

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Peters, Steffen

Article — Published Version

The Prospective Power of Personality Factors for Family Formation and Dissolution Processes Among Males: Evidence from Swedish Register Data

**European Journal of Population** 

# **Provided in Cooperation with:**

Springer Nature

Suggested Citation: Peters, Steffen (2025): The Prospective Power of Personality Factors for Family Formation and Dissolution Processes Among Males: Evidence from Swedish Register Data, European Journal of Population, ISSN 1572-9885, Springer Netherlands, Dordrecht, Vol. 41, Iss. 1, https://doi.org/10.1007/s10680-025-09748-4

This Version is available at: https://hdl.handle.net/10419/330606

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

## Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



#### **ORIGINAL RESEARCH**



# The Prospective Power of Personality Factors for Family Formation and Dissolution Processes Among Males: Evidence from Swedish Register Data

Steffen Peters<sup>1,2</sup>

Received: 19 November 2024 / Accepted: 7 August 2025 © The Author(s) 2025

#### **Abstract**

Personality has increasingly become relevant for family formation processes. However, the association between personality and family formation (dissolution) has been underexplored in demographic research. This study contributes to existing research by examining the prospective association between two personality factors [social maturity (SM), and emotional stability (ES)] and family formation and dissolution processes, i.e., (1) marital status, (2) fertility, and (3) partnership dissolution as both (a) divorce and (b) cohabitation dissolution, based on large Swedish register data. Poisson regression, Linear Probability, and Cox proportional hazard models were applied for different outcomes. Findings suggest that males with high scores on SM and ES measured at age of assignment to military service (17–20 years) are more likely to get married by age 39 and above. Regarding fertility, SM and ES show positive associations with offspring counts and negative associations with the probability of remaining childless by age 39 and above. Relationship dissolution is negatively linked with SM and ES, in particular among the lowest personality scores. Further analyses using sibling comparisons support these findings.

**Keywords** Family formation · Male fertility · Marital behavior · Personality

#### 1 Introduction

During the second half of the last century, demographic patterns changed essentially in many European countries. Marriage and fertility rates declined, whereas cohabitation and divorce rates increased (Frejka et al., 2008; Sobotka, 2008; Sobotka & Toulemon, 2008). Several explanations addressing these trends exist, e.g., greater

Published online: 16 September 2025



Steffen Peters peters@demogr.mpg.de

Max Planck Institute for Demographic Research, Rostock, Germany

Stockholm University, Stockholm, Sweden

self-realization in fertility due to the availability and use of contraceptives (Frejka, 2008). Personality factors are among those that are most subject to individual differences. Recent research suggests that non-cognitive abilities have become increasingly important for entering parenthood (Aldén et al., 2022), and that personality plays an important role in the marriage market (Dupuy & Galichon, 2014). Therefore, previous studies have increasingly examined the association between personality factors and family-related processes such as marriage (Jokela et al., 2011; Lundberg, 2012), fertility (Allen, 2019; Jokela et al., 2009, 2011; Peters, 2023), or divorce (Boertien & Mortelmans, 2018; Boertien et al., 2017; Lundberg, 2012).

Previous studies examining the relationship between personality and family formation often show essential weaknesses, though. For instance, the analyses of some studies are based on cross-sectional data (Alvergne et al., 2010; Avison & Furnham, 2015) or longitudinal data, but measure personality at relatively late ages (Jokela et al., 2011; Skirbekk & Blekesaune, 2014; Tavares, 2016). This is a strong limitation of previous studies, given that personality may change after crucial life events such as childbirth (Bleidorn et al., 2018; Jokela et al., 2009). One great advantage of the current study is the use of powerful register data from Sweden. Therefore, more detailed analyses on the role of socioeconomic indicators and family background (e.g. via sibling comparisons) for the studied association between personality and family formation are possible.

This study addresses these gaps by examining the prospective association between personality measured in early adulthood, and family formation and dissolution outcomes (marriage, fertility, partnership dissolution) using high-quality Swedish register data. This allows to follow individuals over decades observing their family behavior as well as trajectories in other life domains that may be helpful to understand these associations (e.g., income, education). Furthermore, sibling fixed effects approaches are used to isolate the net influence of personality on family formation and dissolution from background factors (e.g., shared family background) that might bias the relationship.

## 1.1 Background

Many high-income countries have experienced declines in marriage and fertility rates in the second half of the twentieth century, whereas divorce rates have increased, aligning with the Second Demographic Transition (Lesthaeghe, 2014; van de Kaa, 1987). These trends may be linked with increasing autonomy of the individuals. For instance, they may better plan their fertility based on the availability of contraceptives and abortion. Therefore, personality factors may influence family formation and dissolution processes.

Personality is a broad concept covering ways of thinking, feeling, and behaving (Uher, 2017). It is shaped by both nature (genes) and nurture (social environment) (Kandler, 2012; Kandler & Bleidorn, 2015; Vukasović & Bratko, 2015). Personality factors may determine life course pathways including various life domains (Mencarini et al., 2022) such as educational attainment (Leikas & Salmela-Aro, 2015; Meyer et al., 2019; Usslepp et al., 2020), or labor market trajectories (Damian et al.,



2015; Jonason et al., 2018). For instance, the ability to cope with stress or nervousness is beneficial regarding performance in school exams (Chamorro-Premuzic & Furnham, 2003), or job interviews (Caldwell & Burger, 1998), which may affect later career paths (and thus marriage, fertility, and union dissolution).

