ABSTRACT

This study used variable- and person-oriented approaches to conceptualize parenting;
examined the stability of parental behavior over multiple situations (two dyadic
problem-solving situations with a child and a family discussion); investigated
parenting across measures obtained from different informants (the parents themselves;
an independent observer; and the child); and studied gender differences in parenting.
Moreover, personality traits were defined in terms of a five-factor model of
personality, and their linkages with parenting were examined. The study was based on
the ongoing Jyväskylä Longitudinal Study of Personality and Social Development, in
which the originally 8-year-old children ($N = 369$) have been followed up to age 42.
Data collected at ages 33, 36, 38 - 40, and 42 were used in the present study. The data
about parenting were gathered from mothers, fathers, and children (aged 8 - 14 years)
through self-reports, behavioral observations, and questionnaires. The results showed
that parental nurturance, together with the degree of restrictive control parents
exercised over their children, and the extent of their knowledge of their children's
interests, friends, and whereabouts, extracted from self-reports, yielded six gender-
related parenting types with distinguishable personality profiles. Authoritative
(mainly mothers) and emotionally involved (mainly fathers) parents, who were high in
nurturance, were high in Extraversion (E) and high to moderate in Openness to
Experience (O). Authoritarian (mostly fathers) and emotionally detached (mostly
mothers) parents, who were low in nurturance, were low in O and E. In addition, two
other parenting groups were extracted: permissive parents who were high in
nurturance; and engaged parents who were high in all parenting dimensions.
Although self-reported nurturance was relatively stable across time (from age 36 to 42),
it was not directly related to child-centered behavior, as observed in the dyadic
problem-solving situations. The observed child-centeredness was similarly stable over
multiple interactive situations. The parents' E moderated the association between self-
reported nurturance and observed child-centeredness, but in different ways in the
mothers and fathers who had rated themselves to be highly nurturant: the mothers
who were observed to be child-centered were high in E, but the fathers who were
observed to be child-centered were low in E. When the children's views about
parenting and family atmosphere were considered, the parents' low E was related to a
more favorable family environment. The results suggest that the data collection
method and the informant should be critically considered when the quality of
parenting is determined.

Keywords: parenting, self-report, behavioral observation, person-oriented approach,
five-factor model of personality

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CONTENTS

1 INTRODUCTION

1.1 Parenting as a psychological construct

The central goal of parenting is to socialize children to conform to the demands of society while helping them to develop and maintain a sense of personal integrity and autonomy (Baumrind, 1966). Although the specific characteristics, skills, and knowledge considered desirable in children vary from one culture to another, general agreement prevails that children should be reared to become adults who are mentally and physically healthy, productive at work, and who have the ability to form relationships with other people (Maccoby & Martin, 1983). To this end, parents generally (1) function to ensure the survival and reproduction of the offspring by meeting their physical needs, by organizing the physical world to make the environment safe and secure, and by monitoring them; (2) provide their children with nurturance, warmth, and security to bring about psychological well-being and competence; (3) discipline and guide children to foster the development of self-regulation and moral understanding; (4) engage them in interpersonal exchanges to form the basis for social relationships; and (5) provide stimulation to support intellectual development and learning (Bornstein, 1995; Fagot, 1994). Parents are not the only socialization agents that contribute to the development of children, yet they are considered central sources of influence (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Maccoby, 2000).

When attempting to predict and explain child outcomes, researchers have described the developmental contexts of children by focusing on selected aspects of parenting. In brief, research has largely concentrated on *parental behaviors*, such as the techniques that parents use to discipline, advice, and reward their children (Chamberlain & Patterson, 1995; Gershoff, 2002; Henderlong & Lepper, 2002; Hoffman, 1977; Laosa, 1978; McDowell, Parke, & Wang, 2003). Another prominent line of research has concerned the role of *emotions* in parenting, for instance, how emotions are expressed in the parent-child relationships and in the family (Gottman, Katz, & Hooven, 1996) and how

parental emotions orient, organize, and motivate child-rearing (Dix, 1991). Recently, increasing interest has been directed towards analyzing parents' *social cognitions*, including beliefs (Sigel & McGillicuddy-DeLisi, 2002), knowledge and expectations (Goodnow & Collins, 1990; Goodnow, 2002), attitudes (Holden, 1995; Katainen, Räikkönen, & Keltikangas-Järvinen, 1997), and goals (Hastings & Grusec, 1998).

Regardless of the domain of interest, researchers have approached parenting from two general conceptual frameworks. According to Kuczynski and Lollis (2001), some research has looked at micro processes focusing on parent and child behaviors, emotions, and thoughts, as they occur during social interaction (e.g., Holden, 1997). This approach views the parent-child relationship as a bidirectional process characterized by a shared history and anticipation of the future, equal agency, and interdependent power. Examples of micro process models provided by Kuczynski and Lollis (2001), include the model of parenting and internalization of values proposed by Grusec and Goodnow (1994) and Patterson's (1982) coercive process model. Alternatively, some other studies have focused on macro processes, that is, on the general characteristics of parents, children, and the ecological context, in order to examine how they predict or explain various outcomes. An example of macro models is Belsky's (1984) model of the determinants of parenting.

In the present study, I relied on the second conceptual framework, describing macro processes in parenting. According to the framework, parents are believed to hold relatively stable patterns of attitudes and behaviors on which they characteristically differ (Baumrind, 1971; Darling & Steinberg, 1993; Maccoby & Martin, 1983). These so-called parenting styles which have been identified originally evolved out of researchers' interest in finding constellations of parental behaviors that would reliably distinguish between more and less favorable child outcomes (Baumrind, 1971) and they reflect the idea that if parenting has an influence on child development, it must be based on behavioral variance that has some stability across time and situations (Maccoby & Martin, 1983). The perspective investigates parenting as a characteristic of the parent rather than as a feature of the child's developmental process (Darling & Steinberg, 1993). It furthermore emphasizes that, due to the asymmetry in power and competence between parents and children, parents have a unique role in the socialization of children (Maccoby, 1992; Maccoby & Martin, 1983).

In the literature, examinations of micro and macro processes have often been juxtaposed, because they have different points of departure when it comes to direction of causality, level of analysis, and model of power and agency in parenting (Holden, 1997; Kuczynski & Lollis, 2001). However, both approaches have provided influential insights into parent-child relationships.

1.2 Individual differences in parenting

1.2.1 Defining individual differences in parenting

Parenting involves behaviors that are *species-typical*, in the sense of being common to most members of the human species. As reviewed by Papousek and Papousek (1995), such behaviors are observable when parents interact with infants. They include, for instance, the effort made by parents to achieve and maintain direct visual contact with the infant, and the tendency to talk to infants using rhythmical, melodious speech characterized by short utterances and linguistic simplicity. These universal parental behaviors can be contrasted with those behaviors that differ with respect to amount or degree from one parent to the next. Such characteristics or behavioral attributes, conceptualized as bipolar continua that have opposite characteristics at either end (Lerner, 1986), can be understood as aspects of *individual differences* in parenting. For instance, child-centered versus parent-centered parenting can be seen as such a continuum. Child-centered parents, at one end of the scale, exert their influence on their children by sensitively adapting their own behavior to behavioral cues provided by the children, whereas parent-centered parents, on the other hand, organize their interactions with their children almost exclusively around self-oriented goals; failing to meet the children's developmental needs (Collins, Madsen, & Susman-Stillman, 2002; Pulkkinen, 1982).

Individual differences in parenting have been subject to extensive empirical scrutiny and theorizing among parenting researchers. For a long time, this interest was largely due to the commonly-made assumption that the development of children is closely linked to variation in parenting. As part of this tradition, researchers were interested in *child-rearing* (e.g., Hirsjärvi, 1981; Takala, 1960); that is to say, the common practices, materials, attitudes, and beliefs that guide adult care of the young (French, 1995). During the past decade researchers have increasingly recognized that parenting represents one important manifestation of the normal development of adults; and that the study of individual differences in the way parents meet the demands of child care is an interesting research topic in its own right (Gerris, 2001). Investigating this question, researchers have directed their attention to the timing of parenthood in the personal life course, and the extent to which the scheduling of this event may induce stress and risk for future adaptation (Trommsdorff, 2000). As is evident in the recent edition of the *Handbook of Parenting* (Bornstein, 2002), investigators have also started to view the parent-child relationship as a developmental process in which individuals progress from being the parents of infants, preschool aged children, and adolescents, to being parties in parent-child relationships that involve adult children. Overall, researchers have increasingly adopted the concept of *parenting* that emphasizes the point of view of the parent, her or his experiences and perspectives (French, 1995)[1].

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[1]   According to French (1995), the terms child-rearing and parenting have somewhat different connotations. However, as often in the literature, they are here used interchangeably.

1.2.2 Demographic factors influencing parenting

As noted above, one focus of the differential approach is to define individual differences in terms of person's distinct locations along various bipolar dimensions. According to Lerner (1986), another focus is to investigate whether people, sorted into certain subgroups, can be differentiated on the basis of their behavioral attributes. Applied to the study of parenting, researchers have enquired whether child-rearing differs as between parents belonging to particular demographic categories. The demographic category often discussed in relation to parenting is socioeconomic status (and in this connection, education), because consistent differences have been shown to exist between parents drawn from different socioeconomic groups. In their review, Hoff, Laursen, and Tardif (2002) concluded that, on average, parents with lower SES emphasize parental authority and conformity to societal expectations in children, use punitive practices when their directives are violated, are more directive of their children's behavior, and use less time conversing with their children than higher-SES parents. Conversely, parents with higher SES foster the development of initiative in their children, emphasize the negotiation of rules and equality between themselves and children, and are less apt to use punitive and harsh parenting practices. In addition, they are more conversational and less directive towards children.

