



PÄIVI FADJUKOFF

IDENTITY FORMATION IN ADULTHOOD



UNIVERSITY OF JYVÄSKYLÄ

Päivi Fadjukoff

Identity Formation in Adulthood

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Päivi Fadjukoff

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ABSTRACT

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Yhteenveto: Identiteetin muotoutuminen aikuisiässä

Diss.

The present longitudinal study addressed the rarely studied topic of identity formation in adulthood, following the Eriksonian-Marcian research tradition. Contextual- and personality-related antecedents of identity achievement, as well as implications of achievement to later well-being, were examined. The study was part of the Jyväskylä Longitudinal Study of Personality and Social Development, and utilized data collected by multiple methods at ages 14, 27, 36, and 42. The original sample consisted of 12 complete second-grade school classes (173 girls and 196 boys at age 8); participants at ages 36 and 42 were representative of the population of Finnish citizens born in 1959. The 100 women and 97 men with information regarding five domains (religious beliefs, political ideology, occupational career, intimate relationships, and lifestyle) from three identity interviews at ages 27, 36, and 42 formed the primary sample of the study. General identity development toward achievement was demonstrated, although great variation emerged across domains. Progress toward identity achievement was slower in men than in women. Adult identity achievement was preceded by high educational and occupational status of one's parents in the family of origin and the participant's school success in early adolescence. Moderately early transitions into adulthood in family life but later transitions to working life (associated with higher levels of education) preceded identity achievement. Furthermore, high achievement was related to personality styles typical of reflectiveness, low neuroticism, and intellectual interests. Identity diffusion formed a counterpoint to achievement, and was additionally related to a withdrawn personality style and a comparative delay or failure in establishing adult intimate and family relationships. Hence, the most evident determinants of identity formation were related to education and socio-behavioral strategies. Identity achievement anticipated higher personal control over development, generativity, and sociopsychological well-being in middle age.

Keywords: identity status, identity development, adult development, emerging adulthood, personality styles, well-being, longitudinal study

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suitable at that time for a PhD. Hence, I continued on other tracks. I was invited to coordinate the training and international development of the Niilo Mäki Institute and was later appointed its first Executive Director. I thank the staff of the NMI for that interesting and progressive time. My deep gratitude is addressed to Ph.D. (h.c.) Onerva Mäki, a great woman with admirable generosity, resourcefulness, and positive persistency, and to Professor Heikki Lyytinen, whose passionate, innovative research work, as well as his high values and unselfish aim of bringing help for the dyslectic children set a commendable example for any researcher.

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Through identity research regarding participants close to my own age, I have been able to reflect and learn a lot also about myself. As the research evidences, personal growth and development are not merely a privilege of adolescence. Today, I am in a turning point, and ready for new challenges that life will bring about.

Jyväskylä, October 2007
Päivi Fadjukoff

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ABSTRACT

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- II Fadjukoff, P., & Pulkkinen, L. (2006). Identity formation, personal control over development, and well-being. In L. Pulkkinen, J. Kaprio, & R. Rose (Eds.), *Socioemotional development and health from adolescence to adulthood*. (pp. 265-285). Cambridge: Cambridge University Press.
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1 INTRODUCTION

Identity is a complex psychosocial construct that has inspired numerous research approaches and emphases since its first introduction by Erik H. Erikson in 1950. According to Erikson (1968), identity formation is a central developmental task in adolescence, and it provides a person with a sense of sameness and continuity across time and place. Starting in adolescence, a gradual change takes place from being a recipient of care to being a provider. Such development requires a change in a view of oneself in the world (Marcia, 2007). Thus identity development has been primarily studied in adolescents, often among student populations. However, the identity formation process neither begins nor ends during the adolescent years (Kroger, 2007; Kroger & Haslett, 1987, 1991; Marcia, 1980, 1993a; Whitbourne & VanManen, 1996; Whitbourne, Zuschlag, Elliot, & Waterman, 1992). In fact, only about half of young people have been found to obtain an achieved identity by early adulthood (Kroger, 2000a, 2007). Although research interest in adult identity development has increased (e.g., Kroger 2000a, 2000b, 2002; Marcia, 2002), longitudinal studies extending into adulthood are rare and few empirical studies have searched for possible factors that account for adult identity formation. The present study addressed these issues, utilizing longitudinal data extending from adolescence to midadulthood on a heterogeneous sample.

1.1 Identity as a Psychosocial Construct

The concept of identity can be understood from many perspectives. It has been used within contexts of cultures, groups, and individuals by, for instance, historians, social scientists, and psychologists (Grotevant, 1998). Due to its multidimensionality, it has been defined in various ways, depending on the focus of the study. Kroger (2007), for example, introduces five general approaches to identity: historical, structural stage, sociocultural, narrative, and psychosocial, each with their specific strengths and limitations. Bosma (1995)

differentiates three main approaches to identity research: The Eriksonian-Marcian research tradition that emphasizes the developmental perspective; research on self-concept, ideal self-concept and self-esteem; and research on social identity deriving from group and category memberships, largely based on Tajfel's (1978, 1982) propositions. Côté and Levine (2002) regard ego, personal, and social identities as complementary in identity resolution. They propose a taxonomy in which social identity designates the individual's position(s) in a social structure, personal identity indicates concrete aspects of individual experience rooted in interactions, and ego identity refers to the fundamental subjective sense of continuity that is characteristic of the personality.

In spite of their emphases, these different research approaches share an understanding of identity as the dynamic balance between sameness and change, and between subjective and objective perspective (Bosma, 1995; Kroger, 2007). This is congruent with Erikson's original reflection: "The conscious feeling of having a personal identity is based on two simultaneous observations: the perception of the self-sameness and continuity of one's existence in time and space, and the perception of the fact that others recognize one's sameness and continuity" (1968, p. 50). In developmental psychology, the concept of identity accordingly refers to the way one defines him- or herself and the way one is recognized by others, and to one's subjective sense of coherence of personality and continuity over time (Grotevant, 1998).

The present study takes a developmental approach to ego identity, following the Eriksonian-Marcian research tradition in which identity is seen as a self-structure that develops through qualitatively different stages. In his eight-stage life cycle scheme of development, Erikson (1950, 1968) conceptualized identity resolution as a psychosocial stage and central task for adolescence that would enable and impact personal progress in the subsequent stages of intimacy, generativity, and integrity. As an inner structure, ego identity comprises both how experience is handled and what experiences are considered important (Marcia, 1993a). It is shaped by one's biological and physiological characteristics (e.g., gender, physical appearance), psychological characteristics (e.g., needs, interests, feelings, defenses), and the social and cultural environment that provide opportunities for expression and recognition of one's needs and interests (Erikson, 1968; Kroger, 2007). Marcia (1993a) distinguishes three aspects of ego identity: the structural or intrapsychic aspect related to overall ego strength and maturity, the phenomenological aspect (personal sense of coherence of one's identity, whether it is conferred or self-constructed), and the observable behavioral aspect, specifically actions related to identity explorations or commitments.

As noted by Côté and Levine (2002), Erikson's writings and later research on identity have been inspired by the Western culture, in which commitments can be based on individual exploration and choice rather than duty and obligation, and in which identity can thus be defined as "what we make of ourselves" (cf. Josselson, 1996). In Western societies, active identity

formation strategies have become increasingly important, as the societies have evolved from industrialized to late modern age, characterized by individualization, relativity of values, and restructuring of social systems (Côté & Levine, 2002; Furlong & Cartmel, 1997). This progress has also necessitated increasing identity research continuing to adult age. In some other societies, cultural expectations, gender, social class, or family can set tight limits to an individual's pathway and thus largely determine his or her identity.

1.2 Identity Status Approach

From the several approaches that have continued Erikson's initiative, the identity status paradigm, introduced by James Marcia (1966), has thus far been the most widely followed in research. Marcia (1980, p. 159) defined identity as an "internal self-structure encompassing self-constructed, dynamic organization of drives, abilities, beliefs, and individual history," and elaborated the concept in his identity status paradigm, proposing that identity develops through four qualitatively distinct stages: diffusion, foreclosure, moratorium, and achievement (Marcia, 1966, 1980, 1993a, 1993b). Later, hundreds of empirical investigations have been inspired by the paradigm in a variety of cultural contexts in diverse countries and continents (Berzonsky & Adams, 1999; Kroger & Green, 1996).

Marcia (1966, 1980) operationalized the identity statuses in terms of their position on two key dimensions: exploration and commitment. In identity *diffusion* (D), an individual does not have firm commitments, nor is he or she actively exploring to form them. In *foreclosure* (F), commitments are made without an exploratory phase, typically by identifying with parents or with other authorities. In *moratorium* (M), a person is actively exploring alternative identities without having yet made commitments. Finally, in identity *achievement* (A), relatively firm commitments are made following a period of exploration. An achieved individual has, for example, deliberately made decisions concerning his or her occupational preferences and lifestyle, after considering several options. Although the developmental ordering of the identity "stages" has been criticized (e.g., Côté & Levine, 1988; van Hoof, 1999), in further research, the identity status classes have been empirically validated and their patterns of development have been examined (e.g., Berzonsky & Adams, 1999; Kroger, 2000a, 2000b, 2003a; Marcia, 1993a, 1993b; Schwartz, 2001; Waterman, 1999).

The main purpose of Marcia, as he himself described (Marcia, 2007), was to produce an empirical tool to test the validity of Erikson's concept of identity, and to provide an indicator of the hypothesized identity structure. Accordingly, Marcia (1966) introduced a semistructured Identity Status Interview. The interview takes about 30 minutes and covers ongoing or past exploration, as well as personal commitments in selected identity domains meaningful for the

interviewee. The scale reliability based on interrater agreement has been found reasonably high, around 80% (Marcia, 1980). The interview method is continuously used in research, although other identity measures, typically questionnaire-type inventories relying on self-rating, have additionally been introduced and are also widely used (e.g., Ego Identity Process Questionnaire by Balistreri, Busch-Rossnagel, & Geisinger, 1995; Identity Style Inventory by Berzonsky, 1989; and Objective Measure of Ego Identity Status by Adams, 1999). Marcia (2007) pointed out that although a semistructured interview is time-consuming, it can give a more accurate indication of an individual's identity status, offers the possibility to ask additional questions when needed, and opens more possibilities for new findings, as compared to self-ratings.

Age-specific aspects of identity explorations and commitments have to be considered when examining identity (Waterman & Archer, 1990, 1993). The Identity Status Interview was originally designed for adolescents. Their commitments are largely anticipatory, and youths are mainly concerned whether chosen identity elements will match up with their expectations in the future, whereas adults have a broader scope of life experiences, are more knowledgeable, and are living with the concrete consequences of their choices. Since adults are in a position to implement their goals and values to reach solutions, coherent action in line with their commitments should be seen as confirming the identity categorization (Waterman & Archer, 1993). Furthermore, examining the level of identity exploration in adults cannot be restricted to present or recent exploration; instead, the researcher must consider whether an early crisis, for instance, in the late adolescence of the participant, has meaningfully contributed to present commitments, or whether his or her various life phases represent exploration of alternatives. A person's emotional dissatisfaction with his/her present commitments with no efforts to change the situation would imply diffusion rather than ongoing identity exploration.

The areas in which identity commitment may be manifested may change along with social conditions and an individual's identity interests (Marcia, 1993a). Therefore, the content areas for the study of identity status should be selected so as to ensure that the content is relevant to the participants during their particular chronological age, and have some variability of choice permitted by the particular culture (Kroger, 2003a; Marcia, 1993a, 2001). No general agreement exists about what a specific set of domains comprehensively compose the concept of identity. Instead, the number and areas of identity domains slightly vary within numerous studies and methods (van Hoof, 1999; Schwartz, 2001). Erikson (1950, 1968) considered occupational and ideological domains as essential to identity, and Marcia (1966) further divided the ideological domain into political and religious identity domains. Later, interpersonal domains were added (Grotevant, Thorbecke, & Meyer, 1982). The concept of identity therefore consists of both ideological and interpersonal aspects. An individual's identity formation is not uniform; identity development often proceeds at a different pace within different domains, depending on the individual's interests and environment (e.g., Adams, 1999;

Grotevant et al., 1982; Kroger & Haslett, 1991; Marcia, 1993a). According to Waterman and Archer (1993), an assignment to the identity diffusion status in any domain suggests that it is not salient for the respondent. In many studies, the ideological and interpersonal identities are looked at as two dimensions. However, empirical findings do not support that division (e.g., Goossens, 2001). Instead it seems that, toward middle adulthood, the areas of family (an interpersonal aspect) and work (an ideological aspect) unite into an integrated sense of identity, thus breaking down the relevance of this categorization (Whitbourne, 1986).

The research findings imply domain-specific gender differences in identity development: In the interpersonal domains, women have a tendency to exhibit higher identity achievement scores while identity diffusion and foreclosure is more typical of men (see, e.g., Lewis, 2003, for a detailed review) In line with this, focusing on interpersonal relationships and social concern in identity processes is characteristic for females, and on self-definition and autonomy for males (Cramer, 2000; Mallory, 1989). Young women have been found to be more family-oriented, better socially integrated, to have more intellectual interests but to score lower in exploration than men (Pulkkinen, 1996). Possibly related to gender roles, women may be more concerned about issues of care than of justice when facing moral perplexities (Kroger, 2007). In political identity, young men are more typically foreclosed and women diffused (Archer, 1989; Lewis, 2003; Pastorino & Dunham, 1997).

Although the individual identity processes and statuses may vary from domain to domain, common to the various research approaches is that the information measured by the separate domain areas is combined to form a general or overall identity status for each individual. There are alternative practices for generating the overall identity; as counterparts, a "sign" or indicative approach relies on the most salient domain(s) for the individual, viewing the domains as indicators of a global rating, whereas an "additive" approach gives equal weighting to all measured domains (Kroger, 2003a, 2003b). The indicative approach is most feasible within clinical settings or in interview-based research, whereas identity questionnaires typically yield an overall identity status (or separate overall exploration and overall commitment scores) as an arithmetical sum of domain ratings. As criticized by van Hoof (1999), it is not always adequately clarified in research reports how the concept of an overall identity status has been constituted, and no agreement on a single method to integrate the domains exists. On the contrary, based on an empirical comparison of overall ideological identity as opposed to domain-specific statuses (occupation, religion, politics), Goossens (2001) concludes that identity should not be considered a unitary construct and recommends the use of domain-specific identity statuses whenever possible. In some of the latest studies, instead of domains, the focus lies on elaborating the processes of exploration and commitment; Luyckx, Goossens, and Soenens (2006) emphasize identity as a continuously ongoing process, and distinguish between exploration of different alternatives ("exploration in breadth") and of the

current commitment (“exploration in depth”), as well as between primary commitment making and later identification with commitment.

1.3 Identity Formation in Adulthood

1.3.1 Developmental Processes

Identity development is at present not regarded as a straightforward process, but rather one that is far more complex (e.g., Archer, 1989; Josselson, 1996; Kroger, 1996; Marcia 1993b; Meeus, Iedema, Helsen, & Vollebergh, 1999; Stephen, Fraser, & Marcia, 1992). Individuals may move in and out of identity statuses in a manner characterized by variability and individual differences, rather than in a linear fashion as originally postulated. Yet, commitments made after a period of exploration, that is, identity achievement, indicate internalization of self-regulatory mechanisms and hence represent a more mature mode of psychosocial functioning (Bosma & Kunnen, 2001). Accordingly, the identity achievement status is seen the most developmentally sophisticated and mature status, and diffusion the least sophisticated, as postulated in Erikson’s (1950, 1968) theory (e.g., Berzonsky & Adams, 1999; Kroger, 2000a, 2000b, 2003a; Marcia, 1993a, 1993b; Schwartz, 2001; Waterman, 1999). Specifically, the importance of identity commitment (A or F) to personal well-being has been emphasized, and identity achievement and foreclosure representing different types of commitments can be considered psychologically the most adaptive identity statuses (e.g., Berzonsky, 2003; Meeus et al., 1999; Vleioras & Bosma, 2005).

