), reports from both parents were combined. The stem question for all of these items was: “What happens if you have done something your parent really dislikes?” Youths rated angry outbursts statements were: “Becomes very angry and
has an outburst,” “Has outbursts of anger and tells you off,” “Has a hard time controlling his or her irritation,” “Quarrels and complains loudly,” “Screams and yells at you.” The alpha reliabilities for this scale were .87 at Time 1 and .89 at Time 2 in Study II. Youth also rated coldness-rejection statements: “Ignores you if you try to explain,” “Doesn’t talk to you for a long while,” “Is silent and cold towards you,” “Doesn’t listen to your opinions or explanations,” “Makes you feel guilty for a long time,” “Avoids you.” The alpha reliabilities for this scale were .77 at Time 1 and .83 at Time 2 in Study I. These scales were significantly correlated with each other, both at Time 1 ($r = .70, p < .001$), and at Time 2 ($r = .62, p < .001$).

**Discordant Mother-Child Relationships**

In Studies IV and V, interviewers’ ratings were used to describe discordant relationships between mothers and children. Interviews were conducted annually. After each interview occasion, from child ages 6 to 12 years, the interviewers made judgments of the quality of mother-child relationships based on their experiences during the interview and mothers’ responses to interview questions. The interviewers used a 3-point Likert scale with scale values: (1) “good,” (2) “indifferent,” and (3) “bad.” The term “bad” was used for cases characterized by pronounced conflict or by apparent insensitivity. The term “indifferent” was used where there was some evidence of conflict, disagreement, or insensitivity, or where relationships were changing back and forth – at times good and at times bad (see Stattin & Klackenberg, 1992, for a description of this measure). All the questions were posed to mothers only.

**Maternal Rejection**

For the measure of mother’s rejecting behavior in Study IV the (grown-up) children’s retrospective reports given at age 25 were used. Participants were instructed to think about how they perceived their mothers when they were 12 years of age or younger, and to evaluate the following statements: “My mother demanded more of me than one should from a child,” “My mother was really interested in what I did and how I felt” (reversed), “My mother had very few rules for me,” “My mother made me feel wanted and needed” (reversed), “My mother nagged at and quarreled with me when I behaved badly,” “My mother made me feel that what I did was important to her” (reversed), “My mother did not spend more time with me when it was necessary,” “My mother encouraged me to take my own initiatives” (reversed), “My mother did not want to me to bring my friends home.”
“My mother spoke to me in a warm and affectionate manner” (reversed). There were four response options, ranging from “does not apply at all” to “applies perfectly.” Higher scores indicate more rejecting behavior. The alpha reliability for this scale was .82.

**Physical Aggression**

For the physical aggression measure in Study I, the Conflict Tactics Scale (CTS) by Straus (1995) was used. The stem statement for all the items was: “Please indicate how often your parents did each of these things in the past year.” The ratings of the items were on a 5-point Likert scale (never 1 to always 5). The final version included 23 items (together with emotional aggression). Two initial questions asked the child to report on positive parental behaviors. Physical abuse, aggression (10 items) was assessed by inquiring about potential parental behaviors, ranging from less severe to more severe forms of physical abuse, such as “threw something at you,” “slapped or spanked you,” to “beat you up,” and “burned or scalded you.” Alpha reliability estimates, based on the present samples in each of the four countries, ranged from .79 to .87 for the physical abuse, aggression scales.

**Striking and Beating**

For the measures of harsh parenting in Studies IV and V, mothers’ reports of their striking (milder corporal punishment) and beating (stronger corporal punishment) were used, which were given on each assessment from 6 to 12 years. For analysis, mean scores for striking and beating for all the age periods were created. Each mean score represented the average level of each variable over this period. All the questions were posed to mothers only.

**Striking.** To measure striking in Studies IV and V, mothers answered whether or not (and how often) they struck their children. When children were 6 to 9 years, there were six response options, ranging from “never” to “on many occasions every day.” Because of a lower incidence of striking of older children, the response options were changed from age 10 to age 12; there were five response options, ranging from “never” to “daily.”

**Beating.** To measure beating in Studies IV and V, when the child was 6 to 9 years, mothers answered whether or not they had given their child a real beating. For children ages 10 to 12 years, mothers answered about beating frequency. There were five response options, ranging from “never” to “once a day.” To keep consistency in measures over time this measure was dichotomized.
Inept Parental Behavior

For the measures of inept parents’ behavior that might underlie negative parenting practices, or even harsh parenting, in Study III parents’ reports of their worries, distrust, and control were used.

Parents’ “Gut-Level” Reactions. This label for emotionally tied reactions, such as worries and distrust, that might underlay negative parenting was used in Study III. Gut-level reactions are the mean of two scales. Worries was a six-item scale. Parents responded to questions such as “Are you worried that your child will not make it in school?” “Are you worried that your child will end up in bad company?” and “Do you worry about what your child is doing together with friends during evenings and weekends?” The alpha reliability was .88 at Time 1 and Time 3. Trust (reversed) was a six-item scale. Parents responded to questions such as: “Do you trust that your child does not enter into bad company?” and “Do you trust that your child does not do anything dumb in his or her free time?” The alpha reliability for this scale was .80 at Time 1 and .81 at Time 3. The correlation between the two scales was .44 (p < .001).

Monitoring Efforts. This measure in Study III was composed of the items from two scales – control and solicitation – which had been developed previously to measure parents’ active monitoring efforts (Kerr & Stattin, 2000). The scales tapped parents’ efforts to keep track of their youth’s whereabouts and associations by requiring the youth to do things like checking with parents before making plans to go out with friends (control), and talking to the youth, the youth’s friends, and the friends’ parents in order to stay informed (solicitation). Five items that assessed solicitation were: “This month, have you been in contact with and talked to the parents of your child’s friends?” “How often do you talk to your child’s friends when they come over to your house (ask what they do, how they think and feel about different things)?” “During the past month, how often have you started a conversation with your child about his or her free time?” “How often do you ask your child to sit down and tell you what has happened during an ordinary day in school?” and “Do you usually ask the child to tell about what happens in his or her free time (who he or she meets in town, leisure activities, etc.)?” Five items that tapped control were: “Does your child need to have your permission to stay out late on a weekday evening?” “Does your child need to ask you before he/she can decide with his/her friends what they will do on a Saturday evening?” “If your child has been out very late one night, do you require that he/she explains what he/she did and whom he/she was with?” “Do you always require that your child tells you where he/she has been at night, who he/she was with, and what they did together?” and “Before your child goes out on a Saturday night, do you require him/her to
tell you where he/she is going and with whom?” The alpha reliability for the 10-item monitoring strategies measure was .76 at Time 1 and .79 at Time 3.

Children’s and Adolescents’ Characteristics

Early unmanageability

For the measure of early unmanageability in Studies IV and V, temper tantrums and resistance to control were used. Mothers’ ratings from 3 months to 3 years were combined. When the child was 3-12 months, the questions posed were about anger-prone temperament: “Does he/she often get angry?” “Does he/she often get extremely angry?” The alpha reliability for this scale was .81. When the child was 18 months to 3 years several age-appropriate unmanageability items were added: “Does he/she want to get his/her own way?” “Is he/she often disobedient with you?” “Is he/she a noisy child?” “Is he/she a destructive child?” The alpha reliability for this scale was .69.

Adolescents’ Psychopathy-Like Personality Traits

A youth self-report instrument designed to tap subclinical levels of these personality traits in community samples of youths 12 years or older, the Youth Psychopathic Traits Inventory (YPI) by Andershed, Kerr, Stattin, & Levander (2002), was used in Study II to evaluate adolescents’ psychopathy-like personality traits. The ten subscales in this instrument load on three separate factors, representing the dimensions that have been verified in studies using clinical assessment procedures on adult forensic samples (e.g., Cooke & Michie, 2001). This instrument has been found to be reliable and construct valid (Andershed, Hodgins, & Tengström, in press; Dolan, & Rennie, 2006a; Dolan, & Rennie, 2006b; Poythress, Dembo, Wareham, & Greenbaum, 2006; Skeem & Cauffman, 2003). For Study II, a total YPI score, which was calculated as the mean of scores on the three dimensions, was used. The Grandiose, Manipulative Traits dimension comprises 20 items, equally divided among four subscales: Dishonest Charm, Grandiosity, Lying, and Manipulation. Examples of the items are: “I have the ability to con people by using my charm and my smile,” “I am better than everyone else,” “Sometimes I find myself lying without any particular reason.” All the 20 items were averaged to create one dimension. The alpha reliabilities were .85 at Time 1 and .85 at Time 2. The Callous, Unemotional Traits dimension comprises 15 items from three subscales: Unemotionality, Remorselessness, and Callousness. Some examples of the items are: “I think that crying is a sign of weakness, even if no one sees you,” “I usually feel calm when other people are
scared,” and “I have the ability not to feel guilt and regret about things that other people would feel guilty about.” All the 15 items were averaged. The alpha reliabilities for this dimension were .74 at Time 1 and .79 at Time 2. The Impulsive, Irresponsible Traits dimension includes 15 items for Impulsiveness, Thrill-Seeking, and Irresponsibility. Examples of the items are: “I prefer to spend my money right away rather than save it,” “I like to be where exciting things happen,” and “I have probably skipped school or work more than most other people.” All the 15 items were averaged to create one dimension. The alpha reliabilities were .77 at Time 1 and .77 at Time 2 in Study I. These three dimensions were significantly and substantially correlated with each other at Time 1 and Time 2 ($r$ from .54 to .78, $p$ < .001).

Adolescents’ Internalizing Problems

To measure youth internalizing problems in Study II, youths’ responses to statements about self-esteem, depressed mood, and failure expectations were used. For Study II a mean value of the three scales was used. These three scales were significantly and substantially correlated with each other at both Time 1 and Time 2 ($r$ from .39 to .61, $p$ < .001. To measure Self-Esteem, the Rosenberg Self-Esteem Scale (Rosenberg, 1979) was used. Adolescents were asked to rate how well they were described by each of ten statements. There were four response options, ranging from “do not agree at all” to “agree totally.” The statements were: “In general, you are satisfied with yourself,” “Sometimes you think that you are not useful for anything,” “You think that you have many good characteristics,” “You manage to do things as well as most others do,” “You think that you do not have a lot to be proud of,” “You feel really useless from time to time,” “You think that you are worth a whole lot, at least as much as anyone else,” “You wish you could have better thoughts about yourself,” “In general, it is easy for you to feel unsuccessful,” and “In general, you see yourself as positive.” The items were reversed, when necessary, so that high scores indicated low self-esteem. The alpha reliabilities for this scale were .89 at Time 1 and .89 at Time 2. Questions for measuring Depressed Mood in Study II were taken from the Child Depression Scale from the Center for Epidemiological Studies (Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986; Radloff, 1977; Roberts, Lewinsohn, & Seeley, 1991; Schoenbach, Kaplan, Grimson, & Wagner, 1982; Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977). The measure includes twenty items, with three response options ranging from “not at all” to “often.” Examples are: “Couldn’t feel happy, even if my family or friends tried to cheer me up,” “Felt ‘down’ and unhappy,” “Felt like I wanted to cry,” “Felt sad,” and “Thought that others didn’t like me.” The alpha reliabilities for this scale
were .89 at Time 1 and .91 at Time 2. Youths reported on their *Expectations of Failure* on difficult tasks, a construct that is related to self-esteem, but not synonymous with it (Nurmi, 1993; Nurmi, Onatsu, & Haavisto, 1995; Nurmi, Salmela-Aro, & Ruotsalainen, 1994). They evaluated four statements, with four response options, ranging from “do not agree at all” to “agree totally.” The statements were: “I don’t have faith in my ability to cope with hard tasks,” “I easily become uncertain when I face new tasks,” “Often I don’t even think there is any point in trying when I face demanding tasks,” and “The feeling that it’s hard for me to cope with things makes me not do as well in school as I could do.” The alpha reliabilities for this scale were .74 at Time 1 and .71 at Time 2.

**Negative Behavior in the Family**

A measure of youths’ negative behavior in the family for Study III was formed as the mean of three scales – defiance, disclosure (reversed), and off-task behavior. It was designed to evaluate youth behavior at home. Defiance was a three-item scale. Parents responded on 4-point Likert scales from “does not apply at all” to “applies exactly.” The items were: “Often does things although we say several times that it is not allowed,” “You often need to tell him/her several times when he/she has done something wrong to get him/her to stop,” and “Usually it is sufficient to rebuke him/her one time to stop him/her from doing something that he/she is not allowed to do (reversed).” The scale had an alpha reliability of .82 at Time 1 and .83 at Time 3. Disclosure comprised five items. Parents reported on their child’s disclosure of information about daily activities, with questions like: “Does your child hide a lot from you about what he/she does during nights and weekends?” “Does your child talk at home about how he or she is doing in the different subjects at school,” and “Does your child keep a lot of secrets from you about what he or she is doing during his or her free time?” The alpha reliability was .81 at Time 1 and .78 at Time 3. Off-task behavior was an eight-item scale taken from a revised Strategy-Attribution Questionnaire (Nurmi, Salmela-Aro, & Ruotsalainen, 1994). Parents responded on a 4-point scale from 1 (totally disagree) to 4 (totally agree). Some examples are: “It is too easy for him/her to think of other things, day dream or become lost in thought when he/she should concentrate on more important tasks,” “He/she often finds other things to do when solving a difficult problem,” and “If a hard task comes up, he/she quickly chooses to do something else.” The alpha reliability at both times was .90. The mean inter-correlation between these three scales was .46, *p < .001*(range = .44 to .49).
Youth’s Warmth and Closedness

To measure youth characteristics or behavior in Study III youth warmth and closedness measures were used. The warmth measure parallels what youths were asked about their parents’ expressions of Emotional Warmth. Four items were used. Parents were asked whether their child: “Often says or does something nice without an obvious reason,” “Does small things to show tenderness (e.g., hugs, smiles),” “Says that he or she is proud of us,” and “Shows that he or she likes us without a reason, almost regardless of what we do.” Responses were given on a 4-point scale ranging from “does not apply at all” to “applies exactly”. The alpha reliability for the scale was .77 at Time 1 and .80 at Time 3. The degree to which the youth seemed Closed to parents’ influence was measured with five items. Parents rated the following statements on a 4-point scale ranging from “does not apply at all” to “applies exactly”: “Our child keeps his/her feelings to him/herself when he/she is worried or upset, “Our child prefers to comfort him/herself,” “Our child doesn’t seem to think about keeping track of where he/she can reach us,” “Our child does not show who he/she really is,” and “Our child keeps his/her feelings to him/herself after we have been apart for a week or more.” The alpha reliability for the scale was .78 at Time 1.

Youth Delinquency

For the evaluation of youth delinquency in Study III, as one of the youth characteristics to which parents might react, self-reported delinquency was used. Youth-reported delinquency was measured with 21 questions about shoplifting, being caught by the police, vandalizing public or private property, taking money from home, creating graffiti, breaking into a building, stealing from someone’s pocket or bag, buying or selling stolen goods, stealing a bike, being in a physical fight in public, carrying a weapon, stealing a car, stealing a moped or motorcycle; using marijuana or hashish, and using other drugs. The alpha reliability at Time 1 was .92.

Social Adjustment Problems

Psychosocial Symptoms

To evaluate psychosocial symptoms among children and youth in Study I, children and youth answered questions about various symptoms or sexual concerns that they had experienced in everyday life situations.

Symptoms. Psychosocial symptoms were assessed using the Trauma Symptom Checklist Children (TSCC) by Briere (1995), a 54-item 4-point scale (0 never to3 almost all
of the time). The items are grouped into six subscales: Anxiety, Depression, Anger, Posttraumatic Stress, Dissociation, and Sexual Concerns. Mean scores were calculated for each subscale. Alpha reliability ratings were acceptable to good for the data sets of the four countries: Depression, .75–.82; Anxiety, .76–.81; Anger, .74–.80; Dissociation, .71–.78; Posttraumatic stress, .74–.84; and Sexual Concerns, .69–.76.

**Sexual Concerns.** Adolescents completed the Sexual Concerns Questionnaire (ASCQ) by Hussey and Singer (1993). This 31-item scale was administered to 7th grade participants only, since it is meant specifically for adolescents. The items were rated on a 4-point scale (“never” 0 to “almost all of the time” 3). The Sexual Concerns Questionnaire rated somatic problems (5 original items, plus two items added for the purposes of this study) because clinical experience in several of these countries had indicated markedly elevated rates of post-traumatic somatic complaints – sexual concerns (14 items), and relationship issues (10 items).

**Adolescent Problem Behavior**

**Adolescent Conduct Problems.** For the measures of conduct problems in Study IV, behaviors that are included as diagnostic features of Conduct Disorder, Oppositional Defiant Disorder, or both in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., [DSM-IV] American Psychiatric Association, 1994) were used. When the child was 15 or 16 years, behavior problems were measured by asking parents the following questions: “Is he/she defiant when rebuked?” “Can you trust him/her not do things which he/she should not do?” (reversed), “Does he/she break things willfully?” “Argue to have his/her own way?” “If you (Mother) chastise him/her, does he/she seem to mind?” (reversed), “If you (Mother) chastise him/her, will he/she do the same thing again the same day?” “If father chastises him/her, does he/she seem to mind?” (reversed), “If father chastises him/her, will he/she do the same thing again the same day?” “Does he/she stay out without your approval?” “Is he/she disobedient on purpose?” “Does he/she tell fibs to get out of trouble?” “Does he/he take things he/she knows he/she should not have?” “Does he/she get really furious?” and “Does he/she get irritated over trifles?” There were five response options, ranging from “never” to “always” to all the questions. Higher scores indicate more problem behavior. The alpha reliability for this scale was .89.

**Adolescent Norm Violations.** In addition to mother-reported conduct problems, in Study IV, youths’ and interviewers’ reports of behaviors that are listed as associated features of Conduct Disorder, Oppositional Defiant Disorder, or both in the *DSM-IV* (American Psychiatric Association, 1994) were used. They are truancy, alcohol drinking,
drug use, and early initiation of sexual intercourse. For the analysis, a mean score of these four standardized items was created. The alpha reliability for the four items was .71. This adolescent- and interviewer-rated norm violations measure was significantly correlated with mother-rated conduct problems at 15-16 years, $r = .32, p < .001$.

The *Truancy* measure was a judgment made by those who interviewed the adolescents and their parents when the adolescents were 16 years-old. Based on information from both the youths and their parents, the interviewers rated truancy on a four-point scale ranging from: (1) “no sign of being tired of school or truancy” to (4) “a lot of truancy from school.” Alcohol Drinking at age 18 was measured by total alcohol consumption per month (beer, wine and spirits). The questions were “How much wine do you drink per month?”, “How much spirits do you drink per month?”, “How much beer do you drink per month?” The response scale for wine consumption was (1) none to (9) 10 glasses per month; the response scale for spirits consumption was (1) none to (9) 18 glasses (15cl) per month; and, the response scale for beer consumption was (1) none to (9) more than 80 45cl cans per month. At the age of 17, youths reported on their prior Drug Use (hash, amphetamines, LSD, opium, and other drugs). A composite measure of drug use was formed on a 7-point scale, based on the frequency of use of any of these drugs. At age 25, participants answered the question at what age they had their First Intercourse. There were fifteen response options ranging from “at the age of 11” to “at the age of 25.”

**Delinquency.** Youth-reported delinquency in Study III was measured by 21 questions: about shoplifting, being caught by the police, vandalizing public or private property, taking money from home, creating graffiti, breaking into a building, stealing from someone’s pocket or bag, buying or selling stolen goods, stealing a bike, being in a physical fight in public, carrying a weapon, stealing a car, stealing a moped or motorcycle, using marijuana or hashish, and using other drugs. The alpha reliability at Time 3 was .93.

**Relationships with Peers during Adolescence**

**Assessment of Peers.** To evaluate relationships with peers, a definition of peers was given to adolescents in Study II. Youths were asked about their important peers, which we defined as follows: “Someone you talk to, hang out with, and do things with. It cannot be your parents or another adult. It could, for example, be a friend, a sibling, or a boyfriend or girlfriend.” It was explained, further, that these important peers could live anywhere, did not have to be the same age as the participant, and could be either boys or girls. Adolescents were asked to name four important peers in order of importance, and then to rate different aspects of their relationships with their most important peer, or the one they
named first. In Study I, there was a focus on the most important peer. For 77% of participants, the most important peer was a friend, for 11% it was a sibling, and for 7% it was a romantic partner. Adolescents who named a sibling as their most important peer at Time 1 (73 participants) or at Time 2 (40 participants) were excluded from the analyses to keep parent and peer relationships independent. For most participants, the most important peer at Time 1 was different from the most important peer at Time 2. Only 211 youths named the same person at both times.

**Relationships with Peers.** Youths answered 12 questions concerning their relationships with their first-mentioned, or most important, peer in Study II. There were five response options, ranging from “do not agree at all” to “agree perfectly.” Questions were taken from Parker and Asher’s (1993) Friendship Quality Questionnaire. The questions were about conflicts and caring in relationships or the friend’s behavior in the relationship. Principal-components analyses of the 12 variables showed two clear factors, which we labeled “support and trust” and “conflict.” The factor loadings ranged from .64 to .90 and the cross-loadings ranged from -.01 to -.20. Concerning support and trust, youths rated the following items about their most important peer’s behavior: “Says I’m good at different things,” “Says that I’m pretty smart,” “Makes me feel that I have good ideas,” “Sticks up for me if others talk about me behind my back,” “Says ‘I’m sorry’ when he or she has hurt my feelings or been mean,” “Would like me even if nobody else did,” “Keeps his or her promises,” and “Doesn’t give away my secrets to others.” The alpha reliabilities for this scale were .86 at Time 1 and .89 at Time 2. Concerning conflicts in the relationships youths evaluated four statements about conflict: “We often get angry with each other,” “We argue a lot,” “We often get annoyed with each other,” and “We fight a lot.” The alpha reliabilities for this scale were .90 at Time 1 and .91 at Time 2 in Study I.

**Relationship Quality with a Partner**

For the measure of romantic relationships quality in Study V, participants evaluated 10 items describing the relationship with their romantic partner at age 35. The questions were: “Does your partner talk with you about his/her problems?” (reversed), there were four response options, ranging from “yes, always” to “never;” “How warm do you feel towards your partner?” (reversed), there were five response options, ranging from “very much” to “not at all;” “How do you get along with your partner?” there were five response options, ranging from “bad” to “very good;” “How often do you really get mad at your partner?” (reversed), there were five response options, ranging from “never” to “often;” “How would you describe your husband/wife?” there were five response options, ranging
from “only negative features” to “only positive;” “Do you and your husband/wife have any interests in common?” there were five response options, ranging from “no interests in common, no possibilities for recreation together” to “totally share each others activities always with the same pleasure;” “If you would give a picture of your relationships how would you describe the atmosphere at home?” there were six response options, ranging from “very disharmonic, divorce atmosphere” to “very harmonic, we share the same attitude, open, warm home atmosphere;” “How often do you cuddle? If you would think one month back, how often did you spontaneously kissed or hugged each other during last month?” there were five response options, ranging from “not at all” to “daily, almost daily;” “How is your sexual life? Are you well adapted sexually to each other? Do you function well together?” there were six response options, ranging from “have no sexual life or very seldom” to “very well adapted;” “Does your partner give you encouragement and support when you have trouble at work?” (reversed), there were five response options, ranging from “I get all the help I need” to “my partner is more of the obstacle.” For the analyses, a mean score of all the items was created. For the latent profile analysis, all the variables were standardized to create a common metric and created a scale from the standardized items with higher scores indicating better relationship quality. The alpha reliability for this scale was .81.

**Background Variables**

In Study I some analyses included background factors, such as a grouping variable or a risk measure. Respondents were asked to indicate their age, sex, ethnicity, and number of family household members. The research teams grouped the questionnaire responses as coming from big-city, medium-city, or rural schools. The child also replied to two questions related to potential risk factors for parents’ unemployment and alcohol abuse. Participants were asked about their parents’ employment status with the question, “Does your father (mother) work outside the home?” and about excessive alcohol use by a parent with the question “Is there a person in your family who uses alcohol overly much?” The format response for each question was “yes/no”.

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III Results

Study I

There are not many studies that have examined cultural differences in the effects of harsh parenting on adjustment problems, and these have mostly been concerned with the impacts of physical punishment on externalizing behaviors (e.g., Deater-Deckard, et al., 1996; Dornbush, et al., 1987; Gunnoe & Mariner, 1997). Existing studies suggest that physical punishment is used in some cultures more than others. It is also suggested that physical punishment may increase children’s externalizing problems or affect academic achievement among some children but not others. The question still remains whether harsh parenting, such as emotional or physical aggression, may have different effects on adjustment problems, e.g. various psychosocial symptoms, in cultures that are not covered by the existing literature; as noted, most of the research has been performed in North America. To partly address this question, data were collected in some Baltic and Eastern European countries. The goals of this study were to examine the incidence of emotional and physical aggression, abuse in Latvia, Lithuania, Macedonia, and Moldova, and to examine the relationship between emotional and physical aggression and the level of psychosocial symptoms reported by children in each of these countries.

Many children in Latvia, Lithuania, Macedonia, and Moldova are exposed to emotional or physical abuse, and aggression from their parents. 33% of the Lithuanian children, 32% of the Moldovan children, 29% of the Latvian children, and 13% of the Macedonian children reported experiencing emotional and physical abuse, and aggression. Analyzing the incidence of experienced abuse and aggression by school grade revealed that Latvian and Moldovan 7th grade children reported a higher incidence of emotional abuse than 4th graders; however, Lithuanian 4th graders reported more physical abuse than 7th graders. The most common form of emotional abuse or aggression reported by Lithuanian children and Macedonian children is “yelling”. Latvian and Moldovan children reported that their parents used the tactic of making them “feel guilty” (see Table 3, Study I). The mean scores on the emotional and physical abuse, aggression ratings were markedly lower for Macedonian children than children from the other countries. Thus, children from different countries may have similar experiences, although in some countries children experience different forms of, and more, parental aggression than others.

To determine whether experiences in the family may have associations with adjustment problems, the relationships between reported emotional and physical aggression and psychosocial symptoms were examined. First, on comparing the mean differences for
various symptoms between countries it was found that the symptom scores were highest for Latvia and Lithuania, and lowest for Macedonia. A similar pattern was noted for somatic problems. Turning to the relations between experienced abuse or aggression, and various symptoms, the strongest relations were typically between emotional or physical abuse and aggression and children’s anger; the highest correlation between anger and reported physical abuse or aggression was found for Macedonia ($r = .54, p < .001$). Also, significant correlations were found between various psychosomatic symptoms, such as depression, dissociation, anxiety, sexual concerns, post-traumatic symptoms and somatic problems, and the combined abuse mean score, with the highest correlation found for Macedonian children ($r = .69, p < .001$, see Table 5, Study I). Comparing the magnitude of the relationships between experienced abuse and psychosocial symptoms (using Fisher’s $Z$ transformation for independent samples) revealed that there are significant differences between the countries. For example, the relation between Lithuanian children’s experienced abuse and anger and the relation between Macedonian children’s experienced abuse and anger are significantly different. Although, experienced abuse or aggression is related to various problems in different countries, the magnitude of the relation seems to differ between countries and cultures.

This study showed similar results to several previous studies suggesting that, in some cultures and countries, children experience more parental aggression than in others (see e.g., Deater-Deckard et al., 1996). Nevertheless, the current study showed that experienced harsh parental behavior is associated with various problems for children from different countries in a similar way. It might be that children from different countries and cultures have similar problems if they experience harsh treatment from their parents, although ethnic groups were not taken into account in the current study. The samples were homogeneous, and it was not possible to examine the influence of ethnicity. Even though this study has shown that children from different countries have similar problems, such as depression, anger or the like, it cannot answer questions concerning the directions of effects. To address the question of whether parents’ behaviors influence various problems or various problems evoke parents’ behaviors requires longitudinal investigation.

**Study II**

Study I showed that parents’ aggression, either verbal or physical, is related to various symptoms, such as depression, anxiety, or anger, in a number of countries. It seems that children and adolescents in different countries may have very similar psychosocial...
Symptoms, although there are differences in the magnitudes of relations between parents’ aggression and various symptoms. But there remains the question of how these psychosocial, or similar, problems and harsh or inept parenting are related over time. And the interesting question is what are the direction of effects, e.g. whether parents’ harsh or inept behavior causes internalizing problems, or whether the presence of these problems evokes harsh or inept parental behavior. Study I was cross-sectional, and could not address these questions.

Study II considered whether youth characteristics, such as internalizing problems, and psychopathy-like personality traits might influence negative parenting practices over time. The main purpose of Study II was to examine whether links between negative parenting practices and adolescents’ peer relationship quality might be explained by such internalizing problems and psychopathy-like personality traits.

To address the question of whether youth characteristics might evoke negative parenting practices, youth characteristics were examined in relation to negative parenting practices over time. Both internalizing problems and psychopathy-like personality traits significantly predicted increases in perceived negative parenting practices from Time 1 to Time 2 ($\beta = .17, p < .01, \beta = .09, p < .01$, for internalizing problems and psychopathy-like personality traits, respectively). Negative parenting practices predicted increases over time in internalizing problems ($\beta = .18, p < .001$), but did not predict changes over time in psychopathy-like traits ($\beta = .01, p > .05$). Negative parenting behavior may affect later internalizing problems, but has little to do with personality traits. Thus, there are some reciprocal relations between self-perceived negative parenting practices and youth characteristics.

Given that negative parenting behavior has been linked in previous studies to various problems in relationships with peers (e.g., Deković & Meeus, 1997; Lansford, et al., 2003; Vissing, et al., 1991), the study examined whether negative parenting practices are linked to peer relationship quality. Longitudinal results have shown that negative parenting practices at Time 1 significantly predicted self-perceived conflict in peer relationships at Time 2, after controlling for the Time-1 measure ($\beta = .19, p < .01$). This suggested that perceived negative parenting practices contribute to changes over time in perceived conflict in close peer relationships.

Then, to address the question whether the youth characteristics that might evoke negative parenting practices may interfere with relationship quality, it was looked at whether and how youth characteristics are related to relationships with peers. Over time, both internalizing problems and psychopathy-like personality traits significantly predicted
increases in perceived conflict in relationships with important peers. Also, there is evidence that internalizing problems and psychopathy-like traits might evoke negative parenting and create conflict in peer relationships, thus providing a possible explanation for the link between self-reports of negative parenting and peer relationship quality.

To determine whether youth characteristics explain the link between negative parenting practices and peer relationship quality, youth characteristics were controlled for in models designed to assess changes in peer relationship quality over time on the basis of negative parenting practices. There were no unique links between negative parenting practices and self-perceived relationship quality after controlling for youth characteristics, but internalizing problems predicted increases over time in perceived support and trust in peer relationships ($\beta = .09$, $p < .05$); further, psychopathy-like traits uniquely predicted increases over time in perceived conflict in relationships ($\beta = .10$, $p < .05$). Thus, youth characteristics explained the longitudinal links between negative parenting and peer relationship quality. Also, the results suggested that psychopathy-like personality traits play a role in evoking negative parenting and creating peer relationship problems.

Children who experienced negative parental behavior have been found in previous studies to have problems relating to peers. Although several longitudinal studies have suggested interplay between youth characteristics, positive or negative parenting, and different aspects of peer relationships (Clark & Ladd, 2000; Keown & Woodward, 2006; Simons et al., 2001), youth characteristics, such as internalizing problems psychopathy-like personality traits, have not been considered as possible explanations for either negative parenting practices or poor peer relations. The findings of this study suggested not only that negative parental behavior may influence some problems and behaviors, but also that some problems and characteristics may evoke negative parents’ behavior. Further, these same characteristics and behaviors might be responsible for problematic peer relationships.

