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## Changing Economic Conditions and Identity Formation in Adulthood

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### Abstract

Identity formation in political and occupational domains was examined from young to middle adulthood based on an ongoing longitudinal study. In addition to the participants' identity status (diffused, moratorium, foreclosed, achieved), we assessed their perceived importance of politics, future orientation, and career stability four times in adulthood, at ages 27, 36, 42, and 50. The number of participants varied between analyses, from 168 to 291. Changes in the economic situation in Finland from 1986 to 2009 provided a context for the study. 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 were discussed from both age-graded and history-graded perspectives. Developmental trends in political and occupational identity were reversed across age and changes in the economic situation. Political identity was at its lowest level and occupational identity was at its highest level at age 42 during the economic boom. Political identity progressed at a time of economic recession at age 50, whereas occupational identity regressed. In women, identity changes were associated with personal career stability. The perceived importance of politics increased concurrently with political identity achievement. During the recession when they were age 50, women tended to worry about future financial problems, while men perceived their future depending decreasingly on themselves and increasingly on the world situation. The results indicate that macro-level economical conditions may have psychological implications on people's conceptions of themselves that are worth considering in developmental studies.

**Keywords:** adult development; identity status; economic recession; future orientation

### Changing Economic Conditions and Identity Formation in Adulthood

Identity formation has been regarded as a major developmental task; it is a self-structure that provides a person with a sense of sameness and continuity across time and place, thus enabling and impacting personal psychosocial progress and well-being (Erikson, 1950, 1968). The possible areas for identity commitment may change along with social conditions and an individual's identity interests (Marcia, 1993a). The initial identity concept focused on ideological identity, including the three domains of political, religious, and occupational identity (Erikson, 1950, 1968; Marcia, 1966). Interpersonal domains were later included in the concept (Grotevant, Thorbecke, & Meyer, 1982). Data measured by the separate domain areas can be combined to form an overall identity status, or analyzed separately, as recommended by Goossens (2001), to acquire more detailed information. In the present study, identity formation from young to mid-adulthood was examined across age and changing macro-level economic conditions, focusing on the two domains for which the national economy most clearly provides a shared context, namely occupational and political identity.

The most widely followed operationalization approach in identity research is the identity status paradigm by Marcia (1966, 1980, 1993a). He proposed that identity develops through four qualitatively different stages (identity statuses) that differed on two distinct dimensions: exploration and commitment. In identity *diffusion*, an individual does not have firm commitments, nor is he or she actively trying to form them. In *foreclosure*, commitments are made without an exploratory phase, typically by identifying with parents or with other authorities. A person in identity *moratorium* is actively exploring alternative identities without having yet made commitments. Finally, in identity *achievement* relatively firm commitments are made through a period of exploration, independently of parents or other authorities. Both according to the identity status theory and empirical research, identity

achievement is the most mature identity status, while diffusion is the least sophisticated and adaptive status, and identity generally develops toward achievement with age (e.g., Berzonsky & Adams, 1999; Kroger, 2000, 2003; Marcia, 1993a, 1993b, Schwartz, 2001; Waterman, 1999). Identity commitment has been found to be essential for personal well-being (e.g., Berzonsky, 2003; Fadjukoff & Pulkkinen, 2006; Meeus, Iedema, Helsen, & Vollebergh, 1999; Vleioras & Bosma, 2005). Yet, only about half of young people obtain an achieved identity by early adulthood (Kroger, 2000, 2007), and substantial identity development takes place during adult years for many people (Cramer, 2004; Fadjukoff et al., 2005; Josselson, 1996; Pulkkinen & Kokko, 2000).

In today's constantly changing societies, a well-developed identity structure needs to be flexible and open to possible changes in relationships or circumstances. Thus, initial identity commitments are not likely to be final but continue to change over time in both content and in how definite they are (Bosma & Kunnen, 2001; Luyckx, Goossens, & Soenens, 2006; Marcia, 2001, 2002). Even an achieved identity is not always stable, as crises and new circumstances are encountered during subsequent life phases. This fluctuation of a mature identity has been described in terms of moratorium-achievement (MAMA) cycles in adolescence (Marcia, 2002; Stephen, Fraser, & Marcia, 1992), or foreclosure-achievement (FAFA) cycles, indicative of shifting awareness of one's own agency in the commitment process (Pulkkinen & Kokko, 2000). The data of the present study were drawn from the Jyväskylä Longitudinal Study of Personality (JYLS; Pulkkinen, 2006, 2009), in which identity foreclosure was found to peak at age 36, as compared to ages 27 and 42 (Fadjukoff, 2007; Fadjukoff et al., 2005). This unexpected general increase in identity foreclosure at age 36, instead of generally increasing identity achievement, could reflect normative age-graded influences (Baltes, Lindenberger, & Staudinger, 1998), participants relying on traditional values at the time of establishing their families and careers and being parents to small

children, or history-graded influences on development (Baltes et al., 1998), with people turning into foreclosure during unstable times. Foreclosure after earlier exploration in mid-adulthood was also detected between ages 25 and 35 by Valde (1996), who suggested this kind of identity re-foreclosure or closure (after earlier exploration) to be added as a new status to the identity status framework.

