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**Author(s):** Fadjukoff, Päivi; Pulkkinen, Lea; Kokko, Katja

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## Identity Formation in Adulthood: A Longitudinal Study from Age 27 to 50

Päivi Fadjukoff<sup>a</sup>, Lea Pulkkinen<sup>b</sup>, and Katja Kokko<sup>c</sup>

<sup>a</sup>Agora Center, University of Jyväskylä, Jyväskylä, Finland; <sup>b</sup>Department of Psychology, University of Jyväskylä, Jyväskylä, Finland; <sup>c</sup>Gerontology Research Center, University of Jyväskylä, Jyväskylä, Finland

### ABSTRACT


Longitudinal patterns of identity formation were analyzed in a representative cohort group of Finnish men and women born in 1959 across ages 27, 36, 42, and 50. The data were drawn from the Jyväskylä Longitudinal Study of Personality. Identity status (diffused, moratorium, foreclosed, achieved) from all four ages was available for 172 participants (54% females). Marcia's Identity Status Interview used in this research included five domains: religious beliefs, political identity, occupational career, intimate relationships, and lifestyle. The findings indicated great variability in identity status across domains at each age level, and the identity trajectories fluctuated from age 27 to 50. The developmental trend from age 27 to 50 was moderately progressive (toward achievement) for the five domains and for overall identity, with the exception of a slightly regressive trend in male religious identity. Remaining stable in the same status category across the four measurements was rare and emerged only for diffusion in the ideological domains. Women generally outnumbered men in identity achievement at earlier ages, but the gender differences diminished in most domains at age 50, except in religious identity. In women overall diffusion decreased over time, but in men it remained at about 20% at ages 42 and 50.

### KEYWORDS

Congruence; follow-up; identity development; identity domains; identity status; middle-age; overall identity; salience

As Kroger (2015) pointed out, identity is not a static entity, remaining fixed once initial resolutions are made. Instead, changing life circumstances, together with changing biological and psychological needs, trigger further identity development during the decades of adult life. As noted by Côté and Levine (2002), today's Western societies are characterized by individualization, relativity of values, and restructuring of social systems. Thus, a well-developed identity needs to be flexible and open; initial identity commitments continue to change and evolve over time in content and in how certain they are (Bosma & Kunnen, 2001; Luyckx, Goossens, & Soenens, 2006; Marcia, 2002). In this study, the incompletely understood processes of identity formation in adulthood were followed by analyzing identity status stability and change in five domains from age 27 to 36, 42, and 50 years.

Marcia's original (1966, 1980) paradigm involved the idea of identity developing predominantly in adolescence through four distinct stages that he named identity statuses: diffusion (where no commitments were made), foreclosure (commitments without exploration), moratorium (actively ongoing identity exploration), and finally achievement (where identity commitments were made after a period of exploration). Although identity development toward achievement was seen as a central developmental task in adolescence (Erikson, 1968), the initial identity of young adults was not expected to be final (Marcia, 1980) nor does every individual resolve identity issues at a young age. Indeed, empirical studies have shown that, in the studied domains, only about half of young

**CONTACT** Päivi Fadjukoff  [paivi.fadjukoff@jyu.fi](mailto:paivi.fadjukoff@jyu.fi)  Agora Center, P.O. Box 35, University of Jyväskylä, Jyväskylä, 40114 Finland.

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people obtain an achieved identity by early adulthood (Kroger, 2007). In their meta-analysis covering 124 identity studies, Kroger, Martinussen, and Marcia (2010) concluded that it was not until age 36 that almost half of participants had reached overall identity achievement. Empirical research on identity formation in adulthood has highlighted that identity continues to develop during adult years for many people (e.g., Cramer, 2004; Josselson, 1996). In addition to progressive development toward identity achievement, individuals may move in and out of identity statuses in different patterns of variability (Fadjukoff, 2007; Kroger et al., 2010; Marcia, 2002). Therefore, identity formation is evidenced to be a complex process instead of a straightforward one (e.g., Archer, 1989; Fadjukoff, 2007; Josselson, 1996; Kroger, 2015; Kroger et al., 2010; Marcia, 2002; Meeus, Iedema, Helsen, & Vollenbergh, 1999).

As Waterman (1999) postulated, achievement is clearly the most developmentally sophisticated and diffusion is the least sophisticated identity status whereas it must be noted that identity diffusion might also indicate that the measured domain is not salient for the respondent (Waterman & Archer, 1993). The foreclosure and moratorium statuses lie in the middle of this continuum between diffusion and achievement. There is wide empirical and theoretical consensus about typical development proceeding along the diffusion (D)—foreclosure (F)—moratorium (M)—achievement (A) sequence (e.g., Al-Owidha, Green, & Kroger, 2009; Berzonsky & Adams, 1999; Kroger et al., 2010; Waterman, 1999). However, the relative distance between the categories may vary; for example, in some of their analyses, Al-Owidha et al. (2009) found diffusion and foreclosure statuses to collapse together as the least mature identity categories. The terms *development* and *regression of identity formation*, indicating a theoretically hypothesized sequence (D-F-M-A) and theoretically unexpected shifts to the opposite direction, are widely used. Kroger (1996) has distinguished three different types of regression: disequilibrium (e.g., movement from achievement to moratorium), rigidification (movement from either moratorium or achievement to a rigid closure), and disorganization (from any status to diffusion).

Regressive identity changes from, for instance, achievement to foreclosure, have been explained by possible unreliability of the measure, by possible later reconsideration of one's earlier exploration and commitments (Marcia, 1976), and 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). As discussed by Fadjukoff, Kokko, and Pulkkinen (2010), increasing identity foreclosure at age 36, instead of identity achievement, could also reflect normative age-graded influences (Baltes, Lindenberger, & Staudinger, 1998) when individuals rely on traditional values at the time of establishing their families and careers and being parents to small children. In a single cohort, these findings can also be based on history-graded influences on development (Baltes et al., 1998), for example, people turning toward foreclosure during unstable times such as an economic recession.