Researchers have also recognized the variation that exists among different cultural groups in the styles of parenting. For instance, comparisons of Japanese and German mothers have showed that Japanese mothers display more sensitive and contingent behavior than German mothers (Friedlmeier & Trommsdorff, 1999). Differences can also be found among Western, industrialized countries that have long historical and cultural relationships. The comparison of Estonian, Swedish, and Finnish mothers' controlling attitudes and behaviors showed that Swedish mothers were the least directive. Moreover, Estonian and Finnish mothers living in their countries of origin (Estonia and Finland, respectively) were more controlling than their Estonian and Finnish counterparts residing in Sweden (Tulviste, Mizera, DeGeer, & Tryggvason, 2003). Not only are the patterns of practices and styles of parenting different in different cultures, but the influence of a specific parenting style on children may also vary across cultures. It has been argued that authoritative parenting is most strongly associated with academic achievement among European-American adolescents, and least effective in influencing the academic achievement of Asian and African-American youths (see Darling & Steinberg, 1993; Steinberg, 2001). Finally, children from different cultural backgrounds appear to perceive particular parenting behaviors differently. According to Trommsdorff and Kornadt (2003), research carried out in Japan and Germany showed that when parental control was low, Japanese adolescents felt rejected by their parents, whereas German adolescents felt accepted and respected.

Another category that has been an objective of study is parent's gender. After pregnancy and delivery, parental activities are not specifically gender-linked; as both mothers and fathers are capable of providing care for their infants and young (Fleming & Corter, 2002; Papousek & Papousek, 1995). Yet

recent reviews have listed differences between mothers and fathers both in the quantity and quality of child care (Parke, 1995, 2002). More specifically, it is typical for mothers to take on more responsibility for the supervision of the child and the management of family tasks, for example arranging day care or access to peers, than fathers are likely to do. Mothers also spend more time in interaction with the child; for instance, providing basic care and expressing positive affection, than fathers. During the parent-child interaction, fathers spend more time than mothers in play and they play differently from mothers: their play is tactile and physical; whereas mothers tend to be verbal, didactic and toy-mediated in their play. According to Leaper, Anderson, and Sanders (1998), mothers and fathers also communicate with their children differently; as mothers tend to talk more, using more supportive as well as negative speech, whereas fathers use more directive and informing speech. The directiveness of fathers is evident when self-reported parenting practices are examined: fathers view themselves as more authoritarian than mothers and they put more emphasis on the child's self-control, achievement, responsibility, and punishment. Mothers, in turn, consider themselves more authoritative than fathers, and they attach more significance to emotions, to intimacy with the child, to supervising the child and enjoying time spent with him or her (Lamb, Hwang, & Broberg, 1989; Smetana, 1995). Overall, these findings reflect the fact that in most cultures women have been found to provide more support and engage their children more frequently than men do (Barnard & Solchany, 2002; Bjorklund, Yunger, & Pellegrini, 2002).

1.2.3 Explaining individual differences in parenting by means of a five-factor model of personality

The approach that investigates socioeconomic status or culture as determinants of parenting is part of a larger explanatory framework that focuses on the person's embeddedness in social context (e.g., the ecological systems model proposed by Bronfenbrenner, 1979). As Belsky and Barends (2002) have pointed out, the contextual approach to the determinants of parenting has been important in providing social and family workers with cues for prevention and intervention in order to improve the quality of child care and to promote healthy psychological and behavioral development in children. However, such an approach fails to recognize the role that intrapersonal factors have in shaping parenting, as child-rearing also reflects a person's passing moods and enduring personality characteristics (Belsky & Barends, 2002). A conceptual model that acknowledges that parental personality is an important determinant of child-rearing is the *process model* developed by Belsky (1984). According to Belsky, personality is the most important determinant of parenting; its influence is direct, and also indirect, through the way parents function in the larger social context.

Previous empirical studies of personality-parenting linkage have utilized diverse personality and personality-related constructs. In brief, features of personality favorable to adaptive parenting have included good self-esteem (e.g., Aunola, Nurmi, Onatsu-Arvilommi, & Pulkkinen, 1999), locus of control

(Stevens, 1988), psychosocial competence (Mondell & Tyler, 1981), perspective-taking skills (Gerris, Dekovic, & Janssens, 1997), and ego resiliency (van Bakel & Riksen-Walraven, 2002). Due to the multitude of personality characteristics studied by different investigators, there has been a general lack of theoretical coherence in personality-parenting literature (Belsky & Barends, 2002). In this study, I aimed at a more comprehensive framework for categorizing personality, in order to bring analytical clarity to my study of the personality-parenting association. There is increasing evidence that the five-factor model of personality unifies the different conceptualizations of personality and accommodates most considerable traits (Digman, 1990; McCrae & Costa, 1990). According to McCrae and Costa (1999), the five-factor personality traits (Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness) represent an individual's basic tendencies, which in transaction with the environment produce characteristic adaptations, such as skills, beliefs, attitudes, and interpersonal relationships.

Personality traits are assumed to be essential in social interaction, because they describe an individual's interpersonal styles (McCrae & Costa, 1990). Research findings have shown that personality traits do indeed influence social relationships (e.g., number of peer relationships and frequency of conflicts; Asendorpf & Wilpers, 1998). As caring for the next generation is one of the most important social tasks in adulthood (Erikson, 1968), the question of whether linkages exist between quality of child care and the parent's personality traits is an intriguing research agenda. An advantage of the trait approach is that it conceptualizes personality from the viewpoint of normal, non-clinical psychological functioning (McCrae & Costa, 1990). It extends earlier work on the determinants of parenting, which has mostly examined links between child-rearing and psychological disorders, such as depression and mental health problems (e.g., Leinonen, Solantaus, & Punamäki, 2003; for reviews, see Downey & Coyne, 1990; Field, 1995).

Researchers have only recently begun to link personality traits to trends in parenting behavior. The results have indicated that, in general, high Neuroticism or negative emotionality relates to less competent parenting (Clark, Kochanska, & Ready, 2000; Kendler, Sham, & MacLean, 1997; Kochanska, Clark, & Goldman, 1997), whereas high Extraversion and high Agreeableness are associated with more optimal child care (Belsky, Crnic, & Woodworth, 1995; Clark et al., 2000). The majority of the studies suffer, however, from one or more of three common limitations. First, studies have often relied on other than comprehensive, conceptually-driven instruments in measuring personality traits (Kochanska et al., 1997). Second, most studies have concentrated on the investigation of two or three personality traits only (Belsky et al., 1995; Kendler et al., 1997; Olsen, Martin, & Halverson, 1999). Third, most of the existing research has focused on mothers (e.g., Kochanska et al., 1997; Clark et al., 2000) and therefore it is unclear whether the linkages are similar for fathers.

Studies on the association between personality traits and parenting are important, because they provide information about how the personality characteristics of the parent manifest themselves in child-rearing and how they

shape the developmental surroundings of the offspring (Caspi, 1998). The linkages between personality traits and parenting may be different depending on whether one focuses on self-reports gathered from parents themselves or on actual parental behaviors as experienced by children and perceived by trained observers. I will take a particular personality trait, Extraversion, as an example. Through its association with self-esteem and self-evaluation (McCrae & Costa, 1990), Extraversion may exert an influence on the cognitive appraisals that mothers and fathers make of their actions and practices as parents. Through its influence on the quality of social interaction (Eaton & Funder, in press; McCrae & Costa, 1990; Watson & Clark, 1997), Extraversion may affect the nature of an ongoing parent-child interaction. Finally, on the basis of the association between positive affectivity and how other people perceive an individual and experience his or her company (Berry & Hansen, 1996), Extraversion is likely to influence the way in which children experience parenting, and how observers perceive the parental behavior. Understanding how personality traits are linked with different aspects of parenting may ultimately help to clarify the complex association between parenting measures obtained from different informants.

1.3   Intra- and interindividual stability and changes in parental behavior across situations

As proposed by Lerner (1986), the developmental changes that may become apparent as a person moves through time can be investigated by focusing on a person (the intraindividual level) or on a group (the interindividual level). In the present study, I relied on Lerner's conceptual framework in order to explore the behaviors that parents manifest during parent-child interaction; with the specific aim of studying stability and change in parental behavior over situations.

Intraindividual stability refers to the similarity of an individual parent's behavior across two or more situations. Following the proposal of Lerner (1986), the stability (or lack thereof) may be apparent in the quantity, that is, in *how much* of some behavior is manifested. For instance, one might ask whether a parent provides an equal measure of guidance and assistance to the child in each situation. Alternatively, the stability and change may be apparent in quality, that is, in *what* exists. To give an example: qualitatively new kinds of parental behaviors may be elicited in one situation, in contrast to some other situation in which such behaviors were not observable. The analysis of intraindividual stability and change can be considered as idiographic or ipsative (Caspi, 1998; Lerner, 1986), because in such an approach an individual parent is compared to himself or herself instead of being compared to other people.

Additionally, cross-situational stability in parental behavior can be analyzed at the interindividual (group) level. In this case, the attention is directed towards analyzing what happens to the parent's rank order within a

group relative to other parents over situations (relative stability) or how the particular construct's absolute level averaged across all parents is affected by the change in the situational context (absolute stability) (Holden & Miller, 1999; Lerner, 1986).

Previous studies that have looked at parental behavior as it occurs in a variety of interactive situations have demonstrated that parents modify their behavior to take account of the situational demands of parent-child interaction. For instance, in non-clinical populations parenting practices vary across siblings with whom parents are interacting with (Dunn, 2001), across the various socialization goals the parents may have (Kuczynski, 1984) and across disciplinary situations (Chamberlain & Patterson, 1995; Trickett & Kuczynski, 1986). The number of studies reporting cross-situational changes in parental behavior outnumbers the studies that have sought for evidence of its stability. This remains the case despite the long tradition of representing parenting as trait-like, consistent, and enduring style (Baumrind, 1971; Darling & Steinberg, 1993; Maccoby & Martin, 1983). Parenting seen from this traditional perspective is thought to involve interactions between family members that are patterned with enough regularities to allow conclusions about the quality of parenting to be inferred. Consequently, some parents are described as characteristically loving and involved, whereas others are distant and neglectful. Some parents easily express anger and frustration, whereas others are seldom irritated. A mechanism that promotes stability in parenting is the constellation of the parents' enduring personality characteristics and interpersonal styles that elicit reciprocal responses in others and sustain the style of interacting (Caspi, Elder, & Bem, 1987). Parenting occurs in the context of a relationship where both parents and children have expectations based on their mutual history and their anticipations of the future relationship (Kuczynski & Lollis, 2001), which may direct or constrain the repertoire of behaviors, making it more consistent. Other factors that may promote stability in parenting include cultural beliefs, the way parents see their children, internal representations of self and others, and adult personality characteristics (see Holden & Miller, 1999).