Previous studies on the correlation between personality and family formation have primarily used the widely accepted Five Factor Model, often called as Big Five, as personality measure. The five personality factors from this model are agreeableness, conscientiousness, extraversion, neuroticism, and openness. The current study considers two personality factors that are related to the Big Five—social maturity (SM) as *social domain of personality* and emotional stability (ES) as *emotional domain*. SM contains the factors 'extraversion' (from the Big Five), responsibility [as a dimension of 'conscientiousness' (Roberts et al., 2005; Sutin et al., 2018)], and independence (Bihagen et al., 2013).

ES is the inverse of the factor 'neuroticism' (Ashton & Lee, 2005; Goldberg, 1993; McCrae & Costa, 1987) and refers to the capability of dealing with nervousness, stress, and anxiety (Bihagen et al., 2013). Although previous research has used neuroticism, only ES will be addressed here when citing other authors, for simplification purposes.

## 1.2 Personality and Marriage

Personality may influence the transition to marriage. Previous research has shown that personality is linked with partnership formation (Leone & Hawkins, 2019; Senia et al., 2016), which may result in marriage, eventually. Inequalities in union formation may be based on partner preferences according to personality. For instance, previous studies have shown that socially desired personality factors are also traits that individuals desire in their (potential) partners (Buss & Barnes, 1986; Li et al., 2002). Similarly, indicators of the social dimension of personality are associated with higher levels of closeness to, and importance of, friends (Neyer & Asendorpf, 2001), and with an increasing interest in short-term mating (Schmitt & Shackelford, 2008). Moreover, social capacities are positively linked with the chances of falling in love at a younger age (Asendorpf & Wilpers, 1998). Once being in a romantic relationship, people with higher social competences report higher partnership satisfaction (Orth, 2013) and quality (Holland & Roisman, 2008), which may increase the probability of getting married.

Regarding empirical evidence, previous studies have suggested positive associations between personality traits that are related to social competences and the probability to get married, particularly among males (Jokela et al., 2011; Lundberg, 2012). Furthermore, these traits are positively linked with an earlier entry into marriage (Jokela et al., 2011). Therefore, the first hypothesis assumes a positive relationship between social maturity and the probability of having ever been married.

The emotional dimension of personality may also be linked with the entry into marriage. Young individuals with higher emotional stability (ES) are in demand in the partner market (Botwin et al., 1997; Dupuy & Galichon, 2014; Figueredo et al., 2006), which may increase the chances of getting married. Furthermore, previous



23 Page 4 of 61 S. Peters

research has suggested a positive association between ES and both partnership satisfaction (Karney & Bradbury, 1997; Malouff et al., 2010; McNulty, 2008) and relationship quality (Donnellan et al., 2004). Findings from previous research on the link between ES and marital behavior are mixed, though. For instance, no association between ES and marriage probability has been found in Germany (Lundberg, 2012), but a positive one among men from the U.S. (Jokela et al., 2011). Consequently, the second hypothesis claims that ES and the probability of having ever been married are positively associated.

## 1.3 Personality and Fertility

Personality may also predict fertility outcomes, e.g., via intentions or expectations, which are (directly) linked with fertility (Ajzen & Klobas, 2013; Miller, 2011). Indeed, indicators of social personality traits are associated with parenthood expectations (Hutteman et al., 2013) and fertility intentions (Miller, 1992). Furthermore, children may increase the number of social interactions since additional persons are living in the household. This may motivate social individuals to have children. Contrary, opposite effects of parenthood may also emerge when one's social life, including activities with friends, is restricted since one may need to take care of offspring instead. Furthermore, social personality factors may be linked with fertility through sexual behavior. For example, higher social competences are positively associated with the number of sexual partners (Allen & Desille, 2017; Miller et al., 2004; Nettle, 2005, 2006; Schmitt, 2004).

Previous research strongly suggests a positive association between social personality indicators and childbearing. Indicators of social competences are positively related to a higher likelihood of having a first and second child (Jokela et al., 2009, 2011), accelerated childbearing (Jokela et al., 2011; Tavares, 2016), and lower risk of remaining childless (Avison & Furnham, 2015) among both men and women. However, several findings indicate stronger associations among males (Allen, 2019; Jokela et al., 2011; Peters, 2023; Skirbekk & Blekesaune, 2014). Based on the elaborations above, a positive association between SM and fertility is expected.

The emotional dimension of personality may also shape fertility outcomes since ES is related to decreasing ambivalence regarding fertility decisions (Pinquart et al., 2008), and to lower depression risks (Gershuny & Sher, 1998). Entry into parenthood increases stress levels (Epifanio et al., 2015), and negatively affects social life (Johnson & Rodgers, 2006) and psychological well-being (McLanahan & Adams, 1987), which may refrain people with low ES from entering parenthood. On the other hand, individuals with low ES scores may consider parenthood as a stabilizing factor in a partnership (Friedman et al., 1994), and in life more generally (Johns et al., 2011).

Previous research provides evidence for positive associations between ES and childbearing. Positive links can be detected between ES and becoming a parent (Jokela, 2012), or having a second and a third child (Jokela et al., 2009). Some evidence indicates that ES plays a greater role for women's offspring counts and remains relatively unimportant among men (Jokela et al., 2011). Recent research,



however, shows that the positive effects of ES on completed fertility have particularly risen among men across decades in the Nordic context (Skirbekk et al., 2025). Therefore, a positive association between ES and childbearing is expected in this study.

## 1.4 Personality and Union Dissolution

Apart from family formation processes, personality may also be associated with union dissolution. Social personality traits may also attract opposite-sex persons outside the partnership, which may lead to higher infidelity (Orzeck & Lung, 2005), potentially resulting in higher dissolution risks. Contrary, they are positively linked with partnership quality and satisfaction (see above), indicating greater relationship stability and lower dissolution risks.