Identity is often referred to as a single overall concept (e.g., Erikson, 1950), but is in practice studied within various life domains. The number of studied domains has multiplied from the initial domains of occupation and ideology, and the information measured by the separate domain areas is often combined to form a general or overall identity status for each individual. Kroger and Marcia (2011) highlighted that the measured identity domains were originally intended to reveal an underlying identity structure, not to be treated as multiple identities in themselves. Naturally, the selected content areas of any identity study should be relevant to the participants, and have some variability of choice permitted by the particular culture (Kroger, 2003; Marcia, 1993, 2001). An indicative or "sign" approach determines the overall identity relying on the most salient domain(s) for the individual whereas an "additive" approach gives equal weighting to all measured domains (Kroger, 2003). Specifically, the occupational identity status has been used as an index of overall identity status (e.g., Kroger et al., 2010). Additionally, rich literature exists that does not focus on an overall identity but on specific identity domains, such as occupation, spirituality, ethnicity, or gender, and the meaning of domain-specific identities for individuals in their culture (Vignoles, Schwartz, & Luyckx, 2011). Empirical evidence has highlighted that an individual's identity formation is not

uniform, but that 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, 1993). Goossens (2001) recommended analyzing domain areas separately to acquire more detailed information, instead of combining the information to form an overall identity status. Persistent and increasing levels of identity diffusion continuing to middle adulthood have been found, particularly in the political (Fadjukoff, Pulkkinen, & Kokko, 2005; Pulkkinen & Kokko, 2000) and religious domains (Kroger & Haslett, 1987, 1991).

In longitudinal studies, the variability of a mature identity has been described in terms of moratorium-achievement (MAMA) cycles in adolescence (Stephen, Fraser, & Marcia, 1992), or foreclosure-achievement (FAFA) cycles in later early adulthood (Pulkkinen & Kokko, 2000). Foreclosure after earlier exploration was also detected between ages 25 and 35 by Valde (1996) who proposed identity reclosure (after earlier exploration) as a new identity status. The data of the present study were drawn from the Jyväskylä Longitudinal Study of Personality (JYLS; Pulkkinen, 2006; Pulkkinen & Kokko, 2010), which found a general increase in identity commitment with age, investigated until age 42 (Fadjukoff, 2007; Fadjukoff et al., 2005). Across various domains, identity foreclosure peaked at age 36, as compared to ages 27 and 42, whereas identity achievement generally increased between the ages of 36 and 42. Great variability emerged across the identity domains at each age level. Progression toward achievement was the most frequent trajectory for men and women in occupational, intimate relationships, and lifestyle domains whereas the most usual pattern in political identity was regressive. In religious identity, the regressive, stable, and progressive patterns did not differ in frequency. The rates of stability (remaining in the same status category through three measurement points) varied from 9% to 31%, depending on the domain. Diffusion was more likely to remain stable in the ideological identities whereas in the other domains the committed statuses were the most stable ones. In a later study, political identity was found to progress between ages 42 and 50 whereas occupational identity regressed (Fadjukoff et al., 2010).

The primary aim of this study was to update the earlier longitudinal findings by longitudinally analyzing identity status distributions and patterns of identity formation in adulthood in five different domains and across four measurement points from the ages of 27, 36, 42, up to age 50. The analyses were divided into two phases. First, we calculated the distributions of identity statuses separately for five domains at each age level in a variable-oriented approach. The cross-sectional distributions at ages 27, 36, and 42, reported earlier by Fadjukoff et al. (2005), are summarized to enable a comprehensive developmental picture. In addition to the five domains, we determined and analyzed the overall identity status for the participants, combining the additive and indicative approaches (Kroger, 2003) in three successive steps.

In the second phase, the patterns of individual identity change and stability were followed through the four measurement points within each domain and the overall identity. We expected progression along the hypothesized sequence (D-F-M-A) to be a typical pattern in the overall identity, with some variation across domains. The stability of identity was expected to vary across status categories. Based on propositions by Waterman (1999) and meta-analysis by Kroger et al. (2010), we expected moratorium to be the least stable and achievement the most stable status category over time.

Few studies have compared women's and men's identity statuses at adult ages (Waterman & Archer, 1993), or during adolescence and young adulthood, which is why the gender differences in identity status patterns of change and stability across time could not be tested in the meta-analysis by Kroger et al. (2010). Domain-specific gender differences have been reported specifically in the interpersonal domains with men typically exhibiting higher identity diffusion and foreclosure scores and women higher identity achievement scores (e.g. Fadjukoff et al., 2005; Lewis, 2003), and in political domain in which women were more typically diffused (Archer, 1989; Fadjukoff et al., 2005; Lewis, 2003; Pastorino & Dunham, 1997). In this study, we analyzed the results separately for women and men to also detect possible gender-related differences in identity formation across time.

## Method

### Participants

This study was part of the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS; Pulkkinen, 2006, 2009). The initial random sample of the study consisted of 8-year-old children, 173 girls and 196 boys, born in 1959. The sample comprised 12 randomly drawn complete regular school classes situated in downtown and suburban areas of the city of Jyväskylä, Finland. The initial participation rate of 8-year-old school children was 100%, because the permission of school authorities was sufficient for data collection at school in the 1960s. By age 50, the retention rate was 88%; the eligible sample had reduced to 323 from the initial sample since 3.3% had died and 9.2% had withdrawn from the study. The participation rate from the eligible sample (274/323) was 85%, and the retention rate from the initial sample (274/369) was 74%. The sample was ethnically homogeneous; it consisted of Finnish-speaking Finnish citizens, mostly Lutheran by religion. No systematic attrition has been found in the sample. The sample, at ages 36, 42, and 50, was representative of the population of Finnish citizens born in 1959 when compared with data derived from Statistics Finland on, for instance, marriage rate and household composition, number of offspring, and employment status. The sample in adulthood has also represented the initial random sample (see Pulkkinen & Kokko, 2010). As described by Fadjukoff et al. (2010), major changes have taken place in the economic conditions in Finland during the adult life of the JYLS cohort. Data collections at ages 36 (in 1995) and 50 (in 2009) took place during economic recessions, and at age 42 (in 2001) during an economic boom.

