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Title: Implications of timing of entering adulthood for identity achievement

Year: 2007

Version:

Please cite the original version:

Fadjukoff, P., Kokko, K., & Pulkkinen, L. (2007). Implications of timing of entering adulthood for identity achievement. Journal of Adolescent Research, 22(5), 504-530. https://doi.org/10.1177/0743558407305420

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Implications of Timing of Entering Adulthood for Identity Achievement

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Keywords: transition to adulthood, emerging adulthood, markers of adulthood, self-perceived adulthood, identity achievement, gender differences

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Abstract

Five external markers of adulthood, self-perceived adulthood at age 27, and identity achievement at ages 27, 36, and 42 were explored for 95 women and 94 men in a cohort of Finns born in 1959. Earlier transition to adulthood in family life (moving from the parental home, entering marriage or cohabitation, having a child) anticipated higher identity achievement in adulthood. However, later transition to adulthood in working life, composed of the first certification conferral, and entering a full-time job was associated with higher identity achievement. Both components correlated with the higher level and thus the length of education. Self-perceived adulthood was unrelated to the age of achieving external markers of adulthood but was positively associated with identity achievement in women.

Implications of Timing of Entering Adulthood for Identity Achievement

During the past 50 years, Western 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). Hence, the number of lifestyle options available to the youth has multiplied and transitions to adult roles have been delayed. Arnett (2000, 2004, 2006) has named the age span after adolescence and before full adulthood as *emerging adulthood,* and argues that this age period from 18 to late 20s offers the best opportunities for self-exploration as a prolonged stage of psychosocial moratorium. On the other hand, these cultural changes have made it much more demanding to develop a sense of identity than was the case in the premodern societies (Côté & Levine, 2002; Schwartz, Côté, & Arnett, 2005). In the present longitudinal study, we investigated whether the timing of transition to adulthood was associated with one's level of identity achievement assessed at three age points in adulthood. The transition to adulthood was assessed both by external markers of adulthood in family and working life, and by the participants' subjective conceptions of their own adulthood.

James Marcia (1966, 1980, 1993a, 1993b) stated in his identity status paradigm that identity as a dynamic self-structure develops through four distinct stages: diffusion, foreclosure, moratorium, and achievement. He described these identity statuses in terms of their position on two dichotomic dimensions: exploration and commitment. In identity diffusion (D), an individual does not have firm commitments, nor is he or she actively trying to form them. In foreclosure (F), commitments are made without an exploratory phase, typically by identifying with parents or with other authorities. A person actively exploring alternative identities without having yet made commitments has a moratorium (M) identity at that time. Finally, an identity is achieved (A) when relatively firm commitments are made through 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. These identity status classes have been empirically validated and their patterns of development have been examined: The identity achievement status is clearly 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, 2003; Marcia, 1993a, 1993b, Schwartz, 2001; Waterman, 1999). Identity development often proceeds at a different pace within different domains, depending on the individual's interests and environment (e.g., Adams, 1999; Grotevant, Thorbecke, & Meyer, 1982; Kroger & Haslett, 1991; Marcia, 1993a).

Arnett (2004) argues that in both love and work, the process of identity formation begins in adolescence but intensifies in emerging adulthood. However, there are only few studies about the implications of emerging adulthood on identity development. As Schwartz et al. (2005) note, all youth may not be able to make use of this unstructured period of opportunities and potentials, but instead would require external help to transition into adult roles and responsibilities. Their study suggests that youth with better individualization strategies and agentic functioning are more likely to engage in active identity exploration and flexible commitment to life alternatives in emerging adulthood. Osgood, Ruth, Eccles, Jacobs, and Barber (2005) found that the "slow starters"—those who had made little progress in any domain to reach adult roles by age 24—did not appear to engage in positive exploration for personal achievement. On the other hand, those who had undergone more adult transitions seemed to be on a forward-looking path, having goals related to family, work, or education.

The transition to adulthood is characterized by movement from the adolescent or childhood roles in family and working life to those of adulthood. Five external markers of entering adulthood are typically used in research, namely 1) leaving the parental household, 2) onset of marriage or cohabitation with a chosen romantic partner, 3) 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, 2006a; Shanahan, Porfeli, Mortimer, & Erikcson, 2005). There has been a general trend of postponing these transitions in the life course in late modern societies: For instance, the median age of entering marriage and parenthood has risen by several years. Expert knowledge is valued and formal education may last several more years as compared to traditional societies. Higher education has expanded into an experience available to the majority of young people, allowing them to explore various educational alternatives. The same trends are observable in all industrialized countries, and apply to all five traditional external markers of adulthood (Arnett, 2004, 2006; Fussell & Gauthier, 2005).

The prolonged transition into adult roles is also evident in Finland. However, the independence of young people is highly valued in this society. Reflecting this, the age of moving from the parental home is typically younger in Finland than in many other European countries: About 94% of the women and 80% of the men in the 20–24-year-old age groups lived independently of their parents in 2005 (Wilska, 2005). Independent living is supported by the Finnish government-funded social benefits. According to the Statistics Finland (2004), the age of getting married for the first time had risen from 25.9 years in women and 28.1 years in men in 1986–1990 to 29.2 and 31.5 years, respectively, in 2003. However, in Finland, as is the pattern in Sweden (Fussell & Gauthier, 2005), cohabitation prior to or instead of marriage is increasingly widespread, leading to the fact that, since 1995, the average age of having the first child is lower than the age of getting married. As cohabitation it is not officially registered, statistics for its occurrence or increase are not available. The age of the women having their first child had risen from 26.5 years in 1986–1990 to 27.9 years in 2003.

Financial independence is achieved by starting full-time work: About one fifth of the 15–19-year-olds, more than one half of the 20–24-year-olds, and three quarters of the 25–29-year-olds worked full time in 2003 (Statistics Finland, 2004). Women and men participate in full-time employment at equal levels in Finland (Eurostat yearbook, 2004). Many Finns start working full

time already before getting their vocational certifications, which postpones the age for receiving these certifications – together with the time-consuming process of the examination-based entrance into tertiary education and military service (6–12 months) for males.