Consequently, research on social competences and divorce risks shows mixed evidence, including positive (Boertien & Mortelmans, 2018; Boertien et al., 2017; Lundberg, 2012), or no associations (Le et al., 2010; Zare et al., 2013). Thus, no hypothesis on the association between SM and dissolution can be set up.

Dissolution risks may particularly be based on emotional conditions of the partners. Individuals with a poor emotional constitution may worry a lot about many life facets, including their own partnership, which may result in lower partnership satisfaction (Fisher & McNulty, 2008; Spikic & Mortelmans, 2021). Furthermore, lower ES of a partner is linked with higher infidelity risks (Orzeck & Lung, 2005), which may also contribute to higher dissolution risks. On the other hand, low ES is also linked with higher attachment anxiety (Noftle & Shaver, 2006), that is, such individuals may worry about connecting with new networks after a potential partnership dissolution (Spikic & Mortelmans, 2021). This may motivate people with low ES to stay even in an unhappy partnership.

If personality effects on divorce have been found, the strongest associations have referred to emotional stability (Spikic & Mortelmans, 2021). Low scores on ES are linked with higher divorce risks (Boertien & Mortelmans, 2018; Lundberg, 2012; Roberts et al., 2007), and higher risks of relationship dissolution (Solomon & Jackson, 2014). Additionally, personality traits related to low ES show higher divorce risks (Jockin et al., 1996). Therefore, a negative association between ES and dissolution risks is expected for the present analyses, although some evidence suggests that ES is not linked with divorce risks (Boertien et al., 2017).

## 1.5 The Role of Socioeconomic Status and Family Background

Previous studies have suggested that socioeconomic status (SES) may play an important role for the link between personality and family formation. Social and emotional dimensions of personality have been linked with job interview performance (Caldwell & Burger, 1998; Cook et al., 2000), educational attainment (Damian et al., 2015), annual income (Jonason et al., 2018) and occupational attainment (Roberts et al., 2007). However, social competences have also been linked with a lower likelihood to follow the educational path after upper secondary education (Usslepp et al.,



23 Page 6 of 61 S. Peters

2020), indicating lower SES attainment, eventually. Furthermore, ES is positively associated with the tendency to define clear goals and work efficiently (Judge & Ilies, 2002), and with career success (Judge et al., 1999).

SES indicators are associated with marital behavior in the Nordic countries (Duvander & Kridahl, 2020; Sandström & Stanfors, 2020). For instance, high education is positively linked with the intention to marry among males (Wiik et al., 2010). The correlation between income and marital behavior seems to be less clear, though. On the one hand, there is evidence from Sweden indicating that income does not play a great role in marriage intentions (Duvander & Kridahl, 2020). However, another study suggests that income is positively linked with marriage intentions among males from Nordic countries (Wiik et al., 2010). A negative association between SES and relationship dissolution has been found using data from Norway (Lyngstad, 2004) and Finland (Jalovaara, 2001, 2013), although the consideration of a partner's characteristics may attenuate this pattern (Jalovaara, 2003).

SES may also shape fertility behavior since a higher SES may be more attractive to a potential partner due to greater access to resources and the provision of protection (Buss, 1994, 2006; Cummins, 2006). Previous research has found a positive association between SES indicators and fertility among males (Fieder et al., 2005; Hopcroft, 2006), in particular in the Nordic countries (Kolk, 2019; Kolk & Barclay, 2021). For instance, income is positively linked with second and third childbirths among males in Sweden (Andersson & Scott, 2007). Additionally, lower-educated men from Nordic countries show lower fertility and higher probabilities to remain childless over their life course (Jalovaara et al., 2019). Considering previous findings on SES and marriage/fertility, it is crucial to include factors such as income and education in the analyses of this study.

Furthermore, family background information is associated with both personality (e.g., Jokela et al., 2017) and family formation (e.g. Kramarz et al., 2021) and may, therefore, confound the relationship between personality and family formation processes. For instance, sociability is positively linked with maternal education, and negatively associated with sibling group size (Jokela et al., 2017). Some research also suggests that genetics may influence personality traits (Penke & Jokela, 2016; Penke et al., 2007; Van Gestel & Van Broeckhoven, 2003). Additionally, genetics shape the association between personality and marriage (Johnson et al., 2004).

Numerous studies have further found that individuals show similar fertility patterns as their siblings (Buyukkececi & Leopold, 2021; Dahlberg & Kolk, 2018; Lyngstad & Prskawetz, 2010). Cools and Hart (2017) have found that males' fertility increases by each additional sibling. The positive association between number of siblings and own fertility appears to be stronger among firstborns compared to later born siblings (Morosow & Kolk, 2020). Kolk (2015), however, has found that the number of siblings does not have a causal effect on completed fertility in Sweden. These findings suggest that family background (parental education, sibling group size, siblings' family formation processes) may influence one's own family formation, and personality effects may be partly explained by considering shared background information.

Additionally, family background is linked with marital dissolution (Bumpass et al., 1991; Dronkers & Hox, 2006). For instance, genetics have been found to



shape divorce risks (McGue & Lykken, 1992). Furthermore, parental factors such as social class or maternal employment status have been associated with divorce risks (Todesco, 2013). It is, therefore, crucial to adjust for family background factors, which is done through the application of sibling fixed effects models and adjustment for observables in this study. Moreover, specific barriers exist, which may result in decreasing dissolution risks, such as the presence of children (Knoester & Booth, 2000; Todesco, 2011). Consequently, patterns in the association between personality and divorce risks will additionally be examined by parental status.