In research on the cross-situational stability of parental behavior, these two seemingly incompatible, even contradictory, viewpoints (parenting seen as dynamic and changing, or else as stable and trait-like) reflect researchers' divergent theoretical premises, that is, their orientations towards studying macro versus micro processes in parenting (Kuczynski & Lollis, 2001). As Lerner (1986, p. 188) has stated, "the primary reason that people interpret a given change in contrasting ways is that theoretical differences exist among them". If one adopts a theoretical position that stresses the dynamics of child-rearing or the processes of parent-child interaction (e.g., Holden, 1997), one is inclined to design the study in a way that brings about the malleability and constant modification of parental behavior. On the other hand, if parenting is viewed as a relatively stable characteristic of parents (e.g., Darling & Steinberg, 1993), one will necessarily look for evidence of consistent patterns of behavior. These theoretical underpinnings are also reflected in the choice of analytical method. In many studies, the stability of parental behavior has been conceptualized as a matter of counting occurrences of discrete behavioral acts

and comparing them across situations. However, this sort of stability in human behavior is quite rare and perhaps does not exist at all (Funder & Colvin, 1991; Holden & Miller, 1999); and therefore it is likely that such studies have overestimated the behavioral change in parents over situations. Furthermore, many studies have been biased towards exploring the absolute stability only (Fiese, 1990; Hoff-Gingsberg, 1991; O'Brien & Nagle, 1987). Yet changes in mean level may be independent of any changes in rank order (Holden & Miller, 1999) and therefore a study of relative stability is needed to obtain a fuller account of stability and change in parental behavior.

The stability of parental behavior is a topic that frequently emerges in the parenting literature. Recently, Parke (2001) summarized that there is specificity in parental behavior as a function of different relationship and contextual factors, but that parents are also characterized by more general styles of parenting. The ultimate challenge to parenting researchers is how to reconcile these two ways of viewing parenting. To this end, researchers need more information about which aspects of parenting easily become modified, and which are resistant to change and show consistency over different situations. This second category was one of the specific concerns of the present study.

1.4 Methodological and conceptual issues

1.4.1 Assessment of parenting using different measures and informants

Most parent-child interactions occur at home; and so are not easily accessible to researchers, for ethical or practical reasons (Holden, 1990; Maccoby & Martin, 1983). In practice, researchers have often relied upon three sources of data to obtain information about child-rearing: self-reports gathered from the parents themselves, child-reported evaluations of parenting and the home environment, and behavioral observations made by trained observers (Holden, 1990). These parenting measures can be categorized as reflecting 'insider' or 'outsider' perspectives (Olson, 1977). An insider is a member of the parent-child relationship. Parental self-reports and children's views on parenting obviously reflect an insider perspective. An outsider is not involved in the relationship, and this may be a researcher observing parental behavior. In addition, parenting measures vary according to their subjectivity or objectivity (Olson, 1977). Subjective data involves a high degree of interpretation on the part of the informant (e.g., a molar rating scale used in behavioral observations); objective data, in contrast, is less affected by personal interpretation or perception (molecular coding scale). Different measurement procedures have been developed out of researchers' aspirations to use the best source of data in their studies, and these reflect the manner in which the key constructs in the field of parenting have been operationalized (Jacob & Windle, 1999).

Generally, family measures that have been obtained from different informants and that assess the same underlying construct have been assumed

to produce similar information. However, this assumption has been challenged both theoretically and empirically. At the theoretical level, Furman and colleagues (Furman, Jones, Burhmeister, & Adler, 1988) argued that one should not expect strong associations between measures obtained from different informants, because various factors constrain the degree of correspondence theoretically possible between measures. *First*, insiders and outsiders are differentially exposed to parental behavior (Furman et al., 1988). Parents and children have experienced the patterns of interaction over prolonged periods of time and across a broad array of situations, whereas observers typically perceive child-rearing behavior for a limited time and in a single setting. In addition, parents and children have a variety of opinions, perceptions, and experiences in relation to parenting. Observers do not have a direct access to these, and their evaluations are based on what is observable during ongoing interactions. Moreover, observers compare parental behaviors against those they have observed in other parent-child dyads participating the study, whereas parents and children have a different reference point: they make judgments on the basis of their experiences in the family or in their other social networks.

Second, insiders and outsiders differ with respect to their awareness of the context of any given behavior (Furman et al., 1988). Behaviors that are manifested during interaction may carry private meanings that only parents and children are aware of, while those observing the interaction from outside construe the meaning of behavior in terms of normative interpretations of behavior. In this connection, it is worth noting that subjective and objective approaches to behavioral observations allow the observer to attach meanings to behavior to different extents. Molecular codings require the observer to adhere to a fixed system of rules; for instance, scoring the number of certain behavioral instances. In such a system, each behavioral coding is weighted equally. In molar rating, where the observer is expected to make interpretations of the parental behavior, the psychological meaning of a behavior in its context can be more readily taken into account.

Third, the characteristics of parents, children, and observers may intentionally or unintentionally bias the description of parental behavior (Furman et al., 1988). Parents' self-reports may be biased by their wish to present their child-rearing practices in a favorable light. Similarly, parental characteristics, such as a tendency to make overly positive or negative self-evaluations, may unintentionally influence the self-reports. The ability of children to produce reliable and valid reports of their experiences of parenting and home environment has also been questioned, although more recent evidence suggests that children are capable of reporting on their social relationships (Galinsky, 2000; Morris et al., 2002). In the light of the latter findings, it is surprising that children have remained a largely neglected source of information about parenting and family relations. This remains the case, even though researchers have argued that the child's subjective experience of parenting and family environment may function as a most powerful influence in shaping his or her development (see Bronfenbrenner, 1979). Finally, behavioral observations have often been regarded as more reliable and valid

sources of information than self-reports (Furman et al., 1988; Schumm, 1990). Cairns and Green (1979) have, however, listed features that may obscure behavioral observation. These may stem from the characteristics of the observer (for instance, idiosyncratic interpretations of the construct under observation, or stereotyping), the subjects to be rated (fatigue, momentary mood), or the setting (laboratory, home).

Consequently, arguments have been put forward suggesting that researchers should not assume that results obtained with one method of measurement necessarily correspond with those obtained using a different measure. If this argument is taken to extremes, researchers are, as Jacob and Windle (1999) have pointed out, left to conclude that every informant's perceptions are idiosyncratic and no shared meanings or experiences exist. Indeed, when analyzed empirically, discrepancies between different methods of measurement "seem to be the rule, not the exception" (Furman et al., 1988, p. 179). Researchers have, for instance, examined the correspondence between observers' reports of parental behavior and parents' self-reports; and many of these studies have failed to find associations between the measures, or else the associations have been modest in size (Bornstein, Cote, & Venuti, 2001; Cote & Bornstein, 2000; Tulviste et al., 2003). Similarly, the studies that have included the children's evaluation of parental behaviors have reported a low degree of agreement between measures (Sessa, Avenevoli, Steinberg, & Morris, 2001; Tein, Roosa, & Michaels, 1994).

A less extreme view accepts that discrepancies between informants persist, but proposes that information obtained from different informants *can* reflect a common shared reality. As Cook and Goldstein (1993, p. 1387) put it, the question of the convergence of multi-informant data is not an 'either-or' issue. Rather, the measure obtained from each informant includes variance that is shared with other informants, systematic variance reflecting the unique perspective of the rater, and variance stemming from the measurement error. Thus, if one settles for the view that the multiple perspectives obtained from different informants reflect in part a shared reality, one can begin to explore reasons for the failure to find robust empirical associations between measures.

The lack of convergence between different measures may partly be due to limitations in the operationalization of the study constructs. The measures used reflect different levels of generality; there is no close fit between the content of behaviors and verbal reports; behaviors are observed during single situations; or the measures consist of single items (Goodnow, 1984, 1988; Kochanska, Kuczynski, & Radke-Yarrow, 1989; Sigel, 1986). To find linkages among measures obtained from different informants, one should measure constructs by means of multi-item scales and coding schemes rather than with single-item measures; use measures that are general rather than focused on specific behaviors; and use behavioral assessments based on the observations of multiple situations.

Alternatively, the basic premises concerning the association may have been fallacious. More specifically, rather than expecting linear associations between measures, a closer link between evaluations may emerge with some people rather than others (Holden, Ritchie, & Coleman, 1992). The latter

possibility indicates that the relationship between parenting measures is modified by a third variable, a moderator, which functions to alter the direction or the strength of the association between an independent and a dependent variable (Baron & Kenny, 1986). As an example, Kochanska (1990) found that normal mothers behaved more in accord with their reported child-rearing orientations than depressed mothers. Although the possibility of moderated associations between measures on parenting has been recognized in the literature (Holden et al., 1992), there have been few attempts to examine such associations empirically. Yet they suggest a promising avenue for further studies. The analysis of moderated effects in the association between self-reported and observed parenting was one objective of this study.