The results of this study were based on data from JYLS participants who had taken part in interviews at ages 27, 36, 42, and 50; these ages represent young adulthood, early mid-adulthood, mid-adulthood, and beginning of late mid-adulthood (Lachman, 2004). Due to several data collection waves, the amount of information per each participant varied; identity interviews had been executed for 291 participants at age 27, for 277 at age 36, 243 at age 42, and 221 at age 50. Full information about identity statuses was available for 172 participants (93 women and 79 men). In each analysis, the maximum amount of data was used. Thus, the number of participants was higher in the cross-sectional analyses than in the longitudinal analyses. A cross-tabulation confirmed that the identity status distributions of men who had taken part in all four measurements did not differ at any age level from men who had participated in fewer interviews. Similar results were earlier found at age 42 for both genders (Fadjukoff, 2007; Fadjukoff et al., 2005). However, in the present study, women with data from all four measurement points were less often diffuse than women who had participated in fewer interviews.<sup>1</sup>

### Measures and procedure

The identity interview, based on the Eriksonian tradition (Erikson, 1950, 1968), utilizing Marcia's (1966, 2007) identity status paradigm, was conducted at ages 27, 36, 42, and 50. Each identity interview was carried out as part of a more comprehensive psychological interview, which took about 3 hours. The interview covered such topics as life events, personality, well-being, health behavior, marital relationship, family life, friends and leisure time, and work (Pulkkinen, 2006, 2009). Before the interview session, a Life Situation Questionnaire was mailed to the participants. In the context of the interview, the participants also filled out several self-report inventories.

At all ages, the semistructured interview included five domains, that is, religious beliefs, political ideology, occupational career, intimate relationships, and lifestyle. At age 36, parenting was added as

<sup>1</sup>The difference emerged in religious identity at age 36,  $\chi^2(3) = 7.79, p = .050$ , and in lifestyle identity at ages 36,  $\chi^2(3) = 10.79, p = .013$ , and 42,  $\chi^2(3) = 9.58, p = .025$ . The corresponding difference emerged in women's overall identity at ages 36, 42, and 50,  $\chi^2(3) = 12.06, p = .006$ ,  $\chi^2(2) = 10.93, p = .004$ , and  $\chi^2(3) = 12.43, p = .012$ , respectively. At age 36, the women who had taken part in all interviews additionally outnumbered the other women in moratorium in the domain of lifestyle as well as in overall identity.

a new domain (Fadjukoff, Pulkkinen, Lyyra, & Kokko, 2016). However, parenting identity was not included in this study because the intention was to analyze longitudinal data from age 27 to 50. The opening questions were as follows: “Do you have a personal relationship to religion?” “Do you have a political opinion?” “Do you have a conception of your occupational career?” “Do you have an idea of what you expect from a close relationship?” and “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 using two criteria: the firmness of personal commitment (no/yes) and the absence (–) or presence (+) of a period of exploration or identity crisis. Using these dimensional categorizations, four identity statuses were defined: diffused (D: – [or past +] exploration, – commitment); moratorium (M: + exploration at the moment, – commitment); foreclosed (F: – exploration, + commitment); and achievement (A: + exploration, + commitment). The status was first coded by the interviewers and later, on the basis of transcriptions, by a person 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. The rate of full agreement between an interviewer for each identity domain and the second coder varied from 73% to 93% (there were about 15 different interviewers each time).

In assessing the overall identity, we used a combination of the additive and indicative (Kroger, 2003) approaches to determine the overall identity in three successive steps. In the first step, the dominating status was determined as the overall identity status for those participants who had the same status classification across at least three out of five identity domains. For instance, if a person was achieved in his or her intimate relationships, lifestyle, and religious identities, foreclosed in occupational identity, and diffused in political identity, the overall identity would be achieved. The second step concerned those participants with less than three same status categorizations across domains. The overall identity status was determined based on the salient domain if there was another domain with the same status categorization to support this conclusion. Information from the larger interview and a mailed questionnaire was utilized in this process. For instance, if a person was achieved in intimate relationships, and informed that family was his or her most important thing in life, and was also achieved in some other domain, the overall identity was categorized as achieved. However, if he or she was not achieved in any other domain, the overall identity was not determined in this step and with this procedure. If such a person mentioned health as the most important thing in his or her life, the overall identity could not be determined in this step. The third step was based on closer analysis of salience of several domains, and the overall identity for the remaining participants was determined from an overall understanding based on the participant’s responses regarding salience and nonsalience of different areas of life. For instance, a woman at age 27 had the following statuses: religion, diffused; politics, moratorium; lifestyle, foreclosed; intimate relationships, achieved; occupational identity, moratorium. In the Life Situation Questionnaire, she rated “home and family” as her most satisfactory area in life, and was married with a young child. She rated religion “not at all” and politics “not really” significant. Her overall identity was categorized as achieved based on intimate relationships identity. Detailed information about the numbers of participants that were assigned an overall identity status according to each of the three methods can be found in Table 1.

**Table 1.** The three-step procedure of assigning overall identity based on the five measured identity domains, used separately for ages 27, 36, 42, and 50: Number and percentage of participants to whom the overall identity status was determined in each step.

Categorization based on	Age 27		Age 36		Age 42		Age 50	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
1st step: Dominant status (minimum of 3 same statuses across 5 domains)	171	58.8	216	78.0	187	77.3	178	79.8
2nd step: Status in the most salient domain + a supporting same status in another domain	70	21.1	42	15.2	37	15.3	39	17.5
3rd step: Overall judgement based on the most salient domain	50	17.2	19	6.9	18	7.4	6	2.7
Total	291	100	277	100	242	100	223	100

## Data analysis

The analysis was divided into two phases. First, each age level and each identity domain was analyzed separately in a variable-oriented approach. This method allowed the use of interview information of the maximum number of participants at each age level ( $N = 291$  at age 27,  $N = 283$  at age 36,  $N = 243$  at age 42, and  $N = 223$  at age 50). To complement the previous analyses based on ages 27 to 42 (Fadjukoff et al., 2005), we now also included age 50, and analyzed the distributions using the full age range from young adulthood to late mid-adulthood. Chi-square testing was used to measure the significance of gender differences in the identity status distributions at each age, and the adjusted standardized residuals (ASR) detected the cells with more cases than expected by chance (typical) or less cases than expected by chance (atypical; Bergman, Magnusson, & El-Khoury, 2003). The same procedure was used for the overall identity that was determined for each participant based on the five measured domains. Further,  $t$  tests for independent samples were conducted to detect gender differences in the mean number of status classifications at each age level.