#### 2 Data and Methods

The analyses of this study are based on Swedish register data. Each resident in Sweden has a unique identification number, through which information from various registers can be linked. Marital behavior, fertility, and educational level have been collected in civil registers, income in tax registers that further define cohabitation in the analyses. Each individual has to report the current address to the tax office, which is the most specific information on area of residence in the Swedish registers (Thomson & Eriksson, 2013). Possibly, individuals live at the same address but not share a household (e.g., student dorms). However, if a man and a woman have a joint child together and are registered at the same property number, one can strongly assume cohabitation (Thomson & Eriksson, 2013).

Personality factors and cognitive skills come from military conscription data and are available between 1983 and 1997. All young men were obliged to take the military tests during this time. Information on family background was drawn from multigenerational registers. Only full siblings with same mothers and fathers were included in the within-family analyses (fixed effects). These models control for unobserved heterogeneity between individuals to the extent that they are shared by siblings (e.g., genetics, parental background).

The analytical sample is restricted to a relatively homogeneous group of men who were between 17 and 20 years of age at time of recruitment. This includes the vast majority of the male population (98%) from the birth cohorts 1963–1979. All men who left Sweden or died by age 39 have been excluded. At the time of last observation (2018), males were between 39 and 55 years of age. This is a reasonable threshold for fertility analyses, as fertility patterns do not change much among Swedish men after age 40 (Barclay & Kolk, 2020; Nisén et al., 2014). The analytical sample on marriage and fertility consists of 651,790 males (sibling comparison: 222,848). Divorce models were run for males who had married by 2018 (390,344 men, sibling comparison: 136,414). Analyses on cohabitation based on joint childbearing (only non-married males) have been run for 129,820 men (sibling comparison: 42,055). All models include either SM or ES in order to avoid multicollinearity, based the Pearson's correlation coefficient of 0.65, which indicates a moderate or even strong correlation between both personality factors.



23 Page 8 of 61 S. Peters

## 2.1 Personality Factors from Psychological Interviews

Social maturity (SM) and emotional stability (ES) stem from 20–30 min semi-structured interviews by licensed psychologists during obligatory military conscription (Ludvigsson et al., 2022). Both factors are available as scores from 1 ("Low") to 5 ("High"), and have been collected for all men at the time of their recruitment.

SM includes factors such as extraversion, independence, and responsibility (Bihagen et al., 2013; Mood et al., 2012). In recent conscription cohorts, the military psychologists were required to ask the young men to evaluate their relationships to teachers and classmates, and whether they are interested in social activities including sports or outdoor life (Ludvigsson et al., 2022). Although questions might have changed over time and specific question formulations were left with the psychologists, it suggests that the military has been strongly interested in social skills and activities of the males. Social skills are important for serving in the army; in particular in officer positions, to accompany recruits during their military service, or to keep the group's motivation high (Larsson & Kallenberg, 2006). Officers with high social skills tend to be sociable, talkative, and easy-going, and may, therefore, connect easily with their team members (Larsson & Kallenberg, 2006). Recruits may be more loyal and willing to take risks within a trustful relationship to their team leader (Grönqvist & Lindqvist, 2015), which is desired by the army.

Emotional stability includes stress resilience, nervousness, and anxiety (Bihagen et al., 2013; Mood et al., 2012). In the latest conscription cohorts, the males were asked whether they have problems in controlling their temper or how they manage stress (Ludvigsson et al., 2022), which may also reflect previous interests of the army in the emotional skills of the males. The capacity to maintain composure and control over one's emotions can be useful in stressful situations within the military (Larsson & Kallenberg, 2006). In particular, officers may benefit from high levels of emotional stability since stressful situations require wise decisions and clear instructions from strong leaders (Grönqvist & Lindqvist, 2015).

## 2.2 The Swedish Military Conscription and Its Goals

The recruitment procedure has been identical for all males, and consisted of several steps, including medical tests (e.g. blood pressure) and physical tests (e.g. hearing capability) (Mönstringshandboken, 2021). At an early stage of the conscription, the young men had to undergo a cognitive ability test that included tasks on logical, spatial, verbal, and technical abilities (Kolk & Barclay, 2019). Subtest scores were transformed onto a general stanine scale (mean: 5; standard deviation: 2) (Kolk & Barclay, 2019). Toward the end of the conscription, psychological interviews took place (Mönstringshandboken, 2021). Psychologists had prior test results available (Lindqvist & Vestman, 2011; Ludvigsson et al., 2022; Nyberg et al., 2020).

One of the main goals of the army was to filter suitable candidates for different positions in the military, and deselect unsuitable men (e.g., neurotics, psychopaths) (Ludvigsson et al., 2022). Almost one third of the recruits of each cohort was trained as officers in lower hierarchies who stay in the military for approximately one year



(Grönqvist & Lindqvist, 2015). The Swedish military desires certain personality factors and skills among its officers (Grönqvist & Lindqvist, 2015), potentially to increase team performances, similar to evidence from previous research (Chidester et al., 1991). For instance, only recruits with IQ scores of 5 or higher are considered for different officer positions (Grönqvist & Lindqvist, 2015).