The correspondence between parenting measures brings us to the question of the accuracy of the assessment. If measures obtained from different informants converge, should they be regarded as accurate depictions of parenting? Funder has written about the question of accuracy in connection with personality judgments. He has stated that, although "judgments that agree with each other are more likely to be accurate than judgments that disagree" (Funder, 1993, p. 136) agreement is no guarantee of accuracy, as both evaluations might be biased (Funder & Colvin, 1997). If such an *interpersonal consensus* is not a viable approach in defining accuracy, how is it possible to infer the accuracy of parenting measures? According to Kruglanski (1989), viewing accuracy as a *correspondence* between a judgment and a criterion is another general definition. The problem with this definition is the difficulty in determining what should serve as a criterion for accurate judgments, given that any single method of measurement is subject to certain kinds of error (as noted previously). Another approach to defining accuracy is based on the *pragmatic utility* of a judgment. Judgment is accurate if it is useful, that is, facilitates goal attainment or brings about desired outcomes. For most parents, the provision of a growth-promoting home environment for their offspring is an important goal. Therefore, the degree to which children experience their home environment and parenting in accordance with the parent's view could serve as a useful criterion for the accuracy of judgments on parenting.

1.4.2 Conceptualization of parenting using a person-oriented approach

As summarized by McGroder (2000), parenting researchers have identified a large number of behaviors that parents manifest when interacting with their children, and they have employed factor analysis to extract a smaller number of key parenting dimensions from parenting behaviors. The dimensions that have frequently been studied include power-assertion, coercion, and restrictiveness; firm control and consistency of discipline; induction and democracy; monitoring, involvement, and parental knowledge; warmth, responsiveness, acceptance, and nurturance; information provision and skill development; constraining and enabling parenting behaviors; and parenting behaviors that demonstrate connectedness and individuality (see Holmbeck, Paikoff, & Brooks-Gunn, 2002). To capture more global parenting styles, researchers have arranged parenting dimensions in a circumplex order (Schaefer, 1959) or

crossed them to yield styles of parenting (Maccoby & Martin, 1983). Investigators have also correlated parenting dimensions with various determinants, demographic factors, or aspects of child development (see Bornstein, 2002). This kind of operational definition of research phenomena has been named the *variable-oriented approach*. It examines statistical relations between variables across individuals at group level, focusing on single variables or combinations of variables, their interrelations, and their relations to a specific criterion (Magnusson, 1998). The variable-oriented approach is effective due to the fact that it is based on linear models. Linear models have the advantage of drawing on the statistical power of the full sample, and allowing the detection of specific linkages among dimensions of parenting and predictors or outcome measures.

However, the portrayal of parenting in terms of distinctive dimensions has been criticized for offering a limited perspective on parenting, because it concentrates on discrete behaviors rather than on parents as individuals (Jain, Belsky, & Crnic, 1996). According to the *person-oriented approach* (Block, 1971; Magnusson, 1998), individuals can be conceptualized as belonging to different groups or homogeneous clusters, each with its characteristic properties. The approach, thereafter, investigates how groups of individuals who share the defining features compare to other groups of individuals. Applied to the study of parents, the quality of child care is best captured by examining several dimensions of child-rearing simultaneously, the aim being to discover the distinctive configurations of factors that characterize each parents' functioning.

These considerations have not gone unnoticed in the research on parenting. Radke-Yarrow (1991) criticized parenting research for being limited to studying one child-rearing dimension at a time. Likewise, Baumrind (see Darling & Steinberg, 1993, p. 490) recognized the need to look at multiple parenting dimensions in order to understand the overall quality of the parenting relationship; arguing that the influence of any one aspect of parenting is dependent on the configuration of all other aspects. These considerations were reflected in her influential research contribution, in which she studied parenting and child outcomes and defined three parenting styles: authoritative, authoritarian, and permissive (Baumrind, 1966, 1971). The authoritative parent directs the child's activities in a rational, issue-oriented manner, but recognizes the child's individuality. The authoritarian parent exerts restrictive, punitive control and values obedience in children. The permissive parent reacts to the child's impulses, desires, and actions in a non-punitive and accepting way; making few demands for responsible and orderly behavior.

The formulation of typologies that describe the constellations of individual's profiles can be theory-derived or data-driven (Bergman, Magnusson, & El-Khouri, 2003). As an example of the latter, one procedure for identifying patterns or types in multidimensional data is cluster analysis, which classifies individuals into discrete categories (Magnusson, 1998; Robins, John, & Caspi, 1998). The method has been more extensively used in personality and developmental research (Bergman, 1998), but it has yielded robust findings on patterns of parenting as well. McGroder (2000) found two groups of mothers that were relatively patient in the parenting role, but they differed in the

amount of cognitive stimulation they offered to their children (high versus low). Two other groups of mothers were characterized by average or above-average aggravation, but they varied in nurturance (high versus low). These patterns of parenting were predictable from the characteristics of the mother, and they were predictive of children's developmental outcomes. To take another example, Jain and colleagues (1996) analyzed fathers' behaviors with their toddlers. Two emergent groups represented modern and progressive fathers (caretakers and playmate-teachers), whereas two other groups were considered to represent more traditional fathering (disciplinarians and disengaged fathers).

Within parenting research, there has been an increasing recognition of the need for a more inductive, as opposed to deductive, approach to parenting (McGroder, 2000). The more exploratory analysis, using the person-oriented approach, for instance, could yield meaningful types or patterns of parenting, which went beyond those described by earlier research. The advantage of person-oriented analysis is that the results are applicable to individual parents and, consequently, the use of multiple parenting dimensions to identify patterns of child-rearing behaviors is considered an ecologically valid approach to parenting (Darling & Steinberg, 1993; Radke-Yarrow, 1991).

1.5   Aims of the present study

Previous research has demonstrated linkages between quality of parenting and child development (Collins et al., 2000) and revealed how multiple factors influence the way parents rear their children (Bornstein, 2002). However, scholars have pointed out that existing studies have studied separate parenting dimensions rather than explored how they combine to yield parenting types (Radke-Yarrow, 1991); provided only limited knowledge about effects of the situations on parental behavior (Holden & Miller, 1999); given insufficient attention to the linkages between different parenting measures (Holden & Edwards, 1989); examined primarily mothers, and begun only recently to seriously study fathers (Parke, 2002); and paid insufficient attention to the ways in which personality traits shape parenting (Belsky & Barends, 2002; Caspi, 1998).

The present study was designed to produce information about these issues in order to augment current parenting research. The goals of the study were to:
(1)   utilize a variety of approaches to conceptualize parenting (variable- and person-oriented);
(2)   examine the stability of individual differences in parenting over multiple situations (two dyadic problem-solving situations with a child and a family discussion);
(3)   investigate parenting across measures obtained from different informants (the parents themselves, an independent observer, and the child);
(4)   explore gender differences in parenting; and

(5)   study linkages between parenting and personality traits, defined in terms of a five-factor model of personality.

2 METHOD

2.1 Participants and procedure

The study was part of the ongoing Jyväskylä Longitudinal Study of Personality and Social Development (JYLS), directed by professor Lea Pulkkinen (Pulkkinen, 1982, 1998). The JYLS started in 1968 and the original sample consisted of 369 (173 girls and 196 boys) second-grade pupils from 12 whole school classes randomly drawn from urban and suburban elementary schools in Jyväskylä, a medium-sized town in central Finland. When the first data was collected, the participants were about 8 years old (born in 1959) and they have been followed at ages 14, 20, 27, 33, 36, 38 - 40, and 42. The present study was based on the data collected at ages 33, 36, 38 - 40, and 42 (Table 1).

The comparison of JYLS data at age 36 with the data derived from Statistics Finland (1994) showed that the participants unbiasedly represented their age cohort, born in Finland in 1959, with respect to marital status, number of children, level of education, and work situation. No systematic attrition was found at age 42, as the attrition analyses showed that the sample represented the whole cohort, born in 1959, in respect of marriage rate and family type, number of children, and work status (Pulkkinen et al., 2003). The data gathered at ages 38 - 40 was based on selected a subsample of those participants who had school-aged children.

At the age of 33 (in 1992), the Big-Five Personality Inventory (Pulver, Allik, Pulkkinen, & Hämäläinen, 1995) was mailed to the original sample and returned by 126 women (73% of the original sample) and 123 men (63%).

At age 36 (in 1995), a mailed Life Situation Questionnaire (LSQ) was filled in and returned by 151 women (87%) and 160 men (82%). The LSQ concerned, for instance, marital status and children, the structure of the household, education, and work. In addition, 137 women (79%) and 146 men (74%) participated in a structured interview, during which they were presented with 20 self-administered questionnaires, including the Child Rearing Practices questionnaire employed in the current study.

TABLE 1   Summary of the participants, variables, and methods used in Studies I - III.

Study	Participants	Variables	Data-analysis
Study I	At age 33: 94 mothers, 78 fathers At age 36: 94 mothers, 78 fathers	Independent variables at age 33: - Neuroticism (Cronbach α = .92) - Extraversion (α = .88) - Openness to experience (α = .91) - Conscientiousness (α = .82) - Agreeableness (α = .79) Dependent variables at age 36: - Nurturance (α = .86) - Restrictiveness (α= .74) - Parental knowledge (α = .61) Control variables: - Child's age and sex	Exploratory factor analysis; independent samples t-test; Pearson correlations; structural equation modeling (covariance matrices; maximum likelihood); hierarchical cluster analysis (Ward's method); MANOVA; ANOVA with multiple comparison tests (Scheffe, LSD); Mann-Whitney test; partial correlations
Study II	At age 38-40: 38 mothers, 39 fathers	Coding 1. (Cronbach alphas for CT and CWT, respectively): - Emotional warmth (α's = .92; .81) - Parental guidance (α's = .84; .74) Coding 2. (Cronbach alphas for CT, CWT and FD, respectively): - Emotional warmth (α's = .57; .79; .82) - Parental guidance (α's = .87; .83; .80)	Exploratory factor analysis; principal component analysis; Mann-Whitney test; paired samples t-test; Wilcoxon test; Pearson correlations; Spearman correlations; second-order confirmatory factor modeling (Pearson and Spearman correlation matrices; maximum likelihood and generalized least squares estimation)
Study III	At age 33: 46 mothers, 43 fathers At age 36: 53 mothers, 50 fathers At ages 38-40: 54 mothers, 52 fathers; 48 girls, 58 boys At ages 42: 47 mothers, 42 fathers	Independent variable (collected from parents): - Self-reported nurturance at ages 36 and 42 (Cronbach α's = .83; .86) Moderator (parents): - Extraversion at age 33 (α = .88) Dependent variable (observers): - Child-centeredness when the parents were 38-40 (α = .92) Dependent variables (children): - Positive parenting when the parents were 38-40 years of age (α = .66) - Negative family atmosphere when the parents were 38-40 years of age (α = .63)	Exploratory factor analysis; Pearson correlations; hierarchical regression analysis; ANOVA with multiple comparison tests (LSD); t-test

Note. CT = Crossword Task; CWT = Compound Word Task; FD = Family Discussion.