With general agreement regarding the maturity of the identity statuses, the terms development and regression—referring to a hypothesized sequence (D-F-M-A) of identity formation, and theoretically unexpected shifts in the opposite direction—are widely used in longitudinal studies (e.g., Berzonsky & Adams, 1999; Waterman, 1999). In an extended longitudinal study of these processes, a challenge lies in the multitude of possible developmental trajectories. For instance, a follow-up including three episodes of testing on the four identity status categories (D-F-M-A) results in 64 possible distinct patterns of development. To enable the study of the hypothesized developmental sequence in longitudinal settings, Adams (1999; Berzonsky & Adams, 1999) suggested reducing the possible individual trajectories to five general patterns. These patterns are (a) Stability (e.g., A-A-A), (b) Development (e.g., D-M-A), (c) Regression and Development (e.g., F-D-A), (d) Development and Regression (e.g., D-F-D), and (e) Regression (e.g., F-D-D).

Recent reviews (Kroger, 2000a, 2007) have revealed that only about half of young people obtain an achieved identity by early adulthood. However, the findings of longitudinal studies into early and middle adulthood indicate that substantial identity development toward achievement is experienced by many

people during the adult years. Josselson (1996) found that women revise their identities in various ways between ages 21 and 43, for instance, through finding a more balanced life plan, if they had been uncommitted at younger ages, or by opening up to new experiences and to new aspects of themselves, if they had been foreclosed. The latter finding is consistent with Helson's (1992) conclusion that issues related to independent identity are likely to come up in female adult development during early middle age. Pulkkinen and Kokko (2000) reported a significant tendency for identity diffusion and moratorium to decrease and foreclosure and identity achievement to increase in both genders from age 27 to 36. Political identity, opposite of all other domains, moved toward increasing diffusion. Foreclosure and achieved identities were the most stable and moratorium the least stable identity category. Consistently with these findings, Cramer (2004) reported an increase in achieved, moratorium, and foreclosed identities, and a decrease in diffusion during the 24 years from early to late middle adulthood in both men and women, drawn from two longitudinal samples.

In addition to identity status movements toward achievement, a well-developed identity structure (i.e., an attained achieved identity) remains flexible and open to possible changes in relationships or circumstances during later life phases. Once made, identity commitments are not likely to be final but continue to change over time in both intensity and content (Bosma & Kunnen, 2001; Luyckx et al., 2006; Marcia, 2002). Therefore, successive identity decisions after adolescence are inevitable (e.g., Kroger, 2007; Marcia, 1980, 2001, 2002). However, as adults more rarely than adolescents face first-time-in-life decisions regarding their career, ideology, or intimate partnership, their patterns of identity development do not necessarily parallel those observed during adolescence and transition to adulthood (Waterman, 1999). Identity exploration, including readiness for change (moratorium), is specifically typical for early identity formation (Grotevant, 1987; Whitbourne, Sneed, & Skultety, 2002), whereas identity assimilation (i.e., holding to consistent views of the self) instead of identity accommodation (i.e., changing the self) has been found to increase with age (Sneed & Whitbourne, 2001; Whitbourne et al., 2002). The central processes of identity development specifically in middle and late adulthood include identity assimilation, identity accommodation, and identity balance (Sneed & Whitbourne, 2001; Whitbourne et al., 2002).

Persistent diffusion continuing to midadulthood, as well as regressive identity patterns (i.e., increasing levels of diffusion), have been found, particularly, in the political (Pulkkinen & Kokko, 2000) and religious domains (Kroger & Haslett, 1987, 1991). Those theoretically unexpected regressive shifts have been explained by later reconsideration of one's own autonomous role in the commitment process (Marcia, 1976; Pulkkinen & Kokko, 2000), or by the respondent's failing to report some significant piece of information, memory problems, or decrease in significance of a crisis experienced many years prior to the interview (Waterman & Archer, 1990). Marcia (2002) suggests that during critical, disequilibrating life events, an individual may temporarily regress to

earlier identity modes. The variability of a mature identity has been described in terms of moratorium-achievement (MAMA) cycles, emphasizing the role of exploration (Marcia, 2002; Stephen et al., 1992), or foreclosure-achievement (FAFA) cycles, indicative of shifting awareness of one's own agency in the commitment process, specifically in later early adulthood (Pulkkinen & Kokko, 2000). Valde (1996) noted that foreclosure could occur either before conscious exploration or after some degree of earlier exploration (re-foreclosure or closure) if a crisis had been too problematic or previously made commitments were no longer workable. He saw continuingly active openness to alternatives as an essential feature of genuine identity achievement.

In her detailed analysis on regressive development, Kroger (1996) distinguished between different types of regression that are likely to indicate different developmental processes and functions. Regressions of disequilibrium (e.g., movement from achievement to moratorium) often serve the developmental process as intermediate phases of the older ego structure before full construction of the next. They originate from internal or external sources of a moderate conflict. Regressions of rigidification (movement from a phase including exploration to a rigid closure) involve a narrowing of perspective, induced by internal personality factors, such as lowered tolerance for ambiguity or openness to experience, or external factors such as circumstances restricting access to a diversity of life experiences. Regressions of disorganization (movement from any status to diffusion) involve destructuring to a much less mature form of organization, incurred by overwhelming stress caused by a major trauma or loss. Kroger (1996) hypothesized that the latter two types of regressions would likely be rather stable and hence not beneficial in the developmental process.

Continuing identity development in adulthood has been associated with post-adolescence mean-level personality changes found in many studies, for instance, increases in agreeableness and conscientiousness, (e.g., Caspi & Roberts, 2001; McCrae, et al., 1999; McCrae et al., 2000; Rantanen, Metsäpelto, Feldt, Pulkkinen, & Kokko, in press). However, the research results are controversial regarding whether extraversion and openness to experience generally decrease (McCrae et al., 1999, 2000) or increase with age (Rantanen et al., in press). Clancy and Dollinger (1993) suggested that differences in personality variables between late adolescents and adults can be associated with maturing identities. Additionally, Costa, Herbst, and McCrae (2000) concluded that, in midlife, personality is generally largely uninfluenced by life events, although they see the events specifically related to one's specific identity issues, such as loss of a job or a change in marital status, to be most relevant for adult personality changes. However, based on their many findings on curvilinear personality change and individual variability between ages 21 and 75, Helson, Jones, and Kwan (2002) argued that personality change in adulthood cannot be regarded as mere maturation but is largely influenced by the period of life and social climate.

1.3.2 Contexts of Development

Theoretically, environmental contexts of development and individual characteristics form the two main sources of identity formation (e.g., Adams & Marshall, 1996; Berzonsky & Adams, 1999; Bosma & Kunnen, 2001; Grotevant, 1987). Since the developmental history of an individual is an important determinant in the identity developing process (Bosma & Kunnen, 2001), antecedents of adult identity development can be tracked in the earlier successive developmental periods. Both Marcia (1980, 1993b) and Grotevant (1983, 1987; Grotevant & Cooper, 1986) propose that child-centered parenting and individuated communication processes within the context of a caring, supportive atmosphere enable adolescents to explore and develop an achieved identity, while a very close relationship with no possibility of disagreeing with the parents fosters foreclosed identity, and authoritarian, insensitive parenting anticipates identity diffusion. The implications of early family background to adult identity development have not been systematically followed, even though the general positive implications of favorable family circumstances and good school success for positive adult adaptation have been affirmed in several studies (e.g., Magnusson, 1988; Masten & Coatsworth, 1998; Werner & Smith, 2001). Pulkkinen, Nygren, and Kokko (2002) found that childhood developmental background directly accounted for adult social functioning but a direct linkage with psychological functioning was not confirmed. It is possible that identity development plays a role in transferring the effects of these developmental antecedents to later adjustment in life.

Engagement in the identity exploration process is generally more likely to occur in cultures and environments that expose the individual to differing points of view, and in which variability of choice is permitted (e.g., Adams & Marshall, 1996; Berzonsky & Adams, 1999; Erikson, 1968; Grotevant, 1987; Kroger, 2007; Luyckx et al., 2006; Marcia, 2001; Waterman, 1982). Besides the family of origin, contexts of identity development during adolescence and transition to adulthood in any particular culture include various educational and work settings, as well as friends and romantic partners. The individual freedom of choice and identity exploration in these settings has dramatically increased the Western culture: The past decades have evidenced a vast increase in the number of lifestyle options available to the youth, as the societies have evolved from the industrialized to the late modern age, characterized by the restructuring of social systems and the rise in the relativity of values and individualization (e.g., Côté & Levine, 2002; Furlong & Cartmel, 1997). The timing of transitions to adult roles has been delayed and the youth are offered a lengthened period of exposure to various experiences, specifically related to work and love, temporarily without the obligation to take full adult responsibilities in social and family life. Arnett (2000, 2004, 2006) has named this lengthened time between adolescence and full adulthood as emerging adulthood, and argues that this age period from 18 to the late 20s offers the best opportunities for self-exploration as a prolonged stage of psychosocial moratorium.

The transition to adulthood is characterized by movement from the childhood or adolescent roles to those of adulthood. Five external markers of entering adulthood are typically used in research, namely 1) leaving the parental household, 2) the onset of marriage or cohabitation with a chosen romantic partner, 3) the onset of childbearing and parenting, 4) completion of schooling, and 5) entering the labor force in a full-time job (e.g., Arnett, 2004; Furstenberg, Rumbaut, & Settersten, 2005; Kokko, Mesiäinen, & Pulkkinen, 2006; Shanahan, Porfeli, Mortimer, & Erickson, 2005). Timing of these transitions vary across cultures and individuals. At present, increasingly later average timing of transitions into these adult roles is evident in all industrialized countries (Arnett, 2004, 2006; Fussell & Gauthier, 2005), including Finland. The consequent emerging adulthood and extended identity exploration period is experienced mostly positively by the young people themselves (e.g., Arnett, 2004). On the other hand, it is much more demanding to develop a sense of identity in the jungle of endless options than was the case in the premodern societies (Côté & Levine, 2002; Schwartz, Côté, & Arnett, 2005). The few studies about the implications of timing of transitions to adult social roles and the emerging adulthood period on identity development suggest that not all youth may be able to make use of this unstructured period of opportunities and potentials, but instead would benefit of external help in transitioning into adult roles and responsibilities (Osgood, Ruth, Eccles, Jacobs, & Barber, 2005; Schwartz et al., 2005). Based on these notions, emerging adulthood raises new challenges for identity research related to optimal timing and facilitating mechanisms of identity exploration and development.

Educational environments, such as universities, were seen by Erikson (1968) as "institutional moratoriums," as they offer students a diversity of occupational and ideological options, as well as encourage self-exploration and identity formation. Although college environments have been found particularly facilitative for adolescent identity formation (Luyckx et al., 2006; Waterman, 1993; Waterman & Archer, 1990) and, in particular, identity achieved women have been found more highly educated than other women (Helson, Stewart, & Ostrove, 1995), few studies exist about the measurable impacts of educational experiences on later identity advancement, or the mechanisms of those impacts (Kroger, 2007). Youth attending longer and more demanding education presumably have better cognitive capacities and better individualization strategies (Schwartz et al., 2005). It is presumable that early school success determines the number of options and the type of choices for later life in a typical Western society, hence education can be seen as a major "investment" that individuals make in their identity (Côté & Levine, 2002).

Kroger (2007) recently summarized what is known about the internal and external issues related to identity formation during adulthood. She concluded that early adults (ages 23–39 years) are typically preoccupied with issues related to intimacy and parenting as well as career consolidation. Their openness to exploration of further identity commitments seems to decrease from the years of late adolescence. In middle adulthood (ages 40–65 years), generativity-

related issues and increased introspection are typical and therefore new identity elements may emerge. Helson (1992) argued that aiming towards a more independent identity is specifically likely for women in their early middle age. In contemporary Western societies, a wider diversity in the roles and values among middle-aged people is possible than in any other phase of life: Same-aged people can, for instance, be grandchildren and have grandchildren, start new education or a career, as well as retire. However, during this age period, biological changes evidently affect one's physical appearance, and significant role changes in both family and work are typical (Kroger, 2007).

Studies concerning identity enhancing contextual factors during adult years are rare. One of the few studies was a longitudinal study from early to late middle adulthood by Cramer (2004), who found satisfaction in work, positive interpersonal relationships, and involvement in community, in addition to personality characteristics, predict progress toward identity achievement in adulthood. The finding can be related to the notion by Bosma and Kunnen (2001) that environmental support and factors that enhance openness to change are important determinants in the process of identity development. However, based on their retrospective study from adolescence to late middle adulthood, Kroger and Green (1996) conclude that social environments only set broad limits on probable behaviors, while the individual personality variables are of great importance in predicting one's course of adult identity development. Specifically, personal utilization of different adaptive processes has been highlighted by Cramer (2004) and Whitbourne and colleagues (2002).

1.3.3 Individual Characteristics

The role of individual characteristics in identity development has been theoretically elaborated by Grotevant (1987), who suggested that ego resilience, openness to experience, self-esteem, and self-monitoring promote identity development during the life span. Subsequently, Cramer (2000) found openness to experience and self-monitoring to actually promote the process of exploration, while ego resiliency and self-esteem were consequences of such exploration having taken place.

The associations between identity status and personality have been empirically studied mainly in student populations. A systematic study of associations between identity statuses and the "Big Five" personality dimensions (i.e., neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) was conducted by Clancy and Dollinger (1993), who demonstrated that identity achieved students scored higher than others on extraversion and conscientiousness and lower on neuroticism, thus expressing emotional adjustment. The achieved students also had high ego resiliency and self-esteem, and a low level of depression and anxiety in a study by Cramer (2000). The foreclosed students scored particularly low in openness (Clancy & Dollinger, 1993) and in individuality and creativity (Dollinger & Dollinger, 1997). Cramer (2000) further elaborated on the linkage between openness to experience and foreclosed identity, finding that their negative relationship emerged only for

men. Clancy and Dollinger (1993) found that noncommitted groups with identity moratorium and diffusion resembled each other, and characterized them as “sufferers” and “neurotic introverts who lack conscientiousness,” and thus constituted an opposite pole to identity achievement. This finding was confirmed by Cramer (2000), who elaborated it with gender differences: The diffused men demonstrated instability and anxiety, while in women diffusion was characterized by withdrawal, depression, and mistrust. The male moratorium was characterized by high openness to experience, anxiety and depression, but with low self-esteem and low self-confidence. These personality measures were not associated with moratorium identity in females. Cramer (2000) concluded that personality variables and their implications should be assessed separately for males and females.

In addition to analyzing separate personality characteristics or dimensions, identity development can be seen an integral part of personality (McAdams & Pals, 2006), which is related to broader behavioral personality subtypes. The personality styles found by Pulkkinen (1996; Pulkkinen, Feldt, & Kokko, 2005) in the JYLS data were different for males and females: The two main personality style clusters reflecting male adaptive adjustment were the Resilients, with high extraversion, positive life attitudes, and good social integration in terms of stable working career, and the Introverted, characterized by higher introversion, cognitive orientation, and conscientiousness than other men. The distinction between the two adaptive clusters emerging for women was associated with the female roles in society: The Traditionals had high family orientation, conscientiousness, and contentment with present achievements, while the Individuated were characterized by higher intellectual and cultural interests, reflectiveness, longer education, lower neuroticism, and lower family orientation than other women. Both male and female groups in conflicted adjustment were more neurotic, less agreeable, and had more negative life attitudes than their adjusted counterparts. They were less integrated into society and used alcohol more heavily than others. The Undercontrolled men were characterized by high nonconscientiousness and low family orientation, whereas the Brittle women were anxious, highly introverted, and less intellectually oriented than other women. Thus, female maladjustment appeared to be characterized by internalizing problems, whereas male problems were generally externalized.