### 2.3 Reliability of Ratings by Psychologists

The Swedish military has addressed the question of interrater reliability in several ways. First, only certified psychologists with an educational degree have been chosen (Lindqvist & Vestman, 2010). Second, they were trained in a 4-weeks program at the Swedish National Service Administration for their military tasks (Ludvigsson et al., 2022; Nyberg et al., 2020). Moreover, standardized guidelines were available for the interviews with the recruits (Lindqvist & Vestman, 2010). These guidelines have not been made available to the public (Nilsson et al., 2001; Nyberg et al., 2020). However, previous studies provide some details, at least. For instance, the psychologists should focus on personality factors only, without considering the motivation for attending military service (Lindqvist & Vestman, 2010; Ludvigsson et al., 2022), which may partly prevent interview manipulation by the recruits if they do not intend to serve as military officer (Lindqvist & Vestman, 2010). Furthermore, previous research has examined interrater discrepancies. Psychologists assessed recruits from interviews that were recorded, but conducted by other psychologists, and interrater reliability was relatively high (Nyberg et al., 2020). This is supported by similar personality mean values and standard deviations across counties for the present sample (Table 2 in the Appendix). Further information on the military conscription, the psychological interview, the psychological measures and the advantages over self-reports is shown in the Appendix.

#### 2.4 Outcomes

This study considers several outcomes. First, marital status by age 39 and above (0—"Never married", 1—"Ever married") is examined. Second, completed fertility by age 39 and above as both the number of children (0–22) and childlessness (0—"At least one child;" 1—"Childless") is of interest. Third, divorce risk over time (event: 0—"Not divorced", 1—"Divorced") is examined for all married men by age 39 and above (risk starts at marriage). Finally, analyses on cohabitation dissolution risk over time based on males who live together with the mother of their child (event: 0—"Not separated," 1—"Separated;" risk starts at entry into fatherhood) are run.

#### 2.5 Control Variables

The analyses of this study control for a set of variables. All models include cognitive skills (1 "Low" to 9 "High"), birth year (1963–1979), birth order, and sibling group size (including sisters). Additionally, the role of SES indicators has been explored. Indicators are highest educational level obtained by age 39 (1 "No Basic Education", 2



23 Page 10 of 61 S. Peters

"Primary", 3 "Lower Secondary", 4 "Upper Secondary", 5 "Post-Secondary", 6 "Tertiary", 7 "Doctor") and income (cumulated by age 39).

#### 2.6 Statistical Models

Linear probability models (LPM) are applied in order to examine marital status by age 39 and above. The LPM for the analyses take the following forms:

The probability of having ever been married, the outcome of Eqs. (1) and (2), for each individual i depends on a set of variables. The intercept  $\beta_0$  describes the baseline value of the model. *Personality* refers to the corresponding personality factor (SM or ES). Cognitive skills are included as the categorical variable *cognitive*. Furthermore, models control for birth cohorts ( $birth\_year$ ), birth order among all siblings in the family ( $birth\_order$ ), and the total number of siblings, including the individual ( $sibling\_group\_size$ ). Sibling group size has been excluded as covariate from the fixed effects analyses since this information is shared between brothers. Equation (2) also includes SES factors. *Income* means the standardized logarithm of the cumulated income by age 39. *Education* represents the highest educational level by age 39.

Offspring counts have been analyzed by Poisson regression models. Formally, this approach is described as follows:

$$log(E[Y_i|X_i]) = \beta_0 + \beta_1 personality_i + \beta_2 cognitive_i + \beta_3 birth\_year_i + \beta_4 birth\_order_i + \beta_5 sibling\_group\_size_i$$
 (3)

$$log(E[Y_i|X_i]) = \beta_0 + \beta_1 personality_i + \beta_2 cognitive_i + \beta_3 birth\_year_i + \beta_4 birth\_order_i + \beta_5 sibling\_group\_size_i + \beta_6 log(income)_i + \beta_7 education_i$$

$$(4)$$

The logarithm of the expected number of children Y for each individual i depends on the vector of explanatories X. Control variables are identical to those in Eqs. (1) and (2). Again, sibling group size was eliminated as a covariate from fixed effects models since these require variation in all covariates by default. Analyses on childlessness are



based on LPM as shown in Eqs. (1) and (2), including the identical covariates, just with a different outcome (probability of being childless at age 39 and above).

Risks of partnership dissolution (divorce and cohabitation dissolution among parents) are examined using Cox Proportional Hazard models. The underlying time scales are time since marriage and time since first childbirth within an assumed cohabitation, respectively. The observation ends with time at dissolution or the end of the study (2018)—whichever comes first. The model censors the data since not all individuals have experienced the event of interest by the end of the observation time. The models are shown in Eqs. (5) and (6):

$$h(t|x_i) = h_0(t)exp\{\beta_0 + \beta_1 personality_i + \beta_2 cognitive_i + \beta_3 birth\_year_i + \beta_4 birth\_order_i + \beta_5 sibling\_group\_size_i\}$$
(5)

$$\begin{split} h\big(t|x_i\big) &= h_0(t) exp\big\{\beta_0 + \beta_1 personality_i + \beta_2 cognitive_i + \beta_3 birth\_year_i \\ &+ \beta_4 birth\_order_i + \beta_5 sibling\_group\_size_i \\ &+ \beta_6 \ln(income)_{i,t-1} + \beta_7 education_{i,t-1} \big\} \end{split} \tag{6}$$

The hazard h on each time point t depends on the vector of independent variables x for each individual i. It is the product of the baseline hazard  $h_0$  (time-variant) and the exponentiated sum of the estimated intercept ( $\beta_0$ ) and the independent variables x, which are multiplied by the corresponding coefficients  $\beta$ . The set of explanatories is identical to those in Eqs. (1) and (2) above. However, education and income were included as both time-varying and lagged variables (i.e., information from year t-1). Furthermore, based on parenthood as a potential barrier to divorce, additional analyses on divorce risks, including an interaction between personality and parental status (yes/no, time-varying), were conducted.