Studies concerning contextual factors that facilitate identity development toward achievement during adult years are rare. One of the few studies was a longitudinal study from early to late middle adulthood by Cramer (2004), who found satisfaction in work, positive interpersonal relationships, and involvement in community, in addition to personality characteristics, predicted progress toward identity achievement in adulthood. Theoretically, environmental contexts of development, in addition to individual characteristics, form the main source of identity formation: Engagement in the identity exploration process is generally more likely to occur in environments that expose the individual to differing points of view, and in which variability of choice is permitted, (e.g., Adams & Marshall, 1996; Berzonsky & Adams, 1999; Bosma & Kunnen, 2001; Erikson, 1968; Grotevant, 1987; Kroger, 2007; Marcia, 2001; Waterman, 1982).

Little longitudinal research has been done on psychological implications of economic conditions, although an economic recession threatens the stability and security of individuals and has been found to have implications on people's health, depending on social protection within the society's (e.g., Stuckler, Basu, Suhrcke, Coutts, & McKee, 2009). In the study of Novo, Hammarström, and Janlert (2001), young students generally reported more somatic and psychological symptoms during recession than boom. The negative impact of recession on health was not most pronounced for the unemployed but for women in work or in labor market programs. The authors concluded that unemployment in society may trigger pessimism about the future, high demands, and financial problems that have negative

implications on young people's experienced health. In addition, lack of control over the work situation may be an important contributing factor to ill health, specifically among working women during recession.

Unemployment or its threat during economic recession can constitute a challenging and disequilibrating life event in which previously made identity commitments are no longer workable and an individual may temporarily regress to earlier identity modes (Marcia, 2002) or turn to identity re-closure (Valde, 1996). Kroger (1996) described such re-closing processes as rigidification, involving a narrowing of perspective induced by internal personality factors, such as lowered tolerance for ambiguity or openness to experience, or external factors such as circumstances restricting access to a diversity of life experiences. Overwhelming stress could lead to regressive movement from any status to diffusion, involving identity disorganization and destructuring. On the other hand, an identity crisis may advance acquisition of new commitments. Referring to the mobilization of the unemployed in France and Ireland, Chabanet and Royall (2009) argue that, in an open society, political opportunities available for the unemployed may facilitate their political participation.

The Finnish JYLS, with data collection points in 1986, 1995, 2001, and 2009, provides a natural possibility for follow-up of identity development across age (from age 27 to 50) in changing economic conditions. Between the first two measurement points in adulthood, in 1986 and 1995, major political changes took place in Eastern Europe as a consequence of the collapse of the Soviet Union in 1991. Although Finland never belonged to the Socialist bloc, Russia and Finland share a lengthy border. The beginning of the 1990s was thus an exceptional historical time in Finland. The sudden major political changes in the gigantic neighboring country affected Finland, for instance, by triggering an economical recession with a high unemployment rate (from 3% in 1990 to over 16% in 1993) in Finland (Statistics Finland, 2010a), and confusion in ideological thinking in many people. The

unemployment rate was still over 15% in 1995, at the time of JYLS data collection. During this recession the biggest contraction of Gross Domestic Product (GDP) occurred in 1991, when the volume went down by 6%. By 2001, the unemployment rate had decreased to about 9%, and the economy was again booming with an average GDP growth rate of over 5% in 1997–2000. The age-42 interviews were carried out during the winter and spring of 2001, before the events of September 11, 2001, in the United States that affected economies worldwide. The 2009 data collection once again fell on a time of a worldwide economic decline: Finnish GDP fell by 7.8% in 2009, more than in the 1990s recession (Statistics Finland, 2010b). Having learned from the previous collapse, Finland was able to evade extensive impacts on employment: the contemporaneous unemployment rate rose only by 2% from 2008 (6.4%) to 2009 (8.2%).

The first aim of the present study was to follow the participants' identity formation in the domains of occupational and political identity from age 27 to 50, separately for men and women. Earlier research has shown general identity development toward achievement across age (Cramer, 2004; Josselson, 1996; Pulkkinen & Kokko, 2000). Political identity is an exception because, in contrast to other domains, it has remained at low level in young adulthood (Fadjukoff et al., 2005; Lewis, 2003). The national economic situation was considered a shared contextual variable for the identity development across adulthood (at age 27, in year 1986, normal economic situation; at age 36, in year 1995, economic recession, at age 42, in year 2001, economic boom, and at age 50, in year 2009, economic recession). The macro-level economic context could be reflected in an individual's identity development, for instance, as regressing occupational identity during the unstable times and fewer occupational possibilities in economic recession (Fadjukoff, 2007; Kroger, 1996; Marcia, 2002; Valde, 1996), or as progression in societal interests and political identity when there is uncertainty about the future (Chabanet & Royall, 2009). Secondly, parallel change across the age period



and reflections of macro-level economic conditions on reported importance of politics for one's life, sense of control over one's future, and worries about financial problems in the future, as well as on one's own career stability, were investigated, and their association to identity formation was assessed. The role of gender was taken into account in all analyses as domain-specific gender differences have been found in earlier research: In political identity, men are more typically foreclosed and women diffused (Archer, 1989; Fadjukoff, 2007; Fadjukoff et al., 2005; Lewis, 2003; Pastorino & Dunham, 1997) while women generally surpass men in achievement in the interpersonal identity domains (e.g., Fadjukoff et al., 2005; Lewis, 2003).