Pulkkinen’s (1996; Pulkkinen et al., 2005) personality style clusters largely corresponded to those found earlier by Block (1971) for both males and females, and by York and John (1992) for midlife women. The personality styles for males also corresponded to the three personality types most commonly found in studies using instruments confined to the “Big Five” dimensions of personality (as summarized, e.g., by Asendorpf, Borkenau, Ostendorf, & van Aken, 2001; Costa, Herbst, McCrae, Samuels, & Ozer, 2002; Scholte, van Lieshout, de Wit, & van Aken, 2005). The personality type analysis by Block (1971) has been reanalyzed within the identity status framework by Whitbourne and Weinstock (1986). Based on this reanalysis, the personality styles related to adaptive

adjustment in both men and women can be associated with the committed identity statuses (achievement and foreclosure), while the personality styles reflecting conflicted adjustment would be characterized by noncommitted identity, either in diffusion or moratorium.

In line with Whitbourne and Weinstock (1986), Mallory (1989) generated hypothetical ideal personality characterizations for each of the four identity statuses. She asked 10 experts (with an extensive experience of conducting identity interviews) to describe the prototypical individual in each of the four identity statuses. The definitions were made using the personality characteristics in the California Q-set (Block, 1978). According to the agreement among the judges, identity achievers value their own independence; have clear, consistent personality and ethically consistent behavior; and are warm, compassionate and productive. Identity foreclosed persons conduct sex-appropriate behavior, are satisfied with themselves, are conventional and moralistic, and have conservative values. Persons with moratorium identity were characterized as valuing their own independence, being philosophically concerned, as well as anxious, rebellious, nonconforming, and introspective. Identity diffusion was associated with unpredictability, avoidance of close relationships, a brittle ego-defense system, reluctance to act, and lack of personal meaning.

Mallory (1989) found the male and female profiles to be quite similar for identity achievement, while the foreclosed status, in line with Cramer (2000), emphasized the sex role stereotypy in which interpersonal concern was typical for females and issues of power assertion for males. Gender differences were most observable in the moratorium status, where the female profile paralleled that of the achievers (warm, interesting, verbally fluent) but the male profile corresponded to identity diffusion (e.g., avoidance of commitments, feeling that life lacks meaning).

Helson and Srivastava (2001) argued that different personality prototypes and characteristics in early adulthood promote different paths of identity formation, which they saw as major integrative factor in adult development. The identity achieved prototype based on the California Q-set (Block, 1978; cf. Mallory, 1989) was associated with ambitiousness, resilient emotional regulation, and positive emotionality, whereas the foreclosed prototype was characterized by low openness and subdued emotions. Identity diffusion and moratorium, respectively, constituted the opposite poles to these prototypes. Kroger and Green (1996) found internal changes in perspective or important new awareness, without clear links to external presses, to be associated with one-half to two-thirds of all identity status changes across domains. The finding highlights the central role of individual personality variables and internal change processes in transitions to all identity statuses during adult years. The scarce research literature on personality and adult identity development additionally associates adaptive defense mechanisms, both alone and in conjunction with high intelligence (Cramer, 2004) and personally meaningful goals (Pulkkinen, Nurmi, & Kokko, 2002), with identity achievement.

1.4 The Role of Adult Identity Development in Personal Well-being

Erikson (1950, 1968) defined personal identity as an integrative intrapsychic structure, whereby its successful construction is an expression of mental vitality and experienced as a sense of psychosocial well-being. Several researchers (e.g., Archer, 1989; Brandtstädter & Baltes-Götz, 1990; Pulkkinen & Rönkä, 1994) agree on the basis of literature reviews and empirical findings that adaptive capacities are associated with a clear sense of identity and personal control over development. In identity theory, a well-developed identity is an expression of a healthy personality. Identity provides an individual with a sense of continuity and meaning in life (Kroger, 2007).

Careful planning and elaboration of an individual's developmental paths is critical for personal development and the attainment of a high quality of life (Brandtstädter, 2002). For example, Marcia (1993b) concluded in his review that identity achieved individuals believe that they can influence and choose the course of their lives, and are personally responsible for it, whereas the diffused individuals believe that the influential factors of their lives are mainly external of themselves. The moratorium and foreclosed persons stand between these two viewpoints. This notion associates identity with the construct of personal control over development, which has been described by Brandtstädter (1989, p. 96) as "an individual's sense of control over subjectively important areas of personal development." Brandtstädter (1984, 1989) differentiated cognitive, emotional, and behavioral aspects of personal control over development and their interrelationships. In parallel with models of learned helplessness and self-efficacy, the sense of personal control over development is—in addition to identity—another form of self-definition, essentially related to aspects of well-being (Brandtstädter & Baltes-Götz, 1990).

Adult well-being can be considered to cover both psychological and social well-being, as well as physical health. Psychological well-being has been conceptualized as including people's sense of whether their lives have a purpose, whether they are realizing their given potential, what is the quality of their ties to others, and if they feel in charge of their own lives (Ryff & Keyes, 1995). Social well-being covers challenges that people face as social beings, namely social integration, social contribution, social coherence, social actualization, and social acceptance (Keyes, 1998). For well-being, the individual's own experience of his or her physical health can also be critical. In addition to these general well-being indicators, generativity—the adult's concern for and commitment to guiding and caring for the next generation—has been identified as a key developmental task and precondition for psychological well-being, particularly in middle-age (Erikson, 1950, 1959). Its association with well-being has since been confirmed (see, e.g., McAdams & de St. Aubin, 1998; de St. Aubin, McAdams, & Kim, 2004). Marcia (2002) further depicts that identity achievement in late adolescence would lead to generativity in middle age,

whereas identity diffusion is more likely to be succeeded by a sense of personal and interpersonal stagnation when one feels isolated from others and finds difficulties in giving and receiving care.

The association between identity formation and well-being has been studied primarily among adolescents. An extensive review of the relationship between the identity statuses and psychological well-being in adolescence was conducted by Meeus et al. (1999), whose findings accentuated the importance of identity commitment, which was associated with personal well-being measures. Their sequence of identity statuses from low to high psychological well-being was moratorium, diffusion, foreclosure, and achievement. A slow development of identity resulted in a lower level of psychological well-being. Also the research related to identity processing styles (Berzonsky, 1989) suggested that reaching identity commitments through any mechanism is important in terms of well-being, while those who postpone their life choices in some key life domains are most likely to encounter problems in identity formation and personal well-being (e.g., Berzonsky, 2003; Nurmi, Berzonsky, Tammi, & Kinney, 1997; Vleioras & Bosma, 2005).

The few longitudinal studies considering identity outcomes in adulthood demonstrated positive implications of early identity achievement to later well-being. Kahn, Zimmerman, Csikszentmihalyi, and Getzels (1985) showed that identity achievement in arts undergraduates was predictive of happiness ratings up to 18 years later in both genders, and additionally for life satisfaction in men. Helson and Srivastava (2001) found identity processes at age 43 to mediate the relationship between early adult personality characteristics and positive mental health patterns in women at age 60. They saw a consolidated identity as a key feature of positive mental health. Identity integration at age 43 (A) was associated with personal growth and environmental mastery at age 60 (measured by scale of Ryff's, 1989), whereas identity acceptance (F) predicted environmental mastery but lower personal growth. Identity achievement was distinctly associated with generativity in middle age, as depicted by Marcia (2002). However, instead of independent examination of the identity statuses, identity prototypes in the study were based on the California Q-sort (Block, 1978) personality measures related to each identity status (Helson & Srivastava, 2001, Mallory, 1989).

In conclusion, although careful elaboration of an individual's developmental paths is critical for personal development and the attainment of a high quality of life (Brandtstädter, 2002), the implications of identity achievement to later well-being have not gained adequate attention in research.

1.5 The Aims of the Present Study

The primary purpose of the present study was to examine identity development from early to middle adulthood, and its antecedents and consequences. Both developmental history and contexts of development, as well as personality characteristics, were investigated. Additionally, the consequences of identity development to later well-being were examined. Because gender differences in domain-specific identity development (Archer, 1989; Lewis, 2003; Pastorino & Dunham, 1997) and the personality characters related to different statuses (Cramer, 2000) have been found in earlier studies, the patterns for men and women were compared in all analyses in order to confirm the generalizability of the findings across genders.

Study I

Is the paradigm of identity development from diffusion toward achievement applicable to identity development from young to middle adulthood?

We examined whether the theoretically hypothesized developmental shift along the sequence from diffusion toward achievement (Marcia, 1966) could be demonstrated from ages 27 and 36 to 42. In other words, we explored whether there was a significantly greater tendency for identity progression than regression, and for stability of committed identity than for stability of noncommitted statuses (see, e.g., Waterman, 1999). Based on some earlier findings, we assumed to find gender differences in the identity status distributions: women outnumbering men in achievement in the interpersonal domains (Lewis, 2003), and in diffusion in the political domain (Archer, 1989; Pastorino & Dunham, 1997). In addition, the stability of identity was expected to vary across status categories. Related to earlier research (Lewis, 2003; Pastorino & Dunham, 1997; Pulkkinen & Kokko, 2000), particular attention was paid to political identity in order to track whether the increase of identity diffusion and the decrease of salience in that domain continue when the participants face middle age.

Which domain areas typically are the most salient for adult participants and, hence, what is the scope of the concept of an overall identity status?

Overall identity should be based on individually meaningful domains (e.g., Marcia, 2001). Assuming that nondiffused status indicates that the domain is salient for the participants (Waterman & Archer, 1993), we expected to find the individually most meaningful domains to predominate the structure of, particularly, an overall committed identity status.

Study II

Are identity achievement and a sense of personal control over development empirically interrelated dimensions of self-definition?

Marcia (1993b) concluded that identity achieved individuals believe that they are able to influence and choose the course of their lives, whereas the diffused individuals view the influential factors of their lives as mainly external to themselves. In line with this review, we expected identity achievement and personal control over development to be interrelated concepts.

What are the implications of family circumstances and school success in early adolescence for identity achievement and personal control over development in adulthood?

Favorable developmental background was assumed to contribute to positive development in these two dimensions of self-definitions (Marcia, 1980, 1993b; Grotevant, 1983, 1987; Grotevant & Cooper, 1986). Specific interest was focused on the developmental background of adults with consistent identity diffusion.

Does positive progress in identity achievement or personal control over development contribute to positive outcomes in later personal well-being?

In line with the identity status theory postulating achievement as the most developmentally sophisticated status (e.g., Berzonsky & Adams, 1999; Marcia, 1966; Waterman, 1999), and consistent with models of learned helplessness and self-efficacy (Brandtstädter & Baltes-Götz, 1990), we expected higher identity achievement and perceived personal control over development to be associated with better adult well-being. We additionally expected identity achievement and perceived personal control over development to play a role in transferring the effects of developmental antecedents to later well-being.

Study III

Is the timing of the transition to adulthood related to one's level of identity achievement in early or middle adulthood?

As emerging adulthood is considered an extended period of identity exploration (Arnett, 2000, 2004), later entrance into the adult roles can be expected to result in a better-developed identity. However, we assumed that this was not true for endless exploration but that there would be an end point in the optimal time frame for transitions to adulthood (Levinson & Levinson, 1997; Osgood et al., 2005). Both external markers of adulthood and self-perceived adulthood at age 27 were considered in the study. We expected that several external markers together, rather than any single marker, could be related to self-perceived adulthood (Shanahan et al., 2005), and that internal self-perception of adult-

hood would be associated with identity achievement (Arnett, 2000, 2004). Additionally, we expected the level of education to be related to transition to adulthood variables (Kokko, Pulkkinen, & Mesiäinen, 2006).

Do the markers of adulthood in family life and working life have specific implications for their respective identity domains, that is, for intimate relationship and occupational identity?

We proposed that the external markers of adulthood would form two distinctive latent variables—one related to family life (i.e., moving to one's own home, initiating an intimate relationship, and having a child) and another related to working life (i.e., vocational certification and entrance to work). We expected these latent variables to have different implications for identity achievement, possibly specific for their respective identity domains, that is, for intimate relationship and occupational identity.

Study IV

Are there differences in adult identity formation between individuals characterized by different personality styles?

As identity is rooted in the overall personality (McAdams & Pals, 2006) and was embedded in the personality style at age 27, we expected that identity status differences between the personality styles would continue across adult years. We expected, first, that individuals with personality styles reflecting adaptive adjustment (Resilient and Introverted for men, and Traditional and Individuated for women) would be characterized by the most adaptive, that is, the committed identity statuses (A and F; e.g., Berzonsky, 2003; Mallory, 1989; Meeus et al., 1999; Vleioras & Bosma, 2005), whereas individuals with personality styles reflecting conflicted adjustment (Undercontrolled men and Brittle women) were expected to score highest in the noncommitted statuses of identity moratorium and diffusion (Clancy & Dollinger, 1993; Cramer, 2000; Mallory, 1989). Second, we expected that among the adapted clusters, the Resilient men and the Individuated women would score highest in identity achievement, whereas the Introverted men and the Traditional women would typically demonstrate low identity exploration and hence have a foreclosed identity. Among the conflicted clusters, the Undercontrolled men were expected to score highest in identity moratorium, and the Brittle women in diffusion. The hypotheses were based on the profiles of the personality styles. Third, we expected that differences between personality styles in identity statuses would remain stable across adult years.

2 METHOD

2.1 Participants and Procedure

This present study was part of the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS), begun and led by Professor Lea Pulkkinen (2006). The original sample consisted of 12 complete second-grade school classes, randomly selected for the study in 1968. Half of the classes were located in downtown Jyväskylä, in central Finland, and half in the suburban areas of Jyväskylä. All pupils in these classes, 173 girls and 196 boys, born in 1959, participated in the study; no initial attrition existed. At that time Finland was very homogeneous by ethnicity; the sample consisted of Finnish-speaking Finnish citizens, mostly Lutheran by religion.

Since the first data collection for the 8-year-old children, the JYLS study has extended to cover the participants' lives up to the age of 42, with major data collection waves at ages 14, 27, 36, and 42, each containing data collected by multiple methods. In the core of the present study was the information about identity formation, based on semistructured, tape-recorded interviews at ages 27, 36, and 42. The identity interviews were carried out as a part of longer interview sessions and conducted with 291 participants (79% of the original sample) at age 27 in 1986, with 277 participants (75%; two participants had died) at age 36 in 1995, and with 242 participants (67%; six participants had died) at age 42 in 2001. Information on the identity status at all three ages was available for 197 participants (53%; 100 women and 97 men). As described in Study I, the identity statuses of those participants interviewed only one or two times did not differ significantly from the identity statuses of the participants who were interviewed at all three ages. Since the main focus was on longitudinal follow-up of identity formation in adulthood, these 197 participants with full information from the three identity interviews formed the primary sample of the study.

The antecedents and implications of adult identity development were analyzed utilizing data derived from all major data collection waves of the JYLS study. Since there were several data collection methods in each data wave, and

all participants did not take part in every part of the study, the number of respondents in each variable slightly varied. Basically, there were more data available on each separate age level than longitudinal data concerning the entire process. Listwise exclusion of missing data was selected as it only marginally reduced the number of participants from the above mentioned 197: the number of participants in each study varied from 189 to 197.