Study III

Study II showed not only that parents affect youth internalizing problems, but also that youth internalizing problems and personality traits may influence parents’ behaviors, and also children’s later adjustment problems over time. Given that it was the adolescents who evaluated their parents’ behaviors and their own characteristics, these results might be subject to bias. The main question addressed by Study III was how parents and youths respond to each other over time. To test whether the results of Study II might be biased required analysis of parents’ reports and youth self-reported information. Study II showed
that parents respond to youth internalizing problems and personality traits, but a further issue is whether parents respond to youth delinquent behavior. Longitudinal data were used to address this question.

First, it was asked whether parents’ reactions to delinquency and negative behavior at home in the sample of 10 to 14 year-olds were similar to those found earlier in families of 14 year-olds only (Kerr & Stattin, 2003). The cross-sectional results were remarkably similar (see Figure 4.1, Study III) and the question of directions of effects over time remained. To infer directions of effects from this age-heterogeneous sample, cross-lagged paths between all variables used in the previous model were examined. Children’s and parents’ behaviors were moderately stable over time, and many of the cross-paths in the model were found to be significant ($\chi^2 = 3.911$, df = 3, $p = .270$, CFI = .999, TLI = .996, RMSEA = .013). The results (see Figure 4.3, Study III) suggested that parents react with distrust and worry to secretive, defiant, and off-task youth behavior at home. At the same time, in response to both negative behavior at home and youth delinquency, they seem to make fewer efforts to track what the youth is doing away from home. It seems that when parents were faced with adolescent problem behaviors, they reacted in ways that were unlikely to make the situation better. Thus, similarly to what was suggested by the cross-sectional findings, these longitudinal results showed that the more problem behavior youths engage in, the more parents experienced worry and distrust, and the less they monitored. Also, the findings suggested that gut-level reactions predicted increased negative behavior at home and delinquency over time. Monitoring efforts were not found to be significantly related to changes in problem behaviors. According to these results, it seems that a youth’s problem behaviors may affect how parents act toward the youth, in terms of both emotional reactions and monitoring efforts, but it is only the emotional reactions that have an effect on the youth. It seems that emotional context affects adjustment problems more substantially later in life than certain parental behaviors. Taken together, youths’ delinquency and negative behaviors seemed to affect parents in different ways. It is natural that when a youth is secretive at home and has engaged in illegal acts, most parents begin to worry and distrust the youth. However, it is difficult to understand why most parents do not try to take the situation in hand and monitor the youth in order to limit opportunities for further delinquency. This study suggested some explanations.

Turning to why parents would decrease rather than increase their monitoring efforts when faced with adolescent problem behaviors, such as being secretive or defiant, and not concentrating on tasks such as school work, it was tested three possible explanations. However, only one of these was supported by the data. This suggested that results about
defiant youth behaviors and why parents react to them by reducing their monitoring efforts may be explained, in part at least, by general social-response patterns. When people show that they have no interest in talking to others, the others tend to leave them alone, but when these people are warm and open, the others tend to open up to them. It might be that parents do a similar thing with their children. To test this idea, cluster analysis was employed, and a four-cluster solution was found (see Table 4.4, Study III). The largest cluster was an average cluster consisting of youths who were near average on both variables (warm-cold and open-closed). There were two clusters similar in size – a warm-open cluster, consisting of youths who were high on warmth and openness, and a closed cluster, consisting of youths who were about average on warmth but highly closed. The smallest was the cold-closed cluster, comprising youths who were exceptionally low on warmth and exceptionally closed. Parents’ monitoring efforts seemed to follow these youth clusters. Monitoring efforts were highest for the warm-open youths and lowest for the cold-closed youths. Over time, parents of the warm-open youths increased their monitoring relative to the rest of the sample, whereas parents of the closed and cold-closed youths decreased their monitoring. Thus, it appeared that parents’ monitoring efforts were very much influenced by youths’ social signals. If youths were warm and open, parents seem to feel free to keep track of what they were doing; if not, parents seem to be hesitant in getting involved.

Taken together, youths’ delinquency and negative behaviors may affect parents’ behaviors in different ways. This study suggested that youths’ problem behaviors do affect how parents act toward them over time, in terms of both emotional reactions and behaviors, but it is only the emotional reactions that seem to have an effect on the youths. Why most parents would not try to take the situation in hand and monitor their youth’s movements in order to limit opportunities for further delinquency? The results suggest that the link between youth behavior and inept parents’ behavior can be explained by social signals, based on youth characteristics. It seems that youth characteristics play an important role in explaining inept parents’ reactions and later adjustment problems.

**Study IV**

Study I showed that children from different cultures and countries who have experienced harsh parenting may have very similar adjustment problems, although in Study I the idea was not considered that other parenting behaviors might affect the consequences of harsh parenting (Lansford, et al., 2004; Larzelere, et al., 1989; Rohner, et al., 1996; Simons, et al., 1994). In Study IV different combinations of parenting behaviors were
investigated. Harsh parenting measures included striking and beating (measures of physical punishment) and discordant relationships, defined as maternal insensitivity and mother-child conflict (which might communicate rejection to the child). Also, previous studies have suggested that, as well as other parenting behaviors, child characteristics should be taken into consideration (Lau, et al., 2006). Studies II and III suggested that the effects of parents’ behavior on adjustment problems may be affected by various youth characteristics. But previous studies have not examined very early characteristics of the child. Study IV examined how distinct patterns of physical discipline and discordant relationships related to early unmanageable temperament and later conduct problems and norm violations, and also how – apart from these links – early unmanageability relates to later conduct problems and norm violations. Accordingly, the hypothesis that temperamentally unmanageable children who experience physical discipline in the context of discordant relationships will have more behavior problems than those who experience physical punishment in the context of good relationships was examined.

What kind of harsh parenting combinations could be observed? To address this question, latent profiles, classes of mother’s striking, beating, and discordant relationships at ages 6-12 were examined. The final model estimated four classes of mother’s harsh treatment (see Figure 2, Study III). The largest normative class had low levels of all three harsh parenting variables. The second largest class, a physical punishment class, had high levels of mother’s striking, beating and low levels of relationship discord. The third class, a discordant relationships class had high levels of discordant mother-child relationships, but low levels of striking and beating. The final class, a harsh treatment class had high levels of striking, beating, and discordant relationships. Thus, children experienced different combinations of mother’s harsh treatment over ages 6-12. Some children experienced striking and beating with no notable signs of discordant relationships with their mothers. However, for some children, physical punishment occurred in the context of a conflict-ridden mother-child relationship.

Next, in this study, it was examined how distinct patterns of physical discipline and discordant relationships related to early unmanageable temperament and later conduct problems and norm violations, and also how – apart from these links – early unmanageability related to later conduct problems and norm violations. Based on theoretical assumptions, the latent classes were regressed on a covariate (unmanageable temperament); distal outcomes (mother-reported conduct problems in one model and self-and interviewer-reported norm violations in the other) were added to the latent class model,
and problem behaviors (either conduct problems or adolescent norm violations) were regressed on early unmanageability (see Figure 1, Study IV).

Does early unmanageability increase the risk of experiencing specific combinations of harsh parenting? Children with high levels of early unmanageability were found to be more likely to be in the physical punishment class than in the normative class ($OR = 2.78, p < .05$, 95% CI – 1.49-5.21, $OR = 3.05, p < .05$, 95% CI – 1.32-6.96, for the models with conduct problems and norm violations, respectively, as distal outcomes). Children with high levels of unmanageability also showed a tendency to be in the harsh treatment class rather than the normative class ($OR = 1.78, p < .10$, 90% CI – 1.02-3.10, $OR = 1.36, p < .10$, 90% CI – 1.01-1.92, for models with conduct problems and norm violations, respectively, as distal outcomes), but they were not at increased risk of being in the discordant relationships class ($OR = .85, 95% CI – .47-1.42, OR = .88, 95% CI – .50-1.57$, for models with conduct problems and norm violations, respectively). Thus, early unmanageable temperament increased children’s risk of experiencing physical punishment and, to a lesser extent, physical punishment in the context of discordant relationships later in childhood.

As shown in Studies I, II, and III, harsh parenting is related to various adjustment problems. But are different combinations of harsh parenting related to later adjustment problems in different ways? Results from the model with conduct problems or norm violations as outcome variable showed that children in the normative class had significantly lower levels of conduct problems and norm violations in adolescence than children in the other classes, and also that children who experienced harsh treatment were significantly more likely than children in all of the other classes to have conduct problems and violate norms in adolescence. Thus, children who experienced physical punishment in the context of discordant mother-child relationships showed more conduct problems and norm violations later on than those who experienced physical punishment alone; further, those who experienced physical punishment alone had more behavior problems than those who did not experience any harsh parenting.

It was also examined the extent to which children’s early unmanageability was related to later conduct problems or norm violations beyond the risk associated with their membership of the harsh parenting class. Results from the models with conduct problems or norm violations as outcome showed that only among children in the physical punishment class was high early unmanageability significantly related to risk of conduct problems or norm violations. Among children in the harsh treatment class, where conduct problems or norm violations were highest, there was no significant link between early temperament and
conduct problems, apart from the risk associated with harsh parental treatment. For the
harsh treatment group, unlike the physical punishment group, the experience seemed to
play a greater role than temperamental unmanageability in the development of problem
behavior. These group differences were consistent with the idea that physical punishment
has a different meaning in the context of good parent-child relationships than in the context
discordant relationships.

Study V

Study IV showed that harsh parenting can occur with or without good or bad parent-
child relationships, and these different combinations can affect youth problem behavior.
Children who experienced physical punishment in the context of discordant mother-child
relationships showed more conduct problems and norm violations later on than those who
experienced physical punishment alone. Study II showed that the effects of parents’
behavior on relationship quality during adolescence may be affected by various youth
characteristics. It is a question if relationship quality in adulthood might be also affected by
children’s characteristics and different combinations of harsh parenting in context of other
parenting behaviors. In Study V, it was examined how distinct patterns of physical
discipline and discordant relationships related to early unmanageable temperament and later
relationships quality, and also how – apart from these links – early unmanageability relates
to relationships quality with a romantic partner in adulthood. In Study V, the same harsh
parenting combinations (latent classes) as in Study IV were used. Study V extended Study
IV by looking at adulthood outcomes - the quality of romantic relationships at age 35, thus,
the covariates (unmanageable temperament and parents’ attitudes towards marital conflicts)
and the distal outcome (relationship quality with partner at age 35) were added to the latent
class model (Figure 1, Study V). The latent classes were regressed on early
unmanageability and parents’ conflicted marital relations, and then relationship quality with
age-35 partner was regressed on early unmanageability, marital conflicts, and the latent
classes (Log likelihood = -643.257; BIC = 1482.919, SSA BIC= 1365.696, AIC =
1360.513, entropy = .824, number or parameters = 37).

Does children’s early unmanageability increase the risk of experiencing specific
combinations of harsh parenting? Children with high levels of early unmanageability were
more likely to be in the harsh treatment class than in the normative class (OR = 1.96, p <
.05, 95% CI – 1.02-3.75). Children with high levels of unmanageability also showed a
tendency to be in the physical punishment class rather than the normative class (OR = 1.50,
90% CI – 1.04-2.18), but they were not at increased risk of being in the discordant relationships class (\(OR = .84, 95\% CI – .39-1.84\). Thus, unmanageable temperament increased children’s risk of experiencing physical punishment in the context of discordant relationships and to a lesser extent physical punishment in the context of good relationships later in childhood.

Are different combinations of harsh parenting related to relationship quality with a partner at age 35? Results showed that children who experienced physical punishment had significantly higher quality relationships with a partner in adulthood than children in the other classes, and children in the normative class were significantly more likely than children in the discordant relationships or harsh treatment class to have better relationships in adulthood. Children who experienced discordant relationships and harsh treatment had significantly lower quality relationships in adulthood than children in the normative and physical punishment classes. Thus, children who experienced discordant mother-child relationships either alone or with physical punishment had worse relationships later in life than those who experienced physical punishment alone and those who did not experience either type of harsh parenting.

It was also examined to what extent children’s early unmanageability was related to later relationship quality apart from the risk associated with harsh parenting class membership. Results showed that among children in the harsh treatment class, higher early unmanageability was significantly related to having a poor relationship with a partner at age 35. Notably, among children in the discordant relationships class, where quality of relationships with a partner at age 35 was also lowest, there was no significant link between early temperament and relationship quality apart from the risk associated with discordant relations. For the normative and physical punishment classes, early unmanageability was not significantly related to relationship quality and parents’ marital conflicts were not significantly related to relationship quality. Thus, it was only for the harsh treatment group that temperamental unmanageability seemed to play a role in the development of poor relationships.
IV Discussion

Findings and previous research

The main purpose of this dissertation is better to understand the relations between harsh or inept parenting and children’s characteristics in the prediction of adjustment problems. Taken together, this dissertation provides some insights into the role of harsh or inept parenting in the development of various socials adjustment problems. The main lesson is that it is not a simple case of parents affecting the child’s or adolescent’s behavior. To some degree, harsh or inept parenting can be understood as a response to the child’s temperament or personality characteristics. Parents seem to respond emotionally to certain characteristics or behaviors, and adopt harsh or inept parenting behaviors. This is not the only explanation for harsh or inept parenting, but it is clear that the role of the child’s or adolescent’s characteristics cannot be dismissed. Even though parents’ negative behaviors may affect youth social adjustment, youth characteristics and behaviors can strongly contribute to their own adjustment and to harsh or inept parenting. Thus, the links between harsh or inept parenting and adolescent or adult social adjustment are likely to represent complex, partly reciprocal processes of social influence and socialization.

The dissertation makes several contributions to knowledge in the harsh or inept parenting arena. One major contribution is that it illuminates the active role of the child in creating his or her relationship environment. In the developmental literature, many studies have looked at the effects of parenting on children and youths, suggesting that the child can not create his or her relationship environment, but youth characteristics have tended to be neglected as possible explanations for parent-child relations. However, in recent years, there has been a growing awareness that reciprocal processes are important for understanding interactions between parents and children (e.g., Cohen & Brook, 1998; Hastings & Rubin, 1999; Kandel & Wu, 1998; Kochanska, 1998; Snyder et al., 2005; Stice & Barrera, 1995). Although reciprocal effects are now widely accepted in principle, they are still too seldom included in research designs, and especially in harsh parenting studies. Thus, this dissertation adds to the existing literature by making new suggestions concerning how various youth characteristics and harsh or inept parental behaviors may affect each other during adolescence.

Another contribution of the dissertation to knowledge about harsh parenting is to illuminate the importance of parents’ negative emotional reactions to youths’ behaviors. Previous studies have suggested that other parenting behaviors in which context physical punishment takes place may determine the effects of physical punishment on a child’s
development (Deater-Deckard et al., 1996; Lansford et al., 2004; McLoyd & Smith, 2002; Rohner et al., 1996). This dissertation suggests that parents’ negative emotional reactions might be more important, not only more important than physical punishment, but also more important than family management or monitoring efforts. This dissertation also suggests that certain combinations of harsh parenting are more damaging than others. In addition, the findings lend credibility to the idea, from the previous literature, that physical punishment can have differential effects according to whether or not the child perceives the parent as rejecting. Taken together, this dissertation indicates that parents’ negative emotional reactions are more damaging than other types of parental behavior.

This dissertation sheds some new light on the role played by the cultural aspect of harsh or inept parenting in the development of child and adolescent problem behavior. There are not many studies that have explored cultural or ethnic group differences with regard to the effect of harsh or inept parenting on adjustment problems. It seems that cultural or ethnic expectations have a lot to do with whether children perceive parenting behavior as harsh, and, consequently, whether it undermines their adjustment (Deater-Deckard et al., 1996; Dornbusch et al., 1987; Gunnoe & Mariner, 1997; Lansford et al., 2004; Lansford et al., 2005; McLeod et al., 1994; Rowe et al., 1994; Spieker et al., 1999). Most of the research, however, has been performed in North America. Although existing studies suggest that physical punishment is used in some cultures more than others, and that physical punishment increases children’s externalizing problems, or affects academic achievement, for some but not others, this dissertation suggests that the processes and mechanisms through which harsh parenting is related to adjustment problems are very similar across cultures. These have not previously been considered in the harsh parenting literature. Thus, the dissertation gives offers some new suggestions and extends previous research concerning cultural expectations.

The dissertation also adds some new knowledge on the roles of harsh or inept parental behaviors and children’s and youths’ characteristics in the development of various aspects of youth social adjustment, where it focuses on several important aspects. One is the development of socially appropriate behavior, which previous researchers have tended to evaluate by looking specifically at problem behavior. There are studies that have considered youth characteristics while examining relations between parenting and problem behaviors (Colden et al., 1997; Lengua et al., 2000; Leve et al., 2005). However, these studies have usually looked solely at temperamental characteristics and externalizing problems, and have covered just this one aspect of social adjustment. But there are other important aspects of social adjustment. One is the ability to develop and sustain
relationships with other people, peers or romantic partners. Several previous studies have considered youth characteristics while examining relations between parenting and peer relationships (Clark & Ladd, 2000; Hinshaw et al., 1997; Keown & Woodward, 2006; Simons et al., 2001), but most have looked at children rather than adolescents, and not assessed relationship quality from the youths’ or their peers’ points of view. There are also previous studies that have combined youth or young adult characteristics and negative parenting in predicting romantic relationships later in life (e.g., Capaldi & Clark, 1998; Donnellan, Larsen-Rife, & Conger, 2005), but most have focused on adolescents and young adults and the research questions did not lead to examining the influence of very early temperament or harsh parenting combinations on middle adulthood romantic relationships. This dissertation makes a unique contribution by using prospective measures of early temperament and combinations of harsh parenting behaviors to predict social adjustment over a longer period of time than has been done before.

Strengths and limitations

This dissertation has some limitations that should be acknowledged. One concern regards the over-interpreting of results about the directions of effects. It is important to distinguish between effects over time during a period of several years and the original causes of behaviors. The dissertation deals mainly with adolescence and explained effects over time during the adolescent period. Parents and children have histories of interactions, however, and negative parenting practices may play a causal role in shaping people’s characteristics earlier in life, i.e. during childhood. It is not known from this dissertation how any of these youth characteristics developed in the first place or whether parental behavior played a role. Harsh or inept parenting may have played a causal role in shaping characteristics earlier in the child’s life. It is intuitively appealing to believe that parents play a more active role in shaping the behavior of young children than adolescents, even though in some studies young children are increasingly seen as active agents and partners in the socialization process (e.g., Anderson et al., 1986; Dix et al., 1986; Huh et a.,, 2006; Passman & Blackwelder, 1981). But whatever happened earlier, data from this dissertation do reveal changes over time in adolescence, and also directional and bidirectional effects.

There is always a larger context that was not tapped in this dissertation. The literature refers to many contextual factors, such as unemployment, social support, or public policies, which may affect children’s later development or parent-child relations. This dissertation does not consider the conditions that surround the family, e.g., parents’
marital relations, and parent, sibling, and peer characteristics, that may have a direct impact on the way parents and youths act and react to each other, and on the way parents’ or youths’ behaviors can influence later adjustment problems. Also, it may be that there are gender differences in the relationships between parental behaviors and later adjustment that have not been tapped. Nonetheless, the findings from this dissertation provide some new information about processes inside the family and interactions between parents and children.

Concerning individual studies in the dissertation, the reliance only on youths’ or only on mothers’ reports can be seen as a limitation of certain studies, particularly because adolescents sometimes reported on their own traits as well as parents’ behavior, and mothers sometimes reported on their child’s characteristics and their own behavior. The assessment of certain characteristics or parental behaviors could be driven by perceptions of the reporter than by the child’s or mother’s own actual behavior. Even though some scholars have argued that youths’ views of family interactions are the most accurate or valid (e.g., Glasgow, Dornbush, Troyer, Steinberg, & Ritter, 1997), it is possible that youths with certain traits misperceive parents’ behavior in systematic ways, and these misperceptions explain the links between youth characteristics and negative parenting. Some other scholars suggested that there could be several reasons why parental descriptions of children’s behaviors or characteristics are not always valid (for discussions of this, see Kagan, Snidman, McManis, Woodward, & Hardway, 2002; Seifer, Sameroff, Barrett, & Krafchuk, 1994). Although it could be that the results were not affected by the fact that the information was from either youth’ or mothers’ reports, in the studies some information from other informants to avoid informant bias and to answer the major questions was incorporated, as well. All in all, even though there should be awareness that some data represent only youths’ or only mothers’ perceptions of characteristics and parenting, the consistency of findings from all the studies taken together—those that rely on one rater and those that use multiple raters—provides confidence that the results of the models and mechanisms are not just due to rater bias, but do actually tap into developmental processes.

The studies in this dissertation have several strengths. One is that mainly longitudinal data were used, which enables processes over time to be investigated. The longitudinal data permitted examination of relations between inept or harsh parenting, very early unmanageable temperament, and later problem behaviors or relationships in a more elaborate manner than previously reported in the literature. An additional strength of the dissertation is its reliance on community samples with high participation rates. Given that previous studies suggest a cultural influence in harsh parenting effects on adjustment
problems, data from several countries that have not previously been covered by the harsh parenting literature were used to examine the processes linking harsh parenting, adolescent characteristics, and social adjustment problems. It seems that the processes and mechanisms may well be very similar regardless of culture. The findings give confidence that the results of this dissertation are not just due to culture, but that there are similarities between cultures, although the magnitudes of the influences may differ. Even though the studies have some limitations, they were to some extent lessened with data from other studies which gives confidence that the results tap into actual developmental processes.

What is harsh parenting?

In this dissertation, I define harsh parenting as parents’ physical punishment and their verbal or nonverbal aggression, such as anger outbursts, threats, stony silences, or rejection. Thus, both aspects of harsh parenting – physical and nonphysical – are combined. Also, I speak of harsh parenting as a part of inept parenting. It is necessary to have a clear definition for research purposes, but on a philosophical level, it is discussible whether a parenting behavior can be defined objectively as harsh, irrespective of how it is perceived by the child. There are arguments on both sides. On the one hand, historical and cultural views on parenting may change, thereby adjusting any objective definition of harsh parenting. What is harsh for us now might have been regarded differently in our grandparents’ generation, or is still regarded as such in another culture. On the other hand, there is evidence that, under certain conditions, children do not recognize the “harshness” in what many people term harsh parenting. If parents use harsh behaviors, such as physical punishment, but love their child and have a warm atmosphere at home, the child might even not perceive the parental behaviors as harsh or negative. Thus, it can be discussed whether a parenting behavior can be defined objectively as harsh, apart from how it is perceived by the child. Although there are no clear answers to this question, my view is that harsh parenting has to be described objectively for research purposes, but comparing studies from different cultures or historical perspectives harsh parenting definitions has to be acknowledged.

Harsh parenting is a much more complicated matter than is usually presented or defined. There are several things that need to be considered. For example, if we were to ask our grandparents what harsh parenting was or what physical punishment was for them, their answers would be very different from ours. Many of them, or even our parents, would say that they “spare the rode, spoil the child”. Would contemporary society agree with this?
Given that corporal punishment was encouraged by the church and society for centuries, and was common behavior at home and in school, parents who use harsh disciplines may not even think that they are doing something wrong; it might be that such behavior lies in their family tradition, and that they are used to that way of thinking. Even though corporal punishment or harsh parenting practice remains a common way of disciplining children today, its use has significantly declined. Thus, taking into account that understanding of harsh parenting might be dependent on timing, the question remains of how relevant it is to compare harsh parenting studies between different decades. It should be acknowledged that there is a possibility that results would be similar, but that would raise the further issue of whether the similarities are due to harsh parenting per se or to other things – the measurement of harsh parenting in particular. Therefore, when comparing various studies, historical or generational perspectives cannot be neglected.

Cultural context, which could be described as all the behaviors, ways of life, and beliefs of a population that are passed down from generation to generation, should also be taken into account when describing what harsh parenting is. There is a saying in the Baltic States countries that “one spanked child is worth ten children who have not been spanked”. It suggests that children who experience punishment behave better, and implicitly encourages parents to adopt harsh parenting practices. In some cultures, harsh parenting may be more normative than in others (e.g., Deater-Deckard et al., 1996; Lansford et al., 2005). When harsh parenting is both accepted and expected in a cultural context, parents may feel justified in using it, and children can view it as the norm. In cultures in which a power-assertive parenting style is believed to be in the best interests of the child, harsh parenting may be used instrumentally more than emotionally (Grusec, Rudy, & Martini, 1997), which may predict less negative outcomes (Holden & Miller, 1999; Straus & Mouradian, 1998). It seems that, in some cultures, spanking a child is an accepted behavior, while in others it is taboo. Indeed, it was such cultural diversity that brought the idea of emotional context into the literature of harsh parenting. The context in which harsh parenting occurs opened a door into the complexity of harsh parenting. Also, it raised new questions concerning what harsh parenting is, and also the nature of its rejecting context. A key question concerns what kinds of parents’ behaviors might be interpreted as rejecting from the child’s perspective? Many parents would disagree that their worries or conflicts with the child mean that they reject the child; in particular, many parents worry during their child’s adolescence, and this may affect their behaviors in relation to the child. Cultural and the context in which harsh parenting occurs also raises the question of whether it is relevant to compare harsh parenting studies between different cultures or contexts. This dissertation
has shown that that the effects that can be found between ethnic groups can also be found in
homogeneous samples, which suggests that cultural issues in relation to harsh parenting
may not really have been tapped or evaluated. Thus, new ways need to be created to
evaluate cultural or contextual differences that take into account the complexity of harsh
parenting.

Taken as a whole, harsh parenting is a complex phenomenon. It is easier in research
to measure harsh parenting according to a single definition than to take into account the
other aspects by which it is influenced. But the real world is more complex than it is in
current research. The complexity of harsh parenting suggests a need to revisit the existing
literature and results, and to be careful in interpreting the results of previous studies. For
example, many of them evaluate only one aspect of harsh parenting, namely corporal
punishment. But corporal punishment is only a part of harsh parenting, and we must be
careful in generalizing from the results of these studies; the conclusions drawn from studies
evaluating corporal punishment in a certain context may be very different from those in
which a “context-free” approach is adopted. Future research should take into account the
complexity of harsh parenting, and try to combine several ideas, in particular the
combination of harsh parental behavior and the specific context. Complexity raises new
questions and challenges for the harsh parenting literature, such as how to measure harsh
parenting, what kind of instruments should be used, and what kind of research should be
conducted. The complexity of harsh parenting cannot be neglected, although it may be
tempting and convenient not to take it into account in research.

Children and youth as active agents in parent-child relationships

Historically, parenting has typically been viewed as something that parents do to
their child. However, children and youths may affect their parents’ behaviors, just as
parents may affect their children’s behaviors. This idea has been around for some time. For
example, the idea that parents react to children’s characteristics, and children, in turn, react
to parents’ behaviors was suggested early on in coercion theory (Patterson, 1982). On the
other hand, in the literature on harsh or inept parenting, and especially in the corporal
punishment literature, many more studies have looked at the effects of harsh or inept
parenting on children and youths than at youth characteristics as possible explanations for
parenting behaviors. Many studies in the harsh parenting or corporal punishment arena
have assumed that parental behavior is a cause of various child behaviors and experiences,
but – since they are correlational – these studies cannot definitively identify parents’
behaviors as a cause. Nonetheless, for at least some child behaviors, it is conceivable that the causal direction is the opposite of what might be expected; it may be that children are driving the associations, e.g., in that aggressive children tend to elicit more physical punishment from their parents (Gershoff, 2002). Although bidirectionality or reciprocal effects are widely accepted in principle and can clearly be observed in real life, especially at early ages, they are still too seldom included in parenting research designs.

The idea of bidirectionality, as discussed in this dissertation, might have implications not only for the literature on harsh or inept parenting, but also for other parts of the parenting literature. First, it may be relevant to the literature on psychological control. Even though psychological control and harsh or inept parental behavior constructs are rooted in distinct theoretical traditions, and can be treated as different constructs, measures of harsh or inept parenting sometimes include items that appear in the literature as part of the psychological control construct (e.g., Barber, 1996; Barber, Olsen, & Shagle, 1994). For the most part, psychological control has been viewed as a parental characteristic that influences children’s self-esteem and academic achievement (e.g., Barber et al., 1994; Bean, Bush, McKenry, & Wilson, 2003). Second, it may have an impact on the literature concerning parenting styles, which has dominated much of the empirical research on parenting for many years. The parenting styles literature is based on the idea that parents’ warmth and control influence and shape their children’s development (e.g., Baumrind, 1991; Darling & Steinberg, 1993; Steinberg, Lamborn, Darling, Mounts, & Dornbush, 1994). On this line of thought, in the parenting styles and psychological control literature, children’s behavior problems are primarily due to their parents’ behaviors or the style of the parent-child relationship. This part of the literature places a lot of pressure on parents, and seems quite simply to blame parents alone for their children’s bad behaviors. But denying the child effect gives rise to the risk of over-interpreting the extent of parental influence. Acknowledging that children play an important role in parent-child relationships and, in turn, that their behaviors may strongly contribute to their own adjustment, would violate the work of many decades and would raise a lot of questions about the conclusions of previous studies. We cannot say that what has been presented in the psychological control or parenting styles literature is wrong, but it is possible to say that it presents only one side of the coin. And there is another side.

Findings that parents react negatively to youths’ problem behaviors, and that parents’ behaviors affect youth problem behaviors, raise new questions concerning whether parents react only to certain youth characteristics, and also whether parents’ behaviors may affect only certain youth characteristics. Some answers are suggested in this dissertation. It
seems that parents’ behaviors affect youth problem behaviors and internalizing problems. However, parents’ behaviors do not seem to affect youth personality traits over time, thus suggesting that personality traits can be very stable and might evoke parents’ behaviors, but not the other way round. Of course, these results should be interpreted with caution, but the idea is supported by results from temperament research, which assumes that temperamental traits are early-emerging individual characteristics that shape the course of personality development, which then become elaborated over time into stable behavioral dispositions that affect parental behavior (e.g., Caspi, 2000). The temperament literature states very clearly that early temperament affects parents’ behavior. Given that temperament becomes elaborated over time into stable behavioral dispositions, it is natural to think that children’s characteristics and behaviors affect their parents. This not only suggest new questions for the future, but it also provides a further reason to return to some parts of the parenting literature, e.g. the parenting styles literature or psychological control literature, and rethink what it has implied in the broader context of temperament research.

Taken together, there are the ideas that parents affect children and that children affect parents, and these ideas should be combined if we want to understand and illuminate the two-way street, where both sides are important. We still might wander into one way-street labyrinths of the patenting literature, but it should be acknowledged that there are some two-way streets that we have to tread if a better map of the city called parenting is to be obtained.

**Future directions**

An important issue for the future is to understand what other mechanisms might explain the link between harsh or inept parenting and later adjustment problems, and why these parenting practices seem to be associated with problems later in life for some children but not for others. This dissertation provides some new information about what may influence the link between parenting and social adjustment, and also raises some new questions. Evaluating harsh or inept parenting usually involves combining measures of various types of parental behaviors. Some previous studies do not distinguish between different types of harsh or inept parenting, although this dissertation suggests that in some countries some forms of harsh or inept parental behaviors are used more often than in others. It might be that parental behaviors have different meanings or different outcomes according to country. Also, different parental behaviors, such as trying to make a child feel guilty, controlling the child, or yelling at the child, might have very similar outcomes.
Parents’ behaviors may be influenced by cultural stereotypes, or they might be influenced by different child or youth characteristics. It seems reasonable to distinguish between different types of harsh or inept parental behaviors, and take a closer look at how they influence later adjustment.