## Method

### *Participants*

The study was part of the Jyväskylä Longitudinal Study of Personality and Social Development (JYLS; Pulkkinen, 2006, 2009). The original random sample of the study consisted of 8-year-olds, 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 survival rate was 88%; the eligible sample had reduced to 323 from the original sample, since 3.3% had died and 9.2% had entirely declined from the study. The participation rate from the eligible sample (274/323) was 85%, and the retention rate from the original 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 was, at ages 36, 42, and 50, 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. The sample in adulthood has also represented the original random sample (Metsäpelto et al., 2010).

The measures used for the present study were a Life Situation Questionnaire (LSQ) mailed to the participants in the beginning of data collection at all adult ages, and a semi-structured psychological interview including an identity interview. At age 27, the participation rates from the original sample were 90% (LSQ) and 82% (interview) for women, and 85% and 77% for men, respectively. The corresponding participation rates at age 36 were 87% and 79% for women, and 82% and 76% for men. By age 42, the eligible sample had reduced to 158 women and 186 men; the participation rates from the eligible sample were 84% (LSQ) and 76% (interview) for women, and 79% and 66% for men, respectively. At age 50, the eligible sample had reduced to 149 women and 174 men; the participation rates were 84% (LSQ) and 74% (interview) for women, and 82% and 67% for men, respectively.

The results of the present study were based on data from JYLS participants who had taken part in interviews at ages 27, 36, 42, and 50, and additionally given information on their career situation, values, concerns, and views in the LSQ at these ages representing young adulthood, early mid-adulthood, mid-adulthood, and beginning of late mid-adulthood (Lachman, 2004). Due to several data collection points and methods, 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. In each analysis, the maximum amount of data was used but no imputation took place. Full information about identity statuses was available for 168 participants, of which 54% were women. As was earlier found for age-42 measurements (Fadjukoff et al., 2005), the participants who had taken part in all interviews did not differ in their identity status frequencies from those who had participated in fewer interviews.

*Variables*

*Identity Status.* The semi-structured identity interview, based on Marcia's (1966) identity status paradigm, was conducted at ages 27, 36, 42, and 50 as a part of a longer interview session. Interviewers of the later samples were unaware of the previous identity statuses of the interviewees. The present study focused on two identity domains included in the interview: political ideology and occupational career. The opening questions were as follows: "Do you have a political opinion?", and "Do you have a conception of your occupational career?" Within the semi-structured interview, the participants were asked a series of questions about the process of their identity formation for each domain: for instance, whether they had ever thought about the issue; whether they had had conflicting ideas about the issue; whether they had had influential people around or other sources for opinions; and how they had ended up with their present views. The participants' identity status was determined for each domain using the criteria of exploration and commitment. The statuses were 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 and the second coder varied from 73% to 93%.

Three question sets in the LSQ mailed to the participants at ages 27, 36, 42, and 50 were utilized to accumulate information related to the effects of the economic situation on the participants' beliefs. The *importance of politics for one's life* was extracted from the question: "How significant and important are the following things for your life?" responded in a four-point response scale: 1 = not at all significant, 2 = not really significant, 3 = somewhat significant, and 4 = extremely significant. The participants' *experienced control over their own future* was measured in the question: "To what extent do you consider that your future

depends on the following things? – yourself / world situation”. The response scale was 1 = very little, 2 = a little, 3 = a lot, and 4 = very much. The *financial problems as a future concern* was included in the question: “How worried are you about the future, thinking of... – financial problems?” responses given on the scale 1 = very little, 2 = a little, 3 = a lot, and 4 = very much.

*Career stability* was evaluated using several questions presented in the LSQ and interview at ages 27 (referring to ages 16 to 27), 36 (ages 28–36), 42 (ages 37–42), and 50 (ages 43–50). Three categories were coded: 1 = unstable career (e.g., frequent changes of jobs and periods of unemployment); 2 = changeable career (e.g., varying jobs in different fields, studies, suddenly unstable work situation); and 3 = stable career (working in one’s own field without repetitive interruptions; Pulkkinen, Ohranen, & Tolvanen, 1999).

#### *Data Analysis*

The frequencies of identity statuses at each age level were cross-tabulated across gender for a general view of identity formation across age and differing economical situations. Chi-square testing was used to measure the significance of differences, and the Adjusted Standardized Residuals (ASR) to find the areas of difference between the genders. In addition, individual identity changes between each age level were followed through the four measurement points. The analyses developmental order of diffusion (= 1) – foreclosure (= 2) – moratorium (= 3) – achievement (= 4), was used as done by Berzonsky and Adams (1999) in their summary of several longitudinal studies. The *Identity Change Measure* was calculated subtracting as follows: Identity level at age 36 – level at age 27, 42 – 36, and 50 – 42. A negative value represented regressive change, a zero meant stable identity, and a positive value progressive change. For instance, achievement at age 50 minus diffusion at age 42 would produce a value of 3 for change between 42 and 50. 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 find possible gender differences in the Identity Change Measure.