The data at age 14 included information of the each participant's school success, derived from the grade point average taken from school archives, as well as information about the family background involving the parents' occupational status and parenting styles. These variables were based on the participants' recollections (measured at age 27) concerning themselves at age 14. At age 27, the used variables included the personality style clusters earlier extracted by Pulkkinen (1996), consisting of information from the interview session, a mailed Life Situation Questionnaire (LSQ), and two personality inventories. At the three ages of 27, 36, and 42, a Personal Control Inventory was presented to subjects as part of the LSQ. The Inventory had been developed by Pulkkinen, based on Brandtstädter's (1984) model. At age 42, information about the timing of life transitions was obtained using the Life History Calendar (Caspi et al., 1996), in which the occurrence, timing, and duration of various life events (from age 15 to age 42) were recorded. At age 42, the study additionally introduced several scales and measures related to the participants' well-being as part of the interview session or a medical examination. These included the Scales of Psychological Well-Being, developed by Ryff (1989), the Scales of Social Well-Being, constructed by Keyes (1998); the Generativity Scale by Ryff and Heincke (1983); the Psychosomatic symptom check-list developed by Aro (1988); as well as self-rated health.

Because the participation rate of the study has remained high throughout the years, no systematic attrition has been found in the sample (Pulkkinen, 2006). To detect a possible selection bias, the sample at age 42 has been compared with the nonparticipants (those who refused or could not be contacted). The findings demonstrate no difference between the groups in, for instance, school success, peer and teacher ratings (e.g., in social behavior) at ages 8 and 14, or smoking, use of drugs, or alcohol consumption at earlier ages (Pulkkinen, 2006). The sample was, at ages 36 and 42, representative of the population of Finnish citizens born in 1959 when compared with data derived from Statistics Finland in, for instance, marriage rate and family type, number of children, and employment status. At age 42, 53% of the participants were married in their first marriage, 8% were in their second or third marriage, 19% cohabited, and 20% were single. Eighty-five percent had children. The education of the male subjects was similarly distributed as in the age cohort, but the females had slightly more education than their age cohort. In fact, the women subjects had more education than men both in the sample and in the entire age cohort. Most (83%) of the participants were employed at the time of the interview; 73% of women and 80% of men were full-time employed.

Between the first two measurement points in adulthood, in 1986 and 1995, major political changes took place in Eastern Europe as a consequence of the collapse of the Soviet Union. Although Finland never belonged to the Socialist bloc, Russia and Finland share a lengthy border. Therefore, changes in Russia affected Finland's economy and political climate, as well as many individuals' beliefs regarding socialist ideology. Additionally, Finland joined the European Union in 1995. The national economy of Finland was in great difficulty in the early 1990s, as indicated by a high unemployment rate that increased from about 3% to 18% between 1990 and 1995. By 2001, the unemployment rate had fallen to about 9%. The most recent interviews were carried out during the winter and spring of 2001, before the World Trade Center attacks on September 11th.

2.2 Measures

The measures used in the present study are only briefly summarized in this section. Detailed information of the measures is provided in Studies I-IV.

The identity status measures in adulthood, based on interviews at ages 27, 36, and 42, were the core measures of the present study, and were included in its all parts. Various transformations of these measures (e.g., scales for the scope of each status, committed/noncommitted categorizations) and their patterns of change (e.g., categorizations of stability, regression, or progressive development) were developed and used according to the purpose and statistical procedures used in each study. The analyzed antecedents of adult identity formation were divided into measures of contextual variables and timing of transitions during developmental phases, and personality measures. Study II additionally focused on the relationship among and the implications of identity development to various well-being measures. An overview of the participants, variables and their reliability, as well as statistical methods used in the study is given in Table 1.

TABLE 1 Summary of the Variables and Methods Used in Studies I-IV.

Participants and Data Collection Methods	Variables	Statistical methods
Study I		
Cross-sectional: At age 27: 291 participants 142 women 149 men At age 36: 277 participants 133 women 144 men Age 42: 242 participants 120 women 122 men	At ages 27, 36, and 42: Variable-oriented analyses: Identity status on five domains (Marcia, 1966) - political identity - religious identity - occupational identity - lifestyle identity - intimate relationships identity	χ^2 test with Adjusted Standardized Residuals McNemar test for the significance of changes for two related samples NPar χ^2 test
Longitudinal: At ages 27, 36, and 42 197 participants 100 women 97 men	Person-oriented analyses: Identity development categories (Adams, 1999) from age 27 through 36 to 42: Stability, Development, and Regression	
Data collection:		
Semistructured interview at ages 27, 36, and 42		
Study II		
Longitudinal: At ages 27, 36, and 42 190 participants 98 women 92 men	Ages 27, 36, 42; Variable-oriented analyses: Identity Achievement-Diffusion Scale (IA-D) Person-oriented analyses: Three distinct extreme identity formation groups: Drifters, Achievers, and Identity Developers	Pearson correlations T-test for paired samples Structural Equation Modeling / Path Models using Multigroup and Maximum Likelihood (LISREL 8.7)
Data collection:		
School archives at age 14	Ages 27, 36, 42: Personal Control over Development Scale (PCoD)	One-way ANOVA with pairwise multiple comparisons (Scheffe's test)
Life Situation Questionnaire at ages 27, 36, and 42	M = 3.1; α = .72 at age 27 M = 3.1; α = .76 at age 36 M = 3.1; α = .80 at age 42	
Semistructured interview at ages 27, 36, and 42	Antecedents, age 14: Parents' occupational status Child-centered parenting (Kokko & Pulkkinen, 2000)	
Medical inspection at age 42	School success (grade point average)	

Outcomes, age 42:
 Scales of Psychological Well-Being
 (Ryff, 1989), $M = 3.2$; $\alpha = .75$
 Scales of Social Well-Being
 (Keyes, 1998), $M = 2.8$; $\alpha = .77$
 Generativity Scale
 (Ryff & Heincke, 1983),
 $M = 3.2$; $\alpha = .72$
 Psychosomatic symptoms check-list
 (Aro, 1988), $M = 1.5$
 Self-rated health

Study III

<p>Longitudinal: At ages 27, 36, and 42 189 participants 95 women 94 men</p>	<p>Ages 27, 36, 42: Identity Achievement-Diffusion Scale (IA-D)</p> <p>Antecedents: Self-perceived adulthood at age 27</p>	<p>χ^2 test</p> <p>T-test for independent samples T-test for paired samples</p>
<p>Data collection:</p> <p>Semistructured interview at ages 27, 36, and 42</p> <p>Life History Calendar at age 42</p>	<p>Timing of five external markers of adulthood (age in years, from the Life History Calendar; Caspi et al., 1996):</p> <ul style="list-style-type: none"> - first vocational certification conferral, - entering a full-time job, - moving from the parental home, - entering marriage or cohabitation, - having a child, - level of first certification 	<p>One-way ANOVA with pairwise multiple comparisons (Scheffe's test)</p> <p>Pearson correlations</p> <p>Structural Equation Modeling using Multigroup and Maximum Likelihood (LISREL 8.7)</p>

Study IV

<p>Longitudinal: At ages 27, 36, and 42 190 participants 98 women 92 men</p>	<p>Ages 27, 36, 42: Identity Achievement scale Identity Foreclosure scale Identity Moratorium scale Identity Diffusion scale (Pulkkinen & Rönkä, 1994)</p>	<p>Pearson correlations</p> <p>T-test for independent samples</p> <p>T-test for paired samples</p>
<p>Data collection:</p> <p>Life Situation Questionnaire, personality questionnaires at age 27</p> <p>Semistructured interview at ages 27, 36, and 42</p>	<p>Antecedents: Three gender-specific personality style clusters derived at age 27 (Pulkkinen, 1996):</p> <ul style="list-style-type: none"> - Resilient, Introverted, and Undercontrolled for men - Traditional, Individuated, and Brittle for women 	<p>Multivariate Analysis of Variance for Repeated Measures (MANOVA), 3 (cluster) \times 3 (time)</p>

2.2.1 Measures of Identity Formation

A semistructured identity interview, based on Marcia's (1966) identity status paradigm, was conducted at ages 27, 36, and 42 as a part of more extensive psychological interview sessions in JYLS. Trained interviewers (11 for age 27, 14 for age 36, and 17 for 42) collected data at each of the measurement points. The interviewers had an academic training in psychology or were graduate students in psychology. A specific interviewer training, including a rehearsal interview, was carried out for each collection period. Interviewers of the later samples were unaware of the previous identity statuses of the interviewees. As noted by Waterman and Archer (1990, 1993), and Whitbourne et al. (2002), measuring identity in adults differs from corresponding measurements in adolescents. For instance, instead of only examining the present level of exploration, it was considered whether an earlier crisis has meaningfully contributed to present commitments, or whether previous distinctly different life phases represented exploration of alternatives. The assessment was based on the participant's own reflections, and shifting awareness of one's own agency in the commitment process was possible (Pulkkinen & Kokko, 2000).

The interview included five domains: religious beliefs, political ideology, occupational career, intimate relationships, and lifestyle. The first three domains were included already in the original Marcian (1966) interview. Intimate relationships identity was seen an important interpersonal domain (cf. Grotevant et al., 1982), and lifestyle identity had been earlier added to identity assessment in EOM-EIS by Grotevant and Adams (1984). A series of questions were included about the personal opinions, and sources of these opinions. The opening questions were as follows: (a) "Do you have a personal relationship to religion?" (b) "Do you have a political opinion?" (c) "Do you have a conception of your occupational career?" (d) "Do you have an idea of what you expect from a close relationship?", and (e) "Do you have an idea of the lifestyle according to which you would like to live?" In addition, the participants were asked a series of questions about how they had acquired their views (e.g., from significant others or by personal exploration). On the basis of the interview, each participant's identity status was determined for each domain using two criteria: the firmness of personal commitment and the presence (+) or absence (-) of a period of exploration or identity crisis. The commitment dimension describes the person's firmness in adhering to a particular opinion. Using these dimensional categorizations, the four identity statuses were defined: 1 = diffused, 2 = moratorium, 3 = foreclosed, and 4 = achieved, and each participant was coded with one of the statuses for each identity domain. The statuses were first coded by the interviewers and, secondly, based on transcriptions, by a recoder unaware of the interviewer's coding. After the double coding, the coding differences were checked, discussed, and corrected if deemed necessary. The consensus coding was used for data analysis. At age 27, the percentage of full agreement between an interviewer and the second coder was 76.2%, at age 36 it was 87.8%, and 88.3% at age 42.

In Study I, the original nominal Identity Status categories were used for each domain; additionally the overall identity status was identified on the basis of what identity status was congruent for three or more domains. In addition, the identity development patterns across the three episodes of testing were classified in three distinct categories: *Stability*, *Progression*, and *Regression*, following the procedure suggested by Adams (1999; Berzonsky & Adams, 1999). As described in Study II, three distinct identity development groups were additionally extracted to highlight the sequences of different developmental pathways, each consisting of about 10% of the whole sample: the *Drifters* (the most consistently diffused group), the *Achievers* (the most consistently achieved group), and the *Identity Developers* (those with the most progression towards achievement). The longitudinal follow-ups of these developmental patterns were carried out following the person-oriented approach (e.g., Bergman, 2001; Magnusson, 1998, 2001).

To enable further longitudinal analyses requiring for ordinal or continuous variables, separate six-point scales (0 to 5) were produced (at ages 27, 36, and 42) for each of the identity statuses (Diffusion, Foreclosure, Moratorium, Achievement) on the basis of the number of domains in which the individual was in a particular status. These scale scores illustrated the relative position of the participants in each specific status, while the general mean scores changed with time. The procedure was the same as used earlier by Pulkkinen and Rönkä (1994), and gave equal weighting to all measured domains through the additive approach (Kroger, 2003a, 2003b). These four identity status scales were used in Study IV. As described in Study II, Identity Diffusion and Achievement scores were highly negatively correlated at each age level, as these statuses represent the opposite ends of the developmental identity continuum. Hence, a new Identity Achievement–Diffusion (IA–D) scale was formed for identity at each age level, by subtracting the number of domains in diffusion (0–5) from the number of domains in achievement (0–5). The range of the IA–D scores was from -5 to +5, that is, from diffusion in all studied five domains to achievement in all of these domains. The IA–D scales were used as continuous variables in the Structural Equation Models in Studies II and III.

2.2.2 Measures of Antecedents of Adult Identity Development

Three developmental antecedents of identity development from age 14 (but derived at age 27) were included in Study II. The parents' occupational status in the family of origin was defined using information from both the father's and mother's occupational status, with the higher occupational status of the two used as an indicator for categorization into blue collar, lower white collar, and higher white collar occupations. The second family background measure, child-centered parenting (Kokko & Pulkkinen, 2000), was related to family atmosphere and parenting practices. The variable was based on participants' recollections (measured at age 27) of parenting practices and the home environment at age 14, and formed by computing an averaged score of five

dichotomized variables. A separate analysis with a smaller sample has confirmed a good correspondence between recollections at age 27 and prospective data collected at age 14. Third, the school success of each individual was measured by the grade point average (GPA), based on school archives.

The timing of the transitions to adulthood was analyzed as an antecedent to adult identity development in Study III. It was operationalized by five external "first-time" markers of adulthood: moving from the parents' home, the onset of marriage or cohabitation in an intimate relationship, having the first child, first vocational certification conferral, and entrance into a full-time job. In each of the five areas, the age of the transition was coded based on the Life History Calendar (adapted from Caspi et al., 1996) that was filled in during the interview at age 42 (Kokko, Mesiäinen, & Pulkkinen, 2006). In addition to the age, the level of the first certification conferred was coded (0 = no certifications, 1 = vocational school, 2 = vocational college or polytechnics, and 3 = university certification). Subjective conceptions of one's own adulthood were assessed at age 27 by an open question included in the interview: "How do you think being an adult differs from being an adolescent?" Even though the question was posed generally, most people (86%) did answer it in reference to themselves because of the personalized context in which the question was posed. The responses were dichotomized into 0 = does not clearly identify himself/herself an adult, and 1 = defines himself/herself as an adult.

In addition to the interview session, a mailed Life Situation Questionnaire and two personality inventories (Eysenck Personality Questionnaire, Eysenck & Eysenck, 1975; and Sensation Seeking Scale, Zuckerman, 1979) were used at age 27 in order to extract the personality styles for men and women. The composition of the personality style variables and clusters is described in earlier publications (Pulkkinen, 1996; Pulkkinen et al., 2005). Following the three component triangular model (Pulkkinen, 1992a), variables from the age-27 data were grouped into three components of personality style: personality characteristics (15 variables), life orientation (20 variables), and behavioral activities (34 variables). From these variables, 12 composites were extracted through factor analyses. Ward's hierarchical clustering technique was used for extracting personality styles from the generated 12 composite variables list. Three major gender-specific clusters (first- and second-order clusters) were compared in the present study. These three main personality styles were different for males and females. For men, the three major clusters were the *Resilients* and the *Introverted* for adaptive adjustment, and the *Undercontrolled* for conflicted adjustment. For women, the respective clusters were the *Traditionals* and the *Individuated* for adaptive adjustment, and the *Brittle* for conflicted adjustment.

2.2.3 Measures of Adult Well-being

Implications of identity development were assessed in Study II in terms of several psychosocial well-being and physical health measures, collected at age 42: The short version of the Scales of Psychological Well-Being (Ryff, 1989; Ryff & Keyes, 1995) included six components of positive psychological functioning: Self-Acceptance, Personal Growth, Purpose in Life, Positive Relations with Others, Environmental Mastery, and Autonomy. It consisted of the total of 18 items (3 items per scale) such as "I am quite good at managing the many responsibilities of my daily life," and "Maintaining close relationships has been difficult and frustrating for me" (reversed). The response scale varied from 1 (*strongly disagree*) to 4 (*strongly agree*).

The Scales of Social Well-Being (Keyes, 1998) consisted of five dimensions of positive social functioning, representing challenges that people face as social beings, namely social integration, social contribution, social coherence, social actualization, and social acceptance. The scale was composed of the mean of 15 items such as "People who do a favor expect nothing in return," "I feel close to other people in my community," and "I cannot make sense of what's going on in the world" (reversed). The response scale varied from 1 = *strongly disagree* to 4 = *strongly agree*.