In the second phase of the study, individual identity status changes and stability were followed between each age level. Only the 172 participants with information at every measured age level were included in these analyses. The developmental order of diffusion (= 1) to foreclosure (= 2) to moratorium (= 3) to achievement (= 4), was used in the analyses, as done by Berzonsky and Adams (1999) and Kroger et al. (2010) in their summaries of several longitudinal studies. The Identity Change Measure (Fadjukoff et al., 2010) was calculated for each domain subtracting as follows: Identity level at age 36 – level at age 27, the level at 42 – the level at 36, and the level at 50 – the level at 42. A negative value represented regressive change, a zero meant stable identity, and a positive value meant progressive change. For instance, in any domain, achievement at age 50 minus diffusion at age 42 would produce a value of 3 for change between 42 and 50 on that specific domain. The Identity Change Measure was thus a continuous variable ranging from  $-3$  (maximum identity regression) to  $+3$  (maximum progression).  $T$  tests for independent samples were used to detect gender differences in identity change between each age level, and a one-sample chi-square test to test whether regression, stability, and progression were equally typical identity trajectories in each of the five identity domains and in overall identity.

Identity status formation (D-F-M-A) on each domain, and for the overall identity, was analyzed in the longitudinal setting with repeated measures multivariate analysis of variance (MANOVA). Mauchly's test of sphericity was used to validate repeated measures factor analysis of variance (ANOVA) and corrected tests for within-subjects were used in case of nonsphericity of the measures. In the  $2$  (group)  $\times$   $4$  (time) analyses gender was treated as a between-groups variable and time as a repeated measure, enabling the investigation of the interaction of these effects, the mean level changes of the identity status measures from age 27 to 36, 42, and 50, and the differences in the mean identity levels between the genders. Results of corresponding analyses on political and occupational identity had been reported earlier by Fadjukoff et al. (2010).

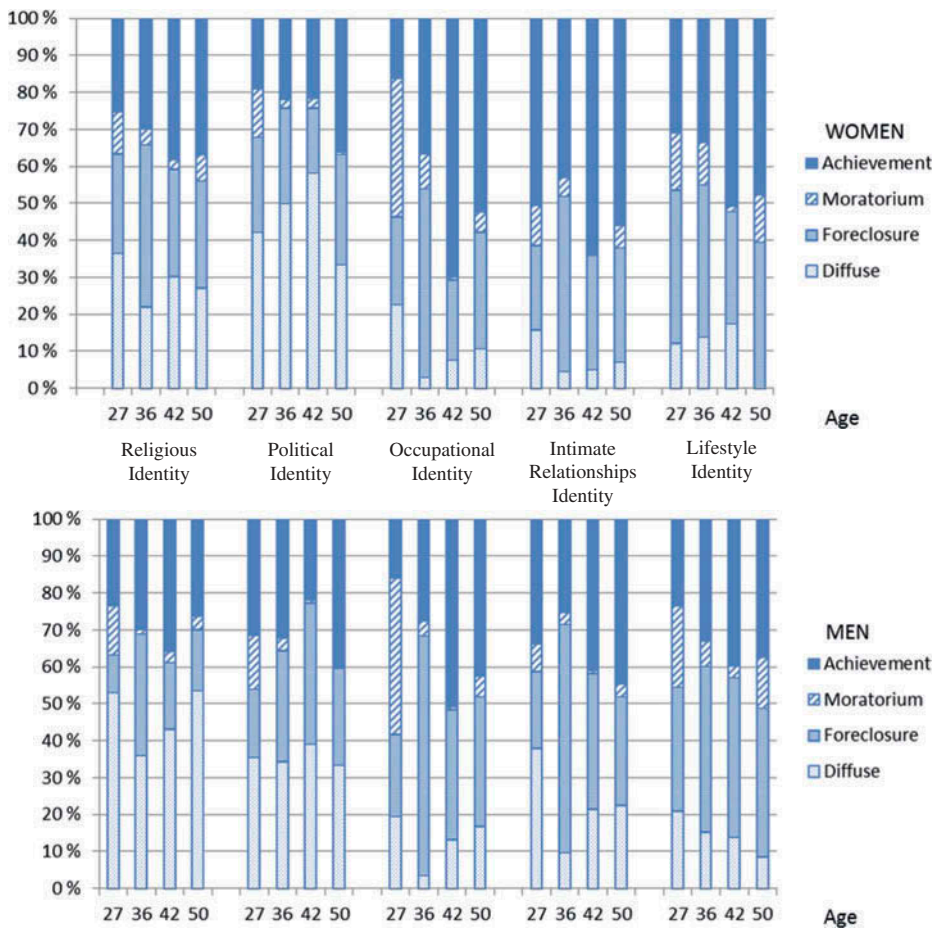
## Results

### Domain-specific distribution of identity statuses

The distributions of identity statuses in each domain were cross-tabulated separately at the four measured age levels across gender to obtain a basic overview to the identity structure. In the following figure, the results for ages 27, 36, and 42 are a summary of the previous analyses reported by Fadjukoff et al. (2005). As Figure 1 demonstrates, great variability emerged in identity statuses across the domains at each age level.

At age 27, only a minority of the participants had reached achievement in any domain. Exploration was most active in occupational identity; the percentage of moratorium was around 40%, several times higher than the corresponding percentage in the other domains. Lifestyle identity was the second-highest domain in moratorium, although foreclosure was the most typical status for





**Figure 1.** The distribution of identity status over five domains at ages 27, 36, 42, and 50 for women and men. For women, with some incidental missing values,  $n = 142$  at age 27,  $n = 132$ – $137$  at age 36,  $n = 120$  at age 42, and  $n = 109$ – $111$  at age 50. For men,  $N$  ranged as follows:  $n = 148$ – $149$  at age 27,  $n = 142$ – $146$  at age 36,  $n = 122$ – $123$  at age 42, and  $n = 107$ – $112$  at age 50. The figures for ages 27, 36, and 42 are drawn from Fadjukoff et al. (2005).

both genders, and men outnumbered women in diffusion. Diffusion was frequent specifically in political and religious identity. In religious identity, men outnumbered women in diffusion whereas foreclosure was more typical of women. In intimate relationships, half of the women, but only a third of the men had reached achievement; men also were more typically diffuse in this domain.