In 2004, the median ages of certifications conferred were 27 years from universities (MA degree), 26 years from polytechnics (BA-equivalent, evolved from earlier vocational colleges), and 22 years from vocational schools (Statistics Finland, 2006).

The timing of transitions into adult roles and their implications on adult psychological and social functioning have been reported in some earlier studies based on the Jyväskylä Longitudinal Study of Personality and Social Development (Pulkkinen, 2006). Rönkä and Pulkkinen (1998) demonstrated that early motherhood (< 22 years) was associated with low work involvement at age 27, which was further related to other problems of social functioning. Kokko et al. (2006a) found that women who had their first child before age 25 experienced early transitions also in other areas of life, such as an early move from the parental home and an early entrance to employment, and they typically were conferred a certification at an early age or, alternatively, had no certification. Furthermore, they had more problems in their social functioning than those who had a child at a later age: Early mothers had a lower level of education and a lower occupational status, an unstable career line, and heavier use of alcohol. Social functioning problems were most prominent among early mothers without education. These differences were, however, more pronounced at age 27 than at ages 36 and 42. Neither study found corresponding negative linkages in men. Conversely, early fatherhood was associated with a favorable career development (Rönkä & Pulkkinen, 1998). Previous research has also demonstrated that there is a link between the timing of certifications conferred and the level of education: The later the age of graduation, the more likely the person was to obtain a certification from the university (Kokko, Pulkkinen, & Mesiäinen, 2006b).

In addition to external markers of adulthood, transition to adulthood can be assessed based on subjective conceptions of one’s own adulthood. The most commonly stated subjective criteria for

feeling oneself an adult include one's own assessment of accepting responsibility for oneself, making independent decisions, and becoming financially independent (Arnett, 2000, 2004; Greene, Wheatley, & Aldava, 1992). Self-perception of reaching these indicators of emotional, cognitive, and behavioral maturity is not necessarily related to external markers of adulthood. In fact, many emerging adults are ambivalent in their assessment and distinguish among dimensions about reaching adulthood: for instance, feeling adult at work but not when with their parents or friends (Arnett, 2004; Shanahan et al., 2005). However, Shanahan et al. (2005) suggest that the three transition markers in family life (moving from the parents' home, marriage or cohabitation, and having a child) in combination are related to self-perceived adulthood: Those who have reached them all would more likely regard themselves as adults than those who are lacking even one of these transitions.

The main goal of the present study was to analyze whether the timing of the transition to adulthood is related to one's level of identity achievement. If emerging adulthood is considered an extended period of identity exploration, one could suppose that those who have entered the adult roles comparably late and hence undergone a lengthy emerging adulthood period, would have benefited by attaining a well-developed identity. This does not imply endless exploration, but rather an end point in the optimal time frame for transitions to adulthood. Arnett (2000, 2004) dates the end of the emerging adulthood period to some time in the late twenties in most cultures. Levinson and Levinson (1997) date the developmental period of entry life structure for early adulthood to ages 22-28. Osgood et al. (2005) concluded that those with no progress toward adult roles at age 24 were less engaged in positive exploration than their peers who had reached more transitions to adult roles. Fadjukoff and Pulkkinen's study (2006) indicated that identity achievement by age 27 anticipated later social well-being and generativity, thus demonstrating how optimal identity development can facilitate an individual's integration within his or her social contexts.

In the present study, the timing of the transition to adulthood was operationalized by five external markers of adulthood: leaving from the parent's home, 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 addition, subjective conceptions of one's own adulthood were assessed. We examined whether the timing of the external markers of adulthood and self-perceived adulthood at age 27 were related to each other, and to identity achievement. Additionally, we examined the association of the level of education to these variables. We assumed that several markers together, and specifically the three family-related markers, or the two markers related to working life, could be related to self-perceived adulthood rather than any single marker, and that internal self-perception of adulthood would be associated with identity achievement.

We assumed 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, an intimate relationship, and having a child) and another related to working life (i.e., vocational certification and entrance to work)—and analyzed whether these latent variables had different implications for identity achievement. The relationship of the timing of the transition to adulthood to identity achievement at ages 27, 36, and 42 was analyzed, because in early adulthood (to age 27) some of the participants were still in the period of identity exploration. Particularly in occupational identity, moratorium was the most frequent status at age 27, as described by Fadjukoff, Pulkkinen, and Kokko (2005). We also analyzed whether the markers of adulthood in family life and working life would have specific implications for their respective identity domains, that is, for intimate relationship and occupational identity.

Our sample was born in 1959, hence their period of transition to adult roles dated back to the late 1970s and to the mid-1980s. This was the time of rapid growth of the phenomena now called emerging adulthood, which we expected to produce a large range of the timing of transitions to

adulthood. All analyses were made separately for women and men in order to discover possible gender differences in the studied associations.

Method

Participants

The present study was part of the ongoing Jyväskylä Longitudinal Study of Personality and Social Development (JYLS; 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. The pupils in these classes, 173 girls and 196 boys, born in 1959, participated in the study; no initial attrition existed. All participants were native Finns; in 1968, Finland was very homogeneous by ethnicity.

No systematic attrition was found in the sample (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 on, for instance, marriage rate and family type, number of children, and employment status. At age 42, two-thirds of the participants lived in Central Finland and 17% in Helsinki region. Nine participants (3.2%) lived abroad. In the level of education, the male participants did not differ from their age cohort, but female participants more often had higher secondary education (e.g., a nurse, a graduate from a vocational college) than women of their age cohort. Women more often had higher secondary education than men, who more frequently had lower secondary education (training for blue-collar professions in vocational schools). This was true both for the present female and male participants and for women and men in the age cohort. Correspondingly, the women at ages 36 and 42 were more often in lower white-collar occupations than the men, who typically were in blue-collar occupations. Differences did not exist in higher white-collar occupations or entrepreneurs.

The results of the present study were based on data of those 189 (95 women, 94 men) JYLS participants who had taken part in three interviews—ages 27, 36, and 42—as well as completed the Life History Calendar (Caspi et al., 1996), during the age-42 interview. As described by Fadjukoff et al. (2005), the smaller group with data from all three interviews did not differ in their identity development from those with fewer interview points.