The Generativity Scale (Ryff & Heinicke, 1983) was composed as a mean of 10 questions, such as "I am concerned about providing guidance and direction to younger people," and "The average person does not have the time to be concerned about the welfare of others" (reversed). Responses for each question were again given on a scale from 1 = *strongly disagree* to 4 = *strongly agree*.

For assessing physical health, two measures were taken as a part of the medical examination at age 42. Self-rated health was measured by the question, "How would you describe your health now?" with response options ranging from 1 = *very good* to 5 = *very bad*. Psychosomatic symptoms were measured as a sum score of 19 items (e.g., headache, trembling hands, muscular pain) taken from the symptom check-list of Aro (1988). The occurrence of each symptom during the previous six months was rated on a scale from 0 = *never* to 4 = *very often*.

In addition, the perceived personal control over development was measured as part of a mailed questionnaire at ages 27, 36, and 42 using the Personal Control Inventory developed by Lea Pulkkinen (Pulkkinen & Rönkä, 1994). The inventory was based on Brandtstädter's (1984, pp. 18–19) model of the structure and interrelationship of cognitive, actional, and emotional orientations, and consisted 18 items such as, "I am able to make my goals come true." Responses were provided based on the following scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*. For the purposes of the present study, a composite Personal Control over Development measure (PCoD) was constructed by averaging the scores of four Personal Control Inventory subscales: Self-Confidence, Social Support, Low Self-worth (reversed), and Accusation of Others (reversed). This procedure gave equal weight to each dimension, regardless of the number of items covered by the

subscale. Due to difficulties in interpreting the role of Contentment in the longitudinal setting, this dimension of the inventory was excluded from the PCoD scale as described in Study II.

2.3 Methods of Data Analysis

All analyses were carried out for men and women separately to confirm the generalizability of results to both genders. For both cross-sectional examinations and longitudinal descriptive analyses of the identity formation patterns, the original nominal variables were used, and the methods of analysis then consisted of categorization of the variables (the overall identity status, committed/noncommitted categorization) and their sequences (Stability, Development, and Regression; Adams, 1999), χ^2 tests, the Adjusted Standardized Residuals, and McNemar tests for the significance of changes for two related samples. Siegel (1988) particularly recommends the McNemar test for “before and after” designs, in which people serve as their own controls, and the when variables are in either a nominal or ordinal scale. One-way ANOVA with pairwise multiple comparisons (Scheffe’s test) was used for comparative purposes.

To tackle research questions related to antecedents and implications of adult identity development, more sophisticated statistical analyses were used. The Identity Achievement-Diffusion (IA-D) scale was formed for research questions specifically contrasting identity achievement and diffusion (Studies II and III). These continuous identity variable transformations allowed the use of structural equation modelling (SEM) with the LISREL 8.7 program (Jöreskog & Sörbom, 1996). Multigroup analyses were used to discover possible gender differences in the studied links. The method of estimation was Maximum Likelihood in both studies. In Study II, a path model, a subtype of SEM that includes measured variables only, was computed based on the matrices of polychoric correlations calculated separately for men and women. The model related to antecedents and implications of identity achievement was structured according to the time span: The developmental background variables at age 14 were set as explanatory variables, and the identity measure (IA-D scale, at ages 27, 36, and 42) as well as adult wellbeing measures at age 42, were positioned as dependent variables. In Study III, the SEM additionally included latent variables (measurement model) and was based on covariance matrices, again calculated separately for men and women.

The model construction was based on theoretical assumptions derived from earlier research, and on modification indices (criteria $> |8|$ for adding a parameter), and t values (criteria $> |1.96|$), nonsignificant parameters were excluded) of the single parameters. The overall fit of the estimated models was evaluated using a χ^2 test. The fit indices used to assess different aspects of the

model (Bollen & Long, 1993) included the root mean square of approximation (RMSEA), goodness of fit (GFI), and comparative fit index (CFI).

The Multivariate Analysis of Variance for Repeated Measures (MANOVA) was used to compare the three male and female personality style clusters extracted in a person oriented approach at age 27 by Pulkkinen (1996) in their identity outcomes in the four Identity Status Scales (Study IV). This 3 (group) \times 3 (time) analysis used the three clusters of personality styles as a between-groups variable and time as a repeated measure, enabling the investigation of (a) the level changes of the identity status variables from ages 27 and 36 to 42, (b) the differences in the mean levels of these variables between clusters, and, (c) the interaction of these effects (i.e., moderating effects; Baron & Kenny, 1986). As the Identity status scales were interdependent, each of the Identity status scores was treated separately as the dependent variable. The significance of group-specific mean level changes related to the interaction effects were further scrutinized using the *t* test for paired samples.

In the person-oriented approach (e.g., Bergman, 2001; Magnusson, 1998, 2001), the longitudinal data were used to find groups of participants that shared similar features in their identity formation from young to middle adulthood (Studies I and II). Significance of the change was measured with NPar χ^2 test expecting all categories equal (Study I), and the groups with different identity formation pathways were compared by one-way ANOVA and pairwise multiple comparisons (Scheffe's test; Study II).

3 MAIN RESULTS OF THE ORIGINAL STUDIES

Study I

Fadjukoff, P., Pulkkinen, L., & Kokko, K. (2005).

Identity processes in adulthood: Diverging domains.

Identity: An International Journal of Theory and Research, 5, 1-20.

The identity status distributions across five domains (political, religious, occupational, lifestyle, and intimate relationships identity) at ages 27, 36, and 42 were examined, and the patterns of identity formation were followed through the three assessments within each of these domains, comparing the results for men and women. With both cross-sectional and longitudinal methods, the data implied an increase of commitment with age, although great variability existed across the identity domains at each age level. The foreclosure identity increased from age 27 to 36, whereas identity achievement increased between the ages of 36 and 42. By consequence, achievement was the most predominant category for both genders at age 42. Active, ongoing exploration at ages 36 and 42 was rare for both genders in any domain. Generally, women outnumbered men in the rate of achievement, most consistently in intimate relationships. In the domains of political and occupational identity, men outnumbered women in identity foreclosure. The significance of these gender differences was greater at older age levels.

Although the developmental pattern following the hypothesized sequence of diffusion-foreclosure-moratorium-achievement was the most frequent developmental sequence for both men and women in most domains, the scheme did not encompass every domain: The most usual pattern of development in political identity was regressive towards diffusion for women and foreclosure for men. In religious identity the stabile, regressive, and progressive trends were equally represented. The rates of stability (remaining in the same status category through three measurement points) varied from 9% to 31%, depending on the domain, with the lowest stability emerging for occupational

and highest for religious identity. Diffuse status was more likely to remain stable in the ideological identities, while the committed statuses were the most stable in the other three domains. The overall view of identity status developing towards achievement from early to middle adulthood was thus typically overwhelmingly based on the three domains of occupational, intimate relationships, and lifestyle identities. The result indicates that the domains demanding concrete, everyday actions in work and family are the most actively processed and hence the most salient focus of identity formation for middle-aged adults. Incongruent diffusion was frequent in the two ideological domains for both men and women, and their contrast to other domains increased with age.

Study II

Fadjukoff, P., & Pulkkinen, L. (2006).

Identity formation, personal control over development, and well-being.

In L. Pulkkinen, J. Kaprio, & R. Rose (Eds.), *Socioemotional development and health from adolescence to adulthood* (pp. 265–285). Cambridge, UK: Cambridge University Press.

Study II was designed to analyze the processes and implications of one's sense of identity, and the self-perceptions of autonomous control over development. First, we analyzed the development in and the interrelatedness of these two dimensions from early adulthood on. Second, we investigated the implications of parents' occupational status, their child-centered parenting, and the participant's own school success in early adolescence on identity achievement and personal control over development in adulthood. Finally, we analyzed whether positive progress in identity achievement or personal control over development contributed to positive outcomes in later personal well-being.

Personal growth in both identity and personal control over development was relatively stable and included general progression toward identity achievement. Although the dimensions were not firmly intercorrelated, the relative strength of identity achievement at age 36 preceded a strong sense of personal control over development at age 42. The antecedents of these two dimensions partially differed: Identity development toward achievement was fostered by a high occupational status of parents in the family of origin and by good school success in early adolescence. Child-centered parenting did not predict identity achievement in adulthood but, together with one's school success, it supported the sense of personal control over development. Personal control over development was not related to the parents' occupational status. Identity achievement significantly predicted later social well-being and generativity from age 27 on, thus validating a developmental linkage between the psychosocial stages of identity and generativity. However, higher identity achievement promoted more favorable psychological well-being outcomes only modestly, (explaining 8% of the variance). In parallel, a higher sense of personal control

over development in preceding adulthood accounted for 50% of variance in psychological well-being. Psychological well-being emerged as a central element in well-being, having strong links to social well-being, generativity, and to a low level of psychosomatic symptoms, which, in turn, correlated with low self-rated health.

The results were confirmed with a person-oriented subgroup analysis: The subgroup demonstrating the most consistent identity diffusion, the Drifters, had the lowest school success. Conspicuously contrary to the other defined groups—the Achievers (demonstrating the most consistent identity achievement across time) and the Identity Developers (with sharp identity development from early to middle adulthood)—none of the Drifters had parents in higher white collar occupations. Furthermore, the Drifters had poorer outcomes than the other two groups in psychological and social well-being, as well as in generativity. However, the Identity Achievers did not differ in developmental background or adult well-being from the Identity Developer group.

Study III

Fadjukoff, P., Kokko, K., & Pulkkinen, L. (2007).

Implications of timing of entering adulthood for identity achievement.
Journal of Adolescent Research, 22, 504–530.

The main aim of Study III was to investigate whether the timing of transition to adulthood was associated with one's level of identity achievement. As hypothesized, transitions related to family and working life composed two distinctive latent variables. The timings of the external markers of adulthood were not related to self-perceived adulthood in this study. However, the latent variables concerning entering adult family and working roles were differently related to identity achievement: Contradictory to the idea of a lengthened emerging adulthood period as an optimal period for identity exploration, reaching the adult family roles (moving from the parental home, entering marriage or cohabitation, having a child) at an earlier age was in both genders associated with higher identity achievement in adulthood. A delay or failure to enter the adult family roles was related to lower identity achievement. Additionally for women, self-perceived adulthood at age 27 was associated with a stronger sense of identity during adulthood. Hence, still not feeling like an adult after that age would not seem beneficial for a woman's identity development. The multitude of family-related transitions took place within the age frame from about 18 to the late 20s in the study. Elaborating the findings specifically in the domain of intimate relationships identity also revealed possible disadvantages of overly early transitions related to family life. These findings referred to the possible curvilinear nature of the relationship between the markers of adulthood in family life and identity achievement. The earliest entrance to adult roles was characteristic of the foreclosed intimate

relationships identity, whereas achievement was associated with slightly later transitions. Hence, the earliest transitions did not appear optimal for identity achievement.

Contrary to the above results regarding family life, a prolonged transition to working life (determined by the timing of one's first vocational certification conferral and entering a full-time job) yielded positive effects on identity achievement. However, the analyses could not differentiate between the intertwining impacts of the length and level of education: The higher the level of education, the later was the entrance into the adult roles in working life. Hence, the mechanisms of the impact of this prolonged timing on identity achievement could be related, for instance, to selective issues or educational contexts and should be further studied. The timing of transitions to working life was not specifically related to any status in the domain of occupational identity; the sole difference pointed out that men with achieved occupational identity at age 27 had entered full-time work two years later (at age 21) than non-achieved men.

Study IV

Fadjukoff, P., Pulkkinen, L., & Feldt, T. (2006).
Role of personality styles in identity formation.
Manuscript submitted for publication.

Three major gender-specific clusters extracted separately for men and women at age 27 (Pulkkinen, 1996) were compared in the study in their identity formation from age 27 to 36 and to 42 years. For men, these clusters were the Resilients and the Introverted for adaptive adjustment, and the Undercontrolled for conflicted adjustment. For women, the respective clusters were the Traditionals and the Individuated for adaptive adjustment, and the Brittle for conflicted adjustment. The personality style clusters were found to be meaningful subgroups and partial moderators of identity formation in adulthood. Moderator effects as revealed by the interaction of personality styles with the age of measurement were detected in identity moratorium for both genders, and in identity achievement for men. Among men, moratorium decreased, particularly, in the Undercontrolled, who additionally reached the high level of identity achievement of the Resilients by age 42, hence demonstrating substantial, although delayed, identity development. Among women, moratorium was consistently low in the Traditionals, while higher at age 27 and thereafter decreasing in the other women, specifically in the Individuated.

Other significant findings concerned more consistent differences between the clusters over ages. The personality styles representing adaptive adjustment with positive life attitudes, high intellectual interests and reflectivity—Resilient men and Individuated women—were characterized by continuously high identity achievement. Specifically, the Individuated women stood out as the

most identity-achieved group, significantly outscoring the other women. However, the nonconscientious, impulsive, Undercontrolled men, who had high levels of exploration and experience seeking, reached the Resilient at age 42. The Introverted men outscored other men in identity foreclosure at age 42. Moreover, they outscored the other men in identity diffusion throughout the studied adult years. The Traditional women scored highest in foreclosure in young adulthood but their identity achievement was continuously increasing, and, correspondingly, their level of foreclosure decreased to the level of the other groups by age 42. Both groups were characterized by low experience seeking and high conscientiousness. In women, the anxious, highly introverted Brittles exceeded the Individuated in diffusion. In moratorium, the group differences disappeared due to the moderator effect by age 42 when the level of moratorium was low for all groups.

Hence, due to their high level of diffusion, the Brittle women and the Introverted men did not reach identity achievement to the same extent as other clusters. This finding, together with the unexpectedly positive identity development of the Undercontrolled men, indicates that behavioral strategies including withdrawal and anxiety were more risky to the individual's positive identity development than undercontrolled behavior.

4 DISCUSSION

Studies I-IV yielded new information regarding the rarely studied issues of identity formation from early to middle adulthood, the contextual and personality related antecedents of identity formation, and the implications of identity development to later well-being. Study I demonstrated general identity development toward achievement from young to middle adulthood, in line with identity status theory, but additionally revealed great variation in identity development and its salience across domains. In Study II, participants' identity achievement in adulthood was associated with the higher occupational status of their parents and the participants' own school success in early adolescence and, in Study III, with moderately early transitions to adulthood in family life but with later transitions to working life, accompanied by a higher level of education. Additionally, self-perceived adulthood at age 27 was associated with adult identity achievement in women in Study III. Study IV demonstrated that personality styles predicted identity formation in adulthood: Adaptive adjustment with positive life attitudes and reflectivity, as well as openness to experience, preceded higher identity achievement outcomes, while withdrawal and anxiety predicted persistent identity diffusion. Additionally in Study II, identity achievement in one's earlier adulthood history was shown to promote favorable outcomes in psychological well-being, social well-being and generativity, thus validating a developmental linkage between the psychosocial stages of identity and generativity.

4.1 Identity Formation in Early and Middle Adulthood

The results showed that at age 27, during their period of emerging adulthood or the first years of early adulthood, the majority of the participants had not reached the achievement status in any domain. At this age, 75% of the participants regarded themselves as adults, with self-perceived adulthood being related to identity achievement in women. Many participants were

preoccupied with exploring their occupational goals; the percentage for occupational moratorium was several times higher than the corresponding percentage in the other domains. Lifestyle identity was the second-highest domain in the degree of current exploration, although the mode was foreclosure for both genders. The finding is in parallel with Arnett's (2000, 2004, 2006) proposition on emerging adulthood as an extended period for exploration, specifically in the areas of love and work, often leading to postponed identity resolutions, and with Kroger's (2007) recapitulation that early adults are typically preoccupied with issues related to their everyday responsibilities, such as intimacy and career consolidation.