At age 36, moratorium was rare because the majority of participants had made identity commitments in the domains of occupational identity, intimate relationships, and lifestyle either through foreclosure or achievement. In the domain of intimate relationships, women were more typically achieved and men more typically foreclosed. In occupational identity, men also were more often foreclosed than women. In political identity, the most frequent status was diffuse for both genders whereas in religious identity men were, as at age 27, more typically diffused and women foreclosed.

At age 42, identity achievement emerged as the most frequent identity status in occupational identity and intimate relationships for both genders. However, occupational identity achievement was more typical of women and foreclosure of men. In intimate relationships, nearly two thirds of women were achieved, and significantly more men than women were classified as diffused. Additionally, women were most frequently achieved in the lifestyle and religious identity domains whereas men scored about as frequently foreclosed and achieved in lifestyle identity, and most

typically diffused in religious identity. In the ideological domains of religious and political identities, diffusion was frequent for both genders. More than half of women were diffused in politics whereas men outnumbered women in foreclosure; the gender difference was significant. Moratorium status was rare in any domain.

At age 50, achievement was the most frequent identity status in every measured domain for women as well as in occupational, political, and intimate relationships identity for men. In lifestyle identity, men scored foreclosed and achieved about equally typically (around 40%) whereas in religious identity most men (54%) were diffused, contrary to other domains. Gender differences highlighted that diffusion was more typical for men than for women in three out of five domains: intimate relationships,  $\chi^2(3) = 10.87, p = .012$ ; lifestyle,  $\chi^2(3) = 10.58, p = .014$ ; and religious identity, in which women additionally outnumbered men in the foreclosure status,  $\chi^2(3) = 16.76, p = .001$ .

The frequencies and gender differences above were based on the maximum number of participants at each age level. We reran the same analyses limited to those 172 participants who had participated in all three measurement points. These analyses gave generally the same results with only minor changes in  $p$  values.

### **Overall identity status**

The overall identity was determined for each individual at the four measured ages (27, 36, 42, and 50) in three successive steps, utilizing a combination of additive and indicative approaches as demonstrated in Table 1. Congruence across three or more domains out of five increased with age from 59% at age 27 to almost 80% at age 50, allowing assignment of the overall identity status based on the dominant status category (three same-status classifications across five domains) for the majority of participants. For those participants without such a dominant identity status, salience of the domains was considered and the categorization was based either on one salient and one supporting same-status domain (for 15–20% of the participants) or, in case of little congruence across domains, only on one salient identity domain. Due to variability of identity statuses at age 27, the number of participants to whom this third step was applied was much higher at age 27 than at later ages. Complete congruence was not frequent at any age: the percentage of the participants who had the same identity status category in all five domains was 7.2% at age 27, 3.5% at 36, 9.5% at age 42, and 7.1% at age 50.

As shown in Figure 2, achievement emerged as the most frequent overall identity status at all ages except age 36 when foreclosure surpassed achievement as the most frequent overall identity status for men and women. The overall identity achievement was reached by about 40% of women and almost 30% of men at ages 27 and 36, about 50% of women and 40% of men at age 42, and about 50% of both genders at age 50. The majority of the participants had a committed overall identity either through achievement or foreclosure at all ages. Identity diffusion and moratorium were at their highest at age 27, after which moratorium played a minor role, being almost nonexistent specifically at age 42. In women diffusion decreased over time, but in men the rate of overall diffusion remained rather high, at about 20% at ages 42 and 50.

Significant gender differences emerged in the overall identity at all measured age levels. At age 27, identity moratorium was about twice as typical of men than of women,  $\chi^2(3) = 10.21, p = .017$ . At age 36, there was a high peak in foreclosure for both genders but it was even more typical of men whereas women outnumbered men in overall identity achievement,  $\chi^2(3) = 10.56, p = .014$ . At age 42, there was again a significant difference in achievement in favor of women,  $\chi^2(3) = 8.03, p = .046$ , although achievement was the most frequent identity status also for men. At age 50, a gender difference emerged in identity diffusion where men outnumbered women,  $\chi^2(3) = 12.98, p = .005$ .



Figure 2. Overall identity status frequencies for women and men at ages 27, 36, 42, and 50.

Most of the participants were achieved in at least one of the identity domains. Even at age 27, when the frequency of achievement ratings was at its lowest, around two thirds of the participants were achieved in at least one identity domain. The percentage of those who scored achieved in at least one out of five measured domains at ages 27, 36, 42, and 50 was 70%, 76%, 89%, and 87% in women and, respectively, 63%, 68%, 76%, and 75% in men.

Significant gender differences emerged in the average number of identity status classifications across the five identity domains. At age 27, the mean number of identity diffusions out of the five domains was 1.7 for men and 1.3 for women,  $t(288) = -2.48$ ,  $p = .014$ , whereas women exceeded men in the mean number of identity foreclosures ( $M = 1.4$  in women;  $M = 1.0$  in men),  $t(288), 2.86$ ,  $p = .005$ . At age 36, the mean number of status classifications was uniform for men and women; the major statuses were foreclosure ( $M = 2.2$  out of five) and achievement ( $M = 1.6$ ). At age 42, however, men ( $M = 1.7$ ) outscored women ( $M = 1.3$ ) in their foreclosure classifications,  $t(240) = -2.78$ ,  $p = .006$ , whereas women ( $M = 2.4$ ) outscored men ( $M = 1.9$ ) in the number of achievement statuses,  $t(240) = 2.82$ ,  $p = .005$ . At age 50, there was a significant mean difference in the number of diffusion statuses; the mean for women was 0.8 and for men 1.3,  $t(210) = -3.58$ ,  $p = .000$ .