The formation of political and occupational identity, perceived importance of politics, the participants' experienced control over their own future, their future concerns, and career stability were analyzed among women and men in the longitudinal setting (at ages 27, 36, 42, and 50) with Multivariate Analysis of Variance for Repeated Measures (MANOVA).

Mauchly's test of sphericity was used to validate repeated measures factor ANOVAs and corrected tests for within-subjects were used in case of non-sphericity of the measures. The 2 (group) x 4 (time) analysis used gender as a between-groups variable and time as a repeated measure, enabling the investigation of (a) the interaction of these effects (i.e., moderating effects; Baron & Kenny, 1986), (b) the mean level changes of the variables from age 27 to 36, 42, and 50, and (c) the differences in the mean levels of these variables between the genders.

Patterns of bivariate correlations between the two identity status domains and other concurrent variables reflecting the economic situation were analyzed using Pearson pairwise correlations across male and female participants at each age level. In the correlation analyses, the identity variables were treated as interval variables using the developmental order in the identity Diffusion–Achievement axis.

## Results

### *Political and occupational identity formation*

In early adulthood, *at age 27*, only a minority of men and women had reached identity achievement in the measured domains as shown in Table 1. Half of the participants were committed either through foreclosure or achievement. The occupational goals were still unclear for many, and moratorium was frequent. The percentage of moratorium in the occupational identity was 37% for women and 42% for men. The most frequent identity status

in political identity was diffusion, implying its low salience for many participants. The gender differences in the distributions were non-significant.

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INSERT TABLE 1 ABOUT HERE

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*At age 36*, during the national economic recession, foreclosure peaked in the occupational identity for both genders (Table 1), but a trend emerged that there was a gender difference,  $\chi^2(3) = 7.20, p = .066$ : Men were more often foreclosed ( $ASR = 2.4$ ) in their occupational identity than women. As compared to the earlier measurement, identity exploration was rare. Although progression was the most frequent trend in occupational identity for both men and women, a third of the participants had regressed towards diffusion and foreclosure after earlier exploration and achievement. In the domain of political identity, the most frequent status continued to be diffusion for both genders. For women, the percentage of diffused identity had risen from 42 % at age 27 to 50 % at age 36. There was a trend of a gender difference in the distribution of political identity,  $\chi^2(3) = 7.49, p = .058$ : women overweighed men in diffusion ( $ASR = 2.6$ ). Regression, stability, and progression trends of political identity change were about as frequent for both men and women. The gender differences in the Identity Change Measure were non-significant.

*At age 42*, during an economic boom, occupational identity demonstrated a general developmental shift along the hypothesized sequence towards identity achievement as compared to the earlier assessments (Table 1). Progression of occupational identity was generally strong: 37% of all participants had progressed and only 18% regressed as compared to age 36. There was a significant difference among women and men in their distributions,  $\chi^2(3) = 9.45, p = .024$ . Although, the most frequent status was achievement for both genders, it was even more typical of women ( $ASR = 3.0$ ) than men. On the other hand, foreclosure was

more typical of men ( $ASR = 2.3$ ) than women. There was also a gender-difference in the distribution of political identity,  $\chi^2(3) = 15.03, p = .002$ . For women, the most typical status in political identity was still diffusion (58%) and it was more typical of women than men ( $ASR = 3.0$ ), while men were classified politically diffused and foreclosed nearly as often. Men overweighed the women in political foreclosure ( $ASR = 3.6$ ). Political identity regression at this time of economic boom was typical of men, only 14% of men progressed while 35% regressed as compared to age 36. The gender difference (men overweighing women in regression) in the Identity Change Measure was significant,  $t(210) = 2.00, p = .046$ .

*Age 50*, during the global recession, the middle-aged participants continued to be typically committed in political and occupational domains either through identity foreclosure or achievement (Table 1). Occupational identity regressed as compared to earlier assessments, while the direction of change was the opposite for political identity, in which achievement increased. Almost a third of participants regressed in occupational identity while in political identity, only 12% of the participants regressed. The gender differences were not significant at this age.

No interaction effects emerged in the repeated measures 2 (gender) x 4 (time) MANOVA analysis on political identity formation (Table 2). However, significant within-subject effects indicated that the mean level of political identity decreased from age 36 to 42, and increased from age 42 to 50. Political identity was thus on its lowest level at age 42 of the participants, at the time of the economic boom, as illustrated in Figure 1. Gender differences were not significant. An interaction effect emerged for occupational identity ( $p = .050$ ): it increased more sharply in women than in men from age 27 to 36 (Table 2). The mean levels highlighted progression in the occupational identity from age 27 to 36, and from age 36 to 42. Opposite to political identity, occupational identity was on its highest level during the

economic boom at age 42, and again regressed to age 50. As shown in Figure 1, women were higher in occupational identity achievement than men<sup>1</sup>.