At ages 38 - 40 (in 1997 - 1999), those participants in the JYLS who had school-aged children took part with their families in the data collection. Data were collected from 109 families. The parent for whom the longitudinal data were available was termed the index parent (54 women, 55 men; 31%, 28%). His or her spouse also participated in the study (42 women, 34 men), as well as a school-aged child (49 girls, 61 boys; 8 - 14 years old). The child's age and gender was matched as closely as possible to the age and gender of the index parent (8 years) when the longitudinal study began in 1968; this child was termed the index child. In 39 families, there was also another school-aged child participating in the study (22 girls, 17 boys). Included in the data collected were the observations of interactions between 1) index-parent and index-child during two problem-solving tasks, and 2) all participating family members during the discussion of a moral dilemma. In addition, index children's views (48 girls, 58 boys) on their parents' child-rearing practices and the family atmosphere were measured using the Family Atmosphere Questionnaire.

At age 42 (in 2001), the participants were presented with 26 self-administered questionnaires, including the Child-rearing Practices questionnaire. The questionnaire was filled in by 120 women (69%) and 121 men (62%).

2.2   Measures

The measures used in the study are explained in detail in the studies in which they were originally used and, therefore, only a brief summary is provided here. The measures are grouped into three general categories: (1) questionnaire data about parenting and family atmosphere, (2) behavioral observational data, and (3) questionnaire data on parents' personality traits. In addition, information about the age and sex of the children used as control variables in Study I was based on the LSQ and structured interviews, derived from the participants at age 36.

2.2.1 Questionnaire data about parenting and family atmosphere

Self-reported parenting was assessed at ages 36 and 42 by means of the 28-item Child-rearing Practices questionnaire. In the questionnaire, the parents evaluated, on the 4-point Likert-scale, the degree to which items described them as parents (*1 = not at all, 4 = very much)*. The items were formulated in the first-person format, and they were drawn from the Child Rearing Practices Report (Roberts, Block, & Block, 1984) and the inventory by Gerris et al. (1993). On the basis of the questionnaire, three composite scores, measuring parents' Nurturance, Restrictiveness, and Parental Knowledge were formed (Table 1). In Study I, these three parenting variables, measured at age 36, were used. In Study III, the variable for nurturance, computed as the mean of the measurements at ages 36 and 42, was employed.

Children's views on parenting and family atmosphere were measured, when the index parents were 38 – 40 -years old, using a 16-item Family Atmosphere Questionnaire. In the questionnaire, the child evaluated the extent to which the items characterized his or her parents' child-rearing (e.g., "My parents try to talk it over when I have misbehaved"; *1 = nearly always* to *4 = seldom or never)* and family atmosphere (e.g., "To what extent do you live in a quarrelsome family atmosphere?"; *1 = completely, 5 = not at all*). Two composite scores, Positive parenting and Negative family atmosphere, based on the exploratory factor analysis of the questionnaire, were employed in Study III.

2.2.2 Behavioral observations on parenting

To obtain *behavioral observations on parenting*, interactions between the index-parent and index-child during two problem-solving tasks (Crossword Task and Compound Word Task), and between all participating family members during the discussion of a moral dilemma (Family Discussion; modified from Colby & Kohlberg, 1987) were analyzed. The observations were conducted when the index-parents were 38 – 40 years old. The interactions were video-recorded from behind one-way mirrors, and dimensions related to parents' emotional warmth and guidance were assessed. Parental behaviors were coded using two coding procedures. The dimensional ratings were based on the total duration of each task, whereas in the dichotomous frequency counts, the total time the dyad spent on each task was divided into five segments of equal length; and after each time segment, the coder made a dichotomous coding by judging the occurrence or non-occurrence of the relevant parental behaviors. A dimensional coding of parental behavior was applied to the analysis of the Crossword Task and the Compound Word Task, and the dichotomous coding was applied to all three interactive tasks. In Study II, data based on both coding procedures were used, and in the Study III, data derived from the dimensional rating were utilized.

2.2.3 Personality traits

Parents' personality traits of Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness were measured at the age of 33. The measurement was based on the Big Five Personality Inventory (Pulver et al., 1995); an authorized adaptation of the NEO Personality Inventory (NEO-PI; Costa & McCrae, 1985), in which about one-quarter of the items are substitutes for the original American items. In this 181-item inventory, participants assessed, on a 5-point Likert- scale, the extent to which they agreed with items (*1 = strongly disagree, 5 = strongly agree*). All five personality variables were used in Study I, and the measure for Extraversion was used in Study III.

2.3   Data analysis

To extract dimensions of parenting, explanatory factor analysis (Studies I, II, and III) and principal component analysis (Study II) were used. To compare study variables across situations (Study II), mothers and fathers (Study I), and boys and girls (Study I), various statistical tests were used. These included paired samples *t*-tests, independent samples *t*-tests, the Wilcoxon signed-ranks test, and the Mann-Whitney test.

Following the variable-oriented approach, Pearson correlations, Spearman correlations, and partial correlations were used to reveal interrelationships between the study variables. In Study I, the structural equation model was estimated, and in Study II, confirmatory factor analysis with a second-order factor model was employed. Study I included a multigroup procedure, estimating the model simultaneously for mothers and fathers. In Study III, the variation of dependent variables was explained by independent variables and their interactions, using hierarchical regression analysis (the moderator analysis).

Following the person-oriented approach, hierarchical cluster-analysis with Ward's method was used in Study I to extract groups of parents with distinguishable profiles in respect of child-rearing variables. Multivariate analysis of variance (MANOVA) and univariate analysis of variances (ANOVA) with pairwise comparisons based on Scheffe and Least Significant Differences procedures were used to compare the means of the dependent variables between the emergent groups across the independent variables.

3   OVERVIEW OF THE ORIGINAL STUDIES

Study I

Metsäpelto, R.-L., & Pulkkinen, L. (2003). Personality traits and parenting: Neuroticism, Extraversion and Openness to Experience as discriminative factors. *European Journal of Personality, 17, 59-78.*

The purpose of the first study was to combine variable- and person-oriented approaches in the investigation of the longitudinal relationship between personality traits (at age 33) and parenting (at age 36). *First*, following the variable-oriented approach, parents' personality traits, defined in terms of a five-factor model of personality (Neuroticism, Extraversion, Openness to Experience, Conscientiousness, and Agreeableness), were examined in relation to dimensions of self-reported parenting (nurturance, restrictiveness, and parental knowledge). *Second*, in line with the person-oriented approach, child-rearing data were investigated in order to identify parenting types and to see whether these parenting types showed distinguishable profiles in personality traits. In both analyses, possible gender differences were explored. It was expected that dimensions of parenting, obtained by the exploratory factor analysis of a parenting questionnaire, would be longitudinally linked with personality traits. It was further assumed that parenting dimensions would yield parenting types, which were also expected to be associated with personality traits. Overall, it was expected that high Extraversion, high Agreeableness, high Openness to Experience and low Neuroticism would be related to more competent parenting, and that opposite associations would be found for less competent parenting.

The SEM-based findings showed that the personality traits of Openness to Experience, low Neuroticism, and Extraversion were linked to parental nurturance; low Openness to Experience to parental restrictiveness; and low Neuroticism to parental knowledge about the child's activities. The paths from personality traits to parenting were similar for mothers and fathers, and no

associations were found between Agreeableness and Conscientiousness and parenting dimensions.

Cluster analysis, based on the parents' nurturance, restrictiveness, and parental knowledge, yielded six parenting types. These parenting types were gender-related and had distinguishable personality profiles. Authoritative parents (mainly mothers) and emotionally involved parents (mainly fathers), who were high in nurturance and high to moderate in parental knowledge, were high in Extraversion, high to moderate in Openness to Experience, and moderate to low in Neuroticism. Authoritarian parents (mostly fathers) and emotionally detached parents (mostly mothers), who were low in nurturance, high to moderate in restrictiveness, and moderate to low in parental knowledge, were low in Openness to Experience and Extraversion, and moderate to high in Neuroticism. In addition, two parenting groups were extracted. Permissive parents, who were low in restrictiveness and parental knowledge and moderate in nurturance, were high in Neuroticism, Extraversion, and Openness to Experience. Engaged parents, who were high in all parenting dimensions, were moderate in the personality traits. Just as with the variable-oriented findings, Agreeableness and Conscientiousness were not related to parenting types.

Study II

Metsäpelto, R.-L., Pulkkinen, L., & Poikkeus, A.-M. (2001). A search for parenting style: A cross-situational analysis of parental behavior. *Genetic, Social, and General Psychology Monographs, 127,* **169-192.**

The main focus of the second study was to analyze behavioral observations in order to examine the cross-situational stability of parents' emotional warmth and guidance. Behavioral observations were conducted by independent observers during three situations in the laboratory (two problem-solving tasks and a family discussion concerning a moral dilemma) and they were coded using dimensional ratings and dichotomous frequency counts as the two molar coding procedures. It was hypothesized that, when analyzed at such a molar level, parental behavior would manifest stability in the rank ordering of individual parents across situations (relative stability). The observational data was gathered when the participants in the longitudinal study were 38 - 40 years of age; the age of their children varied from 8 to 14 years.