Although it is commonly believed that parental behavior, especially negative parental behavior, affects children’s development, parents react to youth characteristics and behaviors, just as youth react to parents’ behaviors. Such bidirectional relations in childhood and adolescence have been examined in previous studies, but there remains the question of how these relations develop over time – starting at very early age through adolescence. Might there be strong differences between age periods in these relationships? Perhaps, various negative parental behaviors could be reactions to a variety of children’s or youths’ characteristics. Might it be that a transactional model that assumes bidirectional relations between parents and children and allows consideration of the development of problems as an ongoing and constantly changing reciprocal process between children and their caretaking environment, starting at very early age and through adolescence, would reveal new information about how these relations develop. Although it is known that harsh or inept parenting and childhood problem behavior seem to affect each other over periods of several years, there have been no empirical tests of the bidirectional processes relating harsh or inept parenting and children’s characteristics from infancy through adolescence. The bidirectional nature of parent-child relations also raises new challenges for the evaluation of bidirectionality in future studies. Existing longitudinal studies have primarily examined bidirectional relations over certain periods of time, e.g., at intervals of one year, two years, or several years. But, according to established theoretical perspectives, parents react to a child’s behavior right after that behavior, not a year later, which suggests that there should be more frequent measurement points. Another question is how frequently parents’ and children’s behaviors should be measured: several times a day, every day, or every month? Might it be that everyday coercive circles are different from what results over a yearly period might suggest? Accordingly, not only bidirectional processes between harsh or inept parenting and children’s characteristics from infancy through adolescence, but also different time periods between parents and children’s behaviors, should be evaluated.

It has been suggested that children who experience physical punishment in a context of behaviors that communicate negative emotions show the highest levels of problem behaviors in adolescence, and that the experience of harsh parenting seems to play a larger role than certain children’s characteristics in the development of problem behaviors. Why and how do parents’ behaviors that communicate negative emotions affect later
adjustment? The mechanisms behind this link were not considered in this dissertation, although there may be several explanations. One possibility lies in a mechanism that might be called “context choice” (Kerr, Stattin, Biesecker, & Ferrer-Wreder, 2003). On this line of reasoning, youths generalize feelings that arise from their interactions with parents to other situations that are structured and controlled by adults. If they feel valued and respected in their interactions with parents, they will gravitate toward other adult-led structured settings. If they feel unvalued, or perhaps distrusted, by parents at home, have bad relationships with parents, or experience harsh parenting, they will gravitate toward situations that do not have the same negative emotions associated with them. These would be situations where adults are not present and do not influence youths’ behaviors. There is evidence in the literature on leisure activities that, in these kinds of situations, youths are at risk of being drawn into delinquency by their peers (e.g., Stattin, Kerr, Mahoney, Persson, & Magnusson, 2005). Hence, negative parent-child relationships quality would lead them to find deviant peers, which would cause more problems (Deković, Wissink, & Meijer, 2004). It is still not known, however, whether the same processes apply to harsh or inept parenting and how they might develop over time.

Another plausible explanation of why and how parents’ behaviors that communicate negative emotions affect later adjustment draws upon social control theory (Hirschi, 1969). The idea is that if youths are strongly attached to their parents, they will develop the social control that prevents them from engaging in aggressive or problem behaviors; they do not want to do anything that would hurt or embarrass their parents. Specifically, Hirschi (1969) suggested that when youths face opportunities to commit delinquent acts, they actually think about their parents, and the psychological presence of their parents inhibits their behavior. One could imagine that if parents express their distrust or use physical punishment, youths might feel that there is little to lose in terms of disappointing parents, and that might undermine the attachment mechanism (if, indeed, it exists). Thus, parents’ harsh disciplinary practices might initiate feelings of low self control in children or adolescents, which may predispose children towards delinquent, antisocial, or aggressive behaviors. The attachment aspect may be helpful in understanding why parental behavior is linked to problems. Several studies have included attachment in the examination of parents’ behaviors and children’s adjustment problems (Gottfredson & Hirschi, 1990; Sampson & Laub, 1994), but the question remains whether this mechanism helps to understand relations between harsh parenting and later adjustment. Thus, there are several plausible theoretical explanations and suggestions concerning the role played by a harsh parenting context in the development of adjustment problems.
What should parents do?

Most parents want to provide a warm, safe, and supportive environment for their children. Parents want to make sure that children in such an environment develop socially appropriate behaviors. However, depending on the child’s temperamental predispositions and behaviors, shaping a child’s behavior can be either quite easy or difficult and frustrating. What should parents do when they face parenting challenges, such as having a child who is angry or behaves badly, who is sad and depressed, or who begins to engage in delinquency? Many parents want to know what they should do. This dissertation has pointed to what parents do that leads to various adjustment problems, thus suggesting what parents should not do or how parents should not react to problems.

Parents are often told that they need to have a lot of control over their teenagers. Some caring parents even think that if they do not control their children, they will be blamed if their teenager develops problem behavior. And many parents believe that, if they are not strict enough, then adolescents will be irresponsible and uncontrollable outside the home. It seems quite natural to think that parents should control their children. However, asking parents to monitor more is probably not a good preventive strategy. Also, prevention or intervention efforts have to be considered in the light of how parents react emotionally to the child. Parents’ gut-level reactions (worries and distrust) to the child’s negative behavior at home, or physical punishment with discordant relationships, might escalate the risk of future problem behaviors. Thus, some parents’ behaviors would generate children’s reactions opposite to what parents expected. Parents should be aware of this, try out other behaviors from time to time, and observe whether or not there are changes in the child’s behavior. One lesson to be learned by parents is that they should think about what they are told to do by other parents or society, and choose behaviors that work in their own families.

Many people think that bad parents will have bad children. It seems that this way of thinking is influenced by the idea that came from abuse literature, which suggests that children who experience abuse from parents will abuse other people later in life. But this way of thinking regards children as passive, implying that they have no chance of improving their quality of life if they experience bad parental behavior. However, there is another way of looking at the matter, which suggests that children are active and can influence later adjustment problems on their own, and also affect their parents’ behaviors. What should parents do with this information? Parents should be aware that children themselves can affect behavior problems, and also that parents reactions to certain children’s problem behaviors can increase rather than decrease childhood problem behaviors. Parents have the power to break these coercive circles. If parents reacted differently, it might be
that children would be affected by their reactions in a different way. There is no doubt that most loving parents, out of frustration, can start to yell at their children, or try to make them feel guilty, instead of trying to understand the situation and solve the problem in a constructive way. But as many situations continue, parents’ reactions may become habitual. In such case, the parents involved should from time to time evaluate their own behaviors, and bear in mind that children’s and adolescents’ characteristics can influence their own reactions. Then, they can think about how they could change that situation.

There is the well-known saying, “Spare the rode, spoil the child”. Our grandparents tended to agree that punishing a child would keep the child out of trouble. There has been ongoing debate in the literature on physical punishment and the consequences of physical punishment for a long time now (see, e.g., Baumrind, 1997; Deater-Deckard & Dodge, 1997; Gershoff, 2002; Holden, 2002; Larzelere, 2000). On the one hand, under the right cultural and family conditions, physical punishment does not necessarily produce more aggressive or problematic behavior. This could be taken as an argument against changing the tradition of physical punishment in countries where it is still legal. And it could even be taken as argument for parents to use more physical punishment. On the other hand, under less than optimal family conditions, physical punishment might contribute to the development of behavior problems that will interfere with the goals of society and the individual’s own enjoyment of life. This should cause concern, in the first instance among parents, but also among people working in prevention, and then among policymakers. Parents should be aware that their attitudes or emotions toward the child can affect their child’s adjustment. Many parents say that they punish their child because they wish the best for the child. But, the matter, it seems, is not about what parents wish, but about how children perceive. Of course, children can interpret parents’ attitudes in a different way than parents do, but parents should be aware that their children are sensitive to their parents’ attitudes and emotions, and make sure that the children perceive their attitudes in the right way.

Concluding remarks

Many children in different countries are exposed to harsh or inept parental behaviors, such as yelling, ignoring, trying to induce guilt, and sometimes even physical punishment. Children who experience such types of parents’ behaviors have various problems later in life. However, the risk is far from universal; many children who experience harsh or inept parenting are normally adjusted. The question is why some
children who experience negative parenting do not have problems later whereas others do. What might influence the link between harsh parenting and later adjustment problems? This dissertation suggests that the effects of negative parenting on later adjustment are influenced by parental behaviors that could communicate negative emotions and the child’s earlier behaviors or characteristics. Child’s earlier behaviors or characteristics also constitute a risk factor for experiencing certain parental behaviors. The dissertation shows that children may experience various patterns of harsh parenting, and these patterns will have different consequences later in life. Although one cannot simply say that parental behaviors interfere with youths’ social adjustment, children’s or youths’ characteristics or behaviors play important roles in both parenting and later adjustment.
V References


corporal punishment but not on physical maltreatment. *Developmental Psychology, 40*, 1047-1058.


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Cross-cultural comparisons of child-reported emotional and physical abuse: rates, risk factors and psychosocial symptoms

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Abstract

Objectives: This study was designed to assess the incidence of child emotional and physical abuse, associated risk factors and psychosocial symptoms in a cross-cultural comparison between post-communist bloc countries.

Method: One-thousand one-hundred forty-five children ages 10–14 from Latvia (N = 297), Lithuania (N = 300), Macedonia (N = 302), and Moldova (N = 246) participated in the study. They completed questionnaires assessing their experience of emotional or physical abuse, and provided information about family risk-factors and psychosocial symptoms, including PTSD-related symptoms.

Results: Incidence rates of maltreatment differed by country, as did levels of reported psychosocial symptoms. Incidence of emotional and physical abuse differed by region, with higher levels of abuse reported in the rural regions. In all four countries, a similar association between emotional/physical abuse and psychosocial symptoms was found, with the uniformly largest correlation between emotional abuse and anger. When examining the combined scores of emotional and physical abuse, even higher correlation’s were found, particularly in relation to anger and depression. In all four countries, parental overuse of alcohol was associated with emotional and/or physical abuse.

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Conclusions: Findings show differences by country in child-reported levels of emotional and physical abuse, but similar patterns of correlation with psychosocial symptoms and the risk factors of parental alcohol overuse and living in a rural area.

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Keywords: Cross-cultural; Emotional abuse; Physical abuse; Psychosocial symptoms

Introduction

Since the break-up of the Soviet Union (1989–1991), social awareness and acknowledgment of child maltreatment have increased enormously in the post-communist bloc countries. During the period of Soviet influence, there was little or no official acknowledgment of child abuse. Any admission of child abuse would have been incongruous with the official vision of the perfect socialist society (Sicher et al., 2000). In addition, central to the Soviet ideology was a primary allegiance to the state. What happened in the family was of less importance. As a result, systematic research and official documentation regarding child abuse was absent.

Child abuse did exist during the period of Soviet domination. Evidence for this comes from listening to adults speaking about their childhood abuse experiences during the Soviet period. In addition, several contemporary studies document adults reporting instances of abuse from their childhood, when the Soviet government was still in power (Sebre, 2000; Vanderlinden, Varga, Peuskens, & Pieters, 1995). Unfortunately, during the Soviet period there was little or no opportunity to speak about these issues. Judicial recourse was absent, particularly for intrafamilial abuse, and few professional resources existed (Lewis et al., 2001).

The present study examined levels of child-reported abuse in four post-Communist bloc countries. This cross-cultural comparison takes into consideration the broader sociohistorical background, since child abuse results from a complex interaction of social and cultural conditions wherein parental behaviors and characteristics become manifest (Agathonos-Georgopoulous, 1992). In the present study, the attitudes and ideologies regarding parent-child relationships during the Soviet period are of greatest concern, since the children and adolescents of today are being parented by those who were raised according to the Soviet childrearing beliefs of yesterday.

The sociocultural context of the Soviet period was imbued by contradictory views on parent-child relationships. The role attributed to motherhood within the Soviet society changed according to shifting ideological stance. These contradictions reflected the Marxist-Leninist emphasis upon the equality of the sexes, versus other proclamations that placed greater emphasis upon the role of woman as mother (Du Plessix Gray, 1989; Kerig, Aloyshina, & Volovich, 1993). On the one hand, Stalin proclaimed the cult of motherhood and abolished abortions, and on the other hand directed the deportation of millions of women and children to Siberia. Throughout the Soviet period debates centered on whether it was better for a woman to adhere to the Marxist-Leninist ideal of sexual equality—the woman as working class heroine driving a tractor—or to “return” to the more traditional roles of housewife and mother (Atwood, 1990). Reference has been made to the “Stalinist mother” as authoritarian, dominating and emotionally distant towards her children, yet overly involved in her own career (Šebek, 1994).

Attitudes about parenting methods were also replete with contradictions. Some officially sanctioned parenting journals advised parents to use disciplinary methods such as the withdrawal of affection, and
encouraged inducing guilt feelings (Bronfenbrenner, 1970). On the other hand, many Soviet mothers were noted for overprotecting their children and restricting age-appropriate autonomy (Pearson, 1990). Child rearing practices differed in relation to gender, but in a direction somewhat opposite to that of the West (where boys have been traditionally encouraged to be the more active and autonomous). In many parts of the Soviet Union mothers encouraged their daughters to be active and responsible, while sons were often pampered and thereby indirectly encouraged to be passive (Kerig et al., 1993). The upbringing of boys was also influenced by the frequent absence of a positive male role model, since often the father was either inactive or rarely at home (Du Plessix Gray, 1989).

It is certainly important to appreciate that the Communist-bloc countries included hundreds of different ethnic groups, each of which integrated into their local child rearing attitudes and behaviors their pre-Communist traditions. For example, the situation in the Soviet Republic of Latvia (1945–1990) was such that women were often likely to adhere to the ideology of the strong working woman, rather than follow those ideological dictates calling for a more “traditional” housewife and gentle mother. The tradition of strong Latvian working woman is consistent with previous historical periods when Latvian men were inscribed in various conquering foreign armies, and the Latvian women were obliged to take care of the farmstead. In addition, the common opinion was not only that work is primary, but that lavishing too much attention and love upon one’s child could be harmful, that “too frequent affection will spoil the child.” Since the breakup of the Soviet Union, Latvian women have infrequently been known to comment upon the fact that as mothers they were “too busy building Communism,” and as grandmothers they regret not having spent more time with their children (Sebre, 2000).

In contrast, the Macedonian family prior to World War II was typically rural and patriarchal, the father assuming the more powerful role in the family. At the same time, he was emotionally disengaged from the children, and their upbringing was entirely the responsibility of the mother. Multigenerational input was typical, and the role of the grandparent was respected. During the past several decades, families are becoming more urbanized and egalitarian, and fathers are becoming emotionally closer to their children. However, the typical “Macedonian man” is still struggling for the most powerful position in the family. Women are often working outside of the home, but expected to take on the role of “super woman,” which entails both career demands and major responsibility for the care of the children and the home.

The present study gathered data nearly 10 years after the dissolution of the Soviet state and the Communist bloc. During this period each country has experienced its own difficulties of transition and development as a democratic nation state. Nevertheless, many positive changes have taken place and are common to each of the countries in this study. There is a new interest and openness regarding parent-child relationships—exemplified by an increase in new journals for parents, parenting literature translated from the West, and articles written locally. Concern with the socialization processes necessary to produce a good Soviet citizen has passed, and has been replaced by a greater awareness of the importance of a positive parent-child relationship. These changes are occurring gradually, and it is the young parents now beginning to raise a family who are the ones most likely to be aware that expression of love and affection is a positive parental attitude.

Despite these improvements, child abuse continues to be a serious concern. Although at present child maltreatment is publicly acknowledged, reported on in the mass media and sometimes considered in court, many problems remain. Only recently have there been attempts to gain valid information on the incidence of child maltreatment and associated symptoms in Eastern Europe. Speculation is that child abuse is a serious problem, and Latvian mental health professionals typically believe that financial difficulty and unemployment leads to anxiety and alcohol abuse in the parent, which then become the
biggest contributors to child abuse (Sebre, Sprugevica, Zagare, & Sluka, 1998). More precise information will allow a better understanding of the complexities of the problem with an eye towards both intervention and prevention.

The present study was a collaborative effort with team members from several Baltic and Eastern European countries, together with specialists from the United States, who were sponsored by the Soros Foundation Open Society Institute. Team members from Latvia, Lithuania, Macedonia, and Moldova agreed to carry out this cross-cultural research project in their respective countries, with the goal of examining the following research questions:

1. What is the child-reported incidence of emotional and physical abuse in each of the countries?
2. What is the relationship between emotional and physical abuse and demographic factors including age, gender, and where the child is living—large city, medium city, or small city/rural area?
3. What is the level of psychosocial symptoms reported by children in each of the countries?
4. What is the relationship between child maltreatment types and psychosocial symptoms?
5. What is the relationship between parents’ employment status, overuse of alcohol and child emotional and physical abuse?

Methods and procedures

Informed consent

Since research ethics committees do not exist in the four countries involved in this study, the research team consulted with several epidemiological researchers from the United States as to the most appropriate strategy to guarantee that the rights of the subjects would be respected. The principle of “passive parental consent” was suggested. Permission to conduct the study was first received from the local school boards. Parents then received information that a study was taking place concerning adolescents’ thoughts, feelings, and relationships, that the study was voluntary and confidential. If parents objected to their child’s participation, they were asked to inform school authorities. In fact, several parents from each locale did so, and their child was excluded from the study. The remaining children were then told that they would be asked to fill out questionnaires regarding their thoughts, feelings, and relationships. The children were also informed that participation in the study was voluntary, completely confidential, and anonymous. We did not request any identifying information on the forms. After the questionnaires had been completed, the children were given an information sheet with telephone numbers of local psychological services or crisis centers where they could call if they wished to discuss any issues or questions which they might have.

Data collection took place in the 4th and 7th grade classrooms during the school day, and was administered according to the same procedure by each country’s respective research team.

Questionnaires were completed by 1145 children ages 10–14 from several Baltic and Eastern European countries. Participants included 297 children from Latvia, 300 children from Lithuania, 302 children from Macedonia, and 246 children from Moldova. The data were collected during the spring of 1998 in Latvia, the spring of 1999 in Lithuania, and the spring of 2000 in Macedonia and Moldova. Data collection within each country took place in two large-city schools, two medium-city schools, and two small-city or rural schools. The cities and schools were randomly chosen from different regions of each country, with the stipulation that the children attending this school would be fluent in the major national language.
Table 1
Grade level, gender and mean age of respondents by country

<table>
<thead>
<tr>
<th>Grade level/gender</th>
<th>Latvia ($n = 297$)</th>
<th>Lithuania ($n = 302$)</th>
<th>Macedonia ($n = 300$)</th>
<th>Moldova ($n = 246$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>71 10.39</td>
<td>77 10.23</td>
<td>72 10.70</td>
<td>53 10.54</td>
</tr>
<tr>
<td>Female</td>
<td>69 10.33</td>
<td>72 10.18</td>
<td>79 10.77</td>
<td>69 10.48</td>
</tr>
<tr>
<td>7th grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>85 13.19</td>
<td>67 13.21</td>
<td>73 13.19</td>
<td>60 13.76</td>
</tr>
<tr>
<td>Female</td>
<td>72 13.15</td>
<td>84 13.19</td>
<td>78 13.14</td>
<td>64 13.69</td>
</tr>
</tbody>
</table>

Such a stipulation was made since the questionnaires for this initial study had been translated into the national languages of each country—Latvian, Lithuanian, Macedonian, Moldovan. Consequently, the ethnic composition of each sample was primarily (greater than 90%) Latvian, Lithuanian, Macedonian, and Moldovan, respectively.

Participants

The study included 1145 primary school students 10–14 years of age from 4th to 7th grades from Latvia, Lithuania, Macedonia, and Moldova (Table 1). Children generally begin first grade at age 7 within the countries participating in this study, subsequently, the children from 4th grade were mostly 10–11 years old, and those from the 7th grade were mostly 13–14 years old. Any child younger than 10 years or older than 14 years was excluded from the study. The age range of the study participants includes both children and adolescents, however, for purposes of brevity they will all be further referred to as children.

Measures

A questionnaire that included items concerning demographic information, reports of emotional abuse and physical abuse, and psychosocial symptoms was compiled in English. After a final version was agreed upon, in each country the questionnaire items were translated from English to Latvian, Lithuanian, Macedonian, and Moldovan, respectively, by two independent translators. Any discrepancies were discussed. The consented upon version was then back-translated to English by two different independent translators, and again any discrepancies were discussed and resolved.

Demographic information

The respondent was asked to indicate his or her age, sex, ethnicity and number of family household members. The research teams grouped the questionnaire forms as coming from big-city, medium-city, or rural schools. (Regrettably, the information on school region for the Moldovan sample became separated from the data in transit to Latvia, where the questionnaire responses were entered into the computer data set and analyzed.)
Abuse measures

*Conflict Tactics Scale, Child Form R (CTS) (Straus, 1995).*

This widely utilized scale assessed the extent of emotional and physical abuse the child reports as having experienced within the past year (“Please indicate how often your parents did each of these things in the past year”). The original scale was modified for this study, with several items added to the emotional abuse scale (e.g., “tried to make you feel guilty”). The rating of the items was changed to a 5-point Likert scale (never = 1 to always = 5). The final version included 23 items. Two initial items asked the child to report on positive parental behaviors. Emotional abuse (11 items) was assessed with such items as “insulted you,” “tried to make you feel guilty,” “made you feel like you were a bad person,” and “sulked or refused to talk about an issue.” Physical abuse (10 items) was assessed by inquiring about potential parental behaviors ranging from less severe to more severe forms of physical abuse, such as “threw something at you,” “slapped or spanked you,” to “heat you up,” and “burned or scalded you.” Coefficient alpha reliability estimates based on the present samples in each of the four countries ranged from .79 to .87 for both the emotional and physical abuse scales.

Three separate scores were derived from the emotional and physical abuse subscales. First, was calculated a mean “emotional abuse score,” which was the average rating of all the emotional abuse items. Second, was calculated a mean “physical abuse score,” the average rating of all of the physical abuse items. Third, an overall rating of “abused” versus “not abused” was also derived. A coding scheme was developed by the research team, with abused/not abused ratings based on the frequency of the reported abuse, while taking into consideration the severity of the abuse item. If the child marked “often” or “always” regarding any of the emotional abuse items, or at least “sometimes” for the more severe emotional abuse items, then the child was coded as “emotionally abused.” If the child marked “sometimes,” “often,” or “always” regarding any of the physical abuse items, or at least “rarely” for the more severe physical abuse items, then the child was coded as “physically abused.” Initially, each of the above mentioned scores was analyzed for 4th and 7th graders separately, and then the ratings from all children within each country were combined and examined for overall, main effects.

Psychosocial symptoms

*Adolescent Sexual Concerns Questionnaire (ASCQ) (Hussey & Singer, 1993).*

This 31-item scale was completed by the 7th grade participants only, since it is meant specifically for adolescents. The items were rated on a 4-point scale (“never” = 0 to “almost all of the time” = 3). The ASCQ rated somatic problems (5 original items plus two items added for the purposes of this study because clinical experience in several of these countries had indicated markedly elevated rates of post-traumatic somatic complaints), sexual concerns (14 items), and relationship issues (10 items). For purposes of the present analysis only mean scores from the Somatic Problems scale were used for general correlations.

*Trauma Symptom Checklist Children (TSCC) (Briere, 1995).*

Psychosocial symptoms were assessed with the TSCC, a 54-item 4-point scale (0 = never to 3 = almost all of the time). The items are grouped into six subscales: Anxiety, Depression, Anger, Posttraumatic stress, Dissociation, and Sexual Concerns. Mean scores were calculated for each subscale. Cronbach alpha reliability ratings were acceptable to good within the data sets of each of the four countries: depression, .75–.82; anxiety, .76–.81; anger, .74–.80; dissociation, .71–.78; posttraumatic stress, .74–.84; and sexual concerns, .69–.76.
Risk measure

The child also completed two questions that were related to the potential risk factors of unemployment and alcohol abuse. Participants were asked about their parents’ employment status with the question, “Does your father (mother) work outside the home?” and about excessive alcohol use by a parent with the question “Is there a person in your family who uses alcohol overly much?” The format for each question was “yes/no.”

Results

Incidence of emotional and physical abuse

The incidence of emotional and physical abuse was derived from the percentage of children within each country who were rated as emotionally or physically abused (Table 2). Based on their responses to the CTS, the occurrences of emotional abuse were: 29% of the Latvian children, 33% of the Lithuanian children, 13% of the Macedonian children, and 32% of the Moldovan children. Physical abuse was reported by 17% of the Latvian children, 26% of the Lithuanina children, 12% of the Macedonian children, and 30% of the Moldovan children were categorized as physically abused.

The percentages of children who reported at least one type of abuse were: 33% of the children from Latvia, 42% of the children from Lithuania, 18% of the children from Macedonia, and 43% of the children from Moldova.

Table 2
Percentage of children reporting emotional and/or physical abuse by country and grade level

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Emotional abuse (%)</th>
<th>Physical abuse (%)</th>
<th>Emotional or physical abuse (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latvia</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4th grade</td>
<td>140</td>
<td>22.1</td>
<td>18.6</td>
<td>28.6</td>
</tr>
<tr>
<td>7th grade</td>
<td>157</td>
<td>34.4</td>
<td>15.9</td>
<td>36.3</td>
</tr>
<tr>
<td>Overall</td>
<td>297</td>
<td>28.8</td>
<td>17.4</td>
<td>32.8</td>
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<tr>
<td>Lithuania</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4th grade</td>
<td>149</td>
<td>36.2</td>
<td>31.5</td>
<td>48.3</td>
</tr>
<tr>
<td>7th grade</td>
<td>150</td>
<td>30.7</td>
<td>20.79</td>
<td>36.7</td>
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<tr>
<td>Overall</td>
<td>299</td>
<td>33.3</td>
<td>26.0</td>
<td>42.3</td>
</tr>
<tr>
<td>Macedonia</td>
<td></td>
<td></td>
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<tr>
<td>4th grade</td>
<td>145</td>
<td>12.9</td>
<td>14.4</td>
<td>18.9</td>
</tr>
<tr>
<td>7th grade</td>
<td>143</td>
<td>12.4</td>
<td>10.0</td>
<td>16.5</td>
</tr>
<tr>
<td>Overall</td>
<td>285</td>
<td>12.5</td>
<td>12.2</td>
<td>17.8</td>
</tr>
<tr>
<td>Moldova</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4th grade</td>
<td>119</td>
<td>21.1</td>
<td>25.4</td>
<td>33.3</td>
</tr>
<tr>
<td>7th grade</td>
<td>124</td>
<td>43.5</td>
<td>35.5</td>
<td>54.0</td>
</tr>
<tr>
<td>Overall</td>
<td>243</td>
<td>32.1</td>
<td>29.7</td>
<td>43.1</td>
</tr>
</tbody>
</table>
Chi-square analyses indicated several differences by grade level: Latvian 7th grade children reported higher incidence of emotional abuse than 4th graders ($p < .05$); Moldovan 7th graders also reported more emotional abuse than 4th graders ($p < .001$); and Lithuanian 4th graders reported more physical abuse than 7th graders ($p < .05$).

The most commonly endorsed emotional abuse items from the CTS are shown in Table 3. Lithuanian children (9%) and Macedonia children (5%) reported that the most commonly used method by their parents for resolving conflicts is “yelling” at them. Latvian and Moldovan children (6%) reported that their parents “often” or “always” used the tactic of making them “feel guilty.”

### Differences in mean scores of abuse by country, region, and gender

An ANOVA comparing the mean scores of the emotional abuse ratings by country indicated significant differences, $F(3, 1121) = 19.89, p < .001$; as did comparison of physical abuse mean scores by country, $F(3, 1108) = 10.87, p < .001$. The mean scores of the emotional abuse and physical abuse ratings were markedly lower for the Macedonian children.

A two-way (Country $\times$ Region) ANOVA indicated significant differences for emotional abuse by region, $F(2, 887) = 4.26, p < .01$; and significant differences for physical abuse by region, $F(2, 874) = 10.12, p < .001$. As shown in Table 4, the abuse scores were typically highest in the rural areas, somewhat less in the middle-size cities, and least in the big-cities. Data on region were not available from Moldova. A two-way (Country $\times$ Gender) ANOVA indicated no differences by gender for emotional or physical abuse.

### Psychosocial symptom scores

Two way ANOVA (Country $\times$ Scale) of the mean scores from the TSCC subscales found significant differences: Anxiety $F(3, 1135) = 26.81, p < .001$; Depression $F(3, 1135) = 41.05, p < .001$; Anger $F(3, 1134) = 56.89, p < .001$; PTS $F(3, 1135) = 37.61, p < .001$; Dissociation $F(3, 1134) = 49.62, p < .001$; Sexual Concerns $F(3, 1135) = 12.08, p < .001$. The ASCQ Somatic Problems scale also differed across countries: $F(3, 687) = 20.18, p < .001$. The mean scores of the TSCC scales were highest for Latvia and Lithuania, and the Macedonia mean scores were lowest. A similar pattern was noted for ASCQ Somatic Problems.

### Relation between psychosocial symptoms and abuse type

Pearson correlations were calculated by country to examine the relationship between reported emotional and physical abuse and psychosocial symptom scores. The TSCC scales are all significantly correlated...
Table 4
Mean scores of child-reported emotional and physical abuse by country and region

<table>
<thead>
<tr>
<th></th>
<th>Latvia</th>
<th>Lithuania</th>
<th>Macedonia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Big-city</td>
<td>Medium-city</td>
<td>Rural</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.44 (.47)</td>
<td>1.48 (.57)</td>
<td>1.52 (.60)</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.09 (.18)</td>
<td>1.12 (.28)</td>
<td>1.19 (.43)</td>
</tr>
</tbody>
</table>

Note: Standard deviations in parentheses.
with the emotional and physical abuse scales. The largest correlations were typically between abuse and TSCC Anger scores, with the highest correlation is between TSCC Anger and reports of physical abuse in Macedonia, \( r(275) = .54, p < .001 \).

Because of literature reporting that cumulative abuse is more problematic than single types of abuse (Garbarino, 1999), we calculated the correlation between total abuse and symptom level from the TSCC and the ASCQ for the entire sample (Table 5). The mean score of the summed emotional abuse and physical abuse mean scores served as the combined abuse score. Again, significant correlations were found between the psychosomatic symptoms and the combined abuse mean score, with the highest correlation found between combined abuse scores and TSCC Anger, \( r(297) = .69, p < .001 \) for the Macedonian children.

**Risk factors and reported abuse**

The reports of father not working outside of the home were: Latvia, 9%; Lithuania, 17%; Macedonia, 7%; Moldova, 24%. Many of the fathers not working outside the home were unemployed, but others may have been self-employed as craftsmen or involved in subsistence farming. Mothers not working outside of the home were reported as follows: Latvia, 19%; Lithuania, 26%; Macedonia, 30%; Moldova, 23%. The children reported the following rates of parental overuse of alcohol: Latvia, 12%; Lithuania, 13%; Macedonia, 4%; Moldova, 4%. Analysis of alcohol overuse by region indicates that there is higher rate of alcohol overuse in the rural areas in comparison to the big cities: in Latvia 22% versus 4%; in Lithuania 17% versus 8%; in Macedonia 6% versus 3% (Moldova data are not registered by region).

We calculated a series of correlations between the potential risk factors of parental employment status, alcohol abuse, and family size with the abuse ratings. When fathers were not working outside the home,
abuse ratings were significantly higher for the Latvian sample: emotional abuse, \( r(297) = .150, p < .05 \), and physical abuse, \( r(297) = .179, p < .01 \). Abuse ratings were not correlated with mother’s employment status nor with family size for any country.

Parental overuse of alcohol was significantly correlated with emotional and physical abuse for Latvia, Lithuania, and Macedonia (Table 6). Abuse of alcohol and emotional abuse were found to be correlated for Moldova, but at a lower rate, \( r(237) = .14, p < .05 \). Father not working outside the home and overuse of alcohol were found to be correlated for the Lithuanian sample, \( r(300) = .132, p < .05 \).