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INSERT TABLE 2 ABOUT HERE

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INSERT FIGURE 1 ABOUT HERE

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### *Perceived importance of politics*

An interaction effect emerged in perceived importance of politics (Table 2): The significance of politics to men varied concurrently with the economic situation of the society while women saw politics not really significant for their life throughout the years as illustrated in Figure 1. Perceived importance of politics correlated consistently with the concurrent political identity status at each age level in both men and women, correlations varying from .43 to .23 and  $p$  from .000 to .012, except at age 36, when the association did not reach statistical significance in men ( $p = .094$ ). In addition, importance of politics at age 50 correlated with progressive identity change between ages 42 to 50 both in men ( $n = 91$ ;  $r = .22$ ,  $p = .038$ ), and women ( $n = 103$ ;  $r = .25$ ,  $p = .010$ ).

### *Future orientations*

An interaction effect emerged for the participants' belief of the future depending on themselves (Table 2): This belief was strong from 27 years onwards but decreased significantly between ages 42 and 50 for men but not for women (Figure 1). Men's belief in the future depending on oneself was positively associated with both their concurrent political identity at ages 27, ( $n = 143$ ;  $r = .20$ ,  $p = .016$ ), and at age 50, ( $n = 106$ ;  $r = .20$ ,  $p = .043$ ) as well as with their occupational identity at age 50, ( $n = 104$ ;  $r = .25$ ,  $p = .009$ ). In women, no



corresponding associations emerged between the identity statuses or identity change and perceptions of one's own control over the future.

The interaction effect detected for the perceived impact of the world situation on one's future was contrary to the perceived impact of oneself (Table 2). The world situation was perceived across age increasingly important by men whereas the women's perception of the impact of the world situation on their lives specifically increased between ages 27 and 36, and from 42 to 50 years – during times of recession – but decreased between ages 36 to 42, at a time of economic boom (Figure 2). The variable was not associated with the identity statuses nor with the Identity Change Measure in men or women at any age.

Finally, a significant interaction effect emerged also for financial problems as future worries (Table 2). It was characteristic of women to anticipate financial problems and worry about them in the future increasingly during times of economic recession, at ages 36 and 50. Corresponding changes did not emerge in men as is illustrated in Figure 1. However, extensivity of future financial concerns at age 50 was similarly positively associated with occupational identity progression from age 42 to age 50 in men ( $n = 91$ ;  $r = .21$ ,  $p = .043$ ), and women, ( $n = 104$ ;  $r = .19$ ,  $p = .049$ ).

### *Career stability*

The percentage of a stable career changed from 69% at age 27 (1986) to 59% at age 36 (1995), and rose again to 74% at age 42 (2001) and to 76% at age 50 (2009). At the time of the economic recession in 1995, the lowest percentage had a stable career but the new emerging recession was generally not visible in the careers of the 50-year old participants in 2009. At age 36, a changeable career peaked for women (29%, men 10%), and about 25% of men and 18% of women had an unstable career. At age 50 a changeable career was rare, particularly among men: It characterized 14% of women and 4% of men. Due to either

societal or personal situations, a female working history typically seemed to include more changeable situations and career choices.

No interaction effects emerged for career stability across age and gender. However, the within-subject test indicated a significant time effect; the stability of the participants' working situation changed over time (Table 2). The working career was most unstable between ages 27–36, at the time of the deepening economic recession, and career stability increased significantly by age 42. No gender effects emerged (Figure 2).

Possible relationships between career stability and occupational and political identity were also analyzed. The between-groups test of repeated measures indicated that significant group effects did not emerge for the occupational or political identity measures at any age. The identity measures did not predict later career stability. Neither were associations between career stability and Identity Change Measures detected in men. However, in women, career stability between ages 27 and 36 correlated negatively with the concurrent occupational identity progression, ( $n=123$ ,  $r = -.22$ ,  $p = .013$ ) but positively with occupational identity progression between ages 36 and 42, ( $n=107$ ;  $r = .27$ ,  $p = .005$ ). Career stability between ages 36 and 42 additionally correlated positively with concurrent occupational identity progression for women, ( $n=107$ ;  $r = .26$ ,  $p = .007$ ). Furthermore, career stability between ages 42 and 50 was associated with concurrent female political identity regression, ( $n=104$ ;  $r = -.20$ ,  $p = .039$ ).

## Discussion

Longitudinal identity formation in the domains of occupational and political identity were analyzed in a cohort group of Finnish men and women born in 1959 across ages 27, 36, 42, and 50, from years 1986 to 2009, in fluctuating economic conditions. An economic recession took place in Finland during the age 36 and 50 data collection points in 1995 and 2009, while the data collection at age 42 (in 2001) coincided with an economic boom.

Moreover, parallel changes in reported importance of politics for one's life, sense of control over one's future, and worries about financial problems in the future, as well as on one's own career stability were investigated, and their association to identity formation assessed. The findings are discussed from both age-graded and history-graded perspectives (Baltes et al., 1998).