Analysis of emotional warmth and parental guidance based on the two coding procedures yielded a similar pattern of findings. Comparison of the mean levels revealed that parents' emotional warmth and guidance was affected by the type of interactive situation. The situation that offered the possibility of playful, gamelike co-operation elicited more emotional warmth and parental guidance than the situations that were interactionally more demanding on parents. The latter situations required either (1) the parents to

allow the children freedom of exploration, while at the same time it drew on their sensitivity to the children's need for help; or (2) the parents to divide their attention between all the family members present, and to negotiate conflicting opinions between family members.

Nevertheless, the cross-situational correlations indicated that the parents tended to maintain their position relative to other parents across situations; suggesting that individual differences in these parental behaviors were relatively stable. Further examination by means of second-order confirmatory factor modeling (LISREL) revealed first, that parents' emotional warmth and guidance in each situation loaded on a single factor; indicating that they measured similar qualities of care. Second, a second-order latent factor was identified that accounted in part for the variance in parental behavior in each situation. It was interpreted to reflect the child-centered parenting style of the parents. This parenting style explained 78% of the variance in parental behavior in dimensional coding, and 53% of that in the dichotomous coding. Consequently, the present findings provided evidence for the view that, when measured at a more general level, relative stability characterizes parental behavior over situations.

Study III

Metsäpelto, R.-L., & Pulkkinen, L. (resubmitted). The moderating effect of Extraversion on the relation between self-reported and observed parenting. *Journal of Applied Developmental Psychology.*

The purpose of this study was, first, to analyze the association between observed parental behavior (child-centeredness) and self-reported parenting (nurturance), which were indicators of parents' acceptance of and involvement in child care; and to find out whether the personality trait of Extraversion moderated this association. Second, to determine whether children's views on parenting and family atmosphere vary according to observed and self-reported parenting and parents' Extraversion. Third, to examine whether the children's evaluations of parenting and family atmosphere vary depending on the concordance (or lack thereof) between self-reported and observed parenting data.

It was expected that the linkages between observed and self-reported parenting would not be direct, but rather, moderated by the parents' personality trait of Extraversion. Those parents who were extraverted were expected to report acceptance of and involvement in child care (high nurturance) and to behave in accordance with this (child-centered parental behavior). It was presumed that parents' high Extraversion would be related to children's positive evaluations of parenting and family atmosphere. It was also expected that the children of parents, whose self-reported and observed parenting were concordant, would judge parenting and family atmosphere more favorably than those of parents whose observed and self-reported

parenting were discordant. The data used were drawn from different phases of the longitudinal study. Extraversion was measured at age 33, self-reported parenting at ages 36 and 42, and observed parenting and children's views on parenting and family atmosphere were measured when the parents were 38 - 40 years old. The analyses were conducted for mothers and fathers separately.

The findings revealed that self-reported nurturance and observed child-centeredness were not directly associated in either mothers or in fathers. Instead, parents' Extraversion moderated the association. Extraverted and nurturant mothers were observed to be higher in observed child-centeredness than introverted and nurturant mothers. The opposite pattern was observed for fathers, as introverted and nurturant fathers were found to be higher in child-centeredness than extraverted and nurturant fathers. Further examination of children's evaluations of parenting and family atmosphere revealed that children of introverted and nurturant fathers reported higher positive parenting than those of extraverted and nurturant fathers. Similarly, there was a tendency for children of introverted and nurturant mothers to report a better family atmosphere than the children of extraverted and nurturant mothers. Thus, when the children's views about parenting and family atmosphere were considered, low Extraversion related to a more favorable family environment. The findings also showed that family atmosphere was seen as better by those children whose fathers reported high nurturance and were observed to be child-centered, than it was by those children whose fathers' self-reported nurturance and observed child-centeredness were discordant.

4   GENERAL DISCUSSION

4.1 Main findings

The findings of the present study demonstrated that nurturance, restrictiveness, and parental knowledge, extracted from self-reports, combined to yield six gender-related parenting types with distinguishable personality profiles. Authoritative parents (mainly mothers) and emotionally involved parents (mainly fathers), who were high in nurturance and high to moderate in parental knowledge, were high in Extraversion, high to moderate in Openness to Experience, and moderate to low in Neuroticism. Authoritarian parents (mostly fathers) and emotionally detached parents (mostly mothers), who were low in nurturance, high to moderate in restrictiveness, and moderate to low in parental knowledge, were low in Openness to Experience and Extraversion and moderate to high in Neuroticism. Permissive parents, who were low in restrictiveness and parental knowledge and moderate in nurturance, were high in Neuroticism, Extraversion, and Openness to Experience. Engaged parents, who were high in all parenting dimensions, were moderate in respect of these personality traits.

   Although self-reported nurturance was relatively stable across time (from age 36 to 42), it was not directly related to the child-centered behavior, which was observed in the dyadic problem-solving situations. The observed child-centeredness, too, was relatively stable over multiple interactive situations. The parents' Extraversion moderated the association between self-reported nurturance and observed child-centeredness, but in different ways in the mothers and fathers who had rated themselves to be highly nurturant: the mothers who were observed to be child-centered were extraverted, but the fathers who were observed to be child-centered were introverted. However, when there was no correspondence between self-reported nurturance and observed child-centeredness, it was the nurturant mothers (as reported by themselves) who were introverted, and the nurturant fathers who were extraverted. Assessments made by children produced information about how they experienced parenting and family atmosphere, and provided a means of

evaluating the accuracy of self-reports and observations on parenting. The findings revealed that children tended to experience the parenting practices of nurturant fathers and mothers more favorably when they were less extraverted. Moreover, when self-reported nurturance accorded with observed child-centeredness in parenting, the children's assessments of the family atmosphere were less negative than the assessment of those children whose fathers' measures were discordant. Thus, when the children's assessment of quality of family atmosphere was used as a criterion for the accuracy of judgments on parenting, the self-report and behavioral measure together provided a more accurate description of parenting than either one alone.

The person-oriented approach was used in the present study to move beyond the examination of separate parenting dimensions to focus on individual parents as the unit of analysis. The dimensions of parental self-reports yielded three parenting types that were functionally very similar to authoritative, authoritarian, and permissive parents introduced by Baumrind (1971), and they were labeled accordingly. Three other types of parents also emerged from the data: the emotionally involved, the emotionally detached, and the engaged. The latter findings suggested that by investigating parenting dimensions it is possible to generate parenting types beyond those that have been traditionally described in the literature. Collectively, the current study and previous research (e.g., McGroder, 2000; Jain et al., 1996) indicated that person-oriented methods can be used as exploratory tools for extracting patterns of parenting, for instance, in low-income or minority populations (McGroder, 2000) and for creating typologies of parenting that are more differentiated than existent models. As an example of the latter, the present study showed that, among the more competent parenting types, the traditional authoritative pattern was more typical of mothers, while emotionally involved parenting characterized by nurturance and moderate restrictiveness was more prevalent in fathers. Among the less competent parenting types, the classic authoritarian parenting type was more typical of fathers, whereas emotionally detached parenting characterized by low nurturance was more prevalent in mothers. Gender-specificity was not examined by gender main effects, but on the basis of "type-membership," thus extending earlier research, which has not generally included the examination of gender differences within parenting types. When interpreting these findings, however, it should be noted that the parenting types reflected the cognitive internal states that mothers and fathers had formed of their actions, behaviors, and practices as parents. Parenting types were closely related to parents' personality traits; but their correspondence with actual behavior remains elusive.

In the present study, parents tended to maintain their position relative to other mothers and fathers across multiple interactive situations. This finding indicated that individual differences in parenting were deeply ingrained and, thus, provided evidence for the concept of parenting style (Baumrind, 1971; Darling & Steinberg, 1993; Maccoby & Martin, 1983). The results were in line with expectations, as parenting involves repeated interactions between parents and children over time that result in an anticipation of the behavior of the interacting partner and that create reciprocal responses that are likely to sustain

the style of parenting (Caspi, Elder, & Bem, 1987). It is noteworthy that parental behavior is likely to be more stable than behavior with most other partners, particularly strangers. Moskowitz (1988) has pointed out that when the interactive situation involves strangers there are no pre-established schemes for behavior, so there is greater inconsistency in engaging in specific behaviors. The stability of parental behavior is part of the broader question concerning the continuity of family environments. For instance, Loeber and colleagues (2000) reported that maladaptive family interaction patterns (e.g., poor communication and bad relationship between parents and children) showed high relative stability from age 6 to 18. The information about the stability of parental behavior and the continuity of family environments is helpful for understanding the child development, for example, the development and maintenance of problem behaviors in the offspring.

Despite the high relative stability of emotional warmth and parental guidance, the current study showed that parenting became more difficult as the situational demands for the parents' behavior increased. The requirement to accomplish the interactive tasks within a strict time-limit, to allow the child the possibility for independent problem-solving, and the presence of other family members appeared to distract the parents and result in less child-centered behavior. This finding was in line with previous findings, which have shown that when faced with more challenging interaction conditions, mothers experience and display less positive and more negative emotions (Martin, Clements, & Crnic, 2002). As Martin and colleagues (2002) have pointed out, such parental emotions and behaviors may serve to motivate the dyad to negotiate the demands of the challenging situation and to complete the task; alternatively, they may have dysfunctional qualities, potentially disrupting any effective co-operation. When designing family interaction studies, the understanding of how different situations modify average levels of parental behaviors is highly valuable. One should recall, however, that the approach adopted here, describing parenting as an enduring style, is not best suited for the analysis of the processes by which parental behavior becomes modified on a moment-to-moment basis. Such a dynamic approach to parenting requires more a molecular level of analysis and represents another, albeit important, line of research (Holden, 1997; Kuczynski & Lollis, 2001).