### Identity status change and stability across age

Considerable fluctuation emerged in identity status across ages and domains. The individual cumulative change across the four measurements from age 27 to 50 varied from the maximum identity regression ( $-3$ ) to maximum progression ( $3$ ) for all specific identity domains and for the overall identity. The general trend was moderately progressive ( $M = 0.1$  to  $0.7$ ) in other domains,

**Table 2.** Cumulative identity status change between ages 27, 36, 42, and 50.

	Women %	Men %	Significance of gender difference $p$	Difference from equal distribution $\chi^2$ ( $df = 2$ )
Religious identity			.034	*
Regression	18.5	29.9		9.67
Stability	42.4	44.2		$p = .000$
Progression	39.1	26.0		
Political identity			.204	
Regression	21.1	25.3		8.57
Stability	37.8	44.3		$p = .014$
Progression	41.1	30.4		
Occupational identity			.145	
Regression	18.3	33.8		24.43
Stability	29.0	16.9		$p = .000$
Progression	52.7	49.4		
Intimate relationships identity			.025	**
Regression	26.9	17.9		8.84
Stability	44.1	35.9		$p = .012$
Progression	29.1	46.1		
Lifestyle identity			.865	
Regression	25.0	23.7		7.54
Stability	33.7	34.2		$p = .023$
Progression	41.4	42.1		
Overall identity			.960	
Regression	19.3	20.2		16.48
Stability	36.6	34.2		$p = .000$
Progression	44.1	45.6		

Note. Predominant identity change category is indicated in bold.

\* For women,  $\chi^2(2) = 9.28, p = .010$ ; for men,  $\chi^2(2) = 4.23, p = .120$ .

\*\* For women,  $\chi^2(2) = 4.90, p = .086$ ; for men,  $\chi^2(2) = 9.53, p = .008$ .

but regressive in religious identity for men ( $M = -0.2$ ). This regressive male trend differed from the women's trend ( $M = 0.3$ ), nearly reaching significance,  $t(167) = 1.97, p = .051$ . The highest cumulative progression emerged for women in occupational identity ( $M = 0.7$ ), in which they outscored men ( $M = 0.2$ ),  $t(168) = 2.04, p = .043$ . For men, the highest cumulative progression emerged in intimate relationships ( $M = 0.5$ ); however, the difference from women ( $M = 0.1$ ) did not reach significance.

The progressive sequence (D-F-M-A) from age 27 to 50 was the most frequent trajectory for men and women in overall identity as well as in the domains of occupation and lifestyle as shown in Table 2. Stability was highest in religious identity as well as in political and intimate relationships identity. Identity regression was infrequent in all domains. Gender differences emerged in the trajectories only in occupational identity where regressive trajectories were more frequent in men than women.

The cumulative stability rates shown in Table 2 allowed for temporary fluctuation in the intermediate age points. For instance, trends such as A-F-A-A, or F-A-A-F were frequent in most domains and resulted in the rather large proportions of stable identities (e.g., over 40% in religious identity). However, staying stable in one status across the four measurement points was rare. In the ideological domains, some participants remained diffuse throughout the study: 13 % of women and 9 % of men in political identity, and 5% of women and 18% of men in religious identity, reflecting low salience of these specific domains to some participants. No stability emerged in the other domains or statuses. Instead, identity categorizations of all other participants fluctuated during this time span.

As shown in Table 3, no interaction effects emerged for identity formation across age and gender; the identity changes of men and women thus approximated parallel. However, the within-subject test indicated significant time effects in the domains of political, occupational, intimate relationships, and lifestyle identity as well as for overall identity. The mean level of occupational identity achievement

**Table 3.** Identity formation in adulthood, effects of gender and age (27, 36, 42, and 50 years), MANOVA 2 (group) x 4 (time).

	Women												Level Change across time	Between groups		
	Men						Women									
	Age 27 M (SD)	Age 36 M (SD)	Age 42 M (SD)	Age 50 M (SD)	Age 27 M (SD)	Age 36 M (SD)	Age 42 M (SD)	Age 50 M (SD)	Age 27 M (SD)	Age 36 M (SD)	Age 42 M (SD)	Age 50 M (SD)				
Religious Identity (N: men 77, women 92)	2.21 (1.31)	2.30 (1.26)	2.34 (1.35)	2.05 (1.30)	2.30 (1.16)	2.54 (1.09)	2.55 (1.28)	2.62 (1.23)	2.62 (1.23)	2.59 (1.23)	2.54 (1.09)	2.55 (1.28)	2.62 (1.23)	F (3, 501) = 1.82 p = .144	F (3, 501) = 1.34 p = .260	F (1, 167) = 3.90 p = .050
Political Identity (N: men 79, women 90)	2.47 (1.27)	2.47 (1.25)	2.01 (1.14)	2.56 (1.32)	2.12 (1.16)	2.04 (1.19)	1.91 (1.20)	2.50 (1.27)	2.50 (1.27)	1.23 (1.23)	1.23 (1.23)	1.23 (1.27)	1.23 (1.27)	F (3, 165) = 11.02 p = .000 36 > 42 ** 42 < 50 ***	F (3, 165) = 11.02 p = .000 36 > 42 ** 42 < 50 ***	F (1, 167) = 3.13 p = .079
Occupational Identity (N: men 77, women 93)	2.56 (1.00)	2.62 (0.96)	3.00 (1.14)	2.77 (1.16)	2.40 (1.02)	2.91 (0.97)	3.44 (0.98)	3.05 (1.12)	3.05 (1.12)	2.59 (1.12)	2.59 (1.12)	3.05 (1.12)	3.05 (1.12)	F (3, 166) = 15.50 p < .001 27 < 36 ** 36 < 42 *** 42 > 50 **	F (3, 166) = 15.50 p < .001 27 < 36 ** 36 < 42 *** 42 > 50 **	F (3, 168) = 5.26 p = .023
Intimate Relationships Identity (N: men 78, women 93)	2.38 (1.28)	2.41 (0.97)	2.65 (1.23)	2.85 (1.26)	3.06 (1.12)	3.02 (1.02)	3.33 (0.99)	3.15 (1.07)	3.15 (1.07)	1.38 (1.07)	1.38 (1.07)	3.15 (1.07)	3.15 (1.07)	F (3, 167) = 4.44 p = .005 36 < 42 **	F (3, 167) = 4.44 p = .005 36 < 42 **	F (1, 169) = 27.30 p < .001
Lifestyle Identity (N: men 76, women 92)	2.61 (1.06)	2.67 (1.05)	2.68 (1.18)	2.91 (1.02)	2.75 (0.99)	2.73 (1.02)	2.99 (1.16)	3.01 (0.94)	3.01 (0.94)	3.26 (0.94)	3.26 (0.94)	3.01 (0.94)	3.01 (0.94)	F (3, 164) = 3.26 p = .079	F (3, 164) = 3.26 p = .023	F (1, 166) = 2.27 p = .134
Overall Identity (N: men 79, women 93)	2.66 (1.17)	2.48 (1.01)	2.66 (1.23)	2.91 (1.23)	2.67 (1.17)	2.94 (1.04)	3.18 (1.08)	3.08 (1.01)	3.08 (1.01)	2.50 (1.01)	2.50 (1.01)	3.08 (1.01)	3.08 (1.01)	F (3, 168) = 4.61 p = .004 36 < 42 *	F (3, 168) = 4.61 p = .004 36 < 42 *	F (1, 170) = 6.59 p = .011