Reverse developmental trends were found for political identity and occupational identity across age. Confirming earlier findings (Cramer, 2004; Josselson, 1996; Pulkkinen & Kokko, 2000), occupational identity formed along the age-graded developmental sequence from identity diffusion toward achievement from age 27 to 42, more strongly in women than in men. However, it regressed at age 50, during the recession, in both genders. This regression could refer to age-graded changes in occupational identity, people already putting aside their working life ambitions, or to history-graded influences of the economic recession. A threat of unemployment or weakening positions in working life may be described as a disequilibrating life event, in which an individual may temporarily regress to earlier identity modes (Kroger, 1996; Marcia, 2002; Valde, 1996). Political identity, on average, regressed up to age 42 and progressed by age 50, supporting the suggestion by Lewis (2003) that politics might be an area considered less important at younger ages, and exploration of and commitments in this domain are not activated until they appear more necessary. The finding could also indicate that difficult economic times may trigger political discussion and interest and may result in a growth of political participation and identity achievement, specifically in a country having with an open political system, as suggested by Chabanet and Royall (2009). The female overrepresentation in political identity diffusion at ages 36 and 42, and occupational identity achievement at age 42, subsided by age 50.

The perceived importance of politics, reported separately in mailed questionnaires, increased concurrently and in correlation to growth of political identity. In men, the

importance of politics peaked during the recessions at ages 36 and 50, and in women at age 50. Economic conditions were also associated with the participants' future orientations, as suggested by Novo et al. (2001), but differently for men and women. Women more strongly than men maintained their belief in their own control over the future, but were more concerned about future financial problems during a recession (at age 50) than men. Future financial concerns at age 50 were related with occupational identity progression from age 42 to age 50 in both genders, suggesting that those with a progressive occupational identity might have considered the negative possibilities more actively than others. At age 50, men perceived their future depending less on themselves and more on the world situation, reflecting pessimism and lack of control over the future, possibly related to the ongoing recession (Novo et al., 2001).

Career stability of the participants was at its lowest between ages 27 and 36, during a time of an economic recession and very high unemployment rates in Finland. Specifically in women, low career stability between ages 27 and 36 correlated with the concurrent occupational identity regression. However, the lower career stability from age 27 to 36 conversely correlated positively with later occupational identity progression in women between ages 36 and 42, that is, during the economic boom, thus highlighting the temporary nature of the rigidification under the time of recession. Career stability between ages 36 and 42 also correlated positively with contemporaneous occupational identity progression in women. Additionally, lower career stability between ages 42 and 50 was associated with concurrent female political identity progression.

Although the study was limited to one cohort and thus did not enable disentangling age and period effects, the results are interesting in the perspective of possible history-graded changes in political and occupational identity development across changes in macro-level economic conditions. Political identity regressed and was at its lowest level and, conversely,

occupational identity progressed to its highest level during an economic boom at age 42 of the participants. Again conversely, occupational identity regressed and political identity, together with perceived importance of politics, progressed at a time of an emerging economic recession at age 50. While fostering political identity, an economic recession may limit the possible occupational alternatives and hence provide a situation of limited variability of choice, yielding to rigidification of occupational identity. In the future, it would be important to replicate the present findings of the development of adult identity in the occupational and political domains with different age cohorts and different societal conditions. Further, the role of individual characteristics such as personality traits in identity formation should be empirically studied, as contexts of development and individual characteristics are considered the two main sources of identity formation (e.g., Bosma & Kunnen, 2001; Grotevant, 1987; Kroger & Green, 1996; Marcia, 2001).

The differentiating developmental trends in the political and occupational identity domains indicate that important information may be missed when combining the domain-specific information into an overall identity status. Thus, the results support the finding of Goossens (2001) that identity should not be considered a unitary construct but the domain-specific identity statuses should be used whenever possible. On the other hand, the conversely fluctuating identity in the two domains may suggest a possible tendency of retaining a rather stable overall identity despite of volatility in a specific domain. More research on the relationship between domain-specific and overall identity is needed.

The main limitation of the present longitudinal research design was that a single cohort study does not allow a strict test of history-graded effects of the economic context to which the whole population is subjected, in comparison to age-graded identity fluctuation. In addition, the small sample size limited the possible methods of analyses. However, the data provided a unique natural setting for examining the associations of economic conditions on adult identity

formation across young and middle adulthood in a sample representative of the Finnish population. Even with its limitations, the study shed light on links between macroeconomic changes and psychological processes, a little studied phenomenon. Economic changes typically have been discussed in regard to consumer behavior, but they may have psychological implications on people's conceptions of themselves that are worth considering in developmental studies.

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## Footnote

<sup>1</sup> Consistently to earlier findings (Fadjukoff, Kokko & Pulkkinen, 2007), educational level (1 = low; 2 = medium; and 3 = high) was positively associated with the level of both political and occupational identity in men and women. Identity fluctuation trajectories were alike across educational levels. Therefore the variable was not included in the main analyses.

Table 1.