Procedure and variables

Identity achievement. The semistructured identity interview, based on Marcia's (1966) identity status paradigm, was conducted at ages 27, 36, and 42. The interview included five domains: religious beliefs, political ideology, occupational career, intimate relationships, and lifestyle (Fadjukoff et al., 2005). 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 about how they had acquired their views, for example, from significant others or by personal exploration.

Each participant's identity status was assessed 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. Interviewers of the later samples were unaware of the previous identity statuses of the interviewees (Fadjukoff et al., 2005). The identity statuses were coded both by the interviewers, and, based on transcriptions, by a re-coder unaware of the interviewers' coding. After the double coding, the coding differences were checked, discussed, and corrected if deemed necessary. 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 at age 42 the corresponding percentage was 88.3%. The consensus coding was used for data analysis.

Separate scales for each of the identity statuses were created at each measurement point (at ages 27, 36, and 42) on the basis of the number of domains in which the individual was in a particular status, following the procedure by Pulkkinen and Rönkä (1994). Given a five-domain interview, 6-point scales (0 to 5) were produced. For example, if an individual was in the identity achievement category for two domains, in the foreclosure status for two domains, and in the moratorium status for one domain, that person received a score of 2 for the Identity Achievement scale, 2 for the Foreclosure scale, 1 for the Moratorium scale, and 0 for the Diffusion scale. As Diffusion and Achievement are the two end points of the identity continuum theoretically, and were empirically highly negatively correlated (from r = -.55 to -.62), we formed a new *Identity Achievement–Diffusion (IA–D) scale* 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; Fadjukoff & Pulkkinen, 2006).

External markers of adulthood. Information about the timing of 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 during the age-42 interview. Caspi and his colleagues claim that the use of visual aids and the study of the streams of life events, rather than isolated events, increase the reliability of the data obtained using this method. The information was confirmed using the information from data collections made earlier or using different methods (Kokko et al., 2006a).

The five external markers of entering adulthood were used in the study (see also Kokko et al., 2006a). In each of the five areas, the age of the transition was coded. If the participant had not experienced a transition in the area in question, the marker was coded “0.” The first three variables were related to one’s psychosocial independence and entering to family responsibilities: 1) the age

of moving out from the parents' home to independent living (in years), 2) the age of committing to a stable relationship for the first time, either in marriage or in cohabitation, and 3) the age of having the first child. The other two variables were related to working life: 4) the first age of certification conferred from a vocational school or institute of higher education, and 5) the age of entering the labor force in a full-time job.

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). While constituting the entering-to-work variable, a youngster's summer jobs and other periods of work lasting only a few months, even if full-time hours, were not counted. However, many young people went to work directly when finishing their basic education, or entered vocational schooling after a period of work.

Many participants—34 men (36%) and 21 women (22%)—had not reached one or more of the markers of adulthood by the latest data collection at age 42. Certainly, the "non-occurrence" participants could still reach these unattained markers later in their lives. But, to analyze the full group, it was necessary to recode the non-occurrence of a marker, originally coded as zeros. After a pre-screening of the data, continuous markers of adulthood variables in terms of age were created by recoding the non-occurrence in the following way: Non-occurrence was categorized as "age 43" for the variables of moving from the parental home (for 1 man, the original range of the variable was 15-35), onset of marriage or cohabitation (for 6 men and 1 woman, original range 15-42), having a child (for 13 men and 8 women, original range 16-39), and for obtaining a full-time job (for 1 man, original range 15-28). However, regarding the certification conferral, a different decision was made. The general trend among all participants was clearly to find a full-time job after the first vocational qualification or higher education degree (e.g., end of vocational schooling). Those participants with no certification mostly had taken low-demand jobs directly following their comprehensive education (Kokko et al., 2006b). Hence, they did not parallel their peers who had

received (mostly university-level) degrees comparably late. Instead, they could be seen in the lowermost level of the vocational education continuum, not aiming at a vocational qualification, as comprehensive schooling (with possibly some additional courses) was enough schooling for their jobs. At age 42, none of the non-certification participants were in target-oriented education to get a certification. Therefore, in this variable, non-occurrence was coded in the beginning of the age continuum, to age 15 (for 26 men and 12 women, the original range of the variable was 16-39).

Self-perceived adulthood. At age 27, the participants had been asked an open question during their interview: “How do you think being an adult differs from being an adolescent?” Even though the question was posed generally, most people did answer it in reference to themselves because of the personalized context in which the question was posed. The question was preceded by a discussion about the interviewee's life changes related to the transition into adulthood.

Based on the responses, a dichotomic measure of self-perceived adulthood was categorized into (a) does not clearly identify himself/herself an adult, including those who mentioned that they did not feel like an adult (10.6%) and those with no clear reference to themselves (14.3%), and (b) defines himself/herself as an adult (75.1%).

Data Analysis

The timing of the five markers of adulthood was analyzed for descriptive purposes. Gender differences in ages of reaching the markers of adulthood were explored by independent samples *t*-tests, and in self-perceived adulthood and in the level of first certifications by χ^2 tests. A one-way variance analysis (ANOVA) with pairwise multiple comparisons (Scheffe) was used to find out whether the age of and level of certifications conferred were related to each other. A paired samples *t*-test was used to analyze changes in the IA-D scale from age 27 to 36 and from 36 to 42. All analyses were carried out for women and men separately.

The distributions of the markers of adulthood were quite skewed. Consequently, the distributions were normalized by using natural logarithmic transformations across gender for all

continuous variables (markers of adulthood and IA-D scale) for these analyses. Patterns of bivariate relations among the markers of adulthood, self-perceived adulthood, and the IA-D scales at ages 27, 36, and 42 were analyzed using Pearson correlations. The level of the first certification obtained was included in the correlation matrix for additional information.

Cross-tabulation and χ^2 tests were used to discover whether several markers of adulthood together, and the three family-related markers or the two markers related to working life, were related to self-perceived adulthood by age 27.