**Discussion**

This is the first study of its kind which has examined both the incidence and correlates of emotional and physical abuse of children, that is, risk factors and psychosocial symptoms, in a large sample of 4th and 7th graders from four post-Communist bloc countries. Studies in which children are questioned directly are generally less frequent than those in which adults are questioned retrospectively about abuse trauma: in addition, this study involves a cross-cultural comparison of child-reported data from Latvia, Lithuania, Macedonia, and Moldova. Results show that children reporting emotional and/or physical abuse during the past year, ranged from 18% of the children from Macedonia, 33% of the children from Latvia, 42% of the children from Lithuania, and 43% of the children from Moldova. Significant differences in the incidence of emotional and physical abuse were noted across countries. Children from Macedonia reported the lowest rates of both types of maltreatment. Children from Lithuania reported the highest rate of emotional abuse, and children from Moldova reported the highest rate of physical abuse.

These between-country differences can be examined from several perspectives. First, it may be that the overall parental behavior in the various countries is genuinely different. Second, maltreatment may be conceptualized differently in these countries, and what “falls outside the range of acceptability” is variously defined (Korbin, 1991). For example, children may consider as “normal” certain parental behaviors which mental health professionals view as abusive. These children do not pay special attention to such “normal” parent behaviors and therefore do not report them. Third, sociocultural traditions and prohibitions may influence the child’s willingness to report freely about experience within the family.

The Macedonian researchers do not believe that Macedonian parents are less abusive, but that Macedonian children are raised with a very strong sociocultural taboo against speaking negatively of one’s family. These sociocultural constraints imply that in order to be a good child one must speak positively of one’s parents. These sociocultural prohibitions against speaking badly of one’s family become internalized and create a constraint on the self-reporting of the Macedonian children. In addition, the sociocultural traditions in Macedonia concerning what “falls outside the range of acceptability” may encourage Macedonian children to perceive certain abusive parental behaviors as positive. For example, the Macedonian sociocultural belief system includes presuppositions that strong discipline is a good thing, “spankings come from the heaven,” and discipline is necessary to help children grow into good persons (Bonevski & Novotni, 2000).

Practical implications and planning future programs for child abuse treatment and prevention might begin with the specific abusive parental behaviors that children have reported and rated in terms of frequency of occurrence. By taking note of the specific abusive parental behaviors in each country, one can make parents more aware and encourage change. For example, the Latvian children rated as most common the emotional abuse item “tried to make me feel guilty” and the Lithuanian children most
frequently marked the item “yelled at me.” These reported parental behaviors seem to fit the cultural stereotype of Lithuanians as more outwardly expressive than Latvians (Lieven, 1993)—hence the more frequent yelling of Lithuanian parents fits this model of active, outward expression. The “making one feel guilty” fits a more passive-aggressive, subtle method of disciplining. The opinion of the Latvian team is that guilt inducement is a serious problem within parent-child relationships in Latvia. Although this discipline technique is widely used, many Latvian parents are not yet aware that such a method is emotionally abusive and has specific consequences.

The reports of physical abuse by the Lithuanian (26%) and Moldovan (30%) children are higher than those of the children from Latvia (17%) and Macedonia (12%). A comparison of the two neighboring Baltic countries, Latvia and Lithuania, again seems to fit the cultural stereotype of Lithuanians as more outwardly expressive than Latvians, and therefore perhaps more likely to “slap or spank” their child.

Comparison of reports between 4th and 7th graders showed higher incidence of emotional abuse by 7th graders in two countries, Latvia and Moldova. The higher reporting of emotional abuse by 7th graders is likely to be the result of a bi-directional effect. The 7th graders (13–14 year olds) are developmentally more eager to assert their claims to autonomy, and such assertions frequently can result in conflict situations between parent and adolescent, possible provocations by the adolescent, and emotionally abusive response from the parents, especially if the parent is so inclined. In addition, early adolescence is often a time of increased emotional sensitivity, and even relatively benign comments by parents can at times be interpreted by the adolescent as offending. There is need for further research to examine more closely these differences of abusive parental behaviors in relation to the child’s developmental level, especially since the elevation in 7th graders’ reporting of emotional abuse was evident only in Latvia and Moldova, not in Lithuania and Macedonia.

Findings from this study also indicate that the levels of emotional and physical abuse in all four countries are higher in the rural areas than in the big or medium cities. The most likely explanation for this finding is that there is a greater amount of financial and psychological stress in the rural areas, due specifically to the breakup of the Soviet-style kolhozes or collective farms. During the Soviet period the kolhozes provided all of the local residents with employment and a small but regular income. After the dissolution of the kolhozes, many residents in the rural areas have been faced with dire financial difficulties and psychological problems due to the loss of one’s professional standing as a skilled collective farm worker. Although only in Latvia did we find a significant relationship between father’s employment status (not working outside the home) and higher rates of abuse, it seems likely that in all four countries the difficult socioeconomic situation in the rural areas is a serious factor affecting the psychological climate within the family.

The results also show that in three of the countries there is higher rate of alcohol overuse in the rural areas in comparison to the big cities (Modova data were not registered by region). In all four countries correlations were found between parental overuse of alcohol and emotional and/or physical abuse. This relationship is similar to that found in Western countries (Chaffin, Kelleher, & Hollenberg, 1996). The fact that alcohol overuse and emotional and physical child abuse are related has implications for the need for coordinated services between alcohol rehabilitation programs and child abuse treatment programs. Of note is that the rate of parental alcohol overuse reported by the Latvian children (12%) is similar to the rate of “about 10%” cited by specialists at the major alcohol and narcotics rehabilitation center of Latvia (Caunitis, 2002, personal communication), but lower than the rate of 15–19% of adults reporting problems related to alcohol overuse cited in a recent sociological study in Latvia (Koroleva & Rungule, 2002).
There are a number of limitations to this study. The participants of this study are not completely representative of all children in each respective country. This study took place in the classroom, and only those children present on the day of the distribution of the questionnaires participated in the study. Certainly, in each of these countries there are considerable numbers of children not attending school regularly, children who often are living in more dysfunctional family situations where rates of emotional or physical abuse are most likely to be higher. Secondly, the fact that these questionnaires were administered in a group format may have affected the openness of the children. In addition, alcohol overuse was assessed with only one question, and in future studies it would be advisable to pose several questions concerning parental overuse of alcohol in order to strengthen the reliability of this factor. Future studies should also aim to obtain reports regarding the abuse experienced by children not attending school, and consider possibilities for comparing the reports of multiple informants.

For purposes of planning future treatment and prevention programs this cross-cultural comparison allows us to consider more specifically which abusive behaviors are more prevalent and correlate most strongly with symptoms, in order to target these aspects. Identification of similar risk factors, such as parental alcohol abuse and the greater risk of abuse in the rural areas, provides the basis for joint discussion of prevention programs between team members from different countries, specific targeting of at-risk families for preventive measures, and joint efforts between abuse prevention and alcohol rehabilitation programs.

In summary, in each country of this cross-cultural comparison there were considerable percentages of children who reported emotional and physical abuse, and these abuse ratings correlated significantly with all of the assessed psychosocial symptoms, thereby adding construct validity to these measures as applied cross-culturally. Parental alcohol overuse and living in a rural area were identified as risk factors these countries.

References


Résumé

**Objectif:** Cette étude a voulu mesurer l’incidence des mauvais traitements émotionnels et physiques, les facteurs qui y sont associés et les symptômes psychosociaux dans le contexte d’une comparaison de diverses cultures dans certains pays anciennement du bloc communiste.

**Méthode:** Mille cent quarante-cinq enfants âgés de 10-14 ans, venant de la Lettonie (*N* = 297), de la Lituanie (*N* = 300), de la Macédoine (*N* = 302) et de la Moldavie (*N* = 246) ont participé à l’étude. Ils ont complété un questionnaire cherchant à évaluer les mauvais traitements physiques ou émotionnels et à fournir des renseignements sur leurs symptômes psychosociaux, y compris les symptômes du syndrome du stress post traumatique, et les facteurs de risque présents dans leurs familles.

**Résultats:** Les taux de maltraitance varient d’un pays à l’autre, tout comme les niveaux des symptômes psychosociaux. Les taux de mauvais traitements émotionnels et physiques varient d’une région à l’autre, c.-à-d. qu’il existe un taux plus élevé dans les régions rurales. Dans les quatre pays on retrouve une relation semblable entre les mauvais traitements et les symptômes; la relation la plus définitive est celle entre les mauvais traitements émotionnels et la colère. Lorsqu’on combine les scores des deux types de mauvais traitements, la corrélation est encore plus prononcée, surtout en ce qui a trait à la colère et la dépression. Dans les quatre pays, on retrouve un lien entre la consommation excessive d’alcool et les deux types de mauvais traitements.

**Conclusions:** On constate des différences entre les pays en ce qui a trait à l’incidence des mauvais traitements, cependant on note des ressemblances par rapport à la corrélation entre la maltraitance et les symptômes psychosociaux, la consommation excessive d’alcool et le fait de vivre dans un milieu rural.
Resumen

**Objetivos:** Este estudio se diseñó para evaluar la incidencia del maltrato emocional y físico, factores de riesgo asociados, y síntomas psicosociales en una comparación entre culturas de países del bloque post-comunista.

**Método:** Un total de mil ciento cuarenta y cinco niños de edades comprendidas entre 10 y 14 años formaron parte del estudio. Estos niños procedían de Letonia (N = 297), Lituania (N = 200), Macedonia (N = 302), y Moldavia (N = 246). Completaron cuestionarios que evaluaban su experiencia de maltrato emocional o físico, y recogían información sobre los factores de riesgo familiares y los síntomas psicosociales, incluidos síntomas relacionados con el PTSD.

**Resultados:** Las tasas de incidencia de maltrato variaban de un país a otro, así como la notificación de síntomas psicosociales. La incidencia de maltrato emocional y físico varió en cada región, con niveles más altos de notificación de maltrato en regiones rurales. En los cuatro países, se dio una asociación similar entre el maltrato físico/emocional y los síntomas psicosociales, con una correlación mayor y uniforme entre maltrato emocional e ira. Cuando se examinaron las puntuaciones combinadas de maltrato emocional y físico, se encontraron correlaciones mayores, particularmente en relación a la ira y a la depresión. En los cuatro países, el abuso paterno de alcohol estuvo asociado al maltrato emocional y/o físico.

**Conclusiones:** Los hallazgos muestran diferencias entre países en niveles de notificación de maltrato emocional y físico, pero patrones similares de correlación con síntomas psicosociales y el riesgo de factores de abuso paterno de alcohol en un área rural.
Youth Characteristics as Explanations of the Link Between Negative Parenting Practices and Adolescent Peer Relationship Quality

Vilmante Pakalniskiene, Margaret Kerr, & Håkan Stattin
Örebro University
Abstract
Negative parenting has been linked to problems in peer relationships for children and adolescents. Youth characteristics have been linked to both negative parenting practices and peer relationships, but they have not been examined as possible explanations for the link between negative parenting practices and peer relationship quality. In this study, we examined whether youths’ characteristics such as internalizing problems or psychopathy-like personality traits might play a role in parents’ negative practices and the quality of youths’ peer relationships, thus explaining the link between them. Participants were 663 adolescents, aged 13-15. Individuals and peers reported independently on the quality of their relationships. In the initial analyses, negative parenting practices were related to poorer peer relationships. However, cross-lagged longitudinal models suggested that youth characteristics contributed to both negative parenting practices and conflict in peer relationships. After controlling for youth characteristics, negative parenting practices were still related to peer relationships cross-sectionally but not longitudinally, and even in the cross-sectional models, psychopathy-like traits were the strongest predictor. From peers’ reports, psychopathy-like traits consistently predicted relationship quality. These findings suggest that one cannot simply say that parental behavior interferes with youths’ abilities to develop close, supportive peer relationships; youths’ characteristics play important roles in both parenting and peer relationships.

Keywords: adolescents, negative parenting practices, youth characteristics, peer relationships
Youth characteristics as explanations of the link between negative parenting practices and adolescent peer relationship quality

Close relationships are important aspects of life. Parents provide the first experiences in close relationships, but by adolescence, peers become more important than family as confidants and providers of emotional support (Bagwell, Newcomb, & Bukowski, 1998; Parker, Rubin, Price, & DeRosier, 1995). Both attachment theory and social learning theory suggest that youths might carry expectations or behaviors over from their relationships with their parents that would affect their peer relationships. This suggests that if children have experienced negative parenting behavior at home, they might have trouble establishing and maintaining supportive peer relationships.

Although the relations tend to be modest, a number of studies link various indicators of negative parenting behavior with youths’ problems in peer relationships. Much of this research deals with young children, but some deals with adolescents, and the results are similar. Negative parenting behaviors such as love withdrawal, harsh discipline, strictness, and verbal and symbolic aggression have been linked with poor quality in children’s and adolescents’ peer relationships, extreme peer orientation, antisocial activities with peers, and trouble making friends (Dekovic & Meeus, 1997; Engels, Decovic, & Meeus, 2002; Fuligni & Eccles, 1993; Lasford, Criss, Pettit, Dodge, & Bates, 2003; Vissing, Straus, Gelles, & Harrop, 1991). Thus, negative parental behavior or practices in the literature are linked to problematic peer relationships for children and adolescents. Consistent with attachment and social learning theories, the results have been interpreted as showing that the experience of negative parenting practices produces expectations or shapes behaviors that interfere with youths’ abilities to form or maintain supportive peer relationships.

Few studies have considered characteristics of the youths, themselves, in the link between negative parenting practices and poor peer relationships, but there are both theoretical and empirical reasons for doing so. Patterson’s (1982) coercion theory, which is based on social learning theory, suggests that children who are disruptive or aggressive can elicit harsh, ineffective parenting behaviors and also tend to be rejected by peers because of their behavior. Consistent with this, numerous experimental and longitudinal studies have shown that adults react negatively to various types of children’s externalizing problems (e.g., Anderson, Lytton, & Romney, 1986; Buss, 1981; Dix, Ruble, Grusec, & Nixon, 1986; Mulhern & Passman, 1981; Passman & Blackwelder, 1981). There is less research on adolescents, but the findings are similar. Externalizing behavior, antisociality, and
undesirable characteristics such as lying and manipulation can affect parenting negatively (Ge, Conger, Cadoret, Neiderhiser, Yates, Troughton, & Stewart, 1996; Kerr & Stattin, 2003). For internalizing problems, the findings are mixed (c.f., O’Connor, Deater-Deckard, Fulkel, Rutter, & Plomin, 1998; Rogers, Buchanan, & Winchell, 2003), but there is some evidence that internalizing problems might evoke negative parental behavior. Concerning peer relationships, longitudinal research has connected personality traits such as extraversion, shyness, neuroticism, and agreeableness (Asendorpf & Wilpers, 1998; Neyer & Asendorpf, 2001) and internalizing problems such as depressed mood (Nolan, Flynn, & Garber, 2003; Prinstein, Borelli, Cheah, Simon, & Aikins, 2005; Stice, Ragan, & Randall, 2004) and self-esteem (Neyer & Asendorpf, 2001) with changes over time in the quality of adolescents’ and young adults’ social relationships. Thus, there is evidence that externalizing and internalizing behaviors can influence both negative parenting practices and peer relationship quality. To our knowledge, however, no study has looked at whether youth characteristics might explain the link between negative parenting practices and poor peer relationship quality.

There have been a few studies that have included all three of these aspects—youth characteristics, parenting or parent-child relationships, and peer relationships (Clark & Ladd, 2000; Hinshaw, Zupan, Simmel, Nigg, & Melnick, 1997; Keown & Woodward, 2006; Lansford, Criss, Pettit, Dodge, & Bates, 2003; Simons, Chao, Conger, & Elder, 2001). They have focused mainly on children rather than adolescents, however, and they did not examine the directions of effects that we are suggesting. Two of these studies looked at child characteristics and mother-child interactions or mothers’ beliefs about parenting as equal predictors of peer relationship problems (Hinshaw et al., 1997; Keown & Woodward, 2006). They were both cross-sectional studies, however, and both used only preadolescent boys. Another study tested a mediation model and positive instead of problematic characteristics in children (Clark & Ladd, 2000). It was also cross-sectional, and negative parenting practices were not part of the study. Two other studies used longitudinal data to examine mediation or moderation models with parenting, youth characteristics, and peer relationships (Lansford et al., 2003; Simons et al., 2001). Again, peer relationship quality was not the outcome of interest in either of these studies and alternative directions of effects were not tested. These studies do, however, suggest that it is important to consider youth characteristics when examining relationships between parenting and peer relationships.

In this study, we ask whether links between negative parenting practices and adolescents’ peer relationship quality might be explained by youths’ internalizing problems.
and psychopathy-like personality traits. As measures of negative parenting practices, we use angry outbursts and coldness-rejection, both of which have been used previously (Isley, O’Neil, Clatfelter, & Parke, 1999; Kim, Conger, Elder, & Lorenz, 2001; Rueter & Conger, 1998; Straus & Field, 2003). First, we look at whether negative parenting practices are linked to peer relationship quality, defined as conflict and support and trust in close relationships. Then, we examine whether youth characteristics might influence negative parenting practices and also create conflict or interfere with support and trust in peer relationships, thus explaining the links between negative parenting practices and peer relationship quality. We consider two categories of youth characteristics: internalizing problems and psychopathy-like personality traits. As mentioned above, internalizing problems have been linked in separate literatures to peer relationship problems and some forms of harsh parental treatment. Thus, they offer a possible explanation for the link between negative parenting practices and poor peer relationships. The psychopathy-like personality profile involves three dimensions, two of which (grandiose-manipulative and callous-unemotional) directly involve unsupportive behavior in relationships with others and the other of which (irresponsible-impulsive) is similar to externalizing problems, which have also been connected in research and coercion theory with negative parenting practices and poor peer relationships. Thus, like internalizing problems, these characteristics offer a possible explanation for the link between parents’ harsh behavior and poor peer relationships. We examine how youth characteristics are related to negative parenting practices and peer relationship quality cross-sectionally and longitudinally, and for the longitudinal analyses we examine both directions of effects. We then control for youth characteristics when examining the link between negative parenting practices and peer relationship quality. In each of the analyses involving peer relationships, we try to verify the findings with youths’ reports of peer relationship quality by using peers’ independent reports.

Method

Participants

Data are from two waves of a longitudinal study that is taking place in a community of about 26,000. The present analyses involve participants who were in 7th through 9th grades (ages 13-15) at the first of the two waves (Time 1). The second wave (Time 2) took place one year later. One thousand forty-six youths (or 94% of the target sample in these grades) participated at Time 1. Because these analyses involved close peer relationships, we
limited the sample to those who participated at both time points and had reported on a relationship with a close peer at Times 1 and 2 ($n = 797$). To determine whether those who participated at both times differed from those who did not, we compared participants with complete peer relationship data and participants with only Time-1 data (171), participants with only Time-2 data (40), and participants who did not answer questions about peer relationships at either time point (38) on all of the other measures used in analyses. These groups did not differ significantly on any of the variables examined. Furthermore, as we will describe below, youths were free to name a sibling as their closest peer, and in order to keep parents’ behavior and close peer relationships independent in these analyses we eliminated those who named a sibling at either of the two times ($n = 134$). Thus, these analyses include 663 adolescents—346 boys (52.2%) and 317 girls (47.8%). At Time 1, 29% of parents were divorced or separated. Sixty-seven percent of participants lived with both mother and father; 13% lived with mother only; 11% with father only; 10% lived mother and stepfather; 6% with father and stepmother; 2% lived with other relatives or with someone else. The demographic characteristics at Time 2 were very similar.

Youths were recruited in their classrooms during school hours. They were given a description of the study and informed that participation was voluntary. Parents were informed about the study ahead of time in meetings held in the community and by mail. They could send in a prepaid postcard if they did not want their youth to participate (1% did so). Adolescents filled out the questionnaires during regular school hours in sessions administered by trained research assistants. Teachers were not present. Youths were not paid for their participation.

**Measures**

**Negative Parenting Practices**

To measure the two aspects of negative parenting practices – angry outbursts and coldness-rejection – we used youths’ responses to 11 relevant statements about how their parents typically responded to wrongdoing. There were three response options, ranging from “never” to “most often.” There were 5 items for angry outbursts and 6 items for coldness-rejection, and youths answered each item for their mothers and fathers separately. For these analyses we used the mean of angry outbursts and coldness-rejection. Also, because reports for mothers’ and fathers’ behaviors were substantially correlated ($r (580) = .68$, $p < .01$ and $r (582) = .62$, $p < .01$ for angry outbursts and coldness-rejection, respectively), we averaged them if we had reports from both parents. The stem question for all of these items was: “What happens if you have done something your parent really
dislike?” Youths rated the statements below. For *angry outbursts*, some examples are: “Becomes very angry and has an outburst,” “Has a hard time controlling his or her irritation,” “Screams and yells at you.” The alpha reliabilities for this scale were .87 at Time 1 and .89 at Time 2. For *coldness-rejection*, examples are: “Is silent and cold towards you,” “Makes you feel guilty for a long time,” “Avoids you.” The alpha reliabilities for this scale were .77 at Time 1 and .83 at Time 2. These scales were significantly correlated with each other at Time 1 ($r = .70, p < .001$) and Time 2 ($r = .62, p < .001$).

From parents’ points of view, angry outbursts and coldness-rejection could be responses to undesirable youth behavior. Thus, to examine criterion-related validity of the youth-reported negative parenting measure, we correlated it with parents’ reports of youth behaviors that might elicit negative parenting. Youth-reported negative parenting correlated significantly with parents’ reports of the youths’ *insensitivity to punishment*, $r (539) = .30, p = .001$ (e.g., “Although we parents rebuke him or her for a specific behavior, he or she continues with it”); *callous, unemotional traits*, $r (542) = .25, p = .001$ (e.g., “Seldom expresses remorse when he or she has done something that we parents consider wrong”); *hyperactivity-impulsivity-attention problems*, $r (542) = .24, p = .001$ (e.g., “Often interrupts others or intrudes on their conversation or activities”); and *off-task behavior*, $r (539) = .20, p = .001$ (e.g., “He or she begins doing many things, but has a hard time finishing them”).

**Peers**

**Assessment of Peers**

We asked youths to name three important peers in order of importance to them. We defined an important peer as, “someone you talk to, hang out with, and do things with. It cannot be your parents or another adult. It could, for example, be a friend, a sibling, or a boyfriend or girlfriend.” We explained, further, that this important peer could live anywhere, did not have to be the same age as the participant, and could be either a boy or a girl. Here, we focus on the first-mentioned, or most important, peer. For 77% of participants, the most important peer was a friend, for 11% it was a sibling and for 7% it was a romantic partner. As mentioned above, adolescents who named a sibling as their most important peer at Time 1 (73 participants) or at Time 2 (40 participants) were excluded from the analyses. For most participants, the most important peer at Time 1 was different from the most important peer at Time 2. Two hundred eleven youths named the same person at both times.

**Relationships with Peers**
Youths answered 12 questions about their relationships with their first-mentioned, or most important, peers. There were five response options, ranging from “do not agree at all” to “agree perfectly.” Questions were taken from Parker and Asher’s (1993) Friendship Quality Questionnaire. The questions were about conflicts and caring in relationships or the friend’s behavior in the relationship. Principal-components analyses of the 12 variables showed two clear factors, which we labeled “support and trust” and “conflict.” The factor loadings ranged from .64 to .90 and the cross-loadings ranged from -.01 to -.20.

**Support and trust** Some examples of items are: “Says I’m good at different things,” “makes me feel that I have good ideas,” and “doesn’t tell my secrets to others.” The alpha reliabilities for this scale were .86 at Time 1 and .89 at Time 2.

**Conflict.** Some examples of items are: “We often get angry with each other,” “We argue a lot,” and “We often get annoyed with each other.” The alpha reliabilities for this scale were .90 at Time 1 and .91 at Time 2.

**Adolescents’ Characteristics**

**Psychopathy-Like Personality Traits**

We used a youth self-report instrument designed to capture subclinical levels of these personality traits in community samples of youths 12 years and older, the Youth Psychopathic traits Inventory (YPI: Andershed et al., 2002). Reliability and construct validity of this instrument have been reported elsewhere (Andershed, Hodgins, & Tengström, in press; Dolan, & Rennie, 2006a; Dolan, & Rennie, 2006b; Poythress, Dembo, Wareham, & Greenbaum, 2006; Skeem & Cauffman, 2003). For this study we used a total YPI score, which was calculated as a mean value of the scores for three dimensions. The *grandiose, manipulative* dimension comprises 20 items, equally divided among four subscales: Dishonest Charm, Grandiosity, Lying, and Manipulation. Examples of the questions are: “I have the ability to con people by using my charm and my smile,” “I am better than everyone else,” “Sometimes I find myself lying without any particular reason.” The alpha reliabilities were .85 at Time 1 and .85 at Time 2. The *callous, unemotional* dimension comprises 15 items from three subscales: Unemotionality, Remorselessness, and Callousness. Some examples of items are: “I think that crying is a sign of weakness, even if no one sees you,” “I usually feel calm when other people are scared,” and “I have the ability not to feel guilt and regret about things that other people would feel guilty about.” The alpha reliabilities for this dimension were .74 at Time 1 and .79 at Time 2. The *impulsive, irresponsible* dimension includes 15 items for Impulsiveness, Thrill-Seeking, and Irresponsibility. Examples of the questions are: “I prefer to spend my money right
away rather than save it,” “I like to be where exciting things happen,” and “I have probably skipped school or work more than most other people.” The alpha reliabilities were .77 at Time 1 and .77 at Time 2. These three dimensions were significantly and substantially correlated with each other at Time 1 and Time 2 (rs from .54 to .78, ps < .001).

Adolescents’ Internalizing Problems

We used youths’ responses to relevant statements about self-esteem, depressed mood, and failure expectations. For this study we used a mean value of three scales, which were significantly and substantially correlated with each other at Time 1 and Time 2 (rs from .39 to .61, ps < .001). To measure self-esteem, we used the Rosenberg Self-Esteem Scale (Rosenberg, 1979), consisting of ten statements rated on a 4-point scale from “do not agree at all” to “agree totally.” The alpha reliabilities for this scale were .89 at Time 1 and .89 at Time 2. The measure of depressed mood was the Child Depression Scale from the Center for Epidemiological Studies (Faulstich, Carey, Ruggiero, Enyart, & Gresham, 1986; Roberts, Lewinsohn, & Seeley, 1991), consisting of twenty questions rated on a 3-point scale from “not at all” to “often.” The alpha reliabilities for this scale were .89 at Time 1 and .91 at Time 2. Youths also reported on their expectations of failure on difficult tasks (Nurmi, 1993; Nurmi, Onatsu, & Haavisto, 1995). They evaluated four statements using a 4-point scale from “do not agree at all” to “agree totally.” The statements included: “I don’t have faith in my ability to cope with hard tasks” and “Often I don’t even think there is any point in trying when I face demanding tasks.” The alpha reliabilities for this scale were .74 at Time 1 and .71 at Time 2.

Analyses

Correlational and multiple regression strategies were used with cross-sectional and longitudinal data. For the longitudinal analyses involving peer relationship quality, we formed a dummy variable to distinguish youths who named the same person as their most important peer at both times (n = 211) from youths who named different peers at the two time points (n = 442). In all of these analyses, we included interaction terms to test whether having the same peer at both times made a difference in the results. Differences are presented separately for the two groups. Also, because internalizing problems and psychopathy-like traits might be comorbid, we included interactions of these two in the models. None of these interactions was significant, so they were removed.
Results

Links Between Negative Parenting Practices and Peer Relationships

The intercorrelations between all variables in the study within time points are shown in Table 1, with Time 1 above the diagonal and Time 2 below. As shown in the first row and the first column, at both time points negative parenting practices were significantly but modestly associated with youth-reported support and trust. These cross-sectional links, presented in Table 1, are similar in magnitude to those reported in previous studies. At Time 1, negative parenting was also related to peers’ independent reports of conflict in the relationship. This link was not found at Time 2, however, and no links were found for support and trust at either time.

The longitudinal analyses appear in the first row of Table 2. In these analyses, negative parenting practices at Time 1 significantly predicted self-perceived conflict in peer relationships at Time 2, controlling for the Time-1 measure. This suggests that perceived negative parenting practices contribute to changes over time in perceived conflict in close peer relationships. This was not substantiated with peers’ independent reports of support and conflict, however. Overall, then, there is evidence that perceived negative parenting is linked to perceived conflict in close peer relationships concurrently and to increased perceived conflict in close peer relationships over time. From the peers’ points of view, there is some support for this cross-sectionally but not longitudinally.

The Role of Youth Characteristics

To examine whether youth characteristics might evoke negative parenting practices and also interfere with relationship quality, we looked first at whether and how youth characteristics are related to negative parenting practices. As shown in the upper part of Table 1, both youth characteristics were significantly correlated with self-perceived negative parenting practices at Times 1 and 2. The longitudinal results with youth characteristics as predictors of negative parenting and peer relationship quality appear in the second and third rows of Table 2. As shown in the first column, both internalizing problems and psychopathy-like personality traits significantly predicted increases in perceived negative parenting practices from Time 1 to Time 2, and as shown in the third column, both youth characteristics predicted increases in perceived conflict in relationships with important peers from Time 1 to Time 2. For conflict, this was significant for youths who named different close peers at the two times, thus suggesting that at Time 2 they perceived more conflict with their closest peer than they had with an earlier close peer. Again, however, this was not found when peers’ independent ratings of conflict in the
relationship were used longitudinally. Thus, there is evidence that internalizing problems and psychopathy-like traits might evoke negative parenting and create conflict in peer relationships from the youths’ points of view, thus providing a possible explanation for the link between self-reports of negative parenting and peer relationship quality. In the next set of analyses, we test this explanation.

To determine whether youth characteristics explain the apparent link between negative parenting practices and peer relationship quality, we controlled for the two youth characteristics in models predicting peer relationship quality from negative parenting practices. The results appear in Table 3. As shown in the upper part of the table, after controlling for youth characteristics, negative parenting practices still remain a significant predictor of self-perceived support and trust and conflict in relationships at Time 1 and of conflict at Time 2. The beta coefficients, however, are only about half of what they were before. But negative parenting practices were not related to peers’ independent reports of either support and trust or conflicts at either time. Both youth characteristics also predicted perceived support and trust, and psychopathy-like traits predicted perceived conflict. Psychopathy-like traits were linked to lower support and trust at both Times 1 and 2, and conflicts at Time 1, according to peers’ independent reports. Cross-sectionally, then, controlling for youth characteristics did not completely eliminate the links between negative parenting and self-perceived peer relationship quality, but it did eliminate the weaker link between negative parenting and peer-reported relationship conflict. Youth characteristics, particularly psychopathy-like traits, showed the most consistent links to relationship quality from both individuals’ and peers’ perspectives.

As shown in the lower part of the table, longitudinally there were no unique links between negative parenting practices and self-perceived relationship quality after controlling for youth characteristics, but internalizing problems predict increases over time in perceived support and trust in peer relationships and psychopathy-like traits uniquely predict increases over time in perceived conflict in relationships. For the longitudinal analyses predicting changes in peers’ views of relationship quality, we focused only on youths who were selected by the same peer at both time points. This insured that differences over time represented changes in a peers’ perception of the relationship rather than differences between one peer and another. In these analyses, there was no significant link between negative parenting and peer relationship quality, but psychopathy-like personality traits significantly predicted increases in peers’ perceptions of conflicts. Thus, when youths’ reports of peer relationships are used, youth characteristics explain the longitudinal but not the cross-sectional links between negative parenting and peer
relationship quality. When peers’ reports of relationship quality are used youth characteristics explain both the longitudinal and the cross-sectional links between self-perceived negative parenting and peer-reported relationship quality.