Note. Scale of variables: 1 = diffusion; 2 = foreclosure; 3 = moratorium; 4 = achievement. \*\*\*p < .001. \*\*p < .01. \*p < .05.

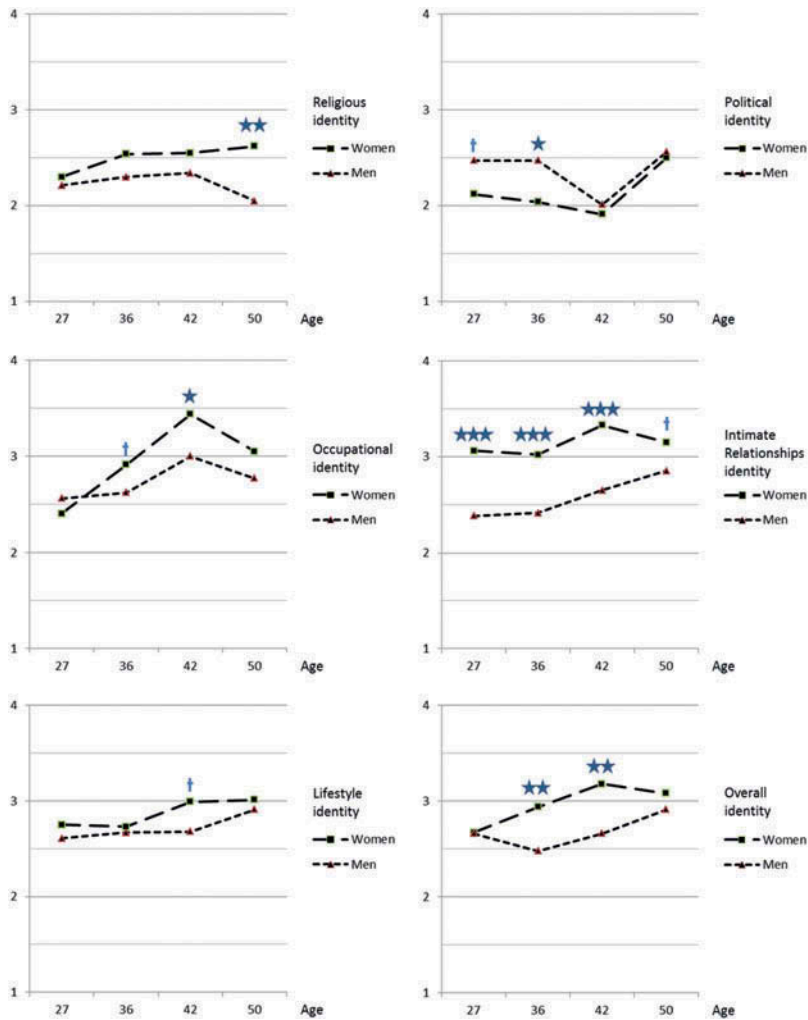


Figure 3. Identity status trajectories across ages 27, 36, 42, and 50 for women and men. \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . † $p < .10$ .

increased strongly from age 27 to 36 and 42, but regressed from age 42 to 50. Concurrently with the peaking occupational identity, the intimate relationships identity and overall identity progressed from age 36 to 42. Conversely, political identity was at its lowest at age 42. For lifestyle identity, the detailed within-subject contrasts did not reveal any specific timepoints for significant level change although the multivariate tests showed significant overall change across time. No level change emerged in religious identity across age.

Significant between-group effects emerged in most identity domains (Table 3). Women exceeded men in identity achievement in religious, occupational, and intimate relationships and in overall identity as shown in Figure 3. The parameter estimates highlighted variation in timing of significant differences across domains: Women outscored men in occupational identity achievement specifically at age 42, and in religious identity achievement at age 50. Although no overall between-group effect emerged, men in turn outscored women in political identity achievement at age 36. The gender difference was most persistent in intimate relationships identity where women outscored men at ages 27, 36, and 42. In overall identity achievement, the difference was significant at ages 36 and 42.

## Discussion

In this study, longitudinal patterns of identity formation were analyzed in a representative cohort group of Finnish men and women born in 1959 across ages 27, 36, 42, and 50. The data were drawn from the Jyväskylä Longitudinal Study of Personality. Identity status (diffused, moratorium, fore-closed, achieved) from all four ages was available for 172 participants (54% were women). Marcia's Identity Interview used in this research included five domains: religious beliefs, political identity, occupational career, intimate relationships, and lifestyle. The overall identity was determined for the majority of participants based on a dominant status, and considering salience of domains for those without a dominant status. The cross-sectional findings implied great variability in identity status across domains at each age level, although congruence across domains increased with age. Although the longitudinal analyses highlighted fluctuation in the identity trajectories from age 27 to 50, the average developmental trend from age 27 to 50 was moderately progressive toward achievement, with only the exception of a slightly regressive trend in male religious identity. Women typically reached overall identity achievement earlier than men, but no longer outnumbered men in achievement at age 50. Most of the participants were achieved in at least one of the identity domains at all ages. Even though having the same identity status at ages 27 and 50 in any domain was frequent, remaining stable in the same status category across the four measurement points was rare and emerged only for diffusion in the ideological domains in which diffusion generally was more frequent than in other domains. Diffusion was more typical and persistent in adult men than in women.