The links between the markers of adulthood and IA-D scales were further analyzed using structural equation modeling with the LISREL 8.7 program (Jöreskog & Sörbom, 1996). The five measured markers of adulthood were merged into two latent variables indicative of the timing of entering adulthood in family and working life, and a path model was generated to analyze the effects of these latent variables on identity achievement at ages 27, 36, and 42. The method of estimation was Maximum Likelihood. In order to discover possible gender differences in the studied links, a multigroup analysis based on covariance matrices, calculated separately for men and women, was conducted. The error variances of the measured variables and the correlation between the latent variables were freed to be estimated by the model for both genders separately. The model construction was based on modification indices (criteria > |8| for adding a parameter), and t values (criteria > |1.96|), non-significant parameters were excluded) of the single parameters. The overall fit of the estimated models was evaluated using a χ^2 test. Other fit indices were used to assess different aspects of the model (Bollen & Long, 1993), and included the root mean square of approximation (RMSEA), goodness of fit (GFI), and comparative fit index (CFI).

We tracked the specific implications of the markers of adulthood in family and working life to intimate relationships identity and occupational identity at ages 27, 36, or 42. Independent samples *t*-tests were used for dichotomized measures (e.g., 4 = achieved against all other status classes 1-3) of intimate relationships identity and occupational identity at ages 27, 36, and 42 to find out

whether the identity status classes differed in the timings of entering family roles and entering working roles, respectively. Only significant results are presented.

Results

Descriptive Results

The markers of adulthood varied in terms of their average timing (Table 1). Entering full-time employment was the only marker with no gender difference. All except one man had found a full-time job by age 28. Men surpassed women by two and half years in reaching their first vocational certifications. However, men remained without certifications more often than women, $\chi^2(1, N = 189) = 6.64$, $p = .010$. In the family domain, women reached the markers significantly earlier than men, who moved from home more than a year later, entered marriage or cohabitation nearly two years later, and had a child three years later than women. The gender differences in the proportions of those who had remained single or childless were insignificant. The great majority of participants, 86.2% of men, and 95.8% of women, had reached at least three of the five markers of adulthood by age 27. All three family-related transitions (variables 1-3 in Table 1) were reached by 39.4% of men, and 61.1% of women, and both working life-related transitions (variables 4-5) were reached by 60.6% of men, and 67.4% of women by age 27. All five transitions were completed by 22.3% of men and 37.9% of women by age 27. The majority of both men and women perceived themselves as adults at age 27.

Insert Table 1 about here

The gender difference in the age of the first certification conferral was related to gender differences in the level and length of education, $\chi^2(3, N = 189) = 31.01$, $p = .000$. For men, 54.3% had their first certifications from vocational school, 12.8% from vocational college, and 5.3% from university. The corresponding percentages for women were 30.9% from vocational school, 47.9%

from vocational college, and 8.5% from university. Specifically in men, the age of certification conferral was related to the level of the completed education, $F(2, 65) = 9.03$, $p = .000$. Men graduated from vocational school earlier ($M = 20.1$ years) than from college ($M = 24.1$ years) or university ($M = 26.4$ years). In women, the mean ages of certification conferral were 22.9 years from vocational school, 24.0 years from vocational college, and 28.1 years from university. The age of certification conferral did not differ significantly between the educational levels in women.

The timings of the first transitions were plotted in Figures 1 and 2. The x-axis indicates the ages of the participants (from 15 to 42 years) and y-axis shows the number of participants. The figures illustrate for both males (Figure 1) and females (Figure 2) that the first peak in the entrance to a full-time job timed at age 16, which is the age of completing the comprehensive school. The first peak did not coincide with any other markers of adulthood. In men, there was a tendency for several markers to coincide in the following peaks: At age 18, the peak in moving away from parental home coincided with certification conferral and entering a full-time job. Another peak at age 21 aligned moving from the parental home together with entering cohabitation or marriage and with taking a full-time job.

Insert Figures 1 and 2 about here

The interconnecting trends of the markers were different for women, and could be described as waves instead of clear peaks. The number of women moving out from parental home increased steadily from age 15 to 20, preceding other markers of adulthood. In a second wave, the number of women entering cohabitation or marriage increased gradually from age 16 to age 20 with a parallel increase in taking a full-time job. During a third wave, women from age 19 to age 23 reached their vocational certifications in increasing numbers. The ages of having the first child were more evenly

distributed than the other transitions, and there were several peaks. In men, those peaks continued to emerge at later ages than in women.

As shown in Table 2, no significant gender differences in the level of identity achievement were found at any age. Achievement increased from young to middle adulthood: A significant increase in identity achievement from age 27 to 36 was found in men, $t(93) = 3.88$, $p = .000$, as well as in women, $t(94) = 2.85$, $p = .005$. Specifically for women, there was an additional increase in identity achievement from age 36 to 42, $t(94) = 2.64$, $p = .010$. The increase in achievement from age 27 to 42 was significant in both genders, $t(93) = 3.65$, $p = .000$ for men, and $t(94) = 4.87$, $p = .000$ for women.

Insert Table 2 about here

Transition to Adulthood and Identity Achievement

The markers of entering adulthood family roles (Table 3, variables 1–3) correlated significantly and positively with each other in both women and men. Correlations were lower between the markers concerning working life (variables 4–5). The positive correlation between the age of certification conferral and entering a full-time job reached statistical significance only among men.

The associations between the markers of adulthood and identity achievement were inconsistent: In women, the markers of adulthood concerning family life had a trend of negative correlation with identity achievement. However, only the correlation between the age of moving from the parental home and identity achievement at age 36 reached statistical significance, indicating that the younger the age of moving, the more achieved the identity. The markers concerning adult roles in working life generally had positive correlations to identity achievement. The self-perceived adulthood and the external markers of adulthood did not correlate, except for the

significant correlation between the self-perceived adulthood and the later age of entering a full-time job in women: Women who reported perceiving themselves as adults at age 27 had entered full-time work at an older age. All women with the exception of one had entered full-time work by age 27 (Table 1). The positive association between self-perceived adulthood and identity achievement emerged only in women.

Insert Table 3 about here

The level of education correlated with the markers of adulthood in the working life domain in men, and with all other markers except moving from the parental home in women. The correlations indicated that the higher the level of education, the later the entrance into the adult roles. In addition, the level of education also correlated with identity achievement at age 36 in men, and at ages 36 and 42 in women.