The results that are supported by both youths’ and peers’ perceptions of relationship quality suggest that psychopathy-like traits play a role in evoking negative parenting and creating peer relationship problems. One might ask, however, whether there are reciprocal relations in which negative parenting and experiences in peer relationships contribute to these traits. To test this idea, in a final set of analyses we predicted changes in youth characteristics (Time-2 measures controlling for Time-1 measures) from negative parenting and the two measures of peer relationship quality. These longitudinal results are reported in Table 4. As shown in the table, negative parenting practices predicted increases over time in internalizing problems, but did not predict changes over time in psychopathy-like traits. In these analyses, there was no significant link between peer-rated relationship quality and youth characteristics, but self-rated support and trust in peer relationships significantly predicted decreases in youth internalizing problems and self-perceived conflicts significantly predicted increases in youth psychopathy-like traits. Thus, there are some reciprocal relations between self-perceived negative parenting practices, experiences in peer relationships, and youth characteristics.

**Discussion**

Children who experience negative parental behavior have been found to have problems relating to peers (Dekovic & Meeus, 1997; Engels, Decovic, & Meeus, 2002; Fuligni & Eccles, 1993; Isley, O’Neil, Clatfelter, & Parke, 1999; Schwartz, Dodge, Pettit, Bates, & The Conduct Prevention Research Group, 2000; Vissing, Straus, Gelles, & Harrop, 1991). Although several studies have suggested an interplay between youth characteristics, positive or negative parenting, and different aspects of peer relationships (Clark & Ladd, 2000; Keown & Woodward, 2006; Simons, Chao, Conger, & Elder, 2001), until now youth characteristics have not been considered as a possible explanation for both negative parenting practices and poor peer relationships. Our findings suggest that negative parenting practices might be, in part, maladaptive parenting responses to adolescents’ characteristics and behaviors, and these same characteristics and behaviors might be responsible for problematic peer relationships. Thus, one cannot say simply that negative parental behavior interferes with youths’ abilities to develop close, supportive peer relationships; youths’ characteristics play important roles in relationships with both parents and peers.
In recent years, there has been a growing awareness that reciprocal processes are important for understanding interactions between parents and children. The idea that parents react to children’s characteristics and children, in turn, react to parents’ behaviors was suggested early on in coercion theory (Patterson, 1982). However, although reciprocal effects are widely accepted in principle, they are still too seldom included in research designs. This study is one of a growing number that includes and tests alternative directions of effects.

There are several studies in the literature that have considered linkages among youth characteristics, parenting, and peer relationships or interactions (Clark & Ladd, 2000; Hinshaw, et al., 1997; Keown & Woodward, 2006; Lansford et al., 2003; Simons, et al., 2001), but they differ from the present study in several important ways. Three of these studies were cross-sectional, which makes it difficult to infer directions of effects. In addition, most have looked at children rather than adolescents, which makes it difficult to generalize to adolescent peer relationships. This study is unique in examining whether youth characteristics might underlie both self-perceived negative parenting practices and friends’ reported or self-perceived poor peer relationship quality, thus explaining the relation between them.

One of the main strengths of this study was the use of peers’ reports in addition to participants’ self-reports of relationship quality. This allowed us to identify the links that are robust across informants as well as across waves. Considering only the findings that reached significance at both waves and for both youths’ and peers’ reports of relationship quality, the clearest conclusion is that they all involved links between psychopathy-like traits and relationship quality. This suggests that these characteristics deserve more attention in respect to peer relationships.

Both internalizing problems and psychopathy-like traits are positively linked to negative parenting practices cross-sectionally and longitudinally, and in that way they are similar. For internalizing problems unlike psychopathy-like traits, however, the relations are bidirectional, suggesting that parents react negatively to internalizing problems and their behaviors also make them worse. The more striking difference is that internalizing problems are positively linked to support and trust in relationships both cross-sectionally and longitudinally, but only from the youths’ own points of view. Perhaps this is not surprising, since youths were reporting on the support and trust gained from their peers. It might be that youths with internalizing problems get support from their friends but do not provide a lot in return.
There are some reasons to be cautious about over-interpreting these results. It is important to distinguish between effects over time during a period of several years and original causes of behavior. In this study, we are dealing with adolescence and explaining effects over time in adolescence. Parents and children have histories of interactions, however, and negative parenting practices might have played a causal role in shaping those characteristics earlier in the child’s life. This is possible, and it is intuitively appealing to think that parents play a more active role in shaping the behavior of young children than adolescents. But whatever has happened earlier, our data do show changes over time in adolescence and directional or bidirectional effects. This could be important for understanding and offering advice to parents of adolescents.

The reliance on youths’ reports can be seen as a limitation, particularly because adolescents reported on their own traits as well as negative parenting. Some scholars have argued that youths’ views of family interactions are the most accurate or valid (Glasgow, Dornbush, Troyer, Steinberg, & Ritter, 1997; Niemi, 1974), but it is possible that youths with certain traits misperceive parents’ behavior in systematic ways, and these misperceptions explain the links between youth characteristics and negative parenting. There are, however, at least two arguments for the validity of our negative parenting measure. One is that the links we find between negative parenting and peer relationships are similar to those reported previously with data provided by children, parents, observers, and multiple raters (Fuligni & Eccles, 1993; Lasford, Criss, Pettit, Dodge, & Bates, 2003; Schwartz, Dodge, Pettit, Bates, & The Conduct Prevention Research Group, 2000). Another is that youths’ reports of negative parenting in our study correlate with parents’ reports of youth behaviors that parents would likely find frustrating, and thus might respond to with angry outbursts or icy silence. These correlations are substantial, given that they are between two different raters and for different behaviors and different actors. All in all, however, we should be aware that these data represent youths’ perceptions of parenting.

The present study has a number of strengths, however. One is the large community sample. Studies done previously in the negative parenting practices area have usually tested younger kids or adults. Another strength is the use of peers’ independent reports of relationships quality. We have been able to tease apart whether youths with certain characteristics might perceive their friendships in biased ways or whether youth characteristics influence their friends’ perspectives of their relationships. A third strength is the longitudinal design, which allowed us to tease apart the directions of effects between negative parenting practices and youth characteristics.
It is quite natural to think that negative parenting practices would affect many aspects of children’s lives, one of them being peer relationships. This may be so. At the same time, however, parents do seem to react to adolescent characteristics. Adolescents are active agents with qualities that help to shape relationships with peers and parents.
References


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*p < .05. **p < .01. ***p < .001. (PR) peer reported.
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**Note.**<sup>a</sup> Controlling for Time 1. <sup>b</sup>Youths (n = 211) who named the same person as their most important peer at both time points. <sup>c</sup>Youths (n = 442) who named different peers at both time points. **p < .01; ***p < .001.
Table 3.
*Simultaneous Regression Models Predicting Peer Relationship Quality from Negative Parenting Practices and Youth Characteristics*

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Note. a Predicting Time 2 relationship quality controlling for Time 1 relationship quality. bLongitudinal analyses—only for the group where the same peer chose the individual at both time points (n = 117). *p < .05. **p < .01. ***p < .001.
Table 4.  
*Beta Coefficients from Regression Models Predicting Youth Characteristics from Self-perceived Parenting and Self- and Peer-rated Relationship Quality Longitudinally*

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*p < .05. **p < .01. ***p < .001. \(^a\) Controlling for Time 1. (PR) peer-rated.*
CHAPTER 4

Parents React to Adolescent Problem Behaviors by Worrying More and Monitoring Less

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INTRODUCTION

As children mature into adolescents, they spend more time away from home and get into situations where they might be drawn into risky behavior such as delinquency. What can parents do to prevent this? We will argue that the majority of studies in the literature on parenting adolescents cannot answer this question, and we will not answer it in this study, either. Our study and many previous studies cannot show what parents can or might best do, but they show what parents do in the normal course of events. These, in our minds, are two very different phenomena, and they require different methods to study.

How could one discover what parents can do to prevent problems? There are two possible designs. One is an experimental study in which parenting behavior is manipulated, and parents are randomly assigned to conditions. Other things being equal, if adolescent behavior changes more in one condition than in another, then whatever parents in that condition did is an answer to the question. There might be other answers that have not been tested, but

The longitudinal study used in this research was financed by the Swedish Research Council. Work on this chapter was supported by The Bank of Sweden Tercentenary Foundation and the Swedish Council for Working Life and Social Research.
those results would give one. To answer the question with a nonexperimental
design is trickier, but let us consider what that would entail. First, parents and
adolescents would have to be followed over time. Second, one would need to
show persistence in good youth behavior or a change in youth behavior from
bad to good that is explained better by parents’ behavior than by anything else.
For persistent good youth behavior, one might want to show that the youth
was at risk for bad behavior—had risk-prone personality characteristics or a
delinquent peer group, for example—but did not fall into bad behavior. Then,
one would need to rule out other potential protective factors and show that
parents’ behavior is the most reasonable explanation. For a change in youth
behavior from bad to good, one would need to show that parents changed
their behavior in some theoretically meaningful way prior to the change in
the youth’s behavior. Otherwise, it would be just as reasonable to assume that
parents caused the bad youth behavior as the good. Then, one would have to
rule out alternative explanations, leaving the change in parents’ behavior as
the most reasonable explanation. Although these strategies are possible, most
non-experimental studies of parenting do not use them. Thus, they do not
show what parents can do.

Our purpose is to examine what parents typically do in the face of problems
such as adolescent delinquency and the defiance and secrecy at home that
accompany it. We argue that this knowledge of what does happen does not
set the limits for what can happen, but it is important for understanding
undesirable adolescent development, the role of parenting, and what parenting
behaviors might be targeted in studies that try to discover what can happen if
parents’ behaviors are changed for the better.

Although the vast majority of studies in the literature on parenting adoles-
cents have focused on trying to show how parenting shapes youths’ behaviors,
there is growing awareness that parents also change their behavior in response
to youth characteristics and behaviors. This is especially so in the parenting
literature more broadly. Bell and Lytton have been two major figures in this
move. More than three decades ago, Bell (1968) reviewed a number of experi-
mental findings in which parents’ and other adults’ behaviors had changed in
response to certain children’s behaviors, and he argued that, because of these
findings, parent-child correlations should not be interpreted as only parent-
to-child effects. More recently, Lytton (1990) made a similar argument about
experimental and observational studies, showing that parents change their
behavior in response to conduct disordered behaviors such as aggression and
noncompliance. Both these researchers have followed up with more recent
reviews (Bell & Chapman, 1986; Lytton, 2000). In all, numerous experimental
and longitudinal studies in the most visible developmental journals have
shown that parents and other adults react to children’s characteristics and
adjust their behavior accordingly (e.g., Anderson, Lytton, & Romney, 1986;
Buss, 1981; Dix et al., 1986; Huh et al., 2006; Mulhern & Passman, 1981;
Passman & Blackwelder, 1981) or have shown good evidence for bidirectional
effects (e.g., Chen, Liu, & Li, 2000; Hastings & Rubin, 1999; Kochanska, 1998;
Mink & Nihira, 1986; Stice & Barrera, 1995). Behavioral genetic studies, too,
argue for reciprocal effects (e.g., Ge et al., 1996; Reiss et al., 2000). Thus, the
evidence is growing that a valid understanding of parenting will have to
include reciprocal relationships—how parents react to children as well as how
they shape them.

Concerning parenting and adolescent problem behavior, a number of studies
have begun to look at parenting as both action and reaction to the youth. Not
all are revealing about what parents do in reaction to adolescent problems,
however. For instance, in one study, girls’ unhealthy eating predicted poorer
parent–child relationships over time (Archibald et al., 2002) and in another
there were reciprocal relations between parent–child relationships and inter-
nalizing and externalizing problems (Buist et al., 2003). To the extent that
these relationship measures can be considered measures of parenting (because
the child is involved in the relationship, too), one can say that there is some
evidence that parents responded to adolescent problems by doing things that
resulted in the child reporting less positive relationships. But what they did
is unknown. In another line of research, a number of studies have shown that
youth problem behavior and parental knowledge (usually called monitoring)
are reciprocally or mutually related (Fite et al., 2006; Jang & Smith, 1997;
Kandel & Wu, 1995; Laird et al., 2003). It is not clear, however, whether the
knowledge measure represents any action on the part of parents. Indeed, there
is evidence that it does not primarily represent parental action (Kerr & Stattin,
2000; Stattin & Kerr, 2000). Consequently, one can neither say that this shows
a parental reaction to youth behavior nor that it shows a youth reaction to
parental behavior, and one cannot say what parents did. Thus, even though
they appear to be studies of reciprocal relations, these studies lack information
about what parents do in the face of adolescent problems.

Other studies have been more informative, however, and the results begin
to paint a consistent picture. In one of the first such studies (Stice & Barrera,
1995), the authors used longitudinal data to examine perceived parental
support and control in relation to adolescent drug use and externalizing
problems. The effects were reciprocal for drug use, but for externalizing
problems it appeared that parents reacted to these problems by relinquishing
control and withdrawing support. There were no reciprocal effects. Another
study tested an idea that was consistent with these results—that parents
would react to a youth’s deviant peers by disengaging and giving the youth
more autonomy (Dishion, Nelson, & Bullock, 2004). The findings were that
deviant peer processes were associated with reductions in family management
over time. However, because the question was about how parents might
react to youths’ peer associations rather than to their own behavior, the
results might underestimate parents’ reactions to adolescents’ own problem
behaviors. Nonetheless, both these studies suggest that parents respond to
adolescent problem behaviors by withdrawing emotionally and behaviorally.
These studies, however, reveal little about the processes.

In our work, we have also examined how parents react to youth delin-
quency and whether that has an effect on later delinquency (Kerr & Stattin,
2003). Whereas the studies mentioned above used at-risk samples, however,
we used a community sample, and we tested a larger model of the processes involved. For one thing, we included youth behaviors that correlate with delinquency and which parents might experience at home, behaviors such as defiance, nondisclosure, lying, and manipulation. Our thinking was that parents might react more to these behaviors than to the delinquency itself. We also included two kinds of parents’ reactions to delinquency: (1) emotionally-tied, or “gut level” reactions such as worry, distrust, and lessened emotional support and (2) monitoring efforts such as setting and enforcing family rules that require the youth to give information about his or her free time activities (control) and asking for information from the youth, the youths’ friends, and the friends’ parents (solicitation). Our findings showed that parents tended to respond to the youth’s negative behavior at home more than to the delinquency itself. The same was true when we substituted a measure of having deviant peers for the delinquency measure. On the gut level, parents reacted with worry, distrust, and lessened support and encouragement. Behaviorally, they reacted by slackening their monitoring efforts. According to these findings, then, parents of delinquents should appear more and more neglectful as time goes by, because they control less over time and give less emotional support.

Although that study was revealing about the processes going on in families that might otherwise have been labeled neglectful, it also raises several questions, which we will try to answer in this study. One question is whether this is a phenomenon of middle adolescence, after parents have tried other strategies and become exasperated, or whether it would show up in younger youths. In our previous study, we started with 14 year olds and followed them to 16 years, but the question remains whether parents would react the same to delinquency in younger offspring. To examine this, in this study, we start with youths aged 10 to 14 and follow them over two years. Second, it is counterintuitive that in our community sample, delinquency would be linked to a slackening of parental monitoring efforts rather than an escalation. In families with multiple problems, one might expect to see this kind of parental disengagement or premature autonomy process because disengaging might be a way for parents to cope with high levels of emotional stress. In a community sample, however, one would expect the opposite—that the majority of parents would step up their monitoring efforts if they started having trouble with their adolescent. The question is why this parental disengagement response appears as a general parenting phenomenon in an ordinary community. In our previous study, we offered several explanations and tried to test them indirectly by predicting different patterns of correlations among some of the measures used in the study. In this study, we have included measures of the constructs that seemed to provide the best explanations, and we use them to test the explanations directly.

In this study, then, we address several questions. The first is whether our earlier model of parents’ responses to problem behavior will appear in a more age-heterogeneous population. The second is how parents and youths respond
to each other over time. To answer this, we test a cross-lagged model using data from two time points. We also include gender in a multiple-groups analysis. Finally, we try with additional analyses to explain the mechanisms behind the links in the model.

**METHOD**

**Participants**

We used data from a longitudinal study of the development of criminality in adolescence that began in 2001. It was designed to build upon the most recent advances in the largely separate literatures on family, peers, and individual characteristics—assessing these factors simultaneously and testing an integrative theory about their combined effects on movements into and out of criminality in adolescence. Each year of the study we targeted nine cohorts (grades 4–12, or roughly ages 10 to 18). One new cohort came into the study each year (those entering the fourth grade) and one cohort left the study (those who graduated from high school the year before). Every second year parents received a questionnaire in the mail, and they participated by filling it out and returning it. Only parents of fourth through tenth graders were asked to participate, however, because many youths in eleventh and twelfth grades have reached the legal age of independence in Sweden (18), are living on their own, or both. In the analyses reported here, we use mainly parents’ reports from Times 1 and 3 for youths who were in grades four through eight at Time 1 (ages 10 through 14), so that youths and their parents both participated at two time points.

At Time 1, we collected data from 1641 youths (roughly 330 students in each grade, or 93% of those registered in school). Two years later, we collected about the same information from 1471 of these youths (90% of the original subjects). The participants took part in the study unless their parents returned a form stating that they did not want their child to participate (1% of the parents returned this form). Neither parents nor children were paid for their participation. At Time 1, 1225 parents (75%) responded. We did not ask parents to fill out separate questionnaires for all of their children if they had more than two. In that case, we randomly selected two and asked them about those. At Time 3, 77% of the original 1225 parents responded.

**Measures**

**Delinquency**

Youth-reported delinquency was measured with 21 questions about shoplifting; being caught by the police; vandalizing public or private property;
taking money from home; creating graffiti; breaking into a building; stealing from someone’s pocket or bag; buying or selling stolen goods; stealing a bike; being in a physical fight in public; carrying a weapon; stealing a car; stealing a moped or motorcycle; using marijuana or hashish; and using other drugs. The alpha reliabilities were .92 and .93 at Times 1 and 3, respectively.

Negative behavior in the family

We formed a measure of the youths’ negative behavior in the family as the mean of three scales: defiance, disclosure (reversed), and off-task behavior. Defiance was a three-item scale. Parents responded on 4-point Likert scales from “does not apply at all” to “applies exactly.” The options were: “Often does things although we say several times that it is not allowed,” “You often need to tell him/her several times when he/she has done something wrong to get him/her to stop,” and “Usually it is sufficient to rebuke him/her one time to stop him/her from doing something that he/she is not allowed to do” (reversed). The scale had an alpha reliability of 0.82 at Time 1 and 0.83 at Time 3. Disclosure comprised five items. Parents reported on their child’s disclosure of information about daily activities with items such as: “Does the child hide a lot from you about what he/she does during nights and weekends?” “Does the child talk at home about how he or she is doing in the different subjects at school?” and “Does the child keep a lot of secrets from you about what he or she is doing during his or her free time?” The alpha reliability was 0.81 at Time 1 and 0.78 at Time 3. Off-task behavior was an eight-item scale taken from a revised Strategy-Attribution Questionnaire (Nurmi, Salmela-Aro, & Ruotsalainen, 1994). Parents responded on a four-point scale from 1 (totally disagree) to 4 (totally agree). Some examples are: “It is too easy for him/her to think of other things, daydream or become lost in thought when he/she should concentrate on more important tasks,” “He/she often finds other things to do when solving a difficult problem” and “If a hard task comes up, he/she quickly chooses to do something else.” The alpha reliability at both times was 0.90. The mean intercorrelation among these three scales was 0.46, p < 0.001 (range = 0.44 to 0.49).

Parents’ “gut-level” reactions

We used this label for emotionally tied reactions such as worries and distrust. Thus, gut-level reactions are the mean of two scales. Worries was a six-item scale. Parents responded to questions such as “Are you worried that the child will not make it in school?” “Are you worried that the child will end up in bad company?” and “Do you worry about what the child is doing together with friends on evenings and weekends?” The alpha reliability was 0.88 at both times. Trust (reversed) was a six-item scale. Parents responded to questions such as “Do you trust that your child does not enter into bad company?”
and "Do you trust that the child does not do anything dumb in his or her free time?" The alpha reliability for this scale was 0.80 at Time 1 and 0.81 at Time 3. The correlation between the two scales was 0.44 ($p < 0.001$).

**Monitoring efforts**

This measure was composed of the items from two scales—control and solicitation—which we developed previously to measure parents’ active monitoring efforts (Kerr & Stattin, 2000). The scales tapped parents’ efforts to keep track of the youth’s whereabouts and associations by requiring the youth to do things such as check with parents before making plans to be out with friends (control) and by talking to the youth, the youth’s friends, and the friends’ parents in order to stay informed (solicitation). Five-point response scales were used. Five items that assessed solicitation were: “This month, have you been in contact with and talked to the parents of your child’s friends?” “How often do you talk to the child’s friends when they come over to your house (ask what they do, how they think and feel about different things)?” “During the past month, how often have you started a conversation with your child about his or her free time?” “How often do you ask the child to sit down and tell what has happened during an ordinary day in school?” and “Do you usually ask the child to tell about what happens in his or her free time (who he or she meets in town, leisure activities, etc.)?” Five items that tapped control were: “Does the child need to have your permission to stay out late on a weekday evening?” “Does the child need to ask you before he/she can decide with his/her friends what they will do on a Saturday evening?” “If the child has been out very late one night, do you require that he/she explains what he/she did and whom he/she was with?” “Do you always require that the child tells you where he/she has been at night, who he/she was with, and what they did together?” and “Before the child goes out on a Saturday night, do you require him/her to tell where he/she is going and with whom?” The alpha reliability for the 10-item monitoring efforts measure was –0.76 at Time 1 and 0.79 at Time 3.

**Additional measures**

Some additional measures were used to test follow-up questions. For ease of comprehension, their descriptions are integrated into the results section and presented just prior to the results where they are used.

**Analyses**

To examine associations between youths’ behavior, such as delinquency and negative behavior at home, and parents’ behavior, such as distrust, worry,
and monitoring efforts, we performed structural path analyses with Mplus 4.0 (Muthén & Muthén, 2006). We also used multiple group analyses to examine the possible moderating effects of youths’ gender and personality traits. For all analyses, we used full information maximum likelihood (FIML) because of missing data. The full information maximum likelihood techniques are thought to provide less biased estimates than listwise or pairwise deletion (Schafer & Graham, 2002), and are appropriate even when data are not missing at random or missing completely at random (Little & Rubin, 2002). The proportion of missing values may be calculated with a covariance “coverage” matrix. This provides an estimate of available observations for each pair of variables. The minimum recommended coverage is 0.10 (Muthén & Muthén, 2006). In this study, the coverage ranged from 0.71 to 0.94.

All structural models were evaluated using three goodness-of-fit indices: CFI (comparative fit index); RMSEA (root mean square error of approximation); and TLI (Tucker-Lewis index), also known as the Bentler-Bonett nonformed fit index. Comparative fit index and TLI values greater than 0.90 represent an adequate fit to the data (Bentler & Bonett, 1980); values greater than 0.95 suggest a good model fit (Hu & Bentler, 1998). Root mean square error of approximation values less than 0.08 represent reasonable errors of approximation; values less than 0.05 indicate a close model fit with the data (Browne & Cudeck, 1993).

RESULTS

Interrelations Among Variables

In Table 4.1, we present intercorrelations among the variables used in the main analyses. Above the diagonal are intercorrelations at Time 1 and below the diagonal are intercorrelations at Time 3.

Table 4.1  Intercorrelations among measures at time 1 (above the diagonal) and time 3 (below the diagonal)

<table>
<thead>
<tr>
<th>Youth-reported delinquency</th>
<th>Youth negative behavior</th>
<th>Parents’ gut-level reactions</th>
<th>Parents’ monitoring efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delinquency (YR)</td>
<td>–</td>
<td>0.23***</td>
<td>0.28***</td>
</tr>
<tr>
<td>Youth negative behavior (PR)</td>
<td>0.32***</td>
<td>–</td>
<td>0.56***</td>
</tr>
<tr>
<td>Parents’ gut-level reactions (PR)</td>
<td>0.27***</td>
<td>0.46***</td>
<td>–</td>
</tr>
<tr>
<td>Parents’ monitoring efforts (PR)</td>
<td>−0.05</td>
<td>−0.27***</td>
<td>0.04</td>
</tr>
</tbody>
</table>

***p < 0.001; YR youth-reported; PR parent-reported
Parents' Reactions to Youth Delinquency

We ask, first, whether parents' reactions to delinquency and negative behavior at home in this sample of 10- to 14-year-olds are similar to what we found earlier in families of 14-year-olds. Here, we use parents' reports of all variables except delinquency, which is youth-reported, and we make assumptions about directionality in this model based on previous longitudinal findings (i.e., Kerr & Stattin, 2003). We started with a saturated model that contained as many parameter estimates as there were available degrees of freedom, and then removed paths that did not significantly contribute to the fit of overall model. The fit indices reported are for the model with nonsignificant paths removed. The results, shown in Figure 4.1, are remarkably similar to those found earlier for 14-year-olds. They show positive links between youth problem behaviors and parents' gut-level reactions (worry and distrust), with the link between negative behaviors at home and gut-level reactions being particularly strong. Thus, parents' worry and distrust are more tied to the problem behaviors they experience at home than to the youth's delinquency. As shown in Figure 4.1, gut-level reactions are weakly related to monitoring efforts, but the stronger associations with monitoring efforts are the negative links between them and youths' negative behaviors at home. The more defiance, secrecy, and off-task behavior youths show at home, the less parents tend to keep track of their comings and goings. In this model, monitoring efforts are not related to changes in delinquency over the next two years, but gut-level reactions predict increases in delinquency. In sum, we find strong concurrent associations

![Diagram](image)

χ² = 4.480, df = 2, p = .105, CFI = .998, TLI = .988, RMSEA = .027

**Figure 4.1** A model of parents' reactions to youth delinquency and behaviors at home that correlate with delinquency
between youths' negative behavior at home and parents' gut-level reactions, which in turn, predict an increase over time in delinquency. The results also show that the more delinquent youths are and the more problematic they are at home, the fewer attempts parents make to track their movements away from home, but that is not related to a change in delinquency.

Reciprocal Effects Over Time

Apart from the inclusion of Time-3 delinquency in the model above, the data are cross-sectional. The directions assumed in the model were based on cross-lagged associations found in the earlier study (Kerr & Stattin, 2003) with one age cohort. To infer directions of effects in this more age-heterogeneous sample, we examined cross-lagged paths between all variables used in the previous model, controlling for stabilities over time and correlations between the variables within time. The model tested is shown in Figure 4.2. Again, we started with a saturated model and then removed paths that did not significantly contribute to the fit of overall model. The fit indices reported are for the model with nonsignificant paths removed.

![Diagram](image)

Figure 4.2 Model used to estimate change longitudinally

Children's and parents' behaviors were moderately stable over time (standardized path coefficients from 0.42 to 0.52), and many of the cross-paths in the model were significant. The model fit was very good, \( \chi^2 = 3.911 \), d.f. = 3, \( p = 0.270 \), CFI = 0.999, TLI = 0.996, RMSEA = 0.013. For ease of interpretation, all significant cross-paths between youth behavior and parenting are presented in Figure 4.3. On the left side of the figure are the cross-paths predicting changes in parenting from youth behaviors. On the right side are
paths predicting changes in youth behavior from parenting. The results in the left side of the figure suggest that parents react on the gut level (i.e., with distrust and worry) to negative (i.e., secretive, defiant, off-task) behavior at home. At the same time, in response to both negative behavior at home and the youth’s delinquency, they make fewer efforts to track what the youth is doing away from home. That is, they relax the rules that would restrict the youth’s movements and provide them with information, and they talk less to the youth and others to get information about the youth’s whereabouts and associations away from home. All in all, then, it seems that when parents are faced with adolescent problem behaviors they react in ways that are unlikely to make the situation better. Thus, similar to what was suggested by the cross-sectional results, these longitudinal results show that the more problem behavior youths engage in, the more parents worry and distrust, and the less they monitor.

![Diagram](image)

Figure 4.3 Significant cross paths between youth behaviors and parenting from longitudinal change model shown in Figure 4.2

Depicted in the right side of Figure 4.3 are the significant cross-paths from parenting to changes in youth behavior. Here, the only significant findings are for gut-level reactions. They predict increased negative behavior at home and delinquency over the following two years. Monitoring efforts are not significantly related to changes in problem behaviors. According to these results, then, it seems that in the normal course of events, a youth’s problem behaviors do affect how parents act toward the youth, both in terms of emotional reactions and monitoring efforts, but it is only the emotional reactions that seem to have an effect on the youth.

**Gender Differences in Changes Over Time**

To determine whether these results generalize to boys and girls, we tested this change model for boys and girls with a multigroup analysis. Again, we started with saturated models and then removed paths that were nonsignificant for both groups. Paths that were nonsignificant for only one group were left in the model. Equal constraints in multiple group analyses were compared using $\chi^2$ difference tests. The fit of the final model was very good, $\chi^2 = 3.382,$
d.f. = 4, p = 0.496, CFI = 1.000, TLI = 1.000, RMSEA = 0.001. The cross-paths between youth behavior and parenting that were significant for either boys or girls appear in Figure 4.4. Although the similarities are striking, there are a couple of significant differences that emerged between boys and girls. First, one difference that is not shown in the figure that delinquency was more stable over time for boys than for girls (0.45 and 0.35, both ps < 0.001 for boys and girls, respectively). Second, as shown in the figure, a link from monitoring efforts to delinquency, which did not appear in the analyses combining boys and girls, now emerges and differs significantly between boys and girls. Monitoring efforts predict increases in boys’ delinquency over the following two years, whereas they show a tendency (p < 0.10) to predict decreases in girls’ delinquency. And parents’ gut level reactions seem to affect boys’ later delinquency significantly more than girls. Apparently, parents’ gut-level reactions are part of an amplification of delinquency for boys and not girls, whereas low monitoring efforts might be part of an amplification of delinquency for girls but they are not for boys. In fact, for boys they seem to work in the opposite way, and for that we have no ready explanation.

![Figure 4.4](image)

**Figure 4.4** Significant cross-paths between youth behaviors and parenting from multi-group analysis of longitudinal change—results for boys are in the upper panel and results for girls are in the lower panel.

To summarize so far, youths’ delinquency and negative behaviors seem to affect parents in different ways. Some seem reasonable but others are counter-intuitive. It is reasonable, for instance, to think that when a youth is defiant
and secretive at home and has engaged in illegal acts, most parents would begin to worry and distrust the youth. These reactions are easy to understand. However, it is difficult to understand why most parents in an ordinary community sample would not try to take the situation in hand and monitor the youth’s movements in order to limit the opportunities for further delinquency. They seem to do the opposite, and that is counterintuitive. Our goal is to understand why.

Why Do Parents Slacken Monitoring in the Face of Adolescent Problem Behavior?

We turn now to explaining why parents would slacken their monitoring efforts rather than increasing them when faced with adolescent problem behaviors such as being secretive about their whereabouts and activities, defying parents’ requests and rules, and not concentrating on tasks such as school work. We propose and test three explanations.