Further, it was found that in the later years of early adulthood, at age 36, the great majority of participants had made identity commitments in the domains of occupational identity, intimate relationships, and lifestyle, either via foreclosure or achievement. In spite of the earlier, rather high rate of identity moratorium, theoretically leading to achievement, identity foreclosure turned out to be at its highest level at age 36 in both men and women. According to Kroger (1996), movement from a phase including exploration to a rigid closure involves a narrowing of perspective, induced by internal personality factors, such as lowered tolerance for ambiguity or openness to experience, or external factors such as circumstances restricting access to a diversity of life experiences. At age 36, foreclosure increased most distinctly in the domains of occupational identity, intimate relationships, and religious identity. As most participants were at that time parents to small children, normative age-graded influences (Baltes, Lindenberger, & Staudinger, 1998) could have precipitated identity transitions toward foreclosure, specifically in intimate relationships and religious identity. The new phase in life, including learning to interact as parents and the common practice of having their babies baptized (most Finns belong to the Lutheran church), may have led the participants to re-close (Valde, 1996) and rely on traditional values in these domains. This interpretation was supported by the simultaneously low levels of identity diffusion. Because there were several years between the measurements, all changes could not be tracked, and the finding could also have reflected the suggested foreclosure-achievement cycles in later early adulthood, resulting from shifting awareness of one's own agency in the commitment process (Pulkkinen & Kokko, 2000). Alternatively, increasing foreclosure might have indicated history-graded influences on development (Baltes et al., 1998), with people turning into foreclosure during unstable times. The beginning of the 1990s was an exceptional historical time in Finland, following the collapse of the Soviet Union in 1991. The sudden major political changes in the gigantic neighboring country affected Finland, for instance, by triggering an economical recession with high employment rate in Finland, and confusion in ideological thinking in many people. Marcia (2002) argues that during disequilibrating life events, an individual may temporarily regress to earlier identity modes.

The findings for age 42 showed that achievement emerged as the most typical identity status in occupational identity and intimate relationships for

both genders, as well as in religious and lifestyle identity for women. Consistent with Whitbourne's (1986) findings, it appeared that the domains that demand concrete, everyday actions in work and family were the most salient for middle-aged adults. About half of the women and a third of the men in the present study had an achieved overall identity at age 42 (by being achieved in majority of the five domains, an adaptation of the additive approach to overall identity; Kroger, 2003a, 2003b). The number of those who had reached an achieved identity in at least one domain by age 42 was 89% for women and 76% for men (approximating the overall identity according to the indicative approach; Kroger, 2003a, 2003b). The results demonstrated that identity moratorium generally decreased simultaneously with increasing achievement in both men and women, reflecting the underlying process of identity development in line with the identity status theory (Marcia, 1966, 1980), and consistent with earlier research on postadolescence identity development (e.g., Kroger & Haslett, 1987, 1991; Pulkkinen & Kokko, 2000; Whitbourne & VanManen, 1996). The hypothesized sequence (D-F-M-A) was the most frequent developmental trend for both men and women in the domains of occupational identity, intimate relationships, and lifestyle identity. In these domains, the committed statuses (A and F) were the most stable ones. For both genders, the positive development of the overall identity was typically overwhelmingly based on these three domains.

The results further discovered that the ideological domains of political and religious identity composed a contradiction to the general view of increasing achievement, demonstrating more regressive or stable development compared to other domains, incongruent identity diffusion, and, hence, low salience among the adult participants compared to the domains involving current exploration or commitment (Waterman & Archer, 1993). The difference between the two ideological domains, and the domains of occupational, intimate relationships and lifestyle identity, was underlined by the fact that, in the ideological identities, diffused identity status was more likely to remain stable, while in the other three domains the committed statuses (F and A) were the most stable ones. Political and religious identities often remained incongruently diffused even when the individual was committed in most other identity domains, and their contrast to other domains increased with age. High rates of diffusion in the political domain have been earlier reported for younger age groups (e.g., Lewis, 2003; Pastorino & Dunham, 1997; Pulkkinen & Kokko, 2000); the present finding indicates that the salience of politics does not increase with age. The large proportion of diffusion in ideological identities could also be seen as a characteristic feature of the late-modern or postmodern society. Postmodernists like Preston (1997) see identity as unstable, flexible, and adapting, according to convenience at that time. Additionally, Wallerstein (1996) argued that the heretofore dominating political ideologies are losing their meaningfulness in the Western societies. It is possible that the high diffusion in these domains in the present study reflected history-graded influences (Baltes et al., 1998); after the highly increased terror threat following the attacks in 2001,

the ideological issues might have become more salient for people around the world.

The gender differences refer to a slower identity commitment and progress toward achievement in men than in women. Women generally exceeded men in the rate of achievement, most consistently in intimate relationships, a finding congruent with earlier research (e.g., Lewis, 2003). At age 27, women outscored men in overall identity foreclosure, whereas men were higher in identity diffusion. The differences leveled off at age 36, but at age 42 women were significantly higher in identity achievement and men in foreclosure. In the domains of political and occupational identity, men outnumbered women in identity foreclosure. The significance of these gender differences was greater at older age levels. In the domains of religious and lifestyle identities women were less frequently diffused and more frequently foreclosed than men, the difference decreasing with increasing age. Although some gender differences emerged in the identity development process itself, generally men attained identity achievement to a lesser extent or slower than women, the antecedents and implications of identity achievement were largely common for both genders. Based on the found identity formation differences in the distinct personality clusters in Study IV, it is possible that the gender influences were too complex to be found without a more careful differentiation of subgroups within both genders.

4.2 Antecedents of Adult Identity Development

The present study examined the antecedents of adult identity development during adolescence, the period of transition to adulthood, and young adulthood. Both contexts of development and personal characteristics were found to be relevant for identity development, congruent with the theoretical propositions (e.g., Adams & Marshall, 1996; Berzonsky & Adams, 1999; Bosma & Kunnen, 2001; Grotevant, 1987).

The results demonstrated that, in early adolescence, a high educational level of the parents, evidenced by their occupational status, and the individual's own good school success were predictive of later identity development toward achievement. The finding was definite in both variable-oriented (path model) and person-oriented approaches (e.g., Magnusson, 1998, 2001). In a longitudinal perspective, school success typically leads to higher education and social status, which have been associated with identity achievement by Helson and colleagues (1995). They emphasized that the greater success of the achieved women was not related to their intelligence, which did not differ from the other groups. Hence, it is possible that parents representing higher educational and occupational statuses support higher educational and social outcomes of their offspring and, in pursuance, their identity achievement. In a modern society, school success determines the number of options and the type of choices for

later life, thus education can be regarded as a major “investment” individuals make in their identity (Côté & Levine, 2002).

However, no connections emerged between child-centered parenting and identity achievement in adulthood. In line with this, Meeus (personal communication) found in his preliminary overview of several studies that parent-adolescent relations were generally not associated with identity development. At the same time, the parents’ occupational status did not contribute to the formation of personal control over development, which was instead predicted by the quality of parenting and school success. The results suggest that identity achievement was more supported by the external social contexts, and personal control over development by the quality of individual relationships.

The findings related to the emerging adulthood period demonstrated that earlier transition to adulthood in family life (moving from the parental home, entering marriage or cohabitation, and having a child) preceded higher identity achievement in adulthood for both men and women. A delay or failure to enter the adult family roles was related to identity diffusion. Hence, the current trend of a prolonged emerging or transitional period (Arnett, 2000, 2004, 2006; Fussell & Gauthier, 2005), allowing for identity exploration before full adult responsibilities in the domains of personal relationships and family, did not result in higher identity achievement outcome. Instead, those who were not able to find a partner and establish a relationship as early as their peers were at risk of not attaining a coherent identity achievement. The finding highlights the importance of relatedness with significant others in postadolescence identity development, in line with the proposition by Adams and Marshall (1996) that low interpersonal integration can lead to marginalization. On the other hand, the direction of this possible causal relationship can be reversed: Helson (1992) perceives that the diffused persons are likely to experience problems in their relationships because of being too conflicted or undeveloped to make commitments particularly in that area. For men, Kahn et al. (1985) found a strong relation between low identity during college years and remaining single. For women, identity achievement did not predict establishment of marriage, but rather it was predictive of marriage stability, with identity diffused women being more likely to divorce.

Yet, within the age frame from about 18 to the late 20s, when the multitude of family-related transitions took place, the earliest entrance to adult family roles was characteristic of a foreclosed identity, specifically in the domain of intimate relationships, whereas achievement in this domain was associated with slightly later transitions. Early motherhood (but not fatherhood) has additionally been associated with problems of social functioning (Kokko, Mesiäinen et al., 2006; Rönkä & Pulkkinen, 1998). Thus, the findings refer to both the importance of triggering the transitions to adulthood in due time (see Osgood et al., 2005) and to the possible curvilinear nature of the relationship between the markers of adulthood in family life and identity achievement, suggesting that there is an end point in the optimal time frame for transitions to

adulthood, possibly in the late 20s, as proposed by Arnett (2000, 2004) and Levinson and Levinson (1997).

The results showed further that in working life, composed of the first vocational certification conferral and entering a full-time job, later transition to adulthood was associated with higher identity achievement in both genders. The result was evidently highly associated with the level of education: The higher the educational level, the later the transition to working life and the higher the identity achievement. The impact of the level of education on identity achievement possibly involved early selection, given that the occupational status of the parents and one's own school success at age 14 predicted adult identity achievement. Youth attending longer education could have better cognitive capacities and individualization strategies (Schwartz et al., 2005), and be better able to take full advantage of the offered schooling and counseling services than those who are less educationally oriented. Furthermore, school contexts (Lannegard-Willems & Bosma, 2006) and college environments (Luyckx et al., 2006; Waterman, 1993; Waterman & Archer, 1990) have been found to be particularly facilitative for identity exploration.

The role of personality and individual characteristics in adult identity development was demonstrated in this study by various identity status levels and level changes typical of distinct personality styles (Pulkkinen, 1996; Pulkkinen et al., 2005). The Resilient male and Individuated female style, representing adaptive adjustment with positive life attitudes, high intellectual interests, and reflectivity, outscored the other groups in identity achievement. The results confirm that identity development toward achievement is associated with ego resilience (Cramer, 2000; Grotevant, 1987; Helson & Srivastava, 2001; Mallory, 1989). The relationship between higher intellectual orientation and higher identity achievement can be regarded a personality correspondent to the findings concerning the positive implications of success in school and attaining education in higher levels. Consistent with the findings of Helson (1992) and Josselson (1996), the family-oriented, conscientious Traditional female group demonstrated a shift from identity foreclosure toward achievement when approaching middle age.

The Undercontrolled men, reflecting high nonconscientiousness, exploration and experience seeking, impulsive behavior, and low family orientation, demonstrated the highest original moratorium scores but, thereafter, proved the most significant adult identity development with sharply decreasing moratorium and increasing achievement. This positive development, although delayed in comparison to some other groups, can be related to their high experience seeking and exploration levels, in other words, their openness to experience (Berzonsky & Adams, 1999; Berzonsky & Kuk, 2000; Bosma & Kunnen, 2001; Clancy & Dollinger, 1993; Cramer, 2000; Dollinger, 1995; Duriez, Soenens, & Beyers, 2004; Grotevant, 1987; Helson & Srivastava, 2001; Tesch & Cameron, 1987). Their progressive identity development has been found to be accompanied by positive development in career stability, self-rated health, and decreasing task-irrelevant behavior (Pulkkinen et al., 2005). On the contrary,

identity diffusion was constantly most typical of the anxious, highly introverted Brittle women, who had low intellectual orientation and reflectiveness, and of the Introverted men, characterized by a cognitive orientation and higher introversion and conscientiousness, but lower reflectiveness and experience seeking, than in other men. Hence, behavioral strategies including withdrawal and anxiety were associated with consistent identity diffusion (as suggested by, i.e., Clancy & Dollinger, 1993; Mallory, 1989; Marcia, 2002; Whitbourne & Weinstock, 1986).

In conclusion, the most evident determinants of identity formation emerging in the study were related to education on one hand, and behavioral withdrawal/integration with significant others on the other hand, thus underscoring identity construction as a person-in-context process. The results consecutively demonstrated that adult identity achievement was preceded by high educational and occupational status of one's parents in the family of origin, school success in early adolescence, intellectual interests, and an extended period of education after comprehensive schooling. In addition to forming a counterpoint to the above description, identity diffusion was specifically related to withdrawn personality and a delay or failure in establishing adult intimate and family relationships.

4.3 Implications of Adult Identity Development on Well-being

The results of the present study revealed that the level of identity achievement reached by early adulthood was particularly predictive of social well-being and generativity 15 years later, at age 42, in both men and women, thus demonstrating how optimal identity development can facilitate an individual's integration within his or her social contexts (Erikson, 1959; Marcia, 2002). The participants with continuously low identity achievement had lower scores in generativity than did their higher achieving counterparts. The finding was consistent with earlier results by Helson and Srivastava (2001). Additionally, it can be related to the other findings of the present study that associate identity diffusion with lowered social integrity through a withdrawn personality (Study IV) and a failure or comparative delay in entering adult family roles (Study III). It is possible that specific social contexts form underlying factors to identity diffusion, low social integrity, and low generativity. As Helson (1992) points out, if people live without hope of control over their lives, their self-system cannot be adequate to reach an achieved identity.

The earlier relative strength of identity achievement preceded a strong sense of personal control over development at age 42, consistent with Marcia's (1993b) proposition. Both a higher sense of personal control, and, to a lesser extent, identity achievement in preceding adulthood promoted more favorable psychological well-being outcomes in middle age. Although the analyses related to these two dimensions of self-definition were carried out separately,

the finding may indicate the importance of personal causality orientations in context of identity achievement. Luyckx and colleagues (2007) found an information-oriented identity style, typical of identity achievement, to be optimal for the well-being of college students only under the conditions of high autonomy and high self-reflection. Psychological well-being emerged as a central element in the well-being indicators used in this study for the middle-aged adults, having strong positive links to social well-being and generativity, and negative links to psychosomatic symptoms, both of which, in turn, correlated with self-rated health. The association between mature personal identity and psychosocial well-being was congruent with identity theory (Erikson, 1950, 1968; Kroger, 2007), as well as with empirical findings related to adolescence identity and well-being (e.g., Berzonsky, 2003; Marcia, 1993b; Meeus et al., 1999; Nurmi et al., 1997; Vleioras & Bosma, 2005). The results were confirmed in a person-oriented analysis: The subgroup with the weaker educational background and the most consistent identity diffusion scored lower in personal control over development and had poorer generativity and psychosocial well-being outcomes than those with more mature or progressing identity.

Hence, coherently with the findings that identity achievement was related to earlier reflectiveness, low neuroticism, and moderately early entrance to adult family responsibilities, identity achievement was found to also precede higher personal control over development, high generativity, and good socio-psychological well-being in middle age. As a counterpoint to this, the results indicate that withdrawn behavior, weaker school success, and parents with lower educational and occupational status are risk factors for adaptive identity development. Identity stagnation may also influence later well-being, and, possibly, the ability to form caring, close relationships with others and integrate meaningfully into the social contexts. Importantly however, the person-oriented analyses discovered that consistent identity achievement and delayed identity progression from age 27 onward resulted in equally favorable well-being outcomes. Hence, not reaching identity achievement by the onset of early adulthood was not detrimental for favorable implications in middle adulthood.