## 3 Results

## 3.1 Descriptives

Among men from birth cohorts 1963–1979, 40.94% have never been married by age 39, and 59.06% have ever been married. About one fifth (20.64%) stayed childless, 14.76% had one child, 42.81% two, and 16.71% three children. Both personality factors follow a relatively normal distribution, with largest numbers on the mid-score 3 (SM: 44.73%; ES: 49.43%). Since the group of missing values is relatively large for both SM (19.58%) and ES (19.65%), a separate category including missing values was kept in the analyses. Most recruits scored 4 (15.35%), 5 (23.64%), or 6 (16.62%) on cognitive skills, and obtained a lower secondary (31.18%), upper secondary (22.85%), or tertiary degree (21.17%). Further information is shown in Table 3 in the Appendix.

Table 1 shows descriptive statistics for the different analytical samples (marriage/fertility, divorce, cohabitation dissolution). The proportion of men who have ever



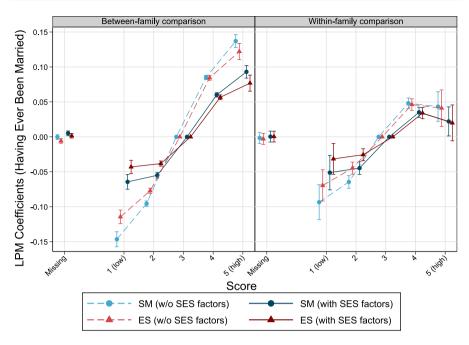
Table 1 Mean values according to SM and ES

Factor SM	Married	# Children	Childless- ness	Cognitive Ability	Education	Income Decile	N
Missing	0.59	1.71	0.22	4.88	3.97	5.18	127,639
1	0.38	1.37	0.37	3.15	3.22	3.49	8,287
2	0.46	1.48	0.32	3.97	3.58	4.47	77,435
3	0.58	1.72	0.20	5.05	4.08	5.56	291,514
4	0.69	1.90	0.14	5.98	4.71	6.35	135,717
5	0.75	2.03	0.10	6.60	5.11	7.08	11,198
ES							
Missing	0.59	1.71	0.22	4.88	3.97	5.18	128,055
1	0.42	1.44	0.34	3.53	3.46	3.90	10,338
2	0.48	1.52	0.30	4.18	3.71	4.66	87,557
3	0.59	1.73	0.20	5.13	4.13	5.60	322,187
4	0.70	1.92	0.13	6.06	4.77	6.54	96,840
5	0.74	2.03	0.10	6.62	5.12	7.25	6,813
Total	0.59	1.73	0.21	5.08	4.14	5.52	651,790

	Divorce	Risks		Cohabitation Dissolution							
SM	Person- time	Events	Rate	Person- time	Events	Rate					
Missing	11,835,971	21,347	0.002	288,595	10,623	0.037					
1	353.081	1.260	0.002	14.269	868	0.061					
2	4,599,827	11,382	0.002	161,672	7,524	0.047					
3	25.614.246	41.981	0.002	707.315	23.731	0.034					
4	14,860,515	21,213	0.001	276,814	8,489	0.031					
5	1,328,343	1,868	0.001	18,294	572	0.031					
ES											
Missing	11,867,504	21,414	0.002	289,607	10,650	0.037					
1	510,064	1,597	0.003	19,019	1,076	0.057					
2	5,535,830	13,168	0.002	180,043	8,107	0.045					
3	29,212,307	47,012	0.002	770,310	25,820	0.034					
4	10,682,003	14,766	0.001	196,579	5,792	0.029					
5	784,275	1,094	0.001	11,401	362	0.032					
Total	58,591,983	99,051	0.002	1,466,959	51,807	0.035					

been married by age 39 and higher increases with higher scores of SM (score 1: 0.38; score 5: 0.75). The average overall offspring count in the analytical sample is 1.73. This value varies between 1.37 and 2.03 by SM scores, with higher SM showing higher fertility. Furthermore, males with lower SM scores are more likely to remain childless (e.g., 37% among males with score 1) than males with highest SM scores (e.g., 10% among men with score 5). Higher SM scores also show higher levels of IQ, education, and income. Similar patterns emerge for ES. Furthermore, partnership dissolution risks decrease over SM and ES scores, as shown in the bottom part of Table 1.





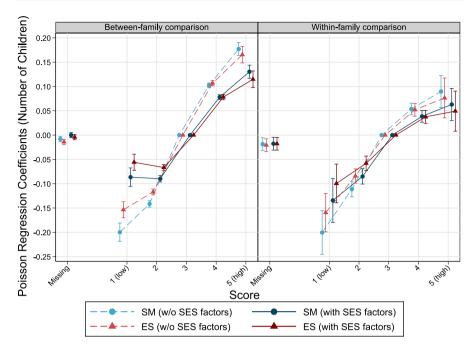
**Fig. 1** The relationship between personality factors measured at ages 17–20 and the probability to get married by age 39 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

#### 3.2 Findings on Personality and Marriage

SM and ES are positively linked with the probability of having ever been married by age 39 and above (Fig. 1). In models without SES factors, males with the highest SM score (5) show an almost 14% higher probability of having ever been married compared to males with the reference score of 3, holding all other covariates constant. This is an increase of approximately 23.2% compared to the baseline probability (59%). Conversely, men with the lowest SM (1) are 14.6% less likely to get married by age 39 and above, which is a reduction of ca. 24.7% compared to the baseline probability in the entire sample. Estimates regarding ES are very similar, albeit on a slightly lower level. Associations attenuate when income and education are included in the models but general patterns remain. When brothers are compared to each other (within-family comparison) the magnitudes decrease slightly but, again, the general patterns persist, although the marriage probability no longer changes much across the highest personality scores. Regression model estimates are shown in Tables 4 (SM) and 5 (ES). Results do not change much across models with and without IQ, as can be seen in the Appendix (Fig. 6).