As demonstrated in Table 1, the study included quite a few participants who had no certifications conferral or no children. To find out possible implications of recoding the non-occurrence of a marker, the non-occurrent markers were excluded and an additional pairwise correlation matrix was calculated. The correlations were similar to those in Table 3 with the exceptions that the correlations between the age of the first certification conferred and entering full-time job in men, and between the first certification conferred and IA-D Scale at age 36 and 42 in women, did not reach significance. Thus women without a certification affected the correlation and, as indicated by an independent samples *t*-test, women without a certification had lower IA–D scale scores than those with certifications at age 36, $t(93) = 2.16$, $p = .034$, and at age 42, $t(93) = 2.14$, $p = .035$. In men, no corresponding differences were found.

Associations between the Markers of Adulthood and Self-perceived Adulthood

As shown by the correlations (Table 3), the only significant relationship between self-perceived adulthood and the timing of an external marker of adulthood was found for the age of entering a full-time job in women. In further comparisons, the participants were classified into two groups: Those who perceived themselves as adults at age 27 were contrasted with those who had not expressed it clearly in regard to the number of markers of adulthood (1,2,3,4, or 5) by age 27. The analysis showed that self-perceived adulthood was not related to the number of external markers reached by age 27 in either men, $\chi^2(3, N = 94) = 2.363$, $p = .501$, or women, $\chi^2(3, N = 95) = .802$, $p = .849$.

In addition, we investigated whether reaching all three family-related transitions to adult roles by age 27 (moving from the parental home, marriage or cohabitation, and having a child) was associated with self-perceived adulthood. The groups of men and women with all three transitions did not differ in self-perceived adulthood from those who had not experienced all three transitions. Similarly, the groups of men and women who had reached both of the working life-related transitions by age 27 (certification conferred, entrance to full-time work) did not differ from those who had not experienced both of these transitions in self-perceived adulthood.

A Model of the Implications of Transition to Adulthood for Identity Achievement

In the structural equation modeling, the five measured external markers of adulthood were merged into two latent variables of the timing of entering family and the timing of entering working life. To analyze their implications for later identity achievement, these two latent variables were set as explanatory variables, and the variables for identity achievement (IA-D scale) at ages 27, 36, and 42 were positioned as dependent variables (Figure 3). The linkages between the three measurement points of the IA–D scale were first confirmed as being significant for both women and men. In addition to the connections from age 27 to 36, and from age 36 to 42, a connection emerged from age 27 to age 42.

Insert Figure 3 about here

The first latent variable of the external markers of adulthood, labeled Timing of Entering Family Life, included the following three markers: the age of moving from the parental home to independent living, the age of committing to a stable relationship either in marriage or in cohabitation, and the age of having the first child (variables 1–3 in Table 3). The second latent variable, labeled Timing of Entering Working Life, comprised the two markers concerning working life: the first age of certification conferral and the age of entering the labor force in a full-time job (variables 4–5 in Table 3). These two latent variables intercorrelated positively in both genders, but more highly in women than in men. The markers of adulthood loaded significantly on their respective latent variables in both men and women, specifically in the area of family life, λ ranging from *.58* to *.88,* $p < .001$ in all. The weakest loading was that of the age of certification conferral on the Timing of Entering Working Life , $\lambda = .24$, $p < .05$. Hence, this latent variable was more strongly indicative of the age of entering full-time work, $\lambda = .63$, $p < .05$, than of age of certification conferral.

The latent variable for the timing of entering working life was positively associated with identity achievement at age 27 in both men and women, $\beta = .43$, $p < .05$. In men, there was an additional positive linkage from the timing of entering working life to identity achievement at age 36, $\beta = .74$, $p < .05$. The corresponding linkage did not exist for women. The linkages from the latent variable of timing of entering family life to identity achievement were in the opposite direction: A later timing in this latent variable was associated with lower levels of identity achievement at age 27 for both men and women, $\beta = -.32$, $p < .01$, and for men also at age 42, $\beta = -.29$, $p < .01$. The model shown in Figure 3 fit the data well, $\chi^2(40) = 40.42$, $p = .452$, *RMSEA* = .011, *GFI* = .95 for men, *GFI* = .94 for women.

Specific Relationships of the External Markers of Adulthood and Identity Domains Related to Love and Work

In order to study whether there were links between the age of entering adult roles and the specific identity domains of "love and work," the participants were grouped at each age level on the basis of their identity status (e.g., achieved vs. any other status) in the domains of intimate relationships identity and occupational identity. The identity status groups did not differ in the occurrence or non-occurrence of any adulthood marker. The identity status classes were then compared to each other in the age of entering adult roles. The results showed that earlier reaching of the markers in personal and family life was typical of a foreclosed intimate relationships identity, whereas identity achievement in this domain was related to slightly later completion of the correspondent markers. The foreclosed men at age 27 had moved from their parental home earlier (M = 19.7) than the other men (M = 21.8), $t(90) = 2.13$, $p = .036$. In women, this association was found for age 36: women who were foreclosed in intimate relationships identity at age 36 had moved from their parental home earlier (M = 19.0) than the other women (M = 20.5), $t(93) = 2.42$, $p = .018$. Respectively, women with an achieved intimate relationships identity at age 36 had moved from their parental home later (M = 20.7 yrs.) than the non-achieved women (M = 19.1 yrs.), $t(93) = -2.68$, $p = .009$. Men with a foreclosed intimate relationships identity at age 27 were likely to have completed more family-related markers of adulthood by age 27 (M = 2.5 markers) than other men (M = 2.0 markers), $t(91) = -1.97$, $p = .052$, whereas men with achieved intimate relationships identity at age 27 had their first child later (M = 29.9 yrs.) than non-achieved men (M = 27.9 yrs.), $t(78) = -2.04$, $p = .045$.

In the domain of occupational identity, only one significant difference between the identity status classes emerged: The men with achieved occupational identity at age 27 had entered full-time work later (M = 21.1 yrs.) than non-achieved men (M = 18.9 yrs.), $t(91) = -2.75$, $p = .007$.