Parenting measures, obtained from different informants (the parents, the children, and observers), that assessed a conceptually similar parenting domain and that had acceptable psychometric properties were not linearly associated and failed to provide a coherent account of the quality of parenting. This finding was in line with the earlier suggestion that parents' self-reports and behavioral observations tend to provide different kinds of information about child-rearing (Goodnow, 1984; Bornstein et al., 2001). For this reason, the data collection method and the informant should be carefully considered when the quality of parenting is determined. New perspectives should also be introduced that would allow taking the information different measures provide more fully into account. At least two lines of research could be pursued. Parenting researchers should continue to develop analytical methods that effectively combine different measures. In future, as Cook and Goldstein (1993) have

shown, researchers could take advantage of structural equation modeling to attribute the observed variance in parenting measures to variance that is shared with other informants, to systematic variance reflecting the unique perspective of the rater, and to variance stemming from measurement error. Measures that are controlled for specific variance and measurement error are more reliable and more likely to produce robust associations. Another line of research should aim at analyzing the unique perspective of each family member. An example of such a dynamic approach is the work conducted by Larson and Richards (1994), who investigated the emotional lives of mothers, fathers, and adolescents. They discovered that family members tend to experience the same events in different ways, being out of touch to each other's thoughts and feelings. Similarly, Solantaus-Simula, Punamäki, and Beardslee (2002) found that family members disagreed in their judgments on the level of the children's mental distress and the quality of parenting. Rather than regarding the lack of agreement as problematic, the authors showed that discrepancies among family members' experiences can be illustrative and important in terms of family dynamics and the children's well-being. It is clear that researchers should forge ahead to explore the "divergent realities of family members" (Larson & Richards, 1994).

In the present study, the five-factor model of personality functioned as a useful explanatory framework. First, personality traits explained individual differences in parental self-reports on child-rearing. Second, the personality trait of Extraversion clarified the complex associations between parenting measures obtained from different informants and contributed to our understanding of the children's experiences of parenting and family life. As a whole, the results showed that the linkages between personality traits, particularly Extraversion, and parenting were different depending on whether one focused on self-reports gathered from parents themselves or on parental behaviors as experienced by children and perceived by observers. Specifically, it was found that more extraverted, open, and emotionally stable mothers and fathers provided more positive accounts of their parenting. According to earlier literature, parents with such personality characteristics are, indeed, more likely to be psychologically healthy adults, who function as competent parents (Belsky, 1984; Belsky & Barends, 2002).

Extraverted mothers and fathers made favorable cognitive appraisals of their actions and practices as parents, but, interestingly, these appraisals were not completely in tune with their children's or the observers' views. Children evaluated introverted and nurturant parents more favorably than extraverted and nurturant parents. In a similar vein, behavioral observations showed that nurturant and introverted fathers were observed to be more child-centered than nurturant and extraverted fathers. The latter findings demonstrated that E moderated the association between self-reported nurturance and observed child-centeredness. The results also called into question the uniformly positive image of extraverts that pervades many writings in the field of personality. Apparently, the assertive behavior and rapid personal tempo typical of extraverts resulted in failure to adopt goals and behaviors that were compatible with those of their children (see Dix, 1992). The findings were not completely consistent, however. Contrary to the above findings on fathers, nurturant and

extraverted mothers were observed to be more child-centered than nurturant and introverted mothers. As Extraversion is a general dimension of personality, which comprises several more specific traits (Watson & Clark, 1997), it seems possible that various sub-facets of the trait expressed themselves differently in the fathers' and mothers' behavior in these particular interactive situations. Among nurturant parents (as reported by themselves), extraverted fathers may have behaved in a prominently dominant and assertive manner, while introverted fathers may have been more controlled, unassertive, and capable of organizing their behavior from the perspective of the child. In contrast, extraverted mothers may have readily expressed positive emotions, affection, and enthusiasm, whereas introverted mothers may have been strikingly reserved and aloof. As a whole, the findings indicated that the examination of the child's subjective experience of parenting, family atmosphere, and parental personality may provide interesting insights into parent-child relationships. The results also suggested that the interface between personality traits, interpersonal behavior, and social cognition merits more research attention among parenting researchers.

The significance of the personality trait theory for understanding parenting is based on the fact the personality traits describe differences between normal individuals in their tendency to feel, think, and behave, thereby providing a framework for the characterization of personal dispositions in non-clinical samples. This is an important strength, as it has been common in the field to concentrate on psychological disturbances and their linkages with parenting (e.g., depression; Field, 1995). Another strength is the accumulating evidence of the associations between personality traits and their relationship with many important areas of adult life, such as marriage (Caughlin, Huston, & Houts, 2000) and health (Kokkonen, Pulkkinen, & Kinnunen, 2001). Such results are potentially rich sources of information that can be used to understand how these more distal determinants in conjunction with parental personality affect child-rearing (Belsky, 1984).

4.2   Methodological conclusions

The strength of the study was its reliance on longitudinal data drawn from the Jyväskylä Longitudinal Study of Personality and Social Development. The current study conceptualized parenting as a general style persisting across situations and time. By aggregating over multiple situations to calculate an observed parental behavior composite, and by combining the same self-reported parenting data from two data-collection waves (at ages 36 and 42) it was possible to more reliably operationalize parenting as a general style. As Epstein (1979) has pointed out, when two measures are combined to form an aggregate score, the resulting measure is less biased by errors of measurement, and more reliably reflects the core construct.

Furthermore, the longitudinal data allowed the prospective follow-up analysis of the relationship between personality traits and self-reported

parenting. The results indicated that the personality traits of Neuroticism, Extraversion, and Openness to Experience measured at age 33 significantly predicted parental nurturance, restrictiveness, and knowledge measured three years later. Although Bergman, Eklund, and Magnusson (1991) have pointed out that the ordering of variables allows conclusions to be drawn about the direction of relationships, conclusions about causality cannot be inferred on the basis of the current findings. It is possible, although not highly likely, given the high stability of personality traits in adulthood (McCrae & Costa, 1990), that personality traits and parenting function interdependently, influencing each other over time. The analysis of such a developmental process would be an interesting topic of future research. To this end, one would need a longitudinal study with multiple measurements of each construct.

The fact that the parents under investigation were drawn from the longitudinal study posed some challenges for the study as well. More specifically, the sample was heterogeneous with respect to the ages, sex, and number of children, because the participants were at different stages of family life. This difficulty primarily concerned Study I. In Study I, separate investigations were carried out to examine how the age and the sex of the children affected the main findings, that is, the personality – parenting association. The results showed that the findings of the study were not confounded by the influence of these factors. It is also worth noting that the mothers and fathers represented various forms of family life typical to modern times: the majority was in their first marriages, but some of them had divorced, remarried, or remained single parents. Although the examination of the effects of such diverse family circumstances on parenting would be a timely research topic worthy of a separate study, analysis of this kind was beyond the scope of the present investigation.

The study relied on data based on the multiple measures and informants urged by Schumm (1990) and other researchers (Bornstein et al., 2001). The data allowed one to address the question of the convergence of information obtained from different informants about parenting. The findings suggested that there were not linear associations among parenting measures. Although this result was in line with many earlier studies, one should bear in mind that the analysis concerned one specific aspect of parenting, acceptance-involvement (Gray & Steinberg, 1999), only. The findings cannot be generalized beyond the acceptance-involvement dimension of parenting, and analysis of the congruence between measures of other aspects of parenting awaits further research.

Although it provided valuable information, self-reported and child-reported parenting measures, as well as the design for the observational analysis can be regarded in some ways as problematic. First, the self-report measure on parenting was based on earlier, more extensive inventories (Roberts et al., 1984; Gerris et al., 1993), which have been widely used in socialization research. The difficulty with many of these self-report measures is the vague item formulation, lack of reliability and validity testing, and their susceptibility to social desirability bias (Holden & Edwards, 1989; Holden, 1995). Yet, when considering the utility of self-report measures on parenting, they produce

information about the ways in which parents perceive, organize, and understand their children and their role as parents. Such data are not easily derived from observation alone (Furman et al., 1988; Parke, 1978).

Second, the investigation of parental behavior in the laboratory setting has been criticized for lack of ecological validity and for the tendency to elicit controlled thinking in parents (Fagot, 1998), resulting in an overly-positive picture. Clearly, in the current study, it would have been preferable to have observational data on parents across more varied settings; for instance, the laboratory and the home. It is worth noting, however, that ratings made by observers in the laboratory often correlate well with behavior measured in different settings. As Kendrick and Funder (1988) have pointed out, such meaningful associations have to be based on the observers' detection of 'true' cross-situational consistency. In this study, behavioral observations conducted in laboratory correlated with child outcomes assessed by teachers, thus providing evidence for the validity of observational measures (Study III). Third, the analysis of children's views on parenting was one of the strengths of the present study, as they have remained a neglected source of information about parenting and family atmosphere. Nevertheless, the children's measures in this study were compromised by marginal internal consistency, which may have attenuated some of the associations.

One advantage of the present study was the use of various statistical methods to analyze the data. Structural equation modeling with simultaneous estimation of two groups (multigroup procedure; Study I) and second-order confirmatory factor modeling (Study II) were employed. Furthermore, hierarchical regression analysis with interaction effects (Study III) and cluster analysis with group comparisons (Study I) were chosen as major statistical methods. The difficulty with some of the statistical analysis was related to the restricted sample size, which may have affected structural equation modeling and the testing of interaction effects in hierarchical regression analysis. Another difficulty was related to the fact that the personality and parenting measures were obtained from different waves of the data collection. This concerned Study III, in particular. Although the use of data collected in different waves reduced the method variance among measures obtained from the same informant, it may have attenuated the associations. Finally, like any categorization procedure, the classification of parents into discrete parenting types may have involved misclassification of individuals near the boundaries. Therefore, replication is necessary to verify the classification (Hinde and Dennis, 1986).

The findings of the present study were based on the JYLS –data, which provides a good representation of Finnish people born in 1959. The sample was randomly drawn, represented the normal population, and included both mothers and fathers. Thus, the study overcame many of the caveats that have compromised the generalizability of numerous previous studies on parenting. However, when considering the generalizability of the findings, one should bear in mind that the findings are likely to be in part affected by cohort, period, and age (Loeber & Farrington, 1994; Rutter, 1995) and cultural beliefs about parenting (Trommsdorff & Kornadt, 2003). As Trommsdorff and Kornadt (2003) have pointed out, parent-child relationships are closely related to the ecological

conditions, social structure and values of the given culture. In the absence of comparative data, the results cannot be generalized to other sociocultural systems.