23 Page 14 of 61 S. Peters



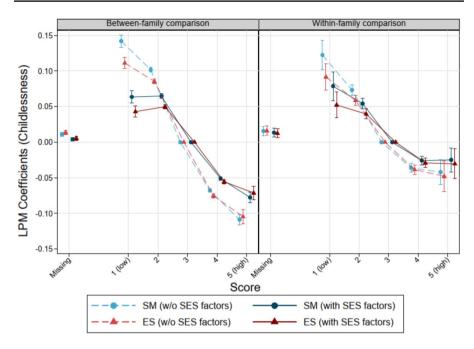
**Fig. 2** The relationship between personality factors measured at ages 17–20 and number of children by age 39 and higher among Swedish men born 1963–1979. Poisson regression models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

## 3.3 Findings on Personality and Fertility

Findings from Poisson regression models indicate that SM and ES are positively associated with the number of children (Fig. 2). Models without SES factors reveal stronger positive associations with fertility for both SM and ES. For instance, men with lowest SM scores obtain 0.20 fewer children on average by age 39 and above compared to the ones who scored 3, conditioned on all other covariates being fixed. However, the magnitude of this coefficient turned to -0.09 when income and education were included. Compared to the overall average of offspring counts in the total population (1.73), this means a reduction of ca. 5%. Patterns regarding ES are very similar. Comparison between brothers (within-family analyses) do not change the results much. All coefficients from the Poisson regression analyses can be found in the appendix (Tables 6 and 7).

Figure 3 depicts the negative association between both personality factors and childlessness. For instance, a young male with an SM score of 1 shows a more than 6% higher probability of remaining childless by age 39 and above (after including income and education), compared to another young male with an SM score of 3 (given that all other covariates are kept constant). This represents a 30% higher





**Fig. 3** The relationship between personality factors measured at ages 17–20 and childlessness by age 39 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

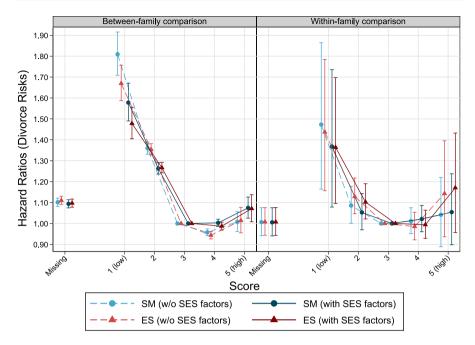
probability than the baseline level (0.21) of remaining childless. In contrast, a male with an SM score of 5 shows a more than 7% lower probability of remaining childless. Results for ES reveal similar patterns. Findings for both personality factors persist in brother comparisons, despite higher statistical uncertainties (Tables 8 and 9). Models with and without IQ reveal similar estimates as can be seen in Figs. 7 and 8 in the Appendix. Additionally, coefficients from models without SES indicators are up to twice as large as the findings from the full models in the between-family comparisons, suggesting an important mediating role of SES for the personality-childlessness link.

## 3.4 Findings on Personality and Divorce

Figure 4 depicts the association between SM/ES and divorce risks among men who ever married. Considering between-family analyses, married men with low scores (1 and 2) on SM and ES show higher divorce risks compared to the reference group (score 3). For instance, males who received an SM of 1 at the time of military conscription and entered marriage before age 39, show a more than 80% higher risk of getting divorced over time (all other covariates held constant). Including income and education reduces this risk to 58%. Highest scores on both SM and ES show slightly



23 Page 16 of 61 S. Peters



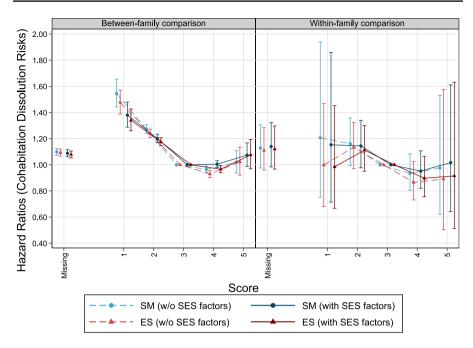
**Fig. 4** The relationship between personality factors measured at ages 17–20 and divorce risks by age 39 and higher among Swedish men born 1963–1979. Cox Proportional Hazards models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

higher divorce risks (7–8%) than the reference group (score 3). Similar patterns (but on a lower level) emerge when brothers are compared to each other (Fig. 4); however, statistical uncertainty increases (Tables 10 and 11). To examine potential differences between parents and non-parents, models including an interaction between personality and parental status (time-varying) were run. No large differences in the overall patterns on the personality-divorce association between parents and non-parents were detected, i.e., decreasing divorce risk among lowest personality scores and no large changes across highest scores were found. In general, however, parents show a lower divorce risk. Among non-parents, increasing divorce risk among higher personality scores might be suggested, but statistical uncertainty is relatively large for this group (Fig. 9).