Discussion

The implications of the timing of transition to adulthood for identity achievement were investigated in a heterogeneous sample. The transition to adulthood was assessed through the timing of five widely used external markers of adulthood, and by self-perceived adulthood at age 27. The great majority of the participants had achieved adulthood by age 27 using both measures as criteria. However, self-perceived adulthood was not related to the age of external markers of adulthood. The five markers of adulthood were merged into two latent variables: timing of entering family life and timing of entering working life. Reaching the adult family roles at an earlier age was in both genders associated with higher identity achievement at age 27, which further preceded higher identity achievement at ages 36 and 42. Specifically for men, an additional linkage emerged for identity achievement at age 42. Yet, reaching adulthood in working life at a later age, specifically in full-time work, was associated with higher identity achievement at age 27, and additionally at age 36 among men. The level and thus the length of education, however, correlated strongly with the age of first certification conferral, the age of starting full-time employment, and with identity achievement at ages 36 and 42. In spite of the associations to general identity achievement, neither the number of completed markers of adulthood in the areas of family and work, nor the occurrence or non-occurrence of these markers, was associated with the identity status in the correspondent domains of intimate relationships and occupational identity.

In women, self-perceived adulthood at age 27 was associated with a stronger sense of identity during adulthood. Hence, prolonged exploration and feeling “in-between” (Arnett, 2004) still at age 27 did not support women’s identity achievement. Reaching identity achievement by age 27 has been found to be beneficial to later social well-being and generativity (Fadjukoff & Pulkkinen, 2006), thereby representing the time frame for optimal development.

Self-perceived adulthood was not related to the external markers of adulthood in this study. The finding was consistent with Arnett’s (2004) finding that for the feeling of being an adult, internal incremental criteria such as responsibility for oneself and independent decision-making are

more important than external markers of adulthood. Those participants who had experienced several transitions to adult roles by age 27, and even those who had experienced all five transitions or markers of adulthood, did not differ from the other participants in their frequency of self-perceived adulthood. These results differed from those by Shanahan et al. (2005) who found that individuals who had reached all three markers in family life more likely regarded themselves as adults than those who were lacking one or more of these transitions. In their study, a more detailed measure of self-perceived adulthood including ten specific situations (e.g., at home, school, or work) was utilized, whereas in our study only one general implicit question related to self-perceived adulthood was used. In the present study, self-perceived adulthood was coded based on an indirect question – even posed in the personalized interview context – about what it means to be an adult, which 86% of the interviewees answered with reference to themselves. A more detailed measure of self-perceived adulthood could have yielded more specific results.

The two main areas of identity exploration in emerging adulthood, love and work, as stated by Arnett (2004), were investigated as two latent variables, timing of entering family life and timing of entering working life, in this study. Prolonged transitions in the areas of personal relationships and family responsibilities did not result in higher identity achievement outcomes. Instead, a delay or failure to enter the adult family roles was related to lower identity achievement. Hence, those who were not able to find a partner and establish a relationship as early as their peers did not seem to benefit of prolonged possibilities for exploration but instead were at risk of not attaining a coherent identity achievement. Therefore, the current trend of postponing the transitions to adult family life (Arnett, 2004, 2006; Fussell & Gauthier, 2005) does not seem to be positively related to identity development. The positive implications of early entrance to family life, including moving from the parental home, address the issue that there is an end point in the optimal time frame for reaching these developmental milestones, and refer to the importance of triggering the transitions to adulthood in due time (see Osgood et al., 2005).

However, the findings also give information about the possible disadvantages of overly early transitions related to family life, and thus the possible curvilinear nature of the relationship between the markers of adulthood in family life and identity achievement. The multitude of family-related transitions took place within the age frame from about 18 to late twenties in the study. This age frame corresponds to the age frame given for emerging adulthood by Arnett (2000, 2004, 2006). During this age span, the earliest entrance to adult roles was characteristic of the foreclosed identity, whereas achievement was associated with slightly later transitions. Hence, the findings suggest that the earliest transitions were not optimal for identity achievement. Earlier studies (Kokko et al., 2006a; Rönkä & Pulkkinen, 1998) show also other risks specifically in early motherhood: It was associated with a lower level of education, lower occupational status, low work involvement at age 27, and other problems in social functioning.

The results show that a prolonged time for education and searching for a full-time job yielded positive effects on identity achievement. These results were evidently associated with the level of education. The study included a number of participants with no vocational certifications, which expanded the heterogeneity in this area (non-occurrence was recoded in the lowermost end of the age range). The mechanisms of the impact of the level of education on identity achievement can possibly be partly explained by early selection involved in the processes: Youth attending longer education could have better cognitive capacities, have better individualization strategies (see 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. Fadjukoff and Pulkkinen (2006) showed earlier that the occupational status of the parents, and one's own school success at age 14, had implications on identity achievement in adulthood. In addition, Lannegard-Willems and Bosma (2006) pointed out that the school context played an important role in the students' identity development already in adolescence, further affecting their academic achievements. Further studies are 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, and of school achievement in early adolescence.

The focus of the present study was on the timing of the transition to adulthood, and its implications for identity achievement. A drawback in the study was that self-perceived adulthood was measured only indirectly, and that identity interviews had not been conducted before age 27, therefore it was not possible to extend the follow-up of the identity development to the early twenties to coincide with the multitude of the adulthood transitions. To enable the correlational analysis, the non-occurrence of a marker was recoded in the study. The analyses of the effects of this recoding revealed that women without any certification (n = 12) 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.

The findings indicate that transitions related to family and working life are differently related to identity achievement, and emphasize the possible selective effects of the level of education to the latter. The results also suggest that there is an optimal time frame for transitions to adulthood from the point of view of identity achievement, referring to the possible role of foreclosure identity in early transitions. Despite its limitations, the study gives insight into the much debated emerging adulthood period in a longitudinal setting, and in a heterogeneous sample.

The cohort studied was born in 1959, hence the typical timing of their transition events could differ from a typical timing of these events for today's emerging adults in Finland. Adequate data for cohort comparisons is not available for transitions other than childbirth (the mean age has risen a little over a year, yet the number of mothers having their first child under age 20 has not decreased) and marriage. However, it seems that external transitions of adulthood are generally becoming more and more disassembled and more challenging to tackle in statistics or research: Parallel to the rising marriage age, cohabitation (coded as equal to marriage in this study) has become increasingly widespread; nowadays more than a third of children are born to non-married couples in Finland. As

autonomy is highly valued, the youngsters continue to move early from the parental home, many still partially depending on their parents' financial support. 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, for instance, by typically increasing exploration and decreasing stable commitments of emerging and young adults. Whether this is beneficial to their identity formation in middle adulthood, is an interesting topic for future research.