*The Distribution of Identity Status over the Domains of Political and Occupational Identity at Ages 27, 36, 42, and 50, and the Identity Status Change between Each Measurement for Women and Men.*

Women							
Political Identity	Age 27, n=142	Change n=122	Age 36, n=132	Change n=105	Age 42, n=120	Change n=105	Age 50, n=111
1 Diffusion	42.3%		50.0%		58.3%		33.3%
2 Foreclosure	25.4%		25.8%		17.5%		29.7%
3 Moratorium	13.4%		2.3%		2.5%		0.9%
4 Achievement	19.0%		22.0%		21.7%		36.0%
Change:							
Regression		32.8%		26.7%		12.4%	
Stability		37.7%		47.6%		51.4%	
Progression		29.5%		25.7%		36.2%	
Occupational Identity	Age 27, n=142	Change n=123	Age 36, n=134	Change n=107	Age 42, n=120	Change n=105	Age 50, n=111
1 Diffusion	22.5%		3.0%		7.5%		10.8%
2 Foreclosure	23.9%		50.7%		21.7%		31.5%
3 Moratorium	37.3%		9.7%		0.8%		5.4%
4 Achievement	16.2%		36.6%		70.0%		52.3%
Change:							
Regression		30.1%		14.0%		31.4%	
Stability		21.1%		44.9%		52.4%	
Progression		48.8%		41.1%		16.2%	
Men							
Political Identity	Age 27, n=149	Change n=123	Age 36, n=143	Change n=107	Age 42, n=123	Change n=95	Age 50, n=110
1 Diffusion	35.6%		34.3%		39.0%		33.6%
2 Foreclosure	18.1%		30.1%		38.2%		25.5%
3 Moratorium	14.8%		3.5%		0.8%		0.0%
4 Achievement	31.5%		32.2%		22.0%		40.9%
Change:							
Regression		29.3%		34.6%		11.6%	
Stability		39.8%		51.4%		53.7%	
Progression		30.9%		14.0%		34.7%	
Occupational Identity	Age 27, n=149	Change n=123	Age 36, n=142	Change n=105	Age 42, n=122	Change n=94	Age 50, n=108
1 Diffusion	19.5%		3.5%		13.1%		16.7%
2 Foreclosure	22.1%		64.8%		35.2%		35.2%
3 Moratorium	42.3%		4.2%		0.8%		5.6%
4 Achievement	16.1%		27.5%		50.8%		42.6%
Change:							
Regression		35.0%		22.9%		33.0%	
Stability		21.1%		43.8%		46.8%	
Progression		43.9%		33.3%		20.2%	

TABLE 2.

*The results of Multivariate Analyses of Repeated Measures [MANOVA 2(group) x 4(time)] at Ages 27, 36, 42, and 50*

	Men				Women				Interaction (gender x time)	Level Change across time	Between groups
	Age 27 <i>M</i> ( <i>SD</i> )	Age 36 <i>M</i> ( <i>SD</i> )	Age 42 <i>M</i> ( <i>SD</i> )	Age 50 <i>M</i> ( <i>SD</i> )	Age 27 <i>M</i> ( <i>SD</i> )	Age 36 <i>M</i> ( <i>SD</i> )	Age 42 <i>M</i> ( <i>SD</i> )	Age 50 <i>M</i> ( <i>SD</i> )			
Political Identity <sup>1</sup> ( <i>N</i> : men 78, women 90)	2.49 (1.27)	2.49 (1.25)	2.03 (1.14)	2.56 (1.33)	2.12 (1.16)	2.04 (1.19)	1.91 (1.20)	2.50 (1.27)	$F(3, 164) = 1.28$ $p = .282$	$F(3, 164) = 10.82$ $p = .000$ 36 > 42 ** 42 < 50 ***	$F(1, 166) = 3.52$ $p = .062$
Occupational Identity <sup>1</sup> ( <i>N</i> : men 77, women 91)	2.56 (1.00)	2.62 (0.96)	3.00 (1.14)	2.77 (1.16)	2.40 (1.03)	2.91 (0.97)	3.45 (0.98)	3.05 (1.12)	$F(3, 164) = 2.66$ $p = .050$		
Importance of politics for one's life <sup>2</sup> ( <i>N</i> : men 101, women 110)	2.14 (0.79)	2.40 (0.78)	2.11 (0.81)	2.33 (0.84)	1.98 (0.73)	2.00 (0.74)	2.01 (0.77)	2.10 (0.78)	$F(3, 582) = 2.77$ $p = .045$		
Future depending on oneself <sup>3</sup> ( <i>N</i> : men 101, women 110)	3.37 (0.64)	3.39 (0.57)	3.45 (0.54)	3.24 (0.62)	3.53 (0.57)	3.40 (0.55)	3.45 (0.62)	3.49 (0.54)	$F(3, 207) = 3.70$ $p = .013$		
Future depending on the world situation <sup>3</sup> ( <i>N</i> : men 100, women 107)	1.91 (0.77)	2.22 (0.77)	2.23 (0.69)	2.39 (0.84)	2.31 (0.87)	2.52 (0.85)	2.28 (0.74)	2.47 (0.78)	$F(3, 203) = 3.49$ $p = .017$		
Financial problems as future concerns <sup>3</sup> ( <i>N</i> : men 101, women 109)	2.17 (0.66)	2.26 (0.78)	2.26 (0.64)	2.07 (0.65)	2.04 (0.61)	2.35 (0.84)	2.06 (0.83)	2.14 (0.78)	$F(3, 607) = 3.40$ $p = .018$		
Career Stability <sup>4</sup> ( <i>N</i> : men 115, women 120)	2.51 (0.83)	2.43 (0.85)	2.63 (0.74)	2.62 (0.77)	2.52 (0.82)	2.39 (0.74)	2.58 (0.75)	2.63 (0.69)	$F(3, 589) = 0.17$ $p = .887$	$F(3, 589) = 6.31$ $p = .001$ 36 < 42 ***	$F(1, 233) = 0.076$ $p = .783$