We expected progression along the hypothesized sequence (D-F-M-A) to be a typical pattern in the overall identity, with some variation across domains. The identity status distributions, measured at each age level, implied an increase of commitment with age, according to our hypothesis. At age 50, achievement was the most frequent identity status in every measured domain for women and in three out of five domains for men. Diffusion generally decreased with age but, as a contrast to the general view, it was the most typical religious identity status in men at age 50. Interestingly, at age 50, the moratorium status reappeared in the domains of lifestyle, intimate relationships, and occupation, implying newly emerging future orientation and exploration in the phase of life when, for example, childcare obligations decrease for many.

The longitudinal analyses confirmed the generally progressive trend over time for all five identity domains and for overall identity. The only exception was the regressive religious identity in men, specifically between ages 42 and 50, extending the earlier finding of vague ideological identities in early middle age (Fadjukoff et al., 2005). At the same time, however, political identity progressed sharply from age 42 to 50. The finding may support the suggestion by Lewis (2003) that politics might be an area considered less important at younger ages, in which exploration and commitments are activated later when they appear more necessary. Alternatively, the finding may be cohort specific and reflect history-graded effects (Baltes et al., 1998), the difficult economic times in 2009 (when the age 50 data were collected) triggering political interest. As elaborated by Fadjukoff et al. (2010), the perceived importance of politics increased concurrently with political identity achievement, whereas both were at their lowest level during a macroeconomic boom in 2001 (when the age 42 data were collected). Conversely, occupational identity progressed to its highest level during the boom at age 42 of the participants, and turned to regression during recession at age 50. In women occupational identity, due to sharp progression in early adulthood, emerged as the domain for the highest cumulative identity progression from age 27 to 50. In men, the highest cumulative progression emerged in intimate relationships identity where the earlier strong gender difference diminished at age 50.

We expected the identity status stability to be lowest over time for moratorium, and highest for achievement (Kroger et al., 2010; Waterman, 1999). In all domains, participants were frequently assigned the same identity status category at starting and endpoints of the study (at ages 27 and 50); this reflected relative fluctuating identity stability as opposed to progressive or regressive identity development. However, due to high fluctuation in identity status, remaining stable in the same status category across the four measurements was rare and emerged only for diffusion in the ideological

domains. Thus, the identity status remained unchanged only when the domain was persistently nonsalient for the participant (see Waterman & Archer, 1993). By contrast, none of the participants remained unchangeably identity achieved in any identity domain nor in overall identity during this long time span. The finding supports the perception that identity needs to be reformulated with age and in response to critical life events (e.g., Kroger, 2015; Marcia, 2002).

In this study, the overall identity was determined for the majority of participants by a dominant status, and by considering salience of domains for those without a dominant status. Regarding an achieved identity status in any domain as a sign of a mature identity structure (as per Waterman & Archer, 1993) yielded much more frequent achievement ratings: the proportion of participants with achievement status in at least in one domain was around 30% points higher than the overall ratings attained through the present procedure. However, the now presented overall identity distributions at each age level were largely similar to those of occupational identity that has been used as a single index domain in earlier research (see, e.g., Kroger et al., 2010). Major differences emerged only at age 27 when the participants were exploring their occupational options, and occupational identity was more typically moratorium and less typically achieved than the overall identity. However, the progressive trend toward achievement was confirmed through all three approaches.

Gender differences emerged at all age levels. Most consistent gender differences emerged, as expected, in intimate relationships identity where women were more often categorized achieved and men either diffused or foreclosed. In religious identity, men outnumbered women in diffusion at ages 27, 36, and 50, and in lifestyle identity at ages 27 and 50. The high rates of diffusion may reflect the low salience of these domains to many men (Waterman & Archer, 1993, or their low level of personal agency and individualization strategies (Schwartz, Côté, & Arnett, 2005). It is also possible that in these domains, our culture permits less options and variability of choice to men than to women, or that women are more able to see and use these options for identity explorations. In an earlier study Fadjukoff et al. (2010) found that, during a recession, at age 50 women more strongly than men maintained their belief in their own control over the future whereas men perceived their future depending less on themselves and more on the world situation. This weakened sense of agency could reflect as increased identity diffusion at age 50 in men. Further research with younger age cohorts is needed to see whether these gendered findings are replicated or change, reflecting movements toward a more gender-equal society. In this data, it is important to note that the significance of gender differences longitudinally diminished at age 50. The finding implies that, although women at a young age developed a mature identity in interpersonal domains earlier than men, (e.g., Lewis, 2003), men's identity progression continued in middle adulthood to become similar to women. Naturally, the lower initial status level of men allowed for their higher potential progressive change. Religious identity proved to be an exception; the difference between men and women increased at age 50 due to regressive development in men despite their high rates of diffusion already in early middle age.

The time span of the present analyses was exceptionally long (i.e., 23 years), extending from early to middle adulthood. However, a limitation was that there were 6–9 years between the measurement points, indicating the impossibility of detecting continuous movements of identity over time (Kroger, 2015). Yet the study was able to highlight that adult identity rarely remains unchanged in any domain. Another limitation of a single-cohort study is that it is not possible to differentiate between history-graded effects to which the whole population is subjected, and age-graded identity changes (Baltes et al., 1998; Kroger, 2015). However, the longitudinal data provided an insight to adult identity formation across young and middle adulthood in a sample representative of one cohort in the Finnish population. We were able to demonstrate the variability of identity formation through adulthood despite the general progression in most domains as well as in overall identity. More research in different cohorts and cultures is needed to elaborate the findings of this study related to diminishing gender differences in most domains in middle age, the decreasing salience of religion to middle-aged men, and importantly, the circumstances, precursors, and possible implications of persistent diffusion in adult men.



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