Explanation one: parents believe the child needs autonomy

One explanation is that parents take their cues about the appropriate parenting actions from their children. They might interpret the youth’s negative behavior at home as a signal that the youth has reached an age where he or she needs to be more autonomous, and they might not question this. Perhaps they then react by asking fewer questions about the youth’s free time and slackening the rules that require the youth to give information in order to give the youth the autonomy that he or she seems to need. If so, then the youth’s negative behavior at home should correspond to parents’ attitudes about free time such that if youths are highly defiant and secretive parents should take this as a cue that their child is ready for them to back off, and they should believe that youths their child’s age should be given much freedom and autonomy to decide what they do in their free time. To examine this, we looked at correlations between negative behavior and parents’ attitudes about free time. Parents’ attitudes about youth free-time was a single-item measure that tapped parents’ strict or lenient attitudes about whether youths should decide on their own free time activities. Parents were asked “What is your general attitude toward leisure time activities for someone your son’s or daughter’s age (leisure time activities means going out with friends, going to friends’ houses or to town during evenings)?” They were asked to indicate which of four response options best fit their attitude: (1) At this age, parents must decide the child’s leisure time activities. You should be able to demand to be told where children are going before they go out and that afterward, they tell you what they have done, where they have been and whom they have met (2) Parents should decide more than the child about children’s leisure habits during this age. You
should keep yourself informed on what is going on by asking on a regular basis. (3) Generally, you should let children do as they like. It is only when it is really needed that you should interfere. You should listen to what they tell you. (4) With children this age, you should absolutely let them do what they think is best. You should not interfere with what they do during leisure time; the children have to be able to do things without parents' insight.

These results appear in Table 4.2. We break them down by age because parents' attitudes about free time differ depending on the youth's age.

Table 4.2 Pearson correlations relating parents' attitudes about whether youths should govern their own free time with youth behavior and parents' monitoring efforts

<table>
<thead>
<tr>
<th>Approximate age (yrs)</th>
<th>Negative behavior at home</th>
<th>Parents' monitoring efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0.07</td>
<td>-0.17**</td>
</tr>
<tr>
<td>11</td>
<td>0.11</td>
<td>-0.26***</td>
</tr>
<tr>
<td>12</td>
<td>-0.04</td>
<td>-0.29***</td>
</tr>
<tr>
<td>13</td>
<td>-0.05</td>
<td>-0.27***</td>
</tr>
<tr>
<td>14</td>
<td>0.05</td>
<td>-0.19**</td>
</tr>
</tbody>
</table>

**p < 0.01; ***p < 0.001

In the first column of the table are the correlations between youths' negative behavior and parents' attitudes about free time. If the explanation is correct that parents are taking cues from the youth's behavior about the amount of freedom that is appropriate for a youth their child's age, then these correlations should be positive and substantial. On the contrary, however, at every age the correlation between negative behavior and parents' attitudes about free time was nonsignificant and near zero. As shown in the other column of the table, parents' attitudes were linked to their actual monitoring behaviors, which suggests that their monitoring behaviors were consistent with their attitudes about how much autonomy youths should have in making decisions about their free time (the more freedom they think youths should have, the less they monitor). Thus, there is no evidence that parents take cues from the youth's negative behavior at home as a guide to what a normal level of independence should be for an adolescent of that age, so this explanation why parents reduce their monitoring in response to negative behavior at home is not supported by the data.

Explanation two: parents are intimidated

Another explanation why parents might slacken their monitoring efforts in response to a youth's secretive, defiant behavior is that they might be intimidated by the youth and reluctant to ask questions or try to enforce
rules because these behaviors incite arguments. To the extent that this is so, controlling for intimidation should reduce the strength of the relation between youth negative behavior and parents’ monitoring efforts. To examine this, we used parents’ reports of how intimidated they were by their youth.

**Intimidation** was a five-item measure. The questions to parents were “Do you avoid taking up certain issues with your child due to bad experiences, e.g. how the child reacted earlier?” “Has it happened that you hesitated to set limits for the child since you know that the child will overreact?” “How often have you felt that it is better to avoid conflicts than to try to bring up certain things with the child?” “Has it happened the last month that you did not stick to certain rules for your child, since it would only lead to conflicts?” and “Do you feel like parenting sometimes is like walking on egg shells, since your child seems to react negatively to a majority of things you do?” Response scales ranged from (1) “no,” to (5) “very often,” or from (1) “has not happened” to (5) “happens all of the time.” The alpha reliabilities were 0.80 and 0.82 at Times 1 and 3, respectively.

We predicted monitoring efforts from youth negative behavior in a multiple regression analysis in which we entered intimidation as a control. Parents’ general attitudes about the youths’ free time were entered as an additional control. The results appear in Table 4.3. Although intimidation is a significant predictor, the link between the youth’s negative behavior at home and monitoring efforts remains substantial and significant. Thus, although intimidation seems to be one reason why parents reduce their monitoring efforts when faced with secretive, defiant, irresponsible youth behavior, it is in no way a complete explanation.

**Table 4.3** Beta slopes from stepwise multiple regression models predicting parents’ monitoring efforts

<table>
<thead>
<tr>
<th>Monitoring efforts beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
</tr>
<tr>
<td>Negative behavior at home</td>
</tr>
<tr>
<td>Step 2</td>
</tr>
<tr>
<td>Parents’ attitudes about youth free time</td>
</tr>
<tr>
<td>Intimidation</td>
</tr>
<tr>
<td>Negative behavior at home</td>
</tr>
</tbody>
</table>

***p < 0.001

**Explanation three: parents respond to the youth**

For a third explanation, we turn our focus to the other end of the distribution. We have been talking about secretive, defiant youth behavior and why parents react to that by reducing their monitoring efforts. At the same time, however,
the results could be seen as suggesting that parents react to compliant, open youth behavior by maintaining or increasing their monitoring efforts. In other words, the relation between negative behaviors and monitoring could be explained, in part, by general social responses to the youth. For most of us, as we go about our everyday lives, when people show that they have no interest in talking to us, we tend to leave them alone, and when they are warm, open, and communicative, we tend to open up to them. Perhaps parents are doing a similar thing with their children. Perhaps when children are warm and open, parents respond by asking them a lot about their daily activities and generally keeping up with their friends and away-from-home activities. Conversely, perhaps if children are cold and closed, parents respond by leaving them alone much of the time. To test this idea, we performed a cluster analysis on two youth characteristics: warmth versus coldness and openness versus closedness.

We designed the measure of youth warmth to parallel what we ask youths about their parents’ expressions of emotional warmth. We used four items. Parents were asked whether the child: “often says or does something nice without an obvious reason,” “does small things to show tenderness (e.g., hugs, smiles),” “says that he or she is proud of us,” and “shows that he or she likes us without a reason, almost regardless of what we do.” Answers were given on a four-point scale ranging from (1) “does not apply at all” to (4) “applies exactly.” The alpha reliability for the scale was 0.77 at Time 1 and 0.80 at Time 3.

With regard to youth closedness. The degree to which the youth seemed closed to parents’ influence was measured with five items. Parents rated the following statements on a four-point scale ranging from (1) “does not apply at all,” to (4) “applies exactly”: “Our child keeps his/her feelings to him/herself when he/she is worried or upset.” “Our child prefers to comfort him/herself.” “Our child doesn’t seem to think about keeping track of where he/she can reach us.” “Our child does not show who he/she really is.” “Our child keeps his/her feelings to him/herself after we have been apart for a week or more.” The alpha reliability for the scale was 0.78 at Time 1.

The results of the cluster analysis appear in Table 4.4. They show four clusters, which explain 64% of the total error sums of squares. The first three columns give the characteristics of the clusters. The largest, an “average” cluster, comprises youths who are near average on both variables. There is a “warm-open” cluster, consisting of youths who are high on warmth and open rather than closed, and a “closed” cluster, consisting of youths who are about average on warmth but highly closed. The smallest is a “cold-closed” cluster, comprising youths who are exceptionally low on warmth and exceptionally closed.

The last two columns in the table show mean monitoring efforts for these clusters both concurrently and two years later. As shown in the last two columns, parents’ monitoring efforts seem to follow these youths’ characteristics closely. Concurrently, monitoring efforts are highest for the warm-open
Table 4.4 Clusters of youths with different combinations of characteristics and their parents’ monitoring over time

<table>
<thead>
<tr>
<th>Youth characteristics</th>
<th>Warm</th>
<th>Closed</th>
<th>n</th>
<th>Monitoring efforts T1 (^1)</th>
<th>Change in monitoring T1 to T2 (^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-open</td>
<td>1.35</td>
<td>-0.97</td>
<td>192</td>
<td>0.44</td>
<td>0.17</td>
</tr>
<tr>
<td>Average</td>
<td>-0.05</td>
<td>-0.41</td>
<td>604</td>
<td>0.11</td>
<td>0.05</td>
</tr>
<tr>
<td>Closed</td>
<td>-0.11</td>
<td>1.13</td>
<td>248</td>
<td>-0.28</td>
<td>-0.15</td>
</tr>
<tr>
<td>Cold-closed</td>
<td>-1.70</td>
<td>1.29</td>
<td>118</td>
<td>-0.51</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

\(^1\)F (3,1158) = 35.03, \(p < 0.001\)  
\(^2\)F (3,897) = 3.22, \(p = 0.02\)

youths and lowest for the cold-closed youths. Then, over time, parents of the warm-open youths increase their monitoring relative to the rest of the sample and parents of the closed and cold-closed youths decrease their monitoring. Thus, it appears that parents’ monitoring efforts are very much influenced by the youths’ social signals. If youths are warm and open, parents seem to feel free to keep track of what they are doing. If they give signals that they do not want parents’ involvement, parents seem to be reluctant to try to be involved.

DISCUSSION

What can parents do when they face parenting challenges such as having a child who defies socialization attempts or who begins to engage in delinquency? To get ideas about what parents can or might best do it is helpful to know what they typically do in these situations and how that seems to work out over time. In this study, we have shown that parents have predictable responses to delinquency and the secretive, defiant behavior at home that correlates with delinquency. Their strongest reactions seem to be to the behavior at home; the more secretive and defiant youths are, the more parents worry and distrust them and the less they monitor them. This slackening of monitoring seems to be primarily a normal, social response, in which parents respond to the youths’ signals about how much involvement they want from parents. If youths are warm and open, parents stay involved by asking questions and keeping track of the youths’ activities; if youths are cold and closed, parents back off.

We should keep in mind that there is a larger context that we have not tapped here. We did not include the contextual conditions that surround the family, the parents’ marital relations, and parent, sibling, and peer characteristics that could have direct impacts on the way parents and youths act and react to each other. Nonetheless, our findings are revealing about processes
inside the family, and this is one of few studies that provides this kind of information.

How do these findings fit with previous knowledge about parenting and adolescent problem behavior? Although there are few studies that have looked at parents' reactions to youth problems, there is some evidence in the literature that parents disengage emotionally or behaviorally in response to delinquency or deviant peers or both (e.g., Dishion, Nelson, & Bullock, 2004; Kerr & Stattin, 2003; Meeus, Branje, & Overbeek, 2004). What distinguishes our previous study (Kerr & Stattin, 2003) and this one from other studies in the literature is that we have tried to understand the mechanisms underlying these reactions. Do parents react to the delinquency itself or to the delinquent youth's behavior at home? Do their gut-level reactions lead them to slacken their monitoring efforts? What are the other possible explanations for their disengagement? In so doing, we have revealed that negative emotional reactions such as trust and worry seem to play a role in the amplification of delinquency. In contrast, we find no robust connections to delinquency for parents' monitoring efforts.

How can one explain the discrepancy between our finding that monitoring efforts play only a minor role in the amplification of problem behavior and the very large accumulated literature in which the strong conclusion is that monitoring is a critical factor? We believe that the main reason for the discrepancy is that there is little comparability between this study and the past literature. One reason for this is that the measures that are most commonly used in the literature do not measure parents' monitoring efforts. They measure parents' knowledge, but knowledge measures largely seem to tap the youth's willingness to give parents information (Kerr & Stattin, 2000; Stattin & Kerr, 2000). Obviously, a measure that represents the youth's willingness to provide information should have clear associations with problem behavior. It would be highly unlikely, for instance, for a delinquent youth to freely tell his or her parents a lot about what he or she is doing away from home (during the time when the delinquent acts are taking place). Knowing that most of parents' knowledge comes from the youth, it is difficult to conclude anything about parents' monitoring efforts from studies in which monitoring was operationalized as knowledge. A second reason this study is not comparable to most of the monitoring literature is that the bulk of those studies were either cross-sectional or considered only one direction of effects, with parents as the causal agents (e.g., Fletcher, Steinberg, & Williams-Wheeler, 2004). Thus, few studies have looked at how parents' monitoring changes in response to adolescent problem behaviors. At least one recent study has looked at this, but the measure of monitoring was parents' knowledge (Laird et al., 2003), which again reveals little about parents' monitoring efforts. Thus, for these reasons, our results concerning monitoring efforts are not comparable to the past literature. Our findings do, however, suggest that a new literature on parental monitoring is needed—one that uses construct valid measures of parents' monitoring efforts and one that considers parents' reactions as well as their actions.
What is the mechanism linking parents' gut-level reactions with delinquency? Although we cannot bring any direct evidence to bear, we can offer a couple of speculations. One draws upon Hirschi's (1969) theory about the role of emotional attachment to parents in inhibiting delinquent behavior. The idea was that if youths are strongly attached to their parents they will not want to do anything such as engaging in delinquent behavior that would hurt or embarrass their parents. Hirschi suggested that when strongly attached youths face opportunities to commit delinquent acts, they actually think about their parents, and this psychological presence of their parents inhibits their behavior. One could imagine that if parents express their distrust, the youth might feel that there is little to lose in terms of disappointing parents and that might undermine the attachment mechanism, if it exists. Another possible explanation is a mechanism that we have called “context choice” (see Kerr et al., 2003). In this line of reasoning, youths generalize feelings that arise from their interactions with parents to other situations that are structured and controlled by adults. If they feel valued and respected in their interactions with parents they will gravitate toward other adult-led structured settings because they elicit the same good feelings. If they feel unvalued, or perhaps distrusted, by parents at home, particularly if parents communicate their distrust in ways that make youths feel disrespected, they will gravitate toward situations that do not have the same negative emotions associated with them. These should be situations where adults are not present and do not influence youths’ behaviors—situations that have been shown to put youths at risk for negative socialization by peers (e.g., Stattin et al., 2005). In one recent test of the context choice idea, youths who reported negative feelings at home or who experienced negative parental treatment were less likely to join structured activities and were more likely to drop out of them and begin loitering on the streets (Persson, Kerr, & Stattin, 2007). Thus, there are at least two plausible theoretical explanations for the role that parents’ gut-level reactions play in the escalation of delinquency. These await further testing.

What does this study say about attempts to manipulate parents’ behaviors in order to prevent future problems or alleviate current problems? We started this chapter by saying that this is a study about what parents do in face of youth problems. It is not a study about what parents can do. We have examined what happens in families in a normal, community-wide sample, and we have used a longitudinal, correlational design. That is different from studies implementing and testing parenting interventions. At the same time, longitudinal studies are the first logical step to take when attempting to understand the complexities behind how parents and youths shape each others’ behavior over time. Studies that use experimental manipulations have to be informed by longitudinal studies such as this. The findings reported here suggest some possible clues to prevention and intervention.

First, these findings suggest that asking parents to monitor more, per se, might not be the best preventive strategy. We do find marginally significant effects of monitoring efforts for girls, but not for boys. Patterson & Fisher
(2002) drew this same conclusion about monitoring as a limited single strategy for prevention. Second, our results suggest that prevention and intervention efforts must consider how parents react emotionally to the child and what they do with those emotions. Our findings suggest that parents’ gut-level reactions to the child’s negative behavior at home might escalate the risk for future delinquency. Third, our results suggest that whatever prevention and intervention efforts are used, they should aim to counterbalance the negative emotional effects that youth problem behaviors can have on parents.

In a broader sense, perhaps this whole area of enquiry has a lesson to teach. It is easy to let our research questions be guided by deeply rooted assumptions. This is perhaps never more true than in the parenting area, where large literatures such as the parenting styles literature have accumulated making bold, causal statements based on cross-sectional findings and longitudinal analyses that tested only one direction of effects—parent to child. Someone said that every time we as researchers test a hypothesis, we should also formulate and test the conceptual opposite hypothesis. We do not remember whom to credit with these wise words but we hope that we can remember to put them into practice in our own work.

REFERENCES


Mulhern, R. K. Jr. & Passman, R. H. (1981). Parental discipline as affected by the sex of
the parent, the sex of the child, and the child's apparent responsiveness to discipline.
Developmental Psychology, 17, 604-613.
& Muthén.
strategies among unemployed young adults: A case of the failure-trap strategy.
European Journal of Personality, 8, 135-148.
the influence of progressive changes in the quality of their sons' apparent behavior
Developmental Psychology, 17, 614-619.
Patterson, G. R. & Fisher, P. A. (2002). Recent developments in our understanding
of parenting: Bidirectional effects, causal models, and the search for parsimony. In
M. H. Bornstein (ed.), Handbook of Parenting: Vol. 5: Practical Issues in Parenting (2nd
activities: explanations involving parents and peers. Developmental Psychology, 43,
197-207.
Code: Deciphering Genetic and Social Influences on Adolescent Development. Cambridge,
MA: Harvard University Press.
Psychological Methods, 7, 147-177.
71, 1070-1083.
Stattin, H., Kerr, M., Mahoney, J. et al. (2005). Explaining why a leisure context is bad
for some girls and not for others. In J. L. Mahoney, R. W. Larson, & J. S. Eccles (eds),
Organized Activities as Contexts of Development: Extracurricular Activities, After-school
and Community Programs (pp. 211-244). Mahwah, NJ: Erlbaum.
between perceived parenting and adolescents' substance use and externalizing
Early Temperamental Unmanageability, Harsh Parenting Profiles, and Adolescent Problem Behavior: A Mixture Modeling Approach With Latent Parenting Classes

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Örebro University
Temperamentally unmanageable children are at risk for developing conduct problems, and several studies have shown moderating effects of harsh parenting. Drawing on ideas from research on physical punishment, we examined the possible roles that different combinations of harsh parenting might play in the link between early unmanageable temperament and later problem behaviors. We used prospective data from 3 months to 18 years in a sample of 212 children. Latent class analysis revealed different patterns of harsh parenting, including physical punishment alone and in the context of a discordant mother-child relationship (harsh treatment). In mixture models, unmanageable temperament increased children’s risk of experiencing physical punishment and, to a lesser extent, harsh treatment. Children who experienced harsh treatment showed the highest levels of problem behaviors in adolescence, and the experience of harsh parenting seemed to play a bigger role than temperament in the development of problem behavior. Children who experienced physical punishment were lower on problem behaviors, and temperament seemed primarily responsible. These differences support the idea that physical punishment is most harmful in development when combined with behaviors that signal rejection.

Keywords: harsh parenting, early unmanageability, conduct problems, norm violations
Early Temperamental Unmanageability, Harsh Parenting Profiles, and Adolescent Problem Behavior: A Mixture Modeling Approach

Children’s conduct problems such as aggression and delinquency are quite stable over time and difficult to change (e.g., Farrington, 1991; Kazdin, 1995; McCord, 1983), and for this reason, researchers have invested much effort into understanding how they develop. There is evidence that the process begins early with a child who is temperamentally prone to anger, aggression, and/or opposition (Bates, 1989; Bates, Bayles, Bennett, Ridge, & Brown, 1991; Bates, Pettit, Dodge, & Ridge, 1998; Caspi, 2000; Caspi, Henry, McGee, Moffitt, & Silva, 1995; Caspi, Moffitt, Newman, & Silva, 1996; Earls & Jung, 1987; Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, et al., 1997; Garrison, Earls, & Kindlon, 1984; Guerin, Gottfried, & Thomas, 1997; Henry, Caspi, Moffitt, & Silva, 1996; Leve, Kim, & Pears, 2005; Morris, Silk, Steinberg, Sessa, Avenevoli, & Essex, 2002; Stoolmiller, 2001). In all of these studies, early anger-prone, oppositional behavior, which was assumed to be temperament based, was linked to conduct problems, delinquency, or even criminal behavior later in life, thus suggesting that temperament lays the developmental foundation for later problems.

Even though children with anger-prone, oppositional temperament, or what could be called temperamental unmanageability, might be predisposed to develop conduct problems, there is evidence that the ways in which their parents try to manage them can make the development of conduct problems more or less likely. In particular, harsh parenting behavior such as physical punishment or maternal rejection might strengthen temperamental predispositions to develop aggressive conduct problems (e.g., Bates, Pettit, Dodge, & Ridge, 1998; Leve, Kim, & Pears, 2005; Stoolmiller, 2001). Thus, for children with unmanageable temperament, the course of development might be much more negative for those who experience harsh discipline than for those who do not. Empirical tests of this moderation idea using a standard interaction approach have produced mixed results. One early study failed to find an interaction between temperamental unmanageability before age 3 and harsh parenting at age 3 in predicting criminal convictions by age 18 (Henry, Caspi, Moffitt, & Silva, 1996). A recent study, however, reported a significant interaction between temperamental unmanageability and harsh discipline, both at age 5, in predicting changes in externalizing behavior over ages 5 to 17 (Leve, et al., 2005). It is difficult to predict and find interaction effects (see, e.g., McClelland & Judd, 1993; Stoolmiller, 2001 for discussions of this problem), so some researchers have used group- or person-centered
approaches (Bates, Pettit, Dodge, & Ridge, 1998, Stoolmiller, 2001). In one study, temperamental unmanageability before age 2 or 5 predicted externalizing problems at ages 7-11 more accurately when the mother had been observed to be relatively low on restrictive control early on (Bates et al., 1998). In the other study, mothers’ unskilled discipline at age 10 was a risk factor for growth in antisocial behavior from age 10 to age 14 only for boys with high levels of age-10 temper tantrums (Stoolmiller, 2001). Thus, there is evidence that harsh parenting moderates the link between temperamental unmanageability and later conduct problems.

One limitation of this research, however, is that the measures of temperament were either not very early (e.g., Stoolmiller, 2001; Leve et al., 2005) or were solely or partly retrospective judgments of early temperament (Bates et al., 1998; Henry et al., 1996). One would like to see this effect tested with prospective measures of early temperament.

Another potential limitation of this research is the use of single aspects of parenting. This could be a limitation because there is evidence that combinations of harsh parenting behaviors might be more important than single aspects. The evidence comes from research on physical punishment, or spanking. In reports from one longitudinal sample, spanking seemed to increase externalizing problems among European American but not African American children (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004). The authors speculated that physical punishment might be more expected for African American children than European American children, and that African American parents might tend to use physical punishment in the context of behaviors that communicate love, whereas European American parents might tend to use it in the context of behaviors that communicate rejection. Thus, they proposed that the negative behavioral effects of physical punishment might depend on: (a) how common it is in the culture, in general, and (b) the emotional message communicated by parents’ other behaviors.

There is supporting evidence from a couple of studies for the idea that the effects of physical punishment depend on the message parents’ other behaviors communicate. In one study, physical punishment was linked to maladjustment when it was perceived as rejection (Rohner, Bourque, & Elordi, 1996). This study was cross-sectional, however, and a number of measures of internal and external adjustment were combined into one omnibus maladjustment measure. In a longitudinal study, however, spanking was associated with an increase in behavior problems over time when maternal emotional support was low, but not when it was high, and this pattern held for European American, African American, and Hispanic children (McLoyd & Smith, 2002). This lends credence to Deater-Deckard and
colleagues’ (1996; Lansford et al., 2004) speculation that the emotional context in which mothers used spanking was responsible for the difference in outcomes between African American and European American children in their sample. Furthermore, though early temperament was not included in these studies, the results suggest that the developmental outcomes of children with unmanageable temperament might depend not only on whether they experience harsh parenting, as shown previously, but on the combination of harsh parenting they experience. This is important, because there is also evidence in the literature to suggest that in addition to being at risk for conduct problems, temperamentally unmanageable children may be at risk for experiencing harsh parenting (Bates et al., 1998; Stoolmiller, 2001). The question is whether they might be at risk for the same combination of harsh parenting that, in turn, increases their risk of conduct problems. If so, then there might be a subgroup for which targeted parenting interventions, if effective, would be maximally beneficial.

In this study, we examine different latent combinations of harsh parenting behaviors and model their relations to early temperamental unmanageability and adolescent problem behaviors. We use data from a birth-to-adulthood longitudinal study that contains prospective assessments of early temperament and later measures of harsh parenting and conduct problems. The sample is culturally homogeneous, and physical punishment was very common when the study began in the 1950s. Thus, the first feature of Deater-Deckard and colleagues’ explanation—physical punishment is common and expected in the culture—is constant across the sample. Using latent profile analysis, we identify different patterns of harsh parenting that children have experienced. The harsh parenting measures include striking and beating (measures of physical punishment) and discordant relationships, defined as maternal insensitivity and mother-child conflict (which could communicate rejection to the child). We use mixture modeling, which combines variable- and person-centered approaches, to examine how distinct patterns of physical discipline and discordant relationships relate to early unmanageable temperament and later conduct problems and norm violations and how, apart from these links, early unmanageability relates to later conduct problems and norm violations. Thus, we examine the hypothesis that temperamentally unmanageable children who experience physical discipline in the context of discordant relationships will have more behavior problems than those who experience physical punishment in the context of good relationships. Finally, we use the grown children’s recollections of maternal rejection to verify the assumption that physical punishment in the context of poor parent-child relationships is experienced as rejection.
Method

Participants

Participants were born in a suburb of Stockholm in the mid 1950s, and they were studied from birth into adulthood by researchers at the Clinic for the Study of Children's Development and Health, Karolinska Hospital, Stockholm and the University of Stockholm. The researchers intended to obtain a comprehensive picture of many aspects of individual growth and development. Their aims included charting the course of physical and psychological development and obtaining reasonably comprehensive life histories that would be useful in many areas of research.

Every fourth pregnant woman who registered at the Solna prenatal clinic (in a suburb of Stockholm) from April 1955 to April 1958 was invited to participate in the study. Only 3% refused. In all, 212 children (122 boys and 90 girls) took part in the study. In Sweden, virtually all pregnant women receive regular care at prenatal clinics such as the one from which these participants were recruited; therefore, these children are representative of the populations in Swedish urban communities on variables such as parents' socioeconomic status, mother's marital status, parents' ages, sibling order, gestational age, and birth weight (Karlberg et al., 1968). The sample also has a rate of registered criminality similar to rates from comparable Swedish longitudinal samples (Statton & Klackenberg-Larsson, 1990). Children and their parents were examined four times equally spaced (every three months) during their first year, twice (every six months) during the second year, and annually (close to their birthdays) thereafter up to the age of 18. Data were also collected at age of 25 years. One hundred and eighty one (85.4%) of the children (104 boys and 77 girls) from the first wave participated at age 25. Nonparticipation was due to change of residence, death, or lack of interest. We used logistic regression to examine whether children’s gender, socioeconomic status, or any of the measures included in this study predicted dropout by age 25. None of these measures predicted dropout among participants. Thus, the age-25 nonparticipation did not seem to be biased.

At the time of the child’s birth, 192 of 212 mothers were married to the child’s biological father (in a first marriage for both partners), 14 were cohabiting, and 5 were single. Most of the mothers (166) did not work outside the home; 41 were employed outside the home; the others were self-employed at home or away from home. The average age of mothers was 27.4 (SD = 5.3); the average age of fathers was 30.2 (SD = 6.0). Parents had been living together for an average of 3.6 years (SD = 3.5). In 180 families, both parents were Swedish by birth; in 27 families, one was Swedish; and in 4 families, neither
was Swedish. According to the Graffar classification (Graffar, 1956; 1960), where socioeconomic status (SES) is classified from 1 (highest) to 5 (lowest), about 4% were classified as 1 (high SES); 20% were classified as 2 (medium-high SES); 31% were classified as 3 (medium SES); 40% were classified as 4 (medium-low SES); and 4% were classified as 5 (low SES).

**Measures**

**Children’s Characteristics**

*Early unmanageability.* For the measure of early unmanageability, we used temper tantrums and resistance to control (see Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995, for a validation of this measure). We combined mothers’ ratings from 3 months to 3 years. When the child was 3 – 12 months, the questions were about anger-prone temperament: “Does he/she often get angry?” “Does he/she often get extremely angry?” The alpha reliability for this scale was .81. When the child was 18 months – 3 years several age-appropriate unmanageability items were added: “Does he/she want to get his/her own way?” “Is he/she often disobedient with you?” “Is he/she a noisy child?” “Is he/she a destructive child?” The alpha reliability for this scale was .69. The correlation between the two scales was .26 ($p < .001$).

*Adolescent conduct problems.* For the measures of conduct problems, we used behaviors that are included as diagnostic features of Conduct Disorder, Oppositional Defiant Disorder, or both in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., [DSM-IV] American Psychiatric Association, 1994). When the child was 15 and 16 years, mother-rated behavior problems were measured by asking the following questions: “Is he/she defiant when being rebuked?” “Can you trust him/her not do things which he/she should not do?” (reversed), “Does he/she break things willfully?” “Does he/she argue to have his/her own way?” “If you (Mother) chastise him/her, does he/she seem to mind?” (reversed), “If you (Mother) chastise him/her, will he/she do the same thing again the same day?” “If father chastises him/her, does he/she seem to mind?” (reversed), “If Father chastises him/her, will he/she do the same thing again the same day?” “Does he/she stay out without your approval?” “Is he/she disobedient on purpose?” “Does he/she tell fibs to get out of trouble?” “Does he/she take things he/she knows he/she should not have?” “Does he/she get really furious?” and “Does he/she get irritated over trifles?” There were five response options ranging from “never” to “always” to all the questions. Higher scores indicate more problem behavior. The alpha reliability for this scale was .89. Additional reliability and validity of the measure has been reported previously for this sample (see
Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995, for a validation of this measure).

**Adolescent norm violations.** In addition to mother-reported conduct problems, in the mixture modeling we used youths’ and interviewer’s reports of behaviors that are listed as associated features of Conduct Disorder, Oppositional Defiant Disorder, or both in the *DSM-IV* (American Psychiatric Association, 1994). They are truancy, alcohol drinking, drug use, and early initiation of sexual intercourse. For the analysis we created a mean score of these four standardized items. The alpha reliability for these four items was .71. This adolescent- and interviewer-rated norm violations measure was significantly correlated with mother-rated conduct problems at 15-16 years, \( r = .32, p < .001 \). The truancy measure was a judgment made by those who interviewed the adolescents and their parents when the adolescents were 16 years old. Based on information from both the youths and their parents, the interviewers rated truancy on a four-point scale ranging from (1) “no sign of being tired of school or truancy” to (4) “a lot of truancy from school.” *Alcohol drinking* at age 18 was measured by total alcohol consumption per month (beer, wine and spirits). The questions were “how much wine do you drink per month?”, “how much spirits do you drink per month?”, “how much beer do you drink per month?” The response scale for wine consumption was (1) none to (9) 10 glasses per month, the response scale for spirits consumption was (1) none to (9) 18 glasses (15cl) per month, and the response scale for beer consumption was (1) none to (9) more than 80 45cl cans per month. At the age of 17, youths reported on their prior *drug use* (hash, amphetamine, LSD, opium, and other drugs). A composite measure of drug use was formed on a 7-point scale, based on the frequency of use of any of these drugs.” At age 25, participants answered the question at what age they had their first *intercourse*. There were fifteen response options ranging from “at the age of 11” to “at the age of 25.”

**Harsh Parenting**

For the measures of harsh parenting we used mothers’ reports of their striking and beating (hitting with an object), and interviewers’ ratings of discordant relationships between mothers and children. In Table 1 are the numbers of mothers who reported using any physical discipline or were judged as having any degree of discord in the mother-child relationship at different age periods.

**Striking.** At each assessment, mothers were asked whether (and how often) they struck their children. When children were 6 to 9 years, there were six response options, ranging from “never” to “on many occasions every day.” Because of a lower incidence of
striking older children, the response options were changed from age 10 to age 12; there were five response options, ranging from “never” to “daily” (see Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995, for a validation of this measure). The period-to-period correlations for these measures ranged from .45 to 56.

**Beating.** When the child was 6 to 9 years, mothers were asked whether they had given the child a real beating. For children ages 10 to 12 years, mothers reported about beating frequency. There were five response options, ranging from “never” to “once a day.” We dichotomized the measure at each age to make them comparable over ages. The resulting dichotomous measures distinguish beating from no beating (see Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995, for a validation of this measure). The period-to-period correlations for beating ranged from .31 – 39.