## 3.5 Findings on Personality and Cohabitation Dissolution

Furthermore, the association between both personality factors and cohabitation dissolution for individuals who live with a partner based on joint parenthood (marriages excluded) is examined. Results are shown in Fig. 5. Low SM and ES scores are linked with higher dissolution risks among parents. Including SES indicators (income, education) slightly attenuates this association. Fathers with lowest





**Fig. 5** The relationship between personality factors measured at ages 17–20 and cohabitation dissolution risks by age 39 and higher among Swedish men born 1963–1979. Cox Proportional Hazards models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

personality scores show a 38% (SM) and 34% (ES) higher risk of experiencing cohabitation dissolution, compared to the reference group (score 3, all covariates fixed). These risks decrease in scores 2 and 3. A slightly increasing trend for the highest score is indicated. For instance, males with an SM score of 5 show a 7.4% higher separation risk compared to the reference (score 3), but these differences are not statistically significant. Trends are similar in brother comparisons for SM, but ES does not show clear patterns, and statistical uncertainty is comparatively high (Tables 12 and 13).

#### 3.6 Robustness Checks

Several robustness checks have been run. First, different age thresholds (45 and 50) were tested for both marriage (Figs. 10, 11) and fertility analyses (Figs. 12, 13, 14, 15). Patterns do not change but statistical power decreases with higher thresholds. Additionally, previous research suggests that personality-marriage associations may change across birth cohorts, e.g., the positive relationship between social competences and marriage has been found among older cohorts of German men but not younger ones (Lundberg, 2012). However, additional analyses on Swedish cohorts have not shown these patterns for the present study (Figs. 16, 17). This may indicate



that the personality-marriage association differs across countries (Germany vs. Sweden). However, both the German and the current study also differ conceptually from each other. The German study measures personality via self-reports on the Big Five several years after a potential marriage, whereas the present study measures personality via psychologists' evaluations on social maturity most often several years before the potential marriage. Rater-differences or personality changes around marriage could not have been examined that may partially explain the observed differences between Germany and Sweden.

Furthermore, logistic regression models were run for analyses on binary-coded fertility and marriage outcomes. Corresponding coefficients from models with and without SES factors are shown in Figs. 18 and 19. Patterns are consistent with findings from LPM that are shown in Figs. 2 and 4 above. For the manuscript, estimates from LPM are preferred over findings from logistic regression models because coefficients across different models (e.g., with and without SES factors) may be compared based on the first approach, while this is not possible with logistic regression models (Mood, 2010). Average marginal effects from logit models allow such comparisons. However, previous research has shown that LPM coefficients produce similar estimates so that LPM is a reliable model for binary-coded outcomes (Angrist & Pischke, 2009). Additionally, models including both personality factors have been conducted. Magnitudes decrease when controlled for both SM and ES but general patterns persist (Figs. 20, 21, 22, 23, 24).

#### 4 Discussion

#### 4.1 Conclusions

This study has examined the prospective association between personality factors from younger ages (SM and ES) and family formation processes by mid-adulthood among males using Swedish register data. As expected, the analyses reveal that SM and ES are positively related to the probability of having ever been married and the number of children by age 39 and higher, and patterns are robust in brother comparisons.

Therefore, personality factors matter for family formation processes, with generally higher magnitudes for SM than ES, and effect sizes are considerable, as demonstrated by comparisons to effect sizes of covariates from the same models. For instance, marriage models without SES indicators produce estimates ranging from -0.15 (score 1, reference: score 3) to 0.14 (score 5) for SM. These effects are larger than the ones of cognitive skills (from -0.07 to 0.11) and of birth year (from -0.05 to 0.09). Moreover, the range is larger than for birth order (-0.18 to 0.00) and sibling group size (0.00-0.22). Models including SES factors reveal SM coefficients between -0.06 and 0.09. These are comparable with educational gradients, from which only the doctoral degree shows stronger associations with marriage (coefficient: 0.13). However, income estimates are typically larger than personality magnitudes (between -0.23 and 0.13). Similar conclusions emerge from models on ES and all fertility analyses. Divorce and cohabitation dissolution are strongly shaped



by personality. For instance, the lowest score (1) is linked with a 58% (SM) and 48% (ES) higher risk of getting divorced (reference: score 3). Larger magnitudes can only be detected in the lowest incomes (decile 1: 68% higher risk). Therefore, personality effects are considerable and can compete to some extent with SES effects. This underlines the relevance of personality factors for important life outcomes, aligning previous research (Roberts et al., 2007). This study contributes to the challenge of demographic research to unfold the potential of personality for family formation.

The findings of this study suggest that education and income mediate the association between personality and family formation, given that the coefficients between models with and without SES factors diminish. However, further mediation analyses are required for reliable conclusions on mediation. There may also be arguments for rather small mediation effects. Among others, the temporal sequence of mediators and family formation outcomes might be reversed for many individuals in the current study. For instance, the majority of children have been born outside of marriage in contemporary Sweden (Eurostat, 2018), i.e., marriage may not necessarily mediate the personality-fertility link. Similarly, income may increase after becoming a parent, rather than the other way around. According to previous research, particularly men benefit from income increases after entering parenthood, known as the "fatherhood premium effect" (Angelov et al., 2016; Bygren et al., 2021).

Additionally, findings of this study indicate that lower scores on both SM and ES predict higher divorce risks by mid-adulthood, with no clear patterns among higher personality scores. These findings are partly in line with expectations that are based on mixed evidence from previous studies (Bleidorn et al., 2018; Spikic & Mortelmans, 2021). For instance, social competences are linked with higher infidelity risks (Spikic & Mortelmans, 2021), indicating lower union stability. Contrary, social personality indicators are also associated with higher life satisfaction after getting married (Boyce et al., 2016), suggesting higher marriage stability. Therefore, the relationship between social competences and marital behavior appears to be complicated. Moreover, previous findings indicate that males become more introvert, i.e., social competences decrease, and more emotionally stable after marriage, which also affects marital satisfaction (Lavner et al., 2018), and therefore marital stability