TIIVISTELMÄ

Lastenkasvatus ja sen yhteys vanhemman persoonallisuuden piirteisiin

Tutkimuksessa tarkasteltiin lastenkasvatusta ja sen yhteyttä vanhemman persoonallisuuden piirteisiin. *Ensimmäisenä* tavoitteena oli selvittää, millaisia lastenkasvatusta kuvaavia ulottuvuuksia vanhemmilta kyselylomakkeella kerätystä aineistosta voidaan erottaa ja millaisia vanhempien tyyppejä niiden perusteella muodostuu (ns. henkilökeskeinen tutkimusote). Tavoitteena oli myös tarkastella pitkittäistutkimuksellisella otteella, ennakoivatko 33 vuoden iässä mitatut ns. viisi suurta persoonallisuuden piirrettä (neuroottisuus, ekstraversio, avoimuus, sovinnollisuus ja tunnollisuus) vanhempien itsearvioimaa lastenkasvatusta 36-vuotiaina. *Toisena* päämääränä oli tutkia vanhemman käyttäytymistä kolmessa eri vuorovaikutustilanteessa lapsen kanssa ja selvittää, onko vanhemman käyttäytymisessä pysyvyyttä yli tilanteiden. Vanhemman käyttäytymisestä arvioitiin emotionaalista lämpöä ja ohjausta, joiden oletettiin heijastavan vanhemman lapsilähtöistä kasvatustyyliä. *Kolmantena* tavoitteena oli tarkastella, onko vanhemmilta kyselylomakkeella kerätty lastenkasvatusta koskeva tieto suoraan yhteydessä heidän havaittuun lapsilähtöisyyteensä vai muuntaako vanhemman persoonallisuuden piirre ekstraversio (ulospäinsuuntautuneisuus) tätä yhteyttä. Tutkimuksessa selvitettiin myös, ovatko lasten arvioinnit vanhempien kasvatuskäytännöistä ja perheilmapiiristä yhteydessä vanhempien itsearvioimaan kasvatukseen, havaittuun lapsilähtöisyyteen ja ekstraversioon.

Tutkimus pohjautui professori Lea Pulkkisen johtamaan Lapsesta aikuiseksi -tutkimukseen, jossa on seurattu samojen vuonna 1959 syntyneiden henkilöiden elämää jo yli kolmenkymmenen vuoden ajan. Tutkimuksen alkuperäisen otoksen muodostivat 173 tyttöä ja 196 poikaa, jotka olivat tutkimuksen alkaessa vuonna 1968 noin 8-vuotiaita. Väitöskirjatutkimuksessani käytin tutkittavista 33- (1992), 36- (1995), 38 - 40- (1997 - 1999) ja 42-vuotiaina (2001) kerättyjä tietoja. Tutkittavien ollessa 38 - 40-vuotiaita pitkittäistutkimus laajeni perhetutkimuksen suuntaan, jolloin tutkittavina oli alkuperäiseen otokseen kuuluneiden tutkittavien (indeksivanhempien) lisäksi myös heidän puolisonsa sekä 1 - 2 kouluikäistä lasta. Tutkimusaineisto koostui lastenkasvatusta selvittäneistä kyselylomakkeista, joita koottiin sekä indeksivanhemmilta että heidän lapsiltaan, indeksivanhemman ja lapsen välisen vuorovaikutuksen havainnoinnista sekä indeksivanhemmille esitetystä persoonallisuutta mittaavasta kyselylomakkeesta. Tutkimusaineiston pääasiallisina tilastollisina analyysimenetelminä käytettiin rakenne-yhtälömalleja, regressioanalyysiä, klusterianalyysiä ja varianssianalyysiä (MANOVA, ANOVA). Muina tilastollisina menetelminä käytettiin mm. faktorianalyysiä, korrelaatioita ja t-testejä.

Vanhempien itsearviot lastenkasvatuksesta tiivistyivät kolmeen ulottuvuuteen, jotka olivat tunneperäinen hoivaavuus (nurturance), rajoittavuus (restrictiveness) ja vanhemman tietämys lapsen toimista (parental knowledge).

Muuttujakeskeinen aineiston analysointi osoitti, että äitien ja isien itsearvioimat kasvatuksen ulottuvuudet olivat yhteydessä persoonallisuuden piirteistä ekstraversioon, neuroottisuuteen ja avoimuuteen uusille kokemuksille siten, että ekstraversio, matala neuroottisuus (emotionaalinen tasapainoisuus) ja avoimuus uusille kokemuksille ennakoivat tunneperäistä hoivaavuutta kasvatuksessa. Vähäinen avoimuus uusille kokemuksille ennakoi rajoittavan ja määräilevän kasvatuksen käyttöä, ja runsas neuroottisuus oli yhteydessä vähäiseen tietämykseen lapsen toimista.

Henkilökeskeinen aineiston analysointi osoitti, että kasvatuksen kolmea ulottuvuutta tarkastelemalla muodostui vanhempien ryhmiä, joiden kasvatusorientaatiot erosivat toisistaan. Kasvatustyyleistä toiset olivat tyypillisempiä äideille ja toiset puolestaan isille. Lämpimiä kasvatustyylejä olivat *Auktoritatiivisten* (tyypillisesti äitejä) ja *Emotionaalisesti saatavilla olevien* (tyypillisesti isiä) vanhempien ryhmät ja kylmiä puolestaan *Autoritaariset* (pääosin isiä) ja *Emotionaalisesti etäiset* (pääosin äitejä) vanhemmat. *Salliva* ja *Korosteinen* vanhemmuus olivat yhtä tyypillisiä sekä äideille että isille. Kasvatustyylit olivat yhteydessä vanhemman persoonallisuuden piirteisiin siten, että lämpimiä kasvatustyylejä luonnehti ekstraversio ja vähäinen neuroottisuus. Kylmille kasvatustyyleille puolestaan oli tavanomaista runsas neuroottisuus ja vähäinen ekstraversio. Sallivat vanhemmat saivat korkeita pistemääriä sekä ekstraversiossa että neuroottisuudessa.

Tutkimuksessa havaittiin, että vanhempien käyttäytymisessä oli suhteellista pysyvyyttä eri vuorovaikutustilanteissa. Vanhemmat, jotka osoittivat eniten lämpöä ja kiinnostusta lasta kohtaan sekä rohkaisivat ja ohjasivat lasta yhdessä vuorovaikutustilanteessa, osoittivat eniten lämpöä ja antoivat tukea myös muissa tilanteissa. Vuorovaikutustilanteesta toiseen jatkuvan vanhemmuuden piirteen tulkittiin heijastavan lapsilähtöisen kasvatuksen määrää. Havaitun lapsilähtöisyyden määrä ei kuitenkaan ollut yhteydessä siihen, miten vanhempi arvioi kasvatustaan, sillä vanhemman ekstraversio muunsi tätä yhteyttä. Äidit, jotka arvioivat itsensä hoivaaviksi kasvattajiksi ja jotka havaittiin lapsilähtöisiksi, olivat persoonallisuudeltaan ulospäin suuntautuneita ja sosiaalisesti aktiivisia, siis ekstravertteja. Sitä vastoin isät, jotka arvioivat itsensä hoivaaviksi ja jotka havaittiin lapsilähtöisiksi, olivat introvertteja. Lapset kokivat kasvatuskäytännöt ja perheilmapiirin positiivisimmin silloin, kun vanhemmat arvioivat itsensä hoivaaviksi ja olivat introvertteja.

Tutkimukseni tulokset antavat uutta tietoa siitä, miten vanhemmat arvioivat lastenkasvatustaan. Vanhempien itsearvioiden perusteella on mahdollista erottaa kasvatustyylinsä puolesta toisistaan eroavia vanhempien tyyppejä, joista toiset ovat sukupuolijakauman perusteella tavanomaisempia äideille ja toiset isille ja jotka ovat läheisesti yhteydessä vanhemman persoonallisuuden piirteisiin. Tutkimustulokset osoittivat kuitenkin myös, että vanhemman itsearvioima hoivaavuus ei ole suoraan yhteydessä hänen havaittuun lapsilähtöisyyteensä eikä lasten kokemuksiin kasvatuksesta tai perheilmapiiristä. Nämä tulokset haastavat tutkijat ja perheiden kanssa työtä tekevät kiinnittämään huomiota menetelmiin, joilla he arvioivat vanhemmuutta ja lastenkasvatusta.

Lapsesta aikuiseksi –pitkittäistutkimuksessa on aikaisemmin havaittu, että lasten raportoimat kasvatuskokemukset ennustivat voimakkaammin heidän kehitystään kuin vanhempien itsearviot kasvatuskäytännöistä (Pulkkinen, 1982). Vanhempien itsearviot ovat olleet tavanomainen tutkimusmenetelmä lastenkasvatuksen tutkimisessa, mutta myös lasten näkökulman ja kokemusten huomioon ottaminen tulisi nostaa esille vanhemmuutta ja perheilmapiiriä arvioitaessa. Tässä tutkimuksessa tulokset viittasivat siihen, että vanhemman vähäinen ulospäinsuuntautuneisuus voi lapsen näkökulmasta merkitä myönteisiä kasvatuskokemuksia ja suotuisaa perheilmapiiriä. Tältä osin tutkimus kyseenalaisti käsityksen, jonka mukaan ulospäin suuntautuneisuudella ja sosiaalisella aktiivisuudella olisi yksinomaan myönteinen vaikutus yksilön toimintaan ihmissuhteissa. Ulospäin suuntautuneet vanhemmat voivat jäädä lapselle etäisiksi, vaikka vanhemmat mielestään olisivatkin lapsilähtöisiä kasvattajia.

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