4.4 Methodological Evaluation

Identity development has been thus far primarily studied with reference to adolescents, often among student populations. Longitudinal studies extending to adulthood are rare, even though longitudinal follow-up is an ideal means of understanding the course of identity (Kroger, 2000b). Longitudinal data allows researchers to address issues such as developmental differences, stability, and directions of effect (Card & Little, 2007). The present study utilized the data drawn from the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS) during a remarkable period of time from early adolescence

to middle adulthood. An advantage of the study was its reliance on these exceptional data, including both genders and a large selection of variables derived with a versatility of instruments during an extensive time span. The participation rate in the JYLS has remained high throughout the years—no systematic attrition has been found—and the sample is heterogeneous and representative of the population of Finnish citizens born in 1959 (Pulkkinen, 2006).

The diverse data collection methods, instruments, and variables in the JYLS provided for meaningful ways of tackling challenging and rarely studied research questions related to the developmental background and to the implications of adult identity development, guided by theoretical assumptions raised in the research literature. The longitudinal data also made it possible to explore currently topical issues, such as emerging adulthood. The versatile exploitation of the available variables can be regarded as an advantage of the study. However, as the specific research questions of the current study were formed after the earlier data collection phases, the variables were not always optimal but had to be compromised. The identity interviews had not been conducted before age 27, therefore it was not possible to extend the follow-up of the identity development from the participants' adolescence or early 20s. Moreover, there were several years between the data collection points, which, as Kroger (2000b) noted, undermines the possibility to assess continuous movements of identity over time. Disadvantages emerged in some less focal measures as well. For instance, a measure on self-perceived adulthood was available only once, and it was coded based on an indirect question—although posed in the personalized interview context—about what it means to be an adult, which not all (but 86%) of the interviewees answered with reference to themselves. A more detailed measure could have yielded more specific results.

The measures of identity status based on Marcian (1966) identity interviews at ages 27, 36, and 42 were at the core of this study and thus a critical issue when considering the methodological validity of the study. Because measuring identity in adults can be more challenging than in adolescents (Waterman & Archer, 1990, 1993; Whitbourne et al., 2002), the use of an interview by well-trained interviewers and the careful coding process, involving recoders and consensus coding, instead of self-reports, was a benefit in the study. Each identity interview was carried out independently; the interviewers of the later samples were unaware of the previous identity statuses of the interviewees. This procedure enables comparisons with cross-sectional and retrospective studies. The discussion about exploration within the interview concerned both previous and ongoing exploration, and about how strongly it was related to the current commitment, an issue especially essential for adults (Waterman & Archer, 1990, 1993; Whitbourne et al., 2002). The domains covered by the interview included both ideological and interpersonal aspects that are currently included in the identity concept (e.g., Adams, 1999; Grotevant et al., 1982; Kroger, 2000a).

For domain-specific processes of identity, the original identity status scores were used as recommended by Goossens (2001). Additional scale scores highlighted the interindividual differences and the relative position of the participants in a specific status—or, in case of IA-D, on the identity achievement–diffusion dimension—while the general mean scores changed with time. These scales were used, specifically, when there were no expectations of relationships between the studied antecedents and implications for a specific identity domain. The procedure of condensing information into one or a few scales gave a general picture that can be elaborated in future research. A drawback in the IA-D scale was that information regarding the intermediate statuses of identity foreclosure and moratorium was lost, as the scale concentrated on the dimension between the widely agreed opposites of the most and least mature identity (e.g., Berzonsky & Adams, 1999; Erikson, 1950, 1968; Kroger, 2000a, 2000b, 2003a; Marcia, 1993a, 1993b; Schwartz, 2001; Waterman, 1999). However, preliminary comparisons between the status groups were carried out prior to using the IA-D scale to portion out the likelihood of ignoring important associations. The significant associations that emerged between the IA-D scale and both various preceding variables and well-being measures indicate that the additive approach, largely used in identity questionnaires (e.g., Adams, 1999; Balistreri et al., 1995; Berzonsky, 1989), is a meaningful way of viewing overall identity. Simultaneously, the results related to the often incongruently diffused ideological identity indicate that careful consideration should be given to the selected identity domains. In the Identity Achievement Scale and the IA-D scale, the ideological identities most likely were the ones differentiating between those with the highest scores from the others, as achievement in these domains was infrequently compared to the other domains.

As the Marcian interview instrument was originally designed for adolescents, it is justified to ask whether it is appropriate for research with middle-aged adults. The time span of 15 years from young to middle adulthood would be long for any same set of questions. However, the semistructured interview included in this study allowed additional questions and specifications when needed, and hence presents a more accurate and age-adapted indication of subjects' identity status than would have been the case with a stable questionnaire (cf. Marcia, 2007). As the time span for (and after) possible identity explorations increased toward middle age, distinguishing between identity foreclosure and achievement proved to be challenging in the adult age, as noted earlier by Waterman and Archer (1990, 1993). The study supported Valde's (1996) notions about re-closure after previous exploration. Additionally, one may ask whether the same set of identity domains remain salient throughout the adult years. This concern received partial answers in the present study, as increasing identity achievement was evidenced for most measured identity domains, reflecting their salience to the participants.

The study was multifaceted in its utilization of different statistical methods, selected, as recommended, according to the character of the research

question under consideration (e.g., Bergman, Eklund & Magnusson, 1991; Card & Little, 2007). The methods ranged from a diverse use of χ^2 and t tests and analyses of variances between groups to the Multivariate Analysis of Variance for Repeated Measures (Study IV) and Structural Equation Modeling (Studies II and III), the latter specifically recommended for the analysis of longitudinal data (e.g., Farrell, 1994). However, in Study II only the path model of SEM was used; latent variables were not included although they could have portioned out possible measurement errors. Person-oriented analyses were used to supplement the variable-oriented methods, as recommended by, for instance, by Magnusson (1998, 2001) and Bergman (2001).

Treatment of missing data is a persisting challenge in longitudinal studies. Although systematic attrition was not found, there were more data available on each separate age level than longitudinal data concerning the entire process. Listwise exclusion of missing data was selected after confirming that the identity statuses of those participants interviewed only one or two times did not differ significantly from the identity statuses of the participants who were interviewed at all three ages. Pairwise exclusion or imputation of missing data could have extended the sample size and, hence, improved the statistical power and significances of the associations. With the present sample size some indicative findings did not reach statistical significance. Although listwise deletion of data is still widely used in research, multiple imputation in particular would be more recommendable (e.g., Peugh & Enders, 2004).

A specific challenge emerged in Study III in dealing with the “non-occurrences” of the timing of the transition to adulthood variables. A large proportion of the participants had not attained all five measured markers of transition to adulthood by age 42, such as earning a vocational or professional certification, or having a child. To include the full diversity of participants in the analyses, the nonoccurrence of a marker was recoded in the study as the extremes of the scale (age 43 for all markers except for certification conferral; in the case of no vocational education, the end of comprehensive schooling at age 15 was coded). The analyses of the effects of this recoding revealed that women without any certification were not as identity achieved as other women. Including these women in the analyses slightly accentuated the positive association between later transition to work and identity achievement but did not change its direction.

Identity formation is essentially a process of adaptation and interchange between the individual and the context (e.g., Erikson, 1950; Baumeister & Muraven, 1996; Sneed & Whitbourne, 2001; Whitbourne et al., 2002). The respective historical point of time and sociocultural environment guide and set broad limits for identity development, for instance, through variability of choice permitted (Baumeister & Muraven, 1996; Côté & Levine, 2002; Kroger, 2003a; Marcia, 1993a, 2001). Hence, a limitation of historical specificity exists in the longitudinal studies when assessing members of a single birth cohort (Caspi & Roberts, 2001), leading to the impossibility of differentiating between age-graded and history-graded influences (Baltes et al., 1998). The contexts for

identity development have not remained unchanged, as evolving from the industrialized to the late modern age has included restructuring of social systems and the rise in the relativity of values and individualization in the Western societies (e.g., Côté & Levine, 2002; Furlong & Cartmel, 1997). Furthermore, it must be taken into account that the Nordic culture differs from even other Western societies in some aspects (e.g., Gupta, Hanges, & Dorfman, 2002; Inglehart & Carballo, 1997). Although the analyses of possible gender differences included in each procedure are a strength of the study, the male and female developments could be more similar in the present sample than in cultures in which the gender roles are more distinct. Hence, future research is needed to substantiate the generalizability of the results and the inferences reported.

Despite its limitations, the study gave insight into rarely studied post-adolescence identity development in a longitudinal setting, and in a heterogeneous sample representative of a cohort of Finnish population. The remarkable diversified impact of education on identity development, emerging in all phases of the study from adolescence to adulthood, highly accentuates the importance of using heterogeneous samples in identity research. This finding elevates the value of the present study, compared to the considerable amount of research carried out in selective student populations.

4.5 Future Directions

The study added to the knowledge of adult identity processes but, additionally, raised new questions for future research. An obvious next step to the current study would be an empirical analysis of the interrelationships among the significant findings of the present substudies. One could hypothesize that significant overlap emerges between the found identity achieved subgroups: the Identity Achievers (Study II), those with moderately early entrance to adult family responsibilities and extended studies (Study III), and the Resilient and Individuated personality style clusters (Study IV). A linkage or overlap between the Identity Developers (Study II) and, specifically, the Overcontrolled (Study IV) can additionally be expected. Furthermore, the most diffused subgroup would most be characterized by withdrawal (Introverted and Brittle, Study IV), delayed transition to adult family life (Study III), and low school success and little further schooling, both of oneself and of one's parents (Study II and Study III). Such a study would provide a more detailed developmental perspective on risk and facilitative factors of identity achievement.

The subsequent data collection wave within the JYLS will be carried out when the participants are around the age of 50. It will be interesting to examine what kind of identity status movements have taken place, and whether identity achievement has supported well-being during the years of middle age while physical changes and significant role changes are likely to occur (Kroger, 2007).

At that age, the relationships between identity, generativity, and integrity (Erikson, 1959; Kroger 2007) will be of specific importance and interest.

The present findings highlight the question about these specific impacts and mechanisms in the person-in-context interaction that facilitate identity achievement. As Kroger (2007) notes, few studies exist about measurable impacts of educational experiences on later identity advancement, or the mechanisms of those impacts. Helson (1992) suggests that less advantaged samples representing lower educational levels would demonstrate greater rates of identity diffusion and foreclosure compared to student samples. How much predictive value lies in the intellectual abilities and early personality (temperament), and what is, respectively, the specific additional role of the early upbringing and further education? Considering the emphasis on student populations in identity research, further studies are specifically needed for the analysis of the impact of longer academic education on identity achievement, independent of the education and occupational status of one's parents, as well as of one's own intelligence, intellectual interests, and early school achievements. A challenge for research of these impacts is the possible selection involved in the processes: Only a portion of the population attains a tertiary degree (about 40% both in the USA and in Finland; OECD, 2006) and, furthermore, different educational programs have been shown to attract students with different identity statuses (Adams & Fitch, 1983). Another interesting question is whether the positive effects of longer education stem from the naturally stimulating college environment and discussions with peers facing similar identity issues, or whether particularly arranged occupational and life orientation guidance during schooling is of specific importance.

Another topical issue raised in the present study concerned the possible optimal time frame for identity resolutions. However, it seems that external transitions of adulthood are generally becoming more and more disassembled and more challenging to tackle with statistics or research. For instance, parallel to the rising marriage age, cohabitation has become increasingly widespread, and marriage is no longer necessarily a lifelong commitment. Specifically for young people, work increasingly often consists of short periods and project-type work, and the educational options for continuing education or career changes are more widespread. This blurring of transitions could be reflected in the identity formation process, for instance, by typically increasing the exploration and decreasing the stable commitments of emerging and young adults. Whether this is beneficial to their identity formation and well-being in middle and later adulthood is an interesting topic for future research.

The present study primarily focused on the antecedents and implications of overall identity achievement, without differentiating the specific identity domains. Extended research is needed to analyze the associations and mechanisms that relate to each specific domain. Specifically, the political and religious identity domains differed essentially from the other measured domains in their continuously and incongruently high rates of diffusion. However, these domains have been included in the concept of identity from the beginning

(Erikson, 1950; Marcia, 1966). Before concluding whether these domains have become nonsalient for contemporary adults, further study is needed about whether there are implications of such incongruently diffused ideological identity for personal well-being. The present findings indicate that achievement in the ideological domains had some importance, as the identity achievement-diffusion scores, including these aspects, were significantly associated with the well-being measures. Erikson (1950) regarded identity as an interchange between the individual and the society and, hence, political ideals are an essential element of identity and the development of individual vigor and human conscience. Similarly, religious identity was related to the basic sense of confidence. Relatedly, Josselson (1996) found that those women who had engaged in a moral purpose in their lives were among the most vital of her participants.

Finally, the study raised some important notions for practical implications by highlighting early risk factors of not attaining a coherent identity achievement. These risks included weak school success, a lower educational and occupational status of the parents, as well as behavioral strategies involving withdrawal and anxiety. The finding that, particularly, the external social context was important for progressive identity development encourages the design of identity facilitative contexts specifically for withdrawn youngsters and those with less success at school. There is evidence, for instance, that important experiences for one's identity development can be provided through activities that offer the opportunity for personal expressiveness, flow experiences, and/or goal-directed behavior (Sharp, Coatsworth, Darling, Cumsille, & Ranieri, 2007; Waterman, 2004). At present, youth are often left alone to find their own paths, especially in the areas of lifestyle, personal relationships, and family life, even though career counseling services are more available. These supportive environments are thus possibly needed, specifically by those prone to introversion and withdrawal, to facilitate the forming of significant relationships or "groups of belonging" (Kroger, 2007) during emerging and young adulthood. Mature identity was found beneficial not only in terms of the psychosocial well-being of the individual, but also in terms of successful integration and generativity within social contexts. Hence, facilitating identity growth would not only serve the individual but also the community.

TIIVISTELMÄ

Tutkimuksen tavoitteena oli seurata yksilöllisen identiteetin kehitystä ja muotoutumista varhaisaikuisuudesta keski-ikään, identiteetin kehitystä ennakoivia tekijöitä sekä identiteetin yhteyksiä henkilökohtaiseen hyvinvointiin keski-ikässä. Aiemmat tutkimukset ovat paljolti keskittyneet nuoriin ja painottuneet opiskelija-aineistoihin. Tutkimus osoitti myönteisen identiteettikehityksen jatkuvan varhaisaikuisuudesta keski-ikään, vaikkakin sekä henkilöiden että identiteetin osa-alueiden välinen vaihtelu oli suurta.

Aikuisuuteen yltävät pitkittäistutkimukset ovat kansainvälisesti harvinaisia. Identiteetin jatkuva aktiivinen työstäminen myös aikuisena on kuitenkin tullut yhä tärkeämmäksi, ja myös tutkimuksellinen kiinnostus identiteetin muotoutumiseen aikuisena yhä ajankohtaisemmaksi yhteiskunnallisen murroksen myötä. Tämänhetkiselle jälkimodernille yhteiskunnallemme on tyypillistä yksilöllisyyden ja yksilön omien valintojen korostaminen, arvojen suhteellisuus ja sosiaalisten systeemien mureneminen ja uudelleen organisoituminen (Côté & Levine, 2002; Furlong & Cartmel, 1997). Esimerkiksi lyhytaikaisten työsuhteiden vaihtuminen, läpi elämän kestävä opiskelu, muutot, parisuhteiden kariutuminen tai uusperheen perustaminen edellyttävät omien arvojen, valintojen ja sitoutumisen —identiteetin—jatkuvaa pohdintaa. Identiteetin rakentaminen merkitsee käsityksen muodostamista omasta yksilöllisyydestä, omista arvoista ja niistä päämääristä, joihin elämässä pyrkii. Samalla se antaa pohjan esimerkiksi sitoutumiselle ammatilliseen valintaan, parisuhteeseen, perherooliin sekä uskonnolliseen ja poliittiseen ideologiaan.