**Discordant mother-child relationships.** After each interview occasion from the children’s ages 6 to 12 years, the interviewers made judgments of the quality of mother-child relationships. The interviewers used a 3-point Likert scale with the scale points described as follows: (1) good relationships—no conflict or maternal insensitivity; (2) some evidence of conflict, disagreement, or insensitivity, or inconsistent relationship quality—sometimes good and other times bad; and (3) pronounced conflict or apparent insensitivity (see Stattin & Klackenberg, 1992, for a validation of this measure). The period-to-period correlations for discordant relationships ranged from .44 to 66.

**Maternal Rejection**
For the measure of mother’s rejecting behavior we used the (grown up) children’s retrospective reports given at age 25. They were instructed to think about how they perceived their mothers when they were 12 years of age and younger and to evaluate the following statements about their mothers: “demanded more of me than one should from the child,” “was really interested in what I did and how I felt” (reversed), “had very few rules for me,” “made me feel wanted and needed” (reversed), “nagged at and quarreled with me when I behaved badly,” “made me feel that what I did was important to her” (reversed), “did not spend more time with me when it was necessary,” “encouraged me to take my own initiatives” (reversed), “did not want to me to bring my friends home,” “spoke to me in a warm and affectionate manner” (reversed). There were four response options, ranging from “does not apply at all” to “applies perfectly.” Higher scores indicate more rejecting behavior. The alpha reliability for this scale was .82.
Data Analysis

For all analyses, we used Mplus 4.0 (Muthén & Muthén, 2006). Missing or incomplete data and participant attrition are problems in all longitudinal research (Hanson, Tobler, & Graham, 1990). Missingness, which was due to not having answers to some questions, was addressed by using the full information maximum likelihood technique, which is thought to provide less biased estimates than listwise or pairwise deletion (Shafer & Graham, 2002). The proportion of missing values may be calculated with a covariance “coverage” matrix (Muthén & Muthén, 2006), which provides an estimate of available observations for each pair of variables. The minimum coverage necessary is .10. In this study, coverage ranged from .76 to .98, which means that the covariance of each set of two variables in the matrix covered 76% to 98% of cases.

Mixture Modeling

We performed mixture modeling to identify whether children’s early temperament would relate to patterns of harsh parenting later on, whether the patterns of harsh parenting would relate to levels of adolescent behavior problems, and whether, independent of these links, early temperament would be related to later behavior problems. First, we tested the latent class model to identify the patterns of harsh parenting that children experienced. Latent class modeling refers to modeling with categorical latent variables that represent subgroups where group membership is not known but is inferred from the data. Latent profile analysis, which is a type of latent class analysis, is a specific statistical modeling method developed to identify distinct subgroups according to selected characteristics and predict class membership from continuous measures. This method offers an alternative to cluster analytic techniques. We will use the term latent class analyses when talking about distinct groups predicted from continuous measures such as striking, beating, and discordant relations.

Second, we tested mixture models, as shown in Figure 1, where the child’s early temperament served as a covariate and adolescent problem behaviors (conduct problems in one model and norm violations in the other) served as distal outcomes. The mixture model estimated latent class analysis together with covariance and a distal outcome. This model helped to test whether children who experienced certain patterns of harsh parenting had higher levels of unmanageable temperament early on (A in Figure 1) and more conduct problems later in life (B in Figure 1). The link between class membership and distal outcomes represents the magnitude of the outcomes for each of the harsh parenting classes. To test whether the means on the distal outcomes varied significantly across classes, we ran
the models with and without holding the means equal across classes to get chi-square (two times the log likelihood) difference tests. The pathways between early unmanageability and the distal outcomes show to what extent early unmanageability is related to the occurrence of adolescent problem behavior, once the model controls for the risk associated with class membership (C in Figure 1). All these links in the mixture models were estimated simultaneously.

Results

Harsh Parenting Behaviors and Their Relations to Early Unmanageability and Adolescent Problem Behavior

To test the model shown in Figure 1, we first examined the latent classes of mother’s striking, beating, and discordant relationships at ages 6-12. Models with different numbers of classes were compared with the Bayesian information criterion (BIC), the sample-size adjusted Bayesian information criterion (SSABIC), the Akaike information criterion (AIC), and the Entropy criterion. Lower scores of BIC, SSABIC, and AIC represent better fitting models (Muthén & Muthén, 2000; Schwartz, 1978). Entropy refers to the average classification accuracy in the assignment of participants to classes. Entropy values range from zero to 1, with values closer to 1 indicating better classifications of individuals to specific classes (Bauer & Currant, 2003). For this model, the five-class solution had the best fit indices, but one class consisted of only 6 people (see Table 2). Inspection of the four- and five-class solutions revealed that the class with 6 people was very similar to the largest class, which had the lowest levels of all three harsh parenting variables. This 6-person class had just slightly higher levels of mother’s striking and beating. We chose the four-class solution because: (a) very small classes can create problems with analyses and interpretation of results (Nylund, Asparouhov, & Muthén, 2006); (b) theoretically, we were most interested in comparing those who experienced physical punishment alone with those who experienced it in the context of discordant relationships, and those two groups existed in the four-class solution; and (c) even though entropy was somewhat lower than with the three-class solution, other indicators suggested that the four-class solution was reasonable. The final model estimated four classes of mother’s harsh treatment (see Figure 2).

The largest class accounted for 49.7% of the sample (n = 90). As shown in Figure 2, this normative class had low levels of all three harsh parenting variables: striking, beating, and discordant relationships ($M = -.305, SE = .084$ for mother’s striking; $M = -.635, SE = .042$ for beating; and $M = -.384, SE = .042$ for discordant relationships). The second largest
class, a physical punishment class, accounted for 30.9% of the sample \((n = 56)\) and had high levels of mother’s striking \((M = .355, SE = .097)\) and beating \((M = .859, SE = .073)\) and low levels of relationship discord \((M = -.271, SE = .051)\). The third class, a discordant relationships class, accounted for 11.6% of the sample \((n = 21)\) and had high levels of discordant mother-child relationships \((M = 1.363, SE = .283)\), and low levels of striking \((M = -.231, SE = .277)\) and beating \((M = -.415, SE = .155)\). The final class, a harsh treatment class, accounted for 7.8% of the sample \((n = 14)\) and had high levels of striking \((M = .821, SE = .228)\), beating \((M = 1.023, SE = .088)\), and discordant relationships \((M = 1.587, SE = .150)\). Thus, even though striking, beating, and discordant relationships are related to each other, children experienced different combinations over ages 6-12. Almost one third of children in the sample experienced striking and beating with no notable signs of discordant relationships with their mothers. For a few, however, physical punishment occurred in the context of a discordant mother-child relationship.

In the process of building the mixture models, the covariate (unmanageable temperament) and the distal outcomes (mother-reported conduct problems in one model and self- and interviewer-reported norm violations in the other) were added to the latent class model. The latent classes were regressed on early unmanageability, and then problem behavior (either conduct problems or adolescent norm violations) were regressed on early unmanageability and the latent classes (Log likelihood \(-762.822\); BIC = 1684.891, SSA BIC= 1589.845, AIC = 1585.643, entropy = .835, number or parameters = 30 for model with conduct problems as a distal outcome; Log likelihood = -711.946; BIC = 1583.146, SSA BIC= 1488.100, AIC = 1483.898, entropy = .828, number or parameters = 30 for model with norm violations as a distal outcome).

### Does early unmanageability increase the risk of experiencing specific combinations of harsh parenting?

In the part of the model that examined relations between children’s early unmanageability (age 3 months–3 years) and combinations of harsh parenting behavior (age 6–12 years), latent class membership was regressed on early unmanageability (A in Figure 1). In this comparison, one class serves as the baseline, or reference, category. We chose the normative class, which had low levels of mother’s striking, beating, and discordant relationships, as the reference category for the other classes. Results are expressed in odds ratios as in logistic regression and presented in the columns labeled A in Table 3. The results were similar in the two models—one with conduct problems as the distal outcome and the other with norm violations as the distal outcome. Children with high levels of early unmanageability were more likely to be in the physical punishment class
than in the normative class ($OR = 2.78, p < .05, 95\% CI = 1.49-5.21, OR = 3.05, p < .05, 95\% CI = 1.32-6.96$, for models with conduct problems and norm violations, respectively, as distal outcomes). Children with high levels of unmanageability also showed a tendency to be in the harsh treatment class rather than the normative class ($OR = 1.78, p < .10, 90\% CI = 1.02-3.10, OR = 1.36, p < .10, 90\% CI = 1.01-1.92$, for models with conduct problems and norm violations, respectively, as distal outcomes), but they were not at increased risk of being in the discordant relationships class ($OR = .85, 95\% CI = .47-1.42, OR = .88, 95\% CI = .50-1.57$, for models with conduct problems and norm violations, respectively). Thus, for models with both problem-behavior outcomes, unmanageable temperament increased children’s risk of experiencing physical punishment and to a lesser extent physical punishment in the context of discordant relationships later in childhood.

Are different combinations of harsh parenting related to levels of later problem behaviors?

In these models, the links between class membership and distal outcomes represent the magnitude of the outcomes for each of the harsh parenting classes (B in Figure 1). To test whether the means of the distal outcomes varied significantly across classes, we ran the models with and without holding the means equal across classes to get chi-square (two times the log likelihood) difference tests.

According to chi-square difference testing for the model with conduct problems as the outcome variable (second column in Table 3), children in the normative and discordant relationships classes had significantly lower levels of conduct problems in adolescence than children in the other classes ($M = -.214, SD = .107, M = -.158, SD = .324$, for the normative and discordant relationships classes, respectively) and children who experienced harsh treatment were significantly more likely than children in all of the other classes to have conduct problems in adolescence ($M = 1.265, SD = .278$). Children who experienced physical punishment alone had significantly lower levels of conduct problems than children in the harsh treatment class, but significantly higher levels of conduct problems than those in the normative and discordant relationships classes ($M = .065, SD = .123$). Turning to the model with norm violations as the distal outcome (fifth column in Table 3), children in the normative class had significantly lower levels of norm violations than children in the other classes ($M = -.105, SD = .075$) and children who experienced harsh treatment had significantly higher levels than children in the other classes ($M = 1.002, SD = .375$). Children who experienced physical punishment alone were similar to those who experienced discordant relationships ($M = .011, SD = .136, M = .076, SD = .192$, for the physical punishment and discordant relationships classes, respectively). Thus, the pattern of
results is largely similar for both problem-behavior outcomes. The only difference between the two models was for those who experienced only discordant relationships. They were similar to the normative group on conduct problems but similar to the physical punishment group on norm violations. Otherwise, in both models children who experienced physical punishment in the context of discordant mother-child relationships had more problem behaviors later on than those who experienced physical punishment alone, and those who experienced physical punishment alone had more problem behaviors than those who did not experience either type of harsh parenting.

**Links between early unmanageable temperament and adolescent problem behaviors**

In the mixture models we also examined to what extent children’s early unmanageability was related to later conduct problems or norm violations apart from the risk associated with their harsh parenting class membership (C in Figure 1). For the expression of this path in the model we use standardized estimates provided by Mplus (equivalent to standardized estimates provided by Amos or Lisrel). It is possible to refer to these estimates as betas (regular standardized coefficients or linear regression coefficients). For the significance levels we used Z statistics, so values that exceed +1.96 or fall below -1.96 are significant at \( p < .05 \) and values that exceed +1.65 or fall below -1.65 are significant at \( p < .10 \).

Results from the mixture model with conduct problems as the outcome (third column in Table 3) showed only one class for which early temperament was linked to later conduct problems after controlling for the risk associated with the class membership. Among children in the physical punishment class, higher early unmanageability was significantly related to risk of conduct problems (Est. = .229, \( z = 1.978 \)). Notably, among children in the harsh treatment class, where conduct problems were highest, there was no significant link between early temperament and conduct problems apart from the risk associated with harsh parental treatment (Est. = -.103, \( z = -.403 \)). For the normative and discordant relationships classes, early unmanageability was not significantly related to conduct problems (Est. = .126, \( z = 1.309 \) and Est. = -.070, \( z = -.241 \) for the normative and discordant relationships classes, respectively). Results from the mixture model with norm violations as the outcome (sixth column in Table 3) showed similar results. The physical punishment class was the only class for which early temperament was significantly linked to later norm violations after controlling for the risk associated with the class membership (Est. = .254, \( z = 2.007 \)). For the normative class, however, there was a tendency (Est. = .146, \( z = 1.627 \)). But again, for the class with the highest levels of norm violations—the
harsh treatment class—early unmanageability was not related to risk of norm violations over and above the risk associated with harsh treatment ($Est. = .073, z = .146$). Finally, among children who experienced discordant relationships, higher early unmanageability was not related to risk of norm violations ($Est. = .093, z = .975$). Comparing the two groups of the most theoretical interest, then, harsh treatment, or physical punishment in the context of discordant mother-child relationships, was related to higher levels of later conduct problems and norm violations than physical punishment in the context of good relationships. What is more, for the harsh treatment group unlike the physical punishment group, the experience of harsh parenting seemed to play a bigger role than temperamental unmanageability in the development of problem behavior. These group differences are consistent with the idea that physical punishment has a different meaning in the context of good parent-child relationships than in the context of discordant relationships. If it could be assumed that the children with discordant relationships had the experience of rejection, then this would support Deater-Deckard and colleagues’ (1996; Lansford et al., 2004) suggestion that physical punishment is related to bad outcomes if a child experiences it in the context of behaviors that communicate rejection.

**Harsh Parenting and Children’s Perceptions of Maternal Rejection**

To infer children’s experiences of these harsh parenting behaviors as rejecting, we tested an additional mixture model that was identical to those reported above, except that the distal outcome was children’s age-25 retrospective reports of their mothers’ rejecting behavior during their upbringing (Log likelihood = -731.176; BIC = 1621.601, SSA BIC=1526.555, AIC = 1522.353, entropy = .837, number or parameters = 30). Significance testing revealed that children who experienced mother’s harsh treatment or discordant relationships remembered their mothers as more rejecting during childhood than children in either of the other classes ($M = .699, SD = .298, M = .681, SD = .316$, for the harsh treatment and discordant relationships classes, respectively). Children who experienced only physical punishment, however, remembered their mothers as significantly less rejecting than children in the harsh treatment and discordant relationships classes, but significantly more rejecting than those in the normative class ($M = .062, SD = .152$). Not surprisingly, children in the normative class recalled the least maternal rejection of all the classes ($M = -.325, SD = .112$). In sum, children who experienced mother’s physical punishment in the context of discordant relationships tended to remember their mothers as more rejecting than children who experienced physical punishment in the context of generally good relationships.
Discussion

Previous studies have shown that among children who are temperamentally difficult to manage, the course of development might be very different for those who experience harsh parenting than for those who do not (Bates et al., 1998; Leve et al., 2005; Stoolmiller, 2001), but previous studies also suggest that combinations of harsh parenting behaviors—physical punishment in the context of behaviors that communicate rejection—might be more important than individual harsh parenting behaviors—physical punishment alone (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; McLoyd & Smith, 2002; Rohner, Bourque, & Elordi, 1996). Using a mixture modeling approach with latent classes representing different harsh parenting profiles, we modeled the relations between temperamental unmanageability, harsh parenting profiles, and later problem behaviors. Taken together, the results show that different harsh parenting profiles play different roles in the link between early temperamental unmanageability and later problem behavior. Unmanageable temperament puts children at risk for physical punishment. For children who experience physical punishment, both it and their own unmanageability seem to play separate roles in their later problem behaviors, which are elevated, but not the highest in the sample. Early temperament also, but to a lesser extent, increases the risk of experiencing physical punishment together with discordant mother-child relationships. Although children in this harsh parenting profile have the highest levels of problem behaviors, their behavior problems are not linked to early temperament apart from the experience of harsh parenting. Because of the tenuous link between temperament and this harsh parenting combination, it seems reasonable to conclude that for this group harsh parenting plays a bigger role than temperamental unmanageability does in the development of later problems. Thus, our results add new information to the earlier findings that harsh parenting moderates the link between early temperament and problem behavior outcomes (Bates et al., 1998; Leve et al., 2005; Stoolmiller, 2001), and they lend credibility to the suggestion (Deater-Deckard et al., 1996; Lansford et al., 2004) that physical punishment can have differential effects depending on whether the child perceives the parent as rejecting. Our findings are not entirely consistent, however, with previous findings that when physical punishment is used frequently, it is less likely to be linked to children’s adjustment problems (Lansford et al., 2005). In this sample, physical punishment was very frequently used, and yet it was linked to higher levels of conduct problems and norm violations, even when it was not experienced together with discordant relationships.
The latent class part of this analysis could be referred to as a person-centered approach, which implies that considering the whole person, or at least a pattern of the person’s characteristics or behaviors, will yield a different understanding of the person’s functioning than one would get by studying relations among variables in a sample of the population (Bergman, Magnusson, & El-Khoury, 2003; Bergman & Trost, 2006; Magnusson & Stattin, 2006). In this case, the combination of the person- and variable-centered approaches in the mixture modeling helped to reveal fundamental differences among the families in the different harsh parenting profiles in the role that temperamental unmanageability plays in harsh parenting and later problem behavior. The striking and beating that one group of mothers did might have been a qualitatively different activity than the striking and beating that the other group did, because relationship discord might have been an indicator of maternal psychopathology or dire problems in the home such as substance abuse or domestic violence. Children who experienced discordant relationships later remembered their mothers as rejecting whether they used a lot of physical punishment or not, and that suggests that there were profound differences between mothers who used physical punishment alone and those who used it in the context of discordant relationships.

There are undoubtedly other ways in which the understanding of these processes could be improved. For instance, one thing that we have not considered in this study is that children with different temperaments might respond differently to the same parenting behaviors. This idea has support from several studies (e.g., Belsky, 1997; Wachs & Gandour, 1983). Although this was not our question for this study, it will ultimately be an important additional issue to consider in this developmental process and to add to future models.

One potential limitation of this study is that it began in the mid 1950s. The question is what the cultural views of physical punishment were at the time, because that would determine how children viewed striking and beating. In part, an answer can be inferred from the sheer numbers of mothers who reported striking and beating their children. For striking, when children were 6 and 7 years old, it was virtually all of the mothers, to one degree or another. When the children were 9 years old, a third of mothers reported having given the child “a real beating.” Thus, we think it is safe to conclude that the children in this study did not view physical punishment as aberrant, and we assume that this explains why children who received physical punishment in the context of harmonious mother-child relationships did not remember their mothers as rejecting. We also assume that if this study could be repeated in Sweden today, the findings concerning physical punishment might be very different. Sweden was the first country in the world to outlaw physical punishment of
children. The law went into effect in 1979, so a whole cohort of Swedes has now grown to adulthood amidst public awareness campaigns concerning this. Although some parents undoubtedly still use physical punishment, they are probably more out of control when they do it than the parents in our sample were when they struck or beat their children. Moreover, because Swedish children know that striking and beating is illegal, if they experience it they are likely to perceive their parents’ intentions and feeling toward them much differently than the children in our sample did.

The present study has a number of strengths. Perhaps the main strength is the prospective, long-term, longitudinal design with data collected at short intervals, beginning before the children’s first birthdays and following the children into young adulthood. These data allowed us to examine connections between harsh parenting, very early unmanageable temperament, and later problem behavior in a more elaborate way than ever before reported in the literature. Another strength was the reliance on a community sample which did not differ much from other Swedish children of the same cohort generally (Karlberg et al., 1968). A further strength of the study was the use of data from different reporters, particularly for the problem-behavior outcomes. The links between mother–rated conduct problems and temperament and physical punishment could be the result of rater bias, but in this case the results were almost identical using youths’ and interviewers’ judgments of norm violations. These findings give us confidence that the results of these models are not just due to rater bias, but are tapping into actual developmental processes.

What implications do our findings have for the debate that has been ongoing in the literature concerning physical punishment (see, e.g., Baumrind, 1997; Deater-Deckard & Dodge, 1997; Gershoff, 2002; Holden, 2002; Larzelere, 2000) and its implications for policy makers? On one hand, the evidence seems to be mounting that under the right cultural and family conditions physical punishment does not necessarily produce more aggressive or problematic behavior. This could be taken as an argument against changing the tradition of physical punishment in countries where it is still legal. On the other hand, the results also show that under less than optimal family conditions, physical punishment might contribute to the development of behavior problems that will interfere with the goals of society and the individual’s own enjoyment of life, and this should arouse concern for policymakers and parents themselves.
References


Table 1

*Numbers of Mothers at Each Age Who Reported Using Any Physical Discipline or Were Judged as Having Any Degree of Discord in the Mother-Child Relationship (N = 212).*

<table>
<thead>
<tr>
<th></th>
<th>6y</th>
<th>7y</th>
<th>8y</th>
<th>9y</th>
<th>10y</th>
<th>11y</th>
<th>12y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Striking</td>
<td>169</td>
<td>163</td>
<td>158</td>
<td>153</td>
<td>123</td>
<td>102</td>
<td>68</td>
</tr>
<tr>
<td>Beating</td>
<td>56</td>
<td>52</td>
<td>31</td>
<td>73</td>
<td>49</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Discordant relations</td>
<td>11</td>
<td>13</td>
<td>18</td>
<td>25</td>
<td>22</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Number of latent classes</td>
<td>Number of parameters</td>
<td>Log likelihood</td>
<td>BIC</td>
<td>SSABIC</td>
<td>AIC</td>
<td>Entropy</td>
<td></td>
</tr>
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<td>----------</td>
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<td></td>
</tr>
<tr>
<td>1 class</td>
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<td>-639.147</td>
<td>1310.144</td>
<td>1291.135</td>
<td>1290.295</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2 classes</td>
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<td>-577.853</td>
<td>1208.789</td>
<td>1177.107</td>
<td>1175.706</td>
<td>.893</td>
<td></td>
</tr>
<tr>
<td>3 classes</td>
<td>14</td>
<td>-538.513</td>
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<td>1106.986</td>
<td>1105.025</td>
<td>.964</td>
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</tr>
<tr>
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<td>1047.389</td>
<td>1044.308</td>
<td>.889</td>
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</tr>
<tr>
<td>5 classes</td>
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<td>1091.921</td>
<td>1016.279</td>
<td>.882</td>
<td></td>
</tr>
<tr>
<td>6 classes</td>
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<td>1145.158</td>
<td>1108.130</td>
<td>1085.609</td>
<td>.833</td>
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Table 3. Summary of Mixture Modeling Results for Models with Conduct Problems and Norm Violations, Respectively, as Distal Outcomes. Column Headings A, B, and C Refer to Pathways Shown in Figure 1.

<table>
<thead>
<tr>
<th>Latent parenting class</th>
<th>Conduct problems</th>
<th></th>
<th>Norm violations</th>
<th></th>
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<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>A</td>
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<tr>
<td></td>
<td>Temperament predicting latent class</td>
<td>Mean conduct problems</td>
<td>Temperament predicting conduct problems</td>
<td>Mean norm violations</td>
</tr>
<tr>
<td>Harsh treatment</td>
<td>1.78 †</td>
<td>1.27 a</td>
<td>-.10</td>
<td>1.36 †</td>
</tr>
<tr>
<td>Physical punishment</td>
<td>2.78 *</td>
<td>.07 b</td>
<td>.22 *</td>
<td>3.05 *</td>
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<tr>
<td>Discordant relationships</td>
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<td>-.16 c</td>
<td>-.07</td>
<td>.88</td>
</tr>
<tr>
<td>Normative</td>
<td>Reference</td>
<td>-.21 c</td>
<td>.13</td>
<td>Reference</td>
</tr>
</tbody>
</table>

*p < .05; †p < .10

1 Odds ratios; 2 Mean values; 3 Estimates

a Significantly higher than all others; b Significantly different from highest and lowest; c Significantly lower than all others
Figure Captions

*Figure 1.* Conceptual latent classes of mothers’ behavior model with risk factor associated with latent classes and prediction of distal outcomes.

*Figure 2.* Model-estimated means for the four-class solution.
Striking 6 – 12 years
Beating 6 – 12 years
Discord relations 6 – 12 years

Class Membership

A

Covariate: - Early unmanageability 3m-3y

B

Outcomes: Conduct problems/ Norm violations
Normative Physical punishment Discordant relationships Harsh treatment

-1 -0.5 0 0.5 1 1.5 2

Striking Beating Discordant relations
Children’s Temperamental Unmanageability, Harsh Parenting, and Quality of Romantic Relationships in Adulthood from a Longitudinal Perspective

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Abstract

Temperamentally unmanageable children or children who experience negative parenting are at risk of having problems in romantic relationships later in life. It has been suggested that parents’ values and attitudes toward marriage might also affect their children’s romantic relationships. Under the assumption that the best understanding might come from combining these factors, in this study I examined the possible roles that different combinations of harsh parenting might play in the link between early unmanageable temperament and parents’ attitudes on one hand and relationship quality later in life on the other. I used prospective data from 3 months to 35 years in a sample of 212 children. Latent class analysis revealed different patterns of harsh parenting. In a mixture model, unmanageable temperament increased children’s risk of experiencing harsh treatment. Children who experienced a combination of physical punishment and discordant relationships (harsh treatment) had the lowest quality romantic relationships later in life. Children’s temperament and the experience of harsh parenting seemed to play similar roles in the development of problems in relationships. Children who experienced discordant relationships also had similarly low quality relationships, and parenting seemed primarily responsible. Also, for these children, parents’ attitudes towards marital conflict affected later romantic relationships. Thus, the results suggest that behaviors that create discord or conflict in the family might be more damaging than other types of parents’ behaviors.

Keywords: harsh parenting, early unmanageability, romantic relations, marital conflict
Children’s Temperamental Unmanageability, Harsh Parenting, and Quality of Romantic Relationships in Adulthood from a Longitudinal Perspective

Eventually, everyone wants to have a partner in life. Generally, people think that having a romantic partner will make their life much better or happier. Research also suggests that people who have a romantic partner have better health, are happier, or have higher self-esteem (see, e.g., Hibbard & Pope, 1991; Kiecolt-Glaser & Newton, 2001; Ross, Mirowsky, & Goldsteen, 1990). However, some people have a romantic partner but are not happy; in such cases, they will have difficulties in the relationship with their partner. The question is why some people have difficulties in their romantic relationships and are not satisfied with romantic relationship quality, whereas others do not. In the literature from different theoretical perspectives, several possible explanations have been tested.

From the perspective of temperament and personality theory, one explanation is that traits and behaviors existing long before the partners first meet contribute to the way romantic partners get along over time. Even children’s temperament and behavior styles at age 3 have been linked to experiences in relationships, such as intimacy, power balance, mutual interests, and partner violence, at age 21 (Newman, Caspi, Moffitt, & Silva, 1997). And a history of childhood tantrums has been linked to divorce at midlife, at age 40 (Caspi, Elder, & Bem, 1987). Temperament is thought of as the foundation for later personality, and it is believed to be elaborated over time into a stable behavioral disposition (e.g., Caspi, 2000; Caspi & Silva, 1995; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Rutter, 1987; Snyder & Ickes, 1985). From this perspective, it follows that researchers interested in older children or adolescents will examine the effects of personality traits on romantic relationships later in life. Empirical evidence suggests that negative emotionality, neuroticism, or aggressiveness during childhood, adolescence or adulthood may have long-term effects on romantic or marital relationships (e.g., Blum & Mehrabian, 1999; Bouchard, Lussier, & Sabourin, 1999; Donnellan, Conger, & Bryan, 2004; Huston & Houts, 1998; Kelly & Conley, 1987; Kinnunen & Pulkkinen, 2003; Watson, Hubbard, & Wiese, 2000). Thus, stable personality characteristics or even early temperamental predispositions may affect future romantic relationships.

From a learning theory perspective, research has suggested that the nature of child upbringing may have long-term consequences for romantic or marital relationships (Andrews, Foster, Capaldi, & Hops, 2000; Capaldi & Clark, 1998; Flouri & Buchanan, 2002; Franz, McClelland, & Weineberger, 1991; Linder & Collins, 2005). In particular, parent-child closeness in adolescence has been linked to the quality of relationships with
partners in midlife, at age 33 (Flouri & Buchanan, 2002). And poor parenting practices, such as monitoring and discipline, or aversive communication during adolescence, have been found to have strong associations with physical aggression towards partners in young adulthood (Andrews, Foster, Capaldi, & Hops, 2000; Capaldi & Clark, 1998). Perhaps the clearest evidence that parental behavior influences the child’s future relationships comes from studies on child abuse and harsh parenting. Adults who have been abused or experienced harsh parenting as children are not satisfied with their relationships, do not have positive perceptions of their current romantic partners (Colman & Widom, 2004; Finkelhor, Hotaling, Lewis, & Smith, 1989; Fleming, Mullen, Sibthorpe, & Bammer, 1999), are fearful of having a partner (Davis & Petretic-Jackson, 2000), or have trouble maintaining intimate or romantic relationships (Colman & Widom, 2004; Felitti, 1991; Fleming et al., 1999). Thus, it seems that negative or harsh parental behavior, especially during late childhood and adolescence, has long-term consequences for the child’s future relationships.

A learning perspective also suggests that parents’ own marital satisfaction, values, and attitudes towards marriage or romantic relationships may affect their children’s romantic relationships, as well as children’s characteristics or parent-child relationships (e.g., Amato & Booth, 2001; Conger, Cui, Bryan, & Elder, 2000; Sanders, Halford, & Behrens, 1999). Social learning theory offers a background for this way of thinking, suggesting that children learn a variety of interpersonal behaviors or attitudes through their observation of adults (Bandura, 1977). And children have frequent opportunities to observe their parents during childhood and adolescence, thus giving them possibilities to get to know their parents’ behaviors and attitudes in the family. More specifically, children with parents who have troubles in their relationships observe less positive behaviors than other children, and may use these types of behaviors later in life with their own romantic partners. Similarly, children with parents who think that conflict is a natural or necessary part of any relationship can have this attitude later in life, and experience various problems in their romantic relationships. Thus, it might be that not only parents’ behavior with a child, but also parents’ behavior to each other or attitudes, affect the child’s romantic relationships later in life.

In reality, children’s temperament, harsh parenting, and parents’ relationships are probably not independent of each other as factors affecting adult romantic relationships. Children with angry, oppositional temperaments are more likely than others to experience harsh parenting (e.g., Bates, Pettit, Dodge, & Ridge, 1998; Pakalniskiene, Kerr, & Stattin, 2007; Stoolmiller, 2001), and harsh parenting seems to escalate adolescents’ problem
behaviors (e.g., Caspi, 2000; Leve, Kim, & Pears, 2005; Morris, Silk, Steinberg, Sessa, Avenevoli, & Essex, 2002; Pakalniskiene et al., 2007; Stoolmiller, 2001). This, in turn, may be linked to adult romantic relationships (Karney & Bradbury, 1995; Kinnunen & Pulkkinen, 2003). Thus, children’s temperament and harsh parenting are related to each other in affecting adult romantic relationships. It is also reasonable to suppose that parents’ marital conflict spills over into their relationships with their children (Fauber, Forehand, Thomas, & Wierson, 1990), and is experienced by the child as conflict or disharmony in the parent-child relationship. This disharmony in relationships, if the child interprets it as parental rejection, can determine whether harsh parenting practices, such as physical punishment, result in increased aggression and other problem behaviors (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; McLoyd & Smith, 2002; Rohner, Bourque, & Elordi, 1996; Pakalniskiene et al., 2007). It seems that disharmony in parent-child relationships is more important than isolated aspects of negative or harsh parenting in determining the nature of adult romantic relationships. Although it would make for a complex model, the best understanding might come from combining all these factors – children’s temperament, harsh parenting, and parents’ relationships.