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

<sup>1</sup> Scale of variable: 1=Diffusion, 2=Foreclosure, 3=Moratorium, 4=Achievement

<sup>2</sup> Scale of variable: 1=Not at all significant, 2=Not really significant, 3=Somewhat significant, 4=Extremely significant

<sup>3</sup> Scale of variable: 1=Very little, 2=A little, 3=A lot, 4=Very much

<sup>4</sup> Scale of variable: 1=Unstable career, 2=Changeable career, 3=Stable career

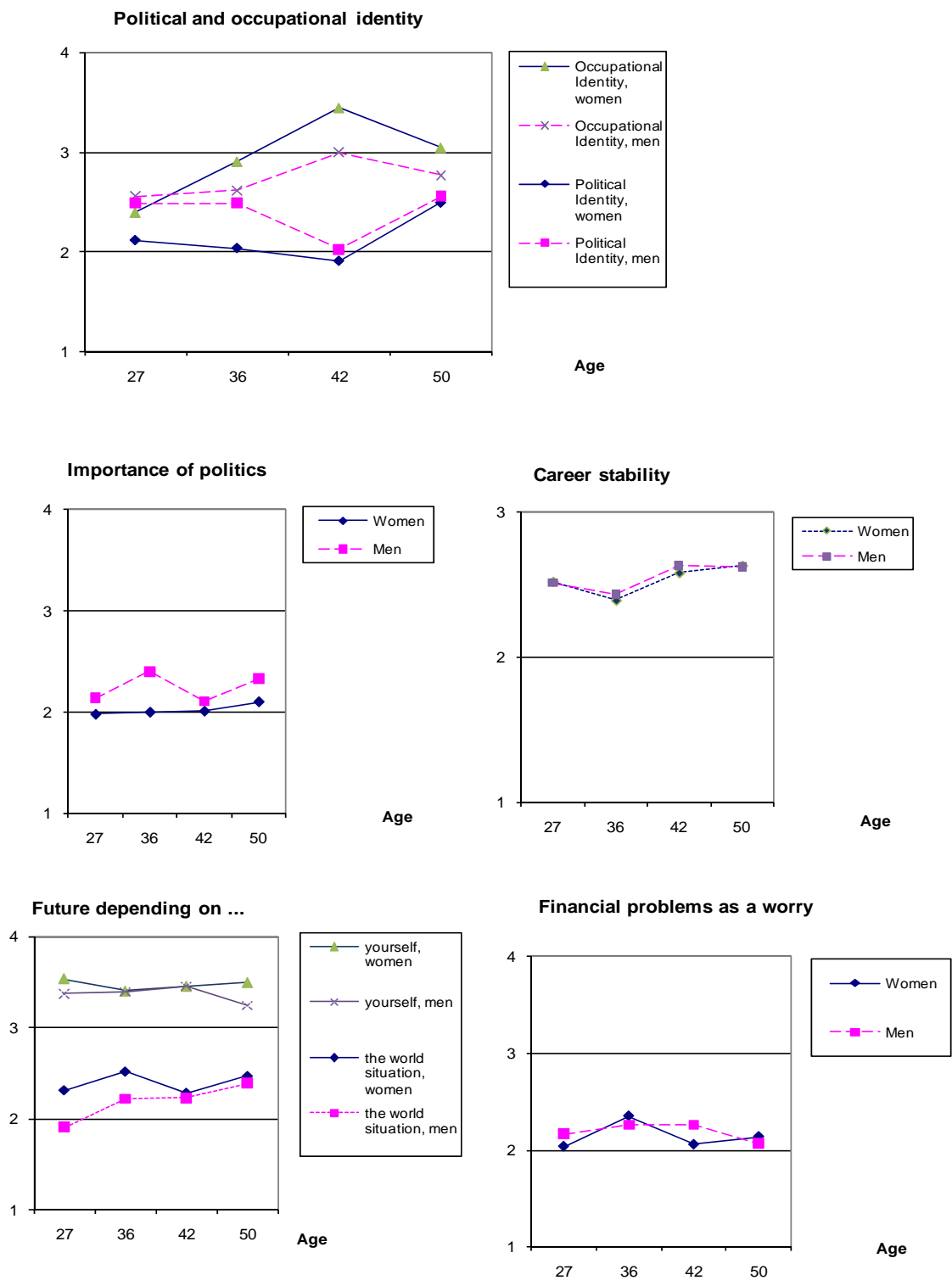


Figure 1.

*Age Changes in the Measured Variables at Ages 27, 36, 42, and 50 in Women and Men*