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Table 1

Timing of external markers of adulthood and self-perceived adulthood in men (n = 94) and women (n = 95)

	MEN		Timing of reaching a marker of adulthood				WOMEN		Timing of reaching a marker of adulthood				Gender difference		
Variables	*M*	*SD*	By age 27	Between 28–36	Between 37–42	Not reached by age 42	*M*	*SD*	By age 27	Between 28–36	Between 37–42	Not reached by age 42	*t*	*df*	*p*
1 Moving from parental home	21.4	3.71	92.6%	6.4%	0 %	1.1%	19.8	2.91	97.9%	2.1%	0 %	0 %	-3.25	186	.001
2 Entering cohabitation or marriage	23.6	4.74	77.7%	13.8%	2.1%	6.4%	21.8	4.05	89.5%	9.5%	0 %	1.1%	-2.72	180	.007
3 Having the first child	28.5	4.32	39.4%	44.7%	2.1%	13.8%	25.6	4.59	61.1%	28.4%	2.1%	8.4%	-4.22	166	.000
4 Certification conferral	21.4	4.71	62.8%	9.6%	0 %	27.7%	23.9	5.76	67.4%	15.8%	4.2%	12.6%	4.13	187	.000
5 Entering a full-time job	20.7	3.88	95.7%	3.2%	0 %	1.1%	21.2	3.78	98.9%	1.1%	0 %	0 %	.23	187	.813
6 Self-perceived adulthood*	-	-	69.1%	-	-	-	-	-	81.1%	-	-	-	3.58[a]	1	.058

** Noe: Self-perceived adulthood was measured only at age 27*

[a] *Tested using a* χ^2 test

Table 2

Descriptive information of Identity Achievement-Diffusion (IA-D) Scale for men (n = 94) and women (n = 95)

Variable	Men			Women			Gender difference		
	Range	*M*	*SD*	Range	*M*	*SD*	*t*	*df*	*p*
IA-D at age 27	-5 to 5	-.22	2.18	-5 to 5	.13	2.18	1.13	187	.259
IA-D at age 36	-4 to 5	.78	2.28	-4 to 4	.83	2.28	.18	187	.859
IA-D at age 42	-5 to 5	.72	2.45	-5 to 5	1.35	2.45	1.85	187	.066

Table 3

Pearson correlations between the markers of adulthood, and Identity Diffusion-Achievement Scales for men (n = 94) and women (n = 95). Across gender normalized variables are used. Women are above and men below the diagonal.

	VARIABLE	1	2	3	4	5	6	7	8	9	10
1	Age of moving from parental home	1	**.556*** **	**.514*** **	.043	**.293** **	-.129	**-.203* **	-.101	-.028	.141
2	Age of marriage or cohabitation	**.478*** **	1	**.675*** **	.064	**.299** **	-.141	-.023	-.037	-.048	**.225* **
3	Age of having the first child	**.283** **	**.606*** **	1	.131	**.346*** **	-.031	.094	.064	.040	**.254* **
4	Age of certification conferred	-.048	-.055	-.045	1	.140	.140	**.311** **	**.254* **	.033	**.588*** **
5	Age of entering a full-time job	.177	.190	.093	**.246* **	1	**.239* **	.046	.093	**.212* **	**.396*** **
6	Identity Diffusion-Achievement Scale, age 27	.046	-.140	-.086	.069	.079	1	**.267** **	**.344*** **	**.226* **	.167
7	Identity Diffusion-Achievement Scale, age 36	.067	.187	.084	.175	**.293** **	**.387*** **	1	**.571*** **	**.202* **	**.264** **
8	Identity Diffusion-Achievement Scale, age 42	-.110	-.129	-.194	.106	**.209* **	**.426*** **	**.563*** **	1	**.236* **	**.286** **
9	Self-perceived adulthood at age 27 (0 or 1)	.022	.006	.107	-.082	.064	.001	.064	.012	1	.052
10	Level of first certification conferred (0-3)	-.038	.146	.080	**.756*** **	**.441*** **	.063	**.259* **	.197	.008	1

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

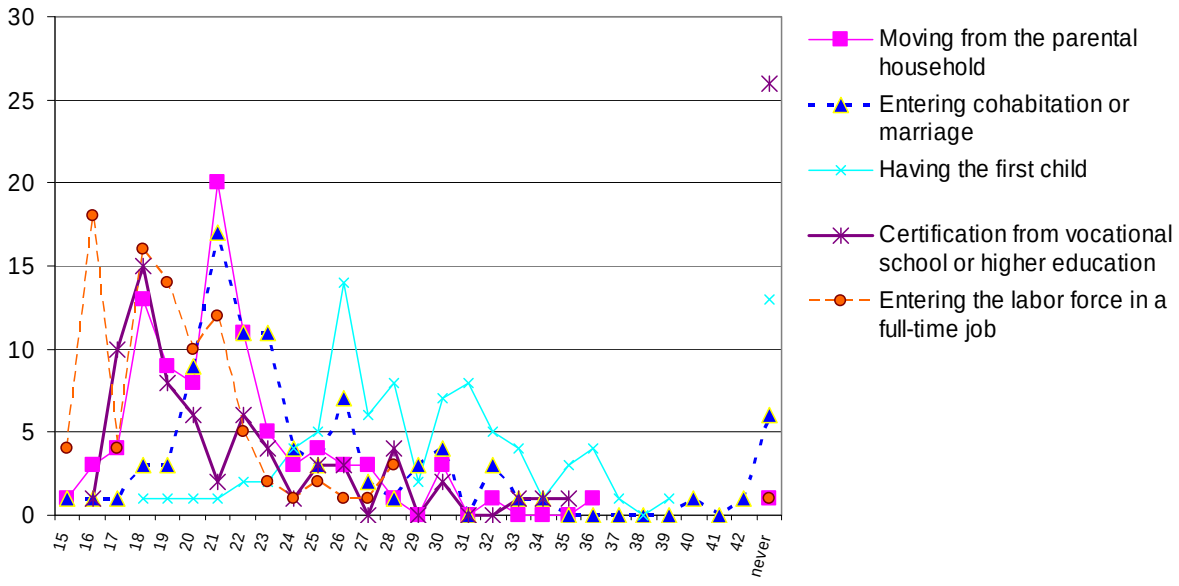


Figure 1

Timing of the markers of adulthood, distributions for men (n = 94)