There are several studies that have combined these factors – children’s characteristics, parenting, and parents’ relationships – in examining future romantic relationships. A couple of longitudinal studies (Capaldi & Clark, 1998; Donnellan, Larsen-Rife, & Conger, 2005) have shown that both parenting behaviors toward the child and adolescent characteristics are important, directly or indirectly, in predicting romantic relationships later on. However, parents’ marital negativity or parental dyadic aggression do not seem to affect children’s later relationships with adult partners. Results from other longitudinal studies are mixed, showing that either parents’ behaviors alone (Conger et al., 2000) or parents’ marital discord alone (Amato & Booth, 2001) predict children’s marital quality or romantic relationship quality in early adulthood. These studies, however, have not included children’s characteristics. There is also empirical evidence suggesting that conflict-ridden parent-adolescent interactions and adolescents’ depression or antisocial behavior may predict satisfaction, communication, and aggression in marital or dating relationships later in life (Andrews et al., 2000; Kim, Conger, Elder, & Lorenz, 2001). Even though only a few studies have examined the combination of children’s characteristics, parenting, and parents’ relationships in the prediction of later romantic relationships, results from other studies indicate that all these three factors in one way or another are important predictors. However, all these studies have focused on adolescents and young adults. They
have not examined the influence of very early temperament or harsh parenting combinations on mid-adulthood romantic relationships.

Taken together, it seems that adult relationship satisfaction may be affected by many factors. From several theoretical perspectives, adult relationships may be influenced by characteristics of the child, parent-child relationships, and parents’ marital satisfaction. Previous studies indicate that various children’s or adolescents’ characteristics, parents’ marital relations, or parent-child relationships in one way or another are important in predicting romantic relationships later in life. In addition, parents’ marital relations may influence parent-child relationships, and be experienced by the child as conflict or disharmony; if the child interprets this as parental rejection, such disharmony can modify the effects of negative parenting. Thus, disharmony in the parent-child relationships may be an important aspect with regard to the nature of the adult romantic relationship. Though it would make for a complex model, the best understanding might come from combining these factors. One previous study, modeled the links between early temperament, different combinations of harsh parenting, and adolescent problem behavior (Pakalniskiene et al., 2007), and the results indicated that the combination of physical punishment and discordant mother-child relationships was linked to adolescent problem behavior, and early temperament was not clearly related to this harsh parenting profile. In this study, I use the same longitudinal dataset to test a model that is similar in that I identify harsh parenting profiles and relate them to early temperament, but different in that I consider the role of early parental conflict in addition to children’s temperament and I look at the grown children’s own partner relationships in middle adulthood as the outcome of interest.

In this study, I use longitudinal data from infancy to middle adulthood to model relations between early temperamental unmanageability and parents’ attitudes toward marital conflict, childhood experiences of different combinations of harsh parenting, and middle adult partner relationship quality. Following the idea that disharmony in parent-child relationships could be important for later relationship quality, the different combinations of harsh parenting behaviors that children experienced included combinations of physical punishment and relationship discord. To examine relationships between patterns of harsh parenting behaviors, early temperamental unmanageability, parents’ attitudes towards marital conflict, and relationship quality in adulthood, I used a mixture model, which combines variable- and person-centered approaches. This model examined whether children who experience various combinations of harsh parenting differ with regard to early unmanageability, parents’ attitudes, and romantic relationship quality later in life.
Method

Participants

All analyses are based on data from a Swedish longitudinal study that started in the mid 1950s. Participants in this study were investigated by researchers at the Clinic for the Study of Children’s Development and Health, Karolinska Hospital, Stockholm and the University of Stockholm from birth into adulthood. Every fourth pregnant woman who registered at the Solna prenatal clinic (in a suburb of Stockholm) from April 1955 to April 1958 was invited to participate in a long-term pediatric study (in Sweden, virtually all pregnant women receive regular care at prenatal clinics). Only 3 percent of those who were asked refused to participate. In all, 212 children (122 boys and 90 girls) took part in the study. Comparisons on variables such as parents’ socioeconomical status (SES), age, and marital status; sibling order; gestational age; and birth weight have shown the sample to be representative of populations in other Swedish urban communities (see Karlberg, Klackenberg, Engström, Klackenberg-Larsson, Lichtenstein, Stensson, & Svennberg, 1968; Stattin & Klackenberg-Larsson, 1993). At the time of the child’s birth, 192 of the 212 mothers who participated in the study were married to the child’s biological father (in a first marriage for both partners), 14 were cohabiting, and 5 were single. Most of the mothers (166) did not work outside the home; 41 were employed outside the home; the others were self-employed at home, or away from home. The average age of mothers was 27.4 (SD = 5.3); the average age of fathers was 30.2 (SD = 6.0). Parents had been living together for an average of 3.6 years (SD = 3.5). In 180 families, both parents were Swedish by birth; in 27 families, one was Swedish; and in 4 families, neither was Swedish. According to the Graffar classification (Graffar, 1956; 1960), where socioeconomic status is classified from 1 (highest) to 5 (lowest), about 4% were classified as 1 (high SES); 20% were classified as 2 (medium-high SES); 31% were classified as 3 (medium SES); 40% were classified as 4 (medium-low SES); and 4% were classified as 5 (low SES). Children and their parents were examined four times, equally spaced (every three months) during their first year, twice (every six months) during the second year, and annually (close to their birthdays) thereafter up to the age of 18. Data were also collected at the average ages of 21, 25, and 35 years.

At the age of 35, 96 of the 212 participants were married, 65 were cohabitating, and 34 had a romantic partner, but were not living together. The ages of the participants’ partners varied from 21 to 52 years, with a mean of 35.5 (SD = 5.7). Partners had been living together for an average of 10.2 years (SD = 5.2). Partners who were not living
together had previously been together for an average of 3.5 years ($SD = 2.3$). Thirty-seven participants had at least one child; 68 reported having two children, 29 three children, and 10 four or more. One hundred eighty-five participants were working at age 35. Thirty-eight percent of participants and 35% of participants’ partners had a university degree at age 35.

**Measures**

**Early Unmanageability**

For the measure of early unmanageability, I used mothers’ reports of children’s early unmanageability and resistance to control, making two assessments: 3 – 12 months and 18 months – 3 years. Child characteristics were assessed with age-appropriate items (for validation of this measure, see Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995). When the child was 3 – 12 months, the behavior problem measures included the following questions: “Does he/she often get angry?” “Does he/she often get extremely angry?” The alpha reliability for this scale was .81. When the child was 18 months – 3 years, behavioral problems were addressed by the following questions: “Is he/she a noisy child?” “Does he/she often get angry?” “Does he/she often get extremely angry?” “Is he/she a destructive child?” “Does he/she want to get his/her own way?” “Is he/she often disobedient?” The alpha reliability for this scale was .69. For the analysis, I standardized scores within time points to create a common metric, and the measures were collapsed into one age period.

**Harsh Parenting**

For the measures of harsh parenting I used mothers’ reports of their striking (milder corporal punishment) and beating (stronger corporal punishment), and interviewers’ ratings of discordant relationships between mothers and children, which were given on each assessment from 6 to 12 years. For the analysis, mean scores for striking, beating, and discordant relationships for all the age periods from 6 to 12 years were computed. The mean scores represent the average level of each variable over this period. As reported previously (Pakalniskiene et al., 2007), the numbers of mothers who engaged in any striking ranged from 169 to 68 over ages 6-12, beating ranged from 56 to 73 over ages 6-9 and from 49 to 20 over ages 10-12.

**Striking.** To measure striking, mothers stated whether or not (and how often) they struck their child. When children were 6 to 9 years, there were six response options, ranging from “never” to “on many occasions every day.” Because of a lower incidence of striking older children, the response options were changed from age 10 to age 12; there
were five response options, ranging from “never” to “daily.” The average period-to-period correlation for the measures of striking ranged from .45 to .56.

**Beating.** When the child was 6 to 9 years, mothers stated whether or not they had given their child a real beating. For children ages 10 to 12 years, mothers reported beating frequency. There were five response options, ranging from “never” to “once a day.” To keep consistency in measures over time we dichotomized this measure. The average period-to-period correlation for beating ranged from .31 to .39.

**Discordant Mother-Child Relationships.** After each interview occasion from the child’s ages 6 to 12 years, the interviewers made judgments of the quality of the mother-child relationship. The interviewers used a 3-point Likert scale with the scale points described as follows: (1) good relationship – no conflict or maternal insensitivity; (2) some evidence of conflict, disagreement, or insensitivity, or inconsistent relationship quality – sometimes good and other times bad; and, (3) pronounced conflict or apparent insensitivity (see Stattin & Klackenberg, 1992, for a validation of this measure) The period-to-period correlations for discordant relationships ranged from .44 to 66.

**Relationship Quality with a Partner**

Participants evaluated 10 items describing the relationship with their romantic partner at age 35. The questions were: “Does your partner talk with you about his/her problems?” (reversed), there were four response options, ranging from “yes, always” to “never;” “how warm do you feel towards your partner?” (reversed), there were five response options, ranging from “very much” to “not at all;” “how do you get along with your partner?,” there were five response options, ranging from “bad” to “very good;” “how often do you get really mad at your partner?” (reversed), there were five response options, ranging from “never” to “often;” “how would you describe your husband/wife?,” there were five response options, ranging from “only negative features” to “only positive;” “do you and your husband/wife have any interests in common?,” there were five response options, ranging from “no interests in common, no possibilities for recreation together” to “totally share each other’s activities always with the same pleasure;” “if you would give a picture of your relationships how would you describe the atmosphere at home?,” there were six response options, ranging from “very disharmonious, divorce atmosphere” to “very harmonious, we share the same attitudes, open, warm home atmosphere;” “how often do you cuddle? If you think one month back, how often did you spontaneously kiss or hug each other?,” there were five response options, ranging from “not at all” to “daily, almost daily;” “how is your sexual life? Are you well adapted sexually to each other? Do you
function well together?, “there were six response options, ranging from “have no sexual life or very seldom” to “very well adapted;” “does you partner give you encouragement and support when you have troubles at work?” (reversed), there were five response options, ranging from “I get all the help I need” to “my partner is more of an obstacle.” For the analyses we computed a mean score of all the items. For the latent profile analysis, we standardized all the question scores to create a common metric and created a scale from the standardized items, with higher scores indicating better relationship quality. The alpha reliability for this scale was .81.

Attitudes towards Marital Conflict

Both mothers and fathers responded to 5 statements describing attitudes towards marital conflict. The statements were: “people who believe that they can manage their marriage without any arguments do not know anything about reality;” “sometimes it is necessary for the wife/husband to disagree with what they say to get their voice heard;” “it does not matter how much partners like each other, there are always differences between them that cause irritation and quarrels;” “there are some thing that cannot be made up with just a discussion;” and, “when two people with a will of their own get married it is natural that they will quarrel.” There were four response options, ranging from “strongly disagree” to “strongly agree.” Higher scores indicated positive attitudes towards marital conflict. For the analyses we created a mean score of all the items. The alpha reliability for this scale was .75.

Data Analysis

For all the analyses, I used Mplus 4.0 (Muthén & Muthén, 2006) software with FIML (full information maximum likelihood) estimation. The FIML estimation allowed me to use the complete sample in this study, even when some data were missing. The reason for missing cases was due mostly to some data not being available for a specific wave or due to not having answers to some questions, rather than due to participants’ attrition. Using ordinary t-tests, I compared participants with incomplete data (87) and participants with complete data (125) on the variables used in these analyses. The two groups did not differ significantly on any of the variables used. Thus, these missing data can be considered missing at random. There is evidence that FIML estimation provides less biased estimates than listwise or pairwise deletion (Shafer & Graham, 2002).
Mixture Modeling

To identify the patterns of harsh parenting that children had experienced latent class model was chosen. Latent class modeling refers to modeling with categorical latent variables representing groups generated from the data. Latent profile analysis, which is a type of latent class analysis, predicts latent class membership from continuous indicators (Muthén & Muthén, 2006), while latent class analysis predicts class membership from categorical data. Even though class membership in this study was predicted from continuous data, I will use the term latent class analysis, because this term is mainly used in mixture modeling.

In this study, I combined the latent class modeling with early covariates and distal outcomes. Models of this type are called mixture models (Muthén & Muthén, 2006). The mixture modeling tested in this study is presented in Figure 1 and estimated simultaneously. Based on the previous research, the child’s early temperament and parents’ marital conflict served as early covariates; and relationship with a partner at age 35 served as the distal outcome. This model helps to test whether children who have higher levels of unmanageable temperament early on are likely to experience certain patterns of harsh parenting (A in Figure 1) and whether these experiences of harsh parenting are systematically related to relationship quality with a partner later in life (B in Figure 1). The pathways between the early covariates and the distal outcome represent the extent to which early unmanageability and parents’ attitudes towards marital conflict are related to partner relationship quality later in life, after controlling for the risk associated with experiencing harsh parenting (C in Figure 1).

Results

In this study, harsh parenting behaviors and their relationships to early unmanageability, parents’ attitudes, and relationship quality with a partner in adulthood were tested in the model presented in Figure 1. First, the latent classes of mother’s harsh behaviors such as striking, beating, and discordant mother-child relationships during late childhood and early adolescence at ages 6-12 were tested. Following the idea that covariates could improve model fit and also improve accuracy of assignment individuals to certain classes or profiles (Muthén, 2003), early unmanageability and parental attitudes towards marital conflicts were included in model building and testing latent classes. Models with increased numbers of classes were compared (Table 1) using the Bayesian information criterion (BIC), the sample-size adjusted Bayesian information criterion (SSABIC), the Akaike information criterion (AIC), and the Entropy criterion. Lower scores on the BIC,
SSABIC, and AIC represent better fitting models (Muthén & Muthén, 2000; Schwartz, 1978). Entropy refers to the average classification accuracy in the assignment of participants to classes or profiles, and higher scores represent greater accuracy (Bauer & Currant, 2003). Entropy values can range from 0 to 1, with values closer to 1 indicating better classifications of individuals into specific classes (Bauer & Currant, 2003). The fit indices for the classes are very similar to those reported previously (Pakalniskiene et al., 2007), with small changes reflecting the addition of parental marital conflicts. Although the BIC value indicated that models with three or four classes have very similar fit, the AIC indicated that four-class solution fits better than three-class solution. However, the five-class solution had the best of all four fit indices. Comparing three-, four-, and five-class solutions it was decided that in order to have a meaningful, adequate size of each class, the four-class solution should be chosen, Very small classes can create problems with analysis and the interpretation of results (Nylund, Asparouhov, & Muthén, 2006).

In the next step, the adulthood outcome (relations with a partner at age 35) was added to the model (Log likelihood = -643.257; BIC = 1482.919, SSA BIC= 1365.696, AIC = 1360.513, entropy = .824). Table 2 shows the mean values of mothers’ behaviors for the four class solution with the adulthood outcomes included in the model. Four-class solution model presents very similar profiles to reported earlier (Pakalniskiene et al., 2007). Four different classes were identified: a normative class consisting of children (n = 103) who very seldom experienced harsh parenting; a physical punishment class, consisting of children (n = 62) who frequently experienced mother’s striking and beating, but not discordant relationships; a discordant relationships class, consisting of children (n = 22) who experienced discordant mother-child relationships and who very seldom experienced mother’s striking or beating; and a harsh treatment class, consisting of children (n = 15) who frequently experienced mother’s striking, beating, and discordant relationships. It seems that children during late childhood and early adolescence could experience various types mother’s behaviors. It could be only physical punishment, physical punishment together with conflicted relationships, or only conflicted mother-child relationships. Chi-square analysis failed to detect significant gender differences in the four classes. This suggests that, in each class, there are similar proportions of girls and boys.

**Parents’ attitudes towards marital conflict, children’s early unmanageability, and the risk of experiencing specific mothers’ harsh behavior**

Previous studies suggested that parent-child relationships or parents’ behavior could be influenced by the child’s temperament or even parents’ marital satisfaction. To estimate
the relationships between children’s temperament, parents’ marital satisfaction, and parents’ behavior latent class membership was regressed on parents’ attitudes towards marital conflict and children’s early temperament (A in Figure 1). The risk for experiencing certain mothers’ behavior is given in reference to the normative class, which had low levels of mother’s striking, beating, and discordant relationships, because in this comparison, one of the classes serves as the reference category. Results are presented in odds ratios and presented in the columns labeled A in Table 3. Relative to children in the normative class, children with higher levels of early unmanageability were more likely to be in the harsh treatment class (OR = 1.96, p < .05, 95% CI – 1.02-3.75) or showed a tendency to be in the physical punishment class (OR = 1.50, 90% CI – 1.04-2.18). However, children with higher levels of unmanageability were not at increased risk of being in the discordant relationships class (OR = .84, 95% CI – .39-1.84). Across all classes, parents’ attitudes towards marital conflict at age 4 did not increase the risk for children of experiencing certain parents’ behavior (OR = 1.04, 95% CI – .47-2.28, OR = 1.11, 95% CI – .74-1.67, OR = 1.08, 95% CI – .66-1.77 for discordant relationships, physical punishment, and harsh treatment class, respectively). Taken together, unmanageable temperament increased children’s risk of experiencing physical punishment in the context of discordant relationships and, to a lesser extent, physical punishment in the context of good relationships later in childhood. It seems that children’s unmanageable temperament could evoke mothers’ physical punishment. However, parents’ attitudes towards marital conflict did not increase children’s risk of experiencing certain parental behaviors.

**Class membership and adulthood outcomes**

It seems that unmanageable temperament increased children’s risk of experiencing certain parents’ behavior. The question is whether certain parents’ behavior could affect children’s later relationships. To test whether the romantic relationship quality varied across classes (B in Figure1), I ran the models with and without holding the means of relationship quality equal across classes to get the chi-square (twice the log likelihood) differences. Because I made multiple comparisons, I used a more conservative significance level (p < .01) than the conventional significance level (p < .05). Significance testing revealed (third column in Table 3) that children who experienced discordant relationships and harsh treatment had significantly lower quality relationships in adulthood than children in the normative and physical punishment classes (M = -.361, SD = .112, M = -.344, SD = .130, for the discordant relationships and harsh treatment classes, respectively). However,
children who did not experience mother’s harsh behavior or who experienced only mother’s physical punishment had significantly higher quality relationships with their partners in adulthood than other children ($M = .056, SD = .064, M = .142, SD = .090$ for the normative and physical punishment classes, respectively). Thus, children who experienced physical punishment in the context of conflicted mother-child relationships or experienced conflicted relationships alone had worse relationships later in life than other children.

**Contribution of early unmanageable temperament and parents’ attitudes towards marital conflict to the prediction of adulthood relationships**

It was found that unmanageable temperament increased children’s risk of experiencing certain parents’ behavior. In this model, the links from children’s early unmanageability and parents’ attitudes towards marital conflict to later relationship quality were also examined for each of the classes (C in Figure 1).

Results are presented in the last two columns in Table 3. Results are expressed in standardized estimates provided by the program. For the significance levels, Z statistics were used, so values that exceed +1.96 or fall below -1.96 are significant at $p < .05$, and values that exceed +1.65 or fall below -1.65 are significant at $p < .10$. Results showed that high early unmanageability was significantly related to the likelihood of having a poor relationship with a partner at age 35 over and above the risk associated with class membership ($Est. = -.443, z = -3.952$) for children who experienced harsh treatment; there was no significant link between parents’ attitudes towards marital conflict and relationship quality ($Est. = .215, z = 1.161$). For children in the discordant relationships class, where the quality of relationships with a partner at age 35 was also the lowest, early temperament did not contribute to the likelihood of having poor relationship quality in adulthood, over and above the risk associated with class membership ($Est. = -.144, z = -.776$). However, there was a significant link between parents’ attitudes towards marital conflict and relationship quality apart from the risk associated with the class membership ($Est. = -.294, z = -1.979$). For children in the normative and physical punishment classes, neither early unmanageability nor parents’ marital conflicts added to the likelihood of having poor relationship quality in adulthood over and above the risk associated with class membership. Thus, for children who experienced harsh treatment, temperamental unmanageability seemed to play a role in the development of poor relationships. Also, it seems that parents’ positive attitudes towards marital conflicts could be related to relationships in adulthood, but only for children who experienced discordant mother-child relationships. What is more, children who experienced discordant relationships or mother’s physical punishment in the
context of discordant relationships had poor romantic relationships later in life. Even though children’s temperamental unmanageability may be a risk factor for experiencing mother’s physical punishment or harsh treatment, the children who experienced mother’s physical punishment in the context of good relationships had much better relationship quality than children who experience conflicts at home. These differences suggest that conflicted attitudes and conflicted atmosphere at home is related to satisfaction later in life, while child’s temperament could be more related to parents’ physical punishment.

Discussion

Previous studies have suggested that children’s characteristics, or early temperament (e.g., Kim et al., 2001; Newman et al., 1997), and negative or harsh parenting (e.g., Andrews et al., 2000; Capaldi & Clark, 1998; Flouri & Buchanan, 2002; Franz et al., 1991) may affect romantic relationships in young adulthood. Also, previous studies suggest that parents’ values, attitudes toward marriage or parents’ marital conflict may affect their children’s romantic relationships. In addition, parents’ marital conflict might influence parent-child relationships and be perceived by the child as disharmony; if the child interprets this as parental rejection, such disharmony can modify the effects of harsh parenting (Deater-Deckard, et al., 1996; Lansford, et al., 2004; McLoyd & Smith, 2002; Rohner, et al., 1996). It seems that best understanding might come from combining these factors. Even though there have been studies combining all or some of the factors, they have focused on adolescents’ and young adults’ characteristics or relationships, and do not examine the influence of very young children’s characteristics or various negative parenting combinations on mid-adulthood romantic relationships. Using a mixture modeling approach, with latent classes representing different parenting profiles, I modeled the relations between temperamental unmanageability, parents’ attitudes, harsh parenting profiles, and later romantic relationship quality. Taken together, the results show that various parenting profiles play different roles in the links between early temperamental unmanageability, parents’ attitudes towards marital conflict, and later romantic relationship quality.

In the previous study, the same parenting profiles proved to be important in understanding adolescent problem behavior (Pakalniskiene et al., 2007). But this study added to that by exploring a completely new domain of social adjustment: adult relationship quality. In this study, also the new covariate - parents’ attitudes towards marital conflicts – was added to the latent class model presented in the previous study (Pakalniskiene et al., 2007). The results suggested that parents’ attitudes could influence
their own behavior as well as their children’s attitudes towards relationships in the future. All in all, this study and the previous study suggest that these parenting profiles have implications not only for adolescence, but also for adulthood.

From the perspective of temperament and personality theory, it seems that unmanageable temperament contributes to the way romantic partners get along over time, and also contributes to the way parents get along with their children. First, unmanageable temperament contributes to the way romantic partners get along over time. For children who experience physical punishment in the context of discordant relationships, their own unmanageability seems to play a role in their later romantic relationships. It seems that early temperament plays a role in the later romantic relationships of some children, but not of others. Second, early unmanageable temperament puts children at risk of physical punishment, together with a discordant mother-child relationship, and to a lesser extent increases the risk of experiencing physical punishment in the context of a good mother-child relationship. It seems that early characteristics of the child also affect the ways in which parents behave with their children. Thus, unmanageable temperament contributes to the ways in which some children get along with other people, either their parents, or their romantic partners.

From a learning theory perspective, the nature of child upbringing may also have consequences for romantic relationships. For children who experience physical punishment in the context of discordant relationships, parents’ behaviors seem to play a role in their later romantic relationships. The same tendency applies to children with a discordant relationship profile. It seems that experiencing conflict relationships, with or without physical punishment, during childhood and adolescence will lead to poor romantic relationships in adulthood. These results suggest that emotional context in the family might be more potentially damaging than any other type of parental behavior, such as physical punishment. In support of this idea, our results suggest that children who experience physical punishment in the context of good relationships, and also children who do not experience mothers’ harsh behaviors, have romantic relationships of a very similar quality later in life. Thus, it seems that physical punishment alone does not interfere with relationship quality, but emotional context, created by other parental behavior in the family, is an important factor with regard to later relationships. It may be that children from different groups interpret their parents’ behaviors differently. For example, children who experience harmonious relationships, or even physical punishment in harmonious relationships, might interpret their mother’s behavior as reflecting their mother’s wish to make them better persons; these children might know and feel that their parents love them.
And children who experience discordant relationships or physical punishment may interpret their mother’s behaviors as rejection. Children’s interpretations of their mothers’ behaviors may change the course of their later romantic relationships.

Also, from a learning theory perspective, certain parental attitudes may also influence what will happen later in a child’s life. Mainly, it has been suggested in previous studies that parents’ marital satisfaction will influence later romantic relationships (e.g., Amato & Booth, 2001; O’Leary & Cascarci, 1998; Stocker & Richmond, 2007). However, it has also been suggested that an orientation towards a romantic partner that has been learned during childhood will eventually affect adult relationships (Waller & Shaver, 1994). It seems that parents influence the attitudes and behaviors of their children towards a romantic partner. Nevertheless, parents’ attitudes towards marital conflict may affect later romantic relationships only in the case of children who have experienced discordant relationships. If children know that marital conflict is an accepted part of relationships, and also experience conflict in mother-child relationships, they might learn that conflict is necessary in any type of relationship. By contrast, for other children, who also experience physical punishment, their unmanageable temperament may play a more important role in the development of relationships than their parents’ attitudes. Whatever the reason, it seems, from a learning theory perspective, that certain parental attitudes during early childhood and parent-child relationships will affect their children’s lives in adulthood.

One possible limitation of the study is that our data were collected in the mid-1950s and onwards. The question is whether children’s view of striking or beating differs from these days. We assume that if this study was repeated in Sweden today, the findings concerning physical punishment would be very different. Sweden was the first country worldwide to outlaw the physical punishment of children. The law came into force in 1979, so a whole cohort of Swedes has now grown into adulthood amidst public awareness of this issue. However, the conditions at the time our sample was taken were very similar to those in North America, where most harsh or negative parenting studies have come from. Similarity between Sweden and North America can be inferred from the sheer numbers of mothers who report striking and beating their children in both countries. In Sweden, for striking, when children in our sample were 6 or 7 years-old, it was virtually all of the mothers, to one degree or another. When the children were 9 years-old, a third of mothers reported having given their child “a real beating.” In nationally representative samples from North America, 85% of parents use corporal punishment, such as slapping, spanking, hitting, or shaking, with their 6 year old children. Despite declining after age 6, over half of American parents hit their children at age 12 (Straus & Stewart, 1999). Thus, we think it is
safe to conclude that children’s views of physical punishment in our sample are similar to those of children in countries where physical punishment is still legal, and even encouraged. This suggests that the findings concerning physical punishment in Sweden may be very similar to findings from countries where corporal punishment is legal.

The present study has a number of strengths. Perhaps the main strength is its prospective, long-term, longitudinal design, with data collected before the children’s first birthday and the follow-up of the children into adulthood. These data allowed us to examine connections between harsh parenting, very early unmanageable temperament, parents’ attitudes, and later relationship quality in a more elaborate manner than ever before reported in the literature. Another strength lies in its use of a community sample, which, in general, does not differ much from other Swedish children of the same cohort (Karlberg et al., 1968). A further strength of the study consists in its usage of data from different reporters. This gives us confidence that the results of our models are not just due to rater bias, but tap into actual developmental processes.

Parents want their children to establish and maintain good relationships with other people, and be happy in romantic relationships. However, depending on the child’s temperamental predispositions or behaviors, and parents’ behaviors or attitudes, this may not be accomplishable. Having a child who is temperamentally prone to anger or aggression is a challenge to some parents, and they can use physical punishment or create conflict in parent-child relationships. It seems that physical punishment does not necessarily make a child’s life worse. However, emotional context in the family may contribute to the development of various problems that will interfere with the goals of society and the individual’s own enjoyment of life, which arouses concern. It seems that parents need to be aware that their ways of thinking, feeling, and behaving can affect their child’s future.
References


### Table 1
*Fit Indices for Latent Class Solutions*

<table>
<thead>
<tr>
<th>Number of latent classes</th>
<th>Number of parameters</th>
<th>Log likelihood</th>
<th>BIC</th>
<th>SSABIC</th>
<th>AIC</th>
<th>Entropy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 class</td>
<td>6</td>
<td>-639.147</td>
<td>1310.174</td>
<td>1291.135</td>
<td>1290.295</td>
<td></td>
</tr>
<tr>
<td>2 classes</td>
<td>10</td>
<td>-577.853</td>
<td>1218.789</td>
<td>1157.107</td>
<td>1175.706</td>
<td>.893</td>
</tr>
<tr>
<td>3 classes</td>
<td>14</td>
<td>-538.513</td>
<td>1151.341</td>
<td>1106.986</td>
<td>1105.025</td>
<td>.964</td>
</tr>
<tr>
<td>4 classes</td>
<td>18</td>
<td>-524.804</td>
<td>1145.188</td>
<td>1108.130</td>
<td>1095.609</td>
<td>.853</td>
</tr>
<tr>
<td>5 classes</td>
<td>22</td>
<td>-500.154</td>
<td>1117.090</td>
<td>1047.389</td>
<td>1044.308</td>
<td>.889</td>
</tr>
<tr>
<td>6 classes</td>
<td>26</td>
<td>-492.139</td>
<td>1112.274</td>
<td>1081.921</td>
<td>1016.279</td>
<td>.842</td>
</tr>
</tbody>
</table>
Table 2

Means of Mothers’ Behavior for Four Latent Class Solution

<table>
<thead>
<tr>
<th>Class</th>
<th>Striking</th>
<th>Beating</th>
<th>Discordant relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative class</td>
<td>-.304</td>
<td>-.638</td>
<td>-.382</td>
</tr>
<tr>
<td>Physical punishment class</td>
<td>.360</td>
<td>.861</td>
<td>-.274</td>
</tr>
<tr>
<td>Discordant relationships class</td>
<td>-.213</td>
<td>-.405</td>
<td>1.362</td>
</tr>
<tr>
<td>Harsh treatment class</td>
<td>.820</td>
<td>1.035</td>
<td>1.596</td>
</tr>
</tbody>
</table>
Table 2. Summary of Mixture Modeling Results for Models with Conduct Problems and Norm Violations as Distal Outcomes. Column Headings A, B, and C Refer to the Pathways Shown in Figure 1.

<table>
<thead>
<tr>
<th>Latent parenting class</th>
<th>A Temperament predicting latent class</th>
<th>A Marital conflict predicting latent class</th>
<th>B Mean relationship quality</th>
<th>C Temperament predicting relationship quality</th>
<th>C Marital conflict predicting relationship quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harsh treatment</td>
<td>1.96 *</td>
<td>1.08</td>
<td>-.34 b</td>
<td>-.44 ***</td>
<td>.22</td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1.50 †</td>
<td>1.11</td>
<td>.14 a</td>
<td>.10</td>
<td>.09</td>
</tr>
<tr>
<td>Discordant relationships</td>
<td>.84</td>
<td>1.04</td>
<td>-.36 b</td>
<td>-.14</td>
<td>-.29 *</td>
</tr>
<tr>
<td>Normative</td>
<td>Reference</td>
<td>Reference</td>
<td>.06 a</td>
<td>-.06</td>
<td>-.05</td>
</tr>
</tbody>
</table>

*p < .05; †p < .10

1 Odds ratios; 2 Mean values; 3 Estimates

a Significantly higher than all others; b Significantly lower than all others
Figure Captions

Figure 1. Conceptual latent classes of mothers’ behavior model with risk factors associated with latent classes and the prediction of distal outcomes.
STUDY V

Striking 6 – 12 years

Beating 6 – 12 years

Discordant relations 6 – 12 years

Class Membership

Outcome:
Relations with a partner at age 35

Covariates:
- Early unmanageability 3m – 3y
- Mother-reported attitudes towards marital conflict 4y
### Publications in series Örebro Studies in Psychology