Identiteetti on monitahoinen ja kiisteltykin psykologinen käsite, jonka esitteli ensimmäisenä Erik H. Erikson (1950) ja josta on sen jälkeen esitetty useita, eri osa-alueita painottavia määritelmiä. Yhteistä eri suuntauksille on näkemys identiteetistä ihmisen sisäisenä dynaamisena tasapainona samuuden ja muutoksen välillä sekä subjektiivisen ja objektiivisen perspektiivin välillä (Bosma, 1995; Kroger, 2007). Kokemus omaksi, yksilölliseksi persoonaksi kehittymisestä kytkeytyy identiteetin kehitykseen.

Oman identiteetin muodostaminen on nähty keskeisenä nuoruuteen kuuluvana kehitystehtävänä, vaikka se alkaakin jo varhaislapsuudessa lapsen ymmärtäessä itsensä ympäristöstään erilliseksi olennoksi ja hioutuu edelleen läpi koko aikuisuuden (mm. Erikson, 1950, 1968; Marcia, 1980). Identiteetin vahvistuessa ihmiselle kasvaa varmuus siitä, että hän pyrkii ja kykenee saavuttamaan järjestyksen ja tarkoituksen elämäänsä. Ihmisellä on tarve tuntea olemassaoloonsa liittyvää samuutta ja jatkuvuutta vuodesta ja tilanteesta toiseen, huolimatta siitä, että ulkoiset piirteet muuttuvat ja käyttäytyminen vaihtelee kypsymisen ja uusien roolien myötä (Erikson, 1950, 1968). Identiteetin etsintä voi olla monia vuosia kestävä prosessi. Jos identiteetti on heikosti jäsentynyt, ihminen kokee hämmennystä ja epäselvyyttä suhteessa omiin pyrkimyksiinsä ja mahdollisuuksiinsa ja joutuu turvautumaan toisiin arvioidakseen itseään ja mahdollisuuksiaan (Marcia, 1980; Pulkkinen, 1992b).

James Marcia (1966, 1980, 1993a) loi identiteetille operationaaliset määritelmät, joiden pohjalta on tehty satoja tutkimuksia. Marcia luokitteli identiteettitilat identiteetin saavuttamiseksi käydyn prosessin mukaan neljään luokkaan:

– *Selkiintymätön* (diffusion) identiteetti tarkoittaa, että ihmisellä ei ole ole-massa selkeää identiteettiä tai omaa näkemystä ja hän suhtautuu asiaan välinpitämättömästi. Hän ei myöskään pyri luomaan itselleen identiteettiä eikä näe tätä asiaa millään tavoin ongelmallisena. Marcian mukaan tällaisille ihmisille ominaista on orientoituminen nykyhetkeen, ei niinkään tulevaisuuteen. Selkiintymätön identiteetti on kehittymättömin identiteetin taso.

– *Etsivä* (moratorium) identiteetti on ihmisellä, joka ei pysty määrittämään kantaansa (identiteettiään), mutta joka kokee tämän olotilan itselleen ongelmalliseksi ja pyrkii aktiivisesti löytämään ja muodostamaan koherentin näkemyksen ja identiteetin. Tällaista identiteettiä Marcia kuvaa ”trapetsilla taiteiluksi”.

– *Omaksuttu* (foreclosure) identiteetti tarkoittaa, että ihminen on ilman erityistä omaa pohdintaansa omaksunut perheestään tai muusta taustayhteisöstään tutut näkemykset ja normit ja sitoutunut niihin. Marcian mukaan omaksuttu identiteetti johtaa ihmistä ikään kuin toteuttamaan ja täyttämään ennalta asetettuja normeja ja odotuksia.

– *Saavutettu* (achievement) identiteetti merkitsee, että ihminen on aktiivisesti itse rakentanut identiteettiään ja näkemystään pohtimalla, kyseenalaistamalla ja vertailemalla erilaisia näkemyksiä, mahdollisesti jopa jonkinlaisen identiteettikriisin kautta. Saavutettu identiteetti on monin tutkimuksin osoitettu kypsimmäksi ja vahvimmaksi identiteetin tasoksi (esim. Berzonsky, 2003; Meeus et al., 1999; Vleioras & Bosma, 2005). Saavutettu identiteetti tuo itsevarmuutta ja vahvuutta: ihminen katsoo tulevaisuutta asiana, johon hän voi itse vaikuttaa.

Käsillä oleva tutkimus on osa professori Lea Pulkkinen johtamaa Lapsesta aikuiseksi -pitkittäistutkimusta (*The Jyväskylä Longitudinal Study of Personality and Social Development, JYLS*), jossa samojen ihmisten persoonallisuuden kehitystä ja sosiaalista toimintakykyä on seurattu 8-vuotiaasta jo 42-vuotiaaksi asti. Pitkittäistutkimukseen osallistui alussa 369 kahdeksanvuotiaasta lasta, jotka olivat pääosin syntyneet vuonna 1959. Tämän jälkeen seuranta-aineistoa on kerätty samoilta tutkittavilta 14-, 27-, 36- ja 42-vuotiaana. Tutkimukseen osallistuneet ovat edustava otos vuonna 1959 syntyneistä suomalaisista (Pulkkinen, 2006). Nyt esiteltävän tutkimuksen aineistona oli laajaan haastatteluun sisältynyt Marcian (1966) identiteettiteoriaan perustuva puolistrukturoitu haastatteluaineisto, jota on kolmessa eri ikävaiheessa (27-, 36- ja 42-vuotiaana) kerätty 100 naiselta ja 97 mieheltä. Haastattelu koski identiteetin muodostumista uskonnollisuuden, poliittisten ideologioiden, ammattiuran, parisuhteen ja elämäntyylin alueilla. Tätä aineistoa täydennettiin JYLS -tutkimukseen eri tavoin kerätyllä muulla monipuolisella aineistolla.

Ensimmäisessä osatutkimuksessa selvitettiin identiteetin muotoutumista varhaisaikuisuudesta keski-ikään viidellä identiteetin osa-alueella: poliittinen identiteetti, uskonnollinen identiteetti, työidentiteetti, parisuhdeidentiteetti ja

elämäntyyli-identiteetti. Tulokset osoittivat huomattavaa vaihtelua identiteetin muotoutumisessa eri osa-alueilla. Työtä ja perhettä koskevat osa-alueet eli työ, parisuhde ja elämäntyyli olivat aikuisille merkitsevempiä kuin ideologisen identiteetin alueet, politiikka ja uskonto, joilla identiteetti oli useammin selkiintymätön. Identiteetin etsintä etenkin työn osalta oli 27-vuotiailla yleistä. Identiteetin kehitys eteni tyyppillisesti iän myötä Marcian esittämän teorian mukaisesti kohti saavutettua identiteettiä kaikilla muilla osa-alueilla paitsi poliittisessa identiteetissä, jossa yleisin kehitystrendi oli päinvastainen: poliittisten mielipiteiden ja arvojen laimeneminen ja muuttuminen epävarmemmiksi. Poliittinen identiteetti oli etenkin 42-vuotiaana hyvin usein selkiintymätön niilläkin henkilöillä, jotka olivat muilla elämänalueilla sitoutuneet tiettyihin elämänarvoihin ja valintoihin (omaksuttu tai saavutettu identiteetti). Identiteetin kehitys eteni miehillä keskimäärin hitaammin, ja he saavuttivat identiteetin oman etsinnän kautta harvemmillä osa-alueilla kuin naiset. Selvimmin naiset ylittivät miesten tason parisuhdeidentiteetissä, jossa jo 27-vuotiaana puolet naisista mutta vain kolmannes miehistä oli yltänyt saavutettuun identiteettiin.

Toisessa osatutkimuksessa tutkittiin identiteetin yhteyttä oman elämän hallinnan tunteeseen. Lisäksi selvitettiin, miten varhaisnuoruuden olosuhteet ennustavat identiteettiä ja elämänhallintaa ja miten nämä tekijät ovat yhteydessä psykososiaaliseen hyvinvointiin keski-iässä. Tulokset osoittivat vanhempien korkean ammattiaseman ja henkilön oman koulumenestyksen varhaisnuoruudessa ennustavan myönteistä identiteettikehitystä. Lapsilähtöinen kasvatus varhaisnuoruudessa ei ollut yhteydessä myöhempään identiteettiin, mutta se ennusti hyvää elämänhallinnan tunnetta yhdessä hyvän koulumenestyksen kanssa. Lisäksi myönteinen identiteetin kehitys 36-vuotiaana ennusti hyvää elämänhallinnan tunnetta 42-vuotiaana. Identiteetin saavuttaminen 27-vuotiaana ennusti erityisesti myöhempää sosiaalista hyvinvointia ja vahvaa generatiivisuutta (halua ja kykyä huolehtia muista, erityisesti seuraavasta sukupolvesta niin perheen piirissä kuin työssä), kun taas hyvä elämänhallinnan tunne varhaisaikuisuudessa oli vahva psykologista hyvinvointia ennakoiva tekijä.

Kolmannessa osatutkimuksessa analysoitiin toisaalta ulkoisten aikuistumisen tunnusmerkkien, toisaalta itsensä aikuiseksi kokemisen suhdetta identiteetin kehitykseen 27-, 36- ja 42-vuotiaana. Suhteellisen varhainen aikuistuminen perhe-elämän alueella, jonka tunnusmerkkeinä olivat muuttaminen vanhempien luota omaan kotiin, vakituisen parisuhteen muodostaminen avotai avioliitossa sekä ensimmäisen lapsen saaminen, ennusti kypsää identiteettiä myöhemmin aikuisuudessa. Sen sijaan varhainen opintojen lopettaminen ja työelämään siirtyminen (aikuistuminen työelämässä) sekä siihen liittyvä tavallista matalampi koulutus- ja ammattitaso olivat yhteydessä identiteetin selkiintymättömyyteen. Valtaosa vastaajista (85 % miehistä ja 96 % naisista) oli saavuttanut vähintään kolme edellä kuvatuista ulkoisista aikuistumisen tunnusmerkeistä 27 ikävuoteen mennessä. Ulkoisten aikuisuuden tunnusmerkkien saavuttaminen ei kuitenkaan ollut yhteydessä siihen, tunsivatko vastaajat it-

sensä aikuiseksi 27-vuotiaana. Aikuisuuden kokemus oli kuitenkin naisilla yhteydessä identiteetin saavuttamiseen.

Neljäs osatutkimus keskittyi persoonallisten tekijöiden osuuteen identiteettikehityksessä. Tutkimus osoitti, että persoonalliset tyylit, jotka oli määritelty persoonallisuuden piirteiden, elämän orientaation ja käyttäytymispiirteiden perusteella 27 vuoden iässä (Pulkkinen, 1996; Pulkkinen et al., 2005), ennustivat merkitsevästi identiteetin kehitystä myöhemmässä aikuisuudessa. Miehillä erotettiin kolme persoonallisuustyyliä: yhteiskuntaan hyvin jäsentyneet ja sosiaalisesti joustavat (resilientit) miehet, pidättyvät ja tunnolliset introvertit sekä impulsiiviset ja ristiriitaiset miehet. Ryhmätasoisessa tarkastelussa joustavaan ryhmään kuuluvat miehet saavuttivat jo 27-vuotiaana suhteellisen hyvän identiteettitasoa, joka säilyi keski-ikään asti. Ristiriitaiset taas olivat muita selvemmässä etsintävaiheessa 27-vuotiaana, jonka jälkeen heidän identiteettitasonsa kuitenkin kehittyi nopeasti siten, että he 42-vuotiaana saavuttivat yhtä korkean identiteettitasoa kuin joustavien miesten ryhmä. Introverttien miesten identiteettikehitys sen sijaan edistyi heikosti: identiteetin etsintä oli heillä muita vähäisempää ja muilta omaksuttu tai selkiintymätön identiteetti yleisempää.

Naisten vastaavat kolme persoonallisuustyyliä olivat itsensä kehittämiseen suuntautuneet ja yksilöllisyyttään toteuttavat yksilöityneet naiset, kotikeskeiset perinteistä naisroolia edustavat naiselliset naiset ja ahdistuneisuuteen taipuvaiset ristiriitaiset naiset. Kaikissa naisten ryhmissä tapahtui iän myötä selvää kehitystä kohti oman pohdinnan kautta saavutettua identiteettiä, joskin yksilöityneet naiset pysyivät muita korkeammalla tasolla saavutetussa identiteetissä. Omaksuttu identiteetti oli odotetusti tyypillisintä perinteistä naisroolia edustaville naisille, kun taas ristiriitaisilla naisilla identiteetti oli useammin selkiintymätön kuin muilla.

Tutkimuksen tulokset antavat uutta tietoa aikuisiän identiteetin kehityksestä sekä sen riskitekijöistä ja mahdollisista hyödyistä heterogeenisessä normaaliväestössä. Identiteetin kehitystä ennakoivia tekijöitä voitiin osoittaa eri elämänvaiheista. Kypsän identiteetin saavuttamista aikuisuudessa ennustivat jo varhaisnuoruudessa oma varhainen koulumenestys sekä vanhempien korkea koulutus- ja ammattiasema. Lisäksi identiteetin saavuttamista edelsivät suhteellisen varhain saavutettu itsenäisyys ja aikuistuminen omaa parisuhdetta ja perhettä perustettaessa. Toisaalta liian varhainen siirtyminen aikuisen rooliin työelämässä ei ollut identiteetin kannalta eduksi: sen sijaan keskimääräistä myöhempi siirtyminen kokopäiväiseen työelämään yhdistyneenä korkeampaan koulutukseen oli yhteydessä myönteiseen identiteetin kehitykseen. Lisäksi saavutettu identiteetti liittyi persoonallisuuden tyyliin, joita luonnehti reflektiivisyys, matala neuroottisuuden taso ja älylliset kiinnostukset ja harrastukset. Saavutettu identiteetti osoittautui aikuisiän hyvinvoinnin voimavaraksi: se ennusti elämänhallinnan tunnetta, generatiivisuutta ja psykososiaalista hyvinvointia keski-ikässä.

Identiteetin selkiintymättömyys oli negatiivisessa yhteydessä edellä mainittuihin identiteetin kehitystä edeltäviin tekijöihin ja oli siten selvä vastakohta

saavutetulle identiteetille. Lisäksi vetäytyvä persoonallisuustyyli sekä vaikeudet tai viiveet aikuisen pari- ja perhesuhteiden muodostamisessa olivat yhteydessä identiteetin selkiintymättömyyteen. Identiteetin kehityksen varhaisia riskitekijöitä ovat siis tutkimuksen perusteella heikko koulumenestys, vanhempien matala koulutustaso ja ammattiasema sekä toisaalta vetäytymistä ja ahdistuvuutta sisältävät käyttäytymisstrategiat.

Tutkimuksen tulokset osoittavat, että identiteetin myönteinen kasvu ja kehitys on mahdollista ja jatkuu useilla ihmisillä pitkälle aikuisikään asti psykososiaalista hyvinvointia edistäen. Toisaalta tulokset osoittavat myös identiteetin myönteisen kehityksen riskiryhmiä. Identiteetin kehittyminen on psykososiaalinen prosessi, johon voidaan tutkimusten perusteella vaikuttaa esimerkiksi oikein suunnitelluin, onnistumisen kokemuksista ja tavoitteellista toimintaa tarjoavin aktiviteetein (Sharp et al., 2007; Waterman, 2004) sekä tarjoamalla mahdollisuus merkitseviin ihmissuhteisiin ja kokemukseen ryhmään kuulumisesta (Kroger, 2007). Vaikuttaakin siltä, että nämä elementit huomioon ottavan, hyvin organisoidun harrastustoiminnan merkitys on erityisen suuri riskiryhmässä oleville, heikosti koulussa menestyville ja vetäytymiseen taipuvaisille nuorille ja nuorille aikuisille sekä heidän myönteiselle identiteetti-kehitykselleen. Tehokkaiden interventioiden kehittäminen on tärkeä haaste jatkotutkimukselle.

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