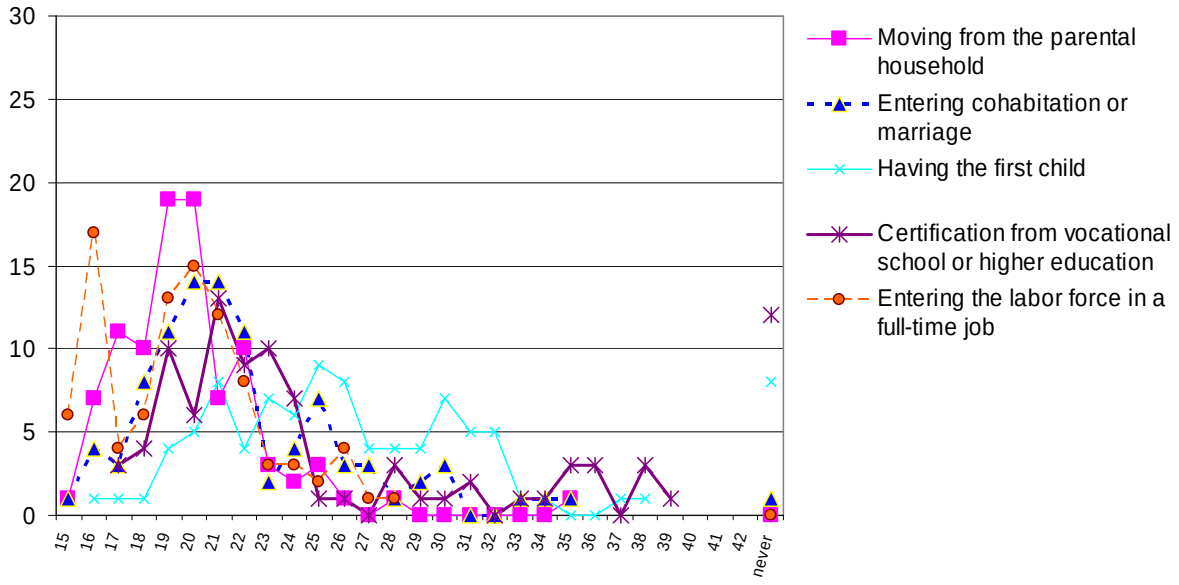
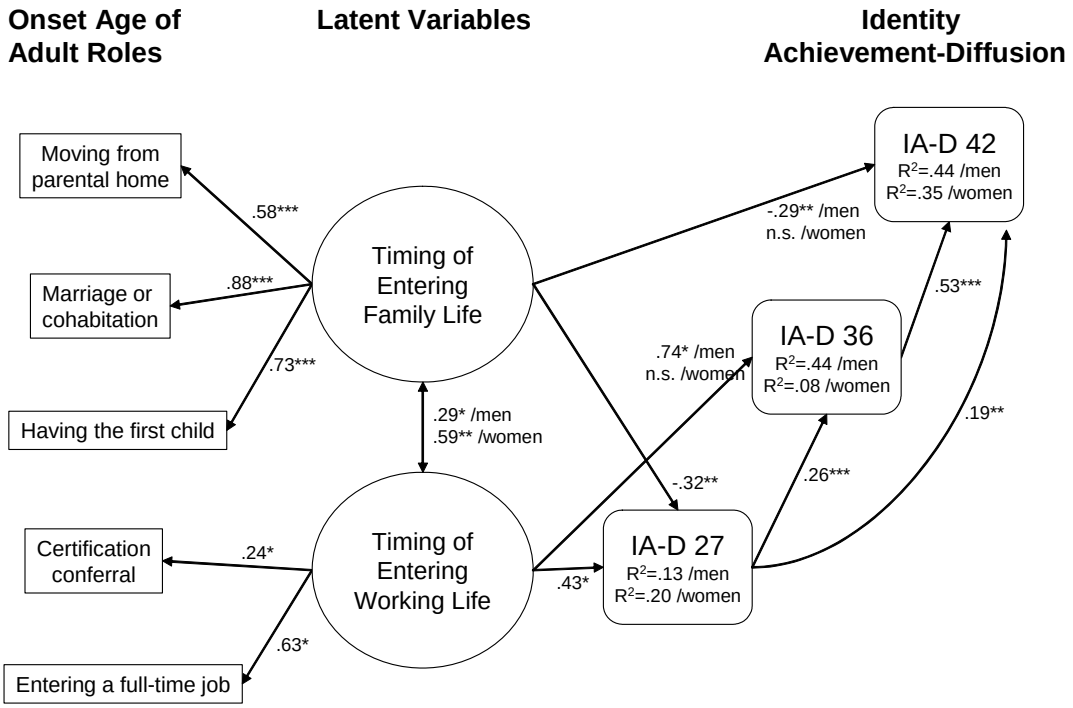


Figure 2.

Timing of the markers of adulthood, distributions for women (n = 95)



Note. LISREL Multigroup Analysis, Common Metric Completely Standardized Solution

*p < .05; ** p < .01; *** p < .001; R^2 = explained variance.*

Figure 3.

A Structural Equation Model including two latent factors of external markers of adulthood variables and their links to Identity Achievement-Diffusion scale (IA–D) at ages 27, 36, and 42

ACKNOWLEDGEMENTS

The Jyväskylä Longitudinal Study of Personality and Social Development has been funded by the Academy of Finland as a part of the project (Nos. 40166 and 44858) "Human Development and Its Risk Factors" (Finnish Centre of Excellence Programme, 1997–2005). Katja Kokko was funded by a grant (No. 118316) awarded by the Academy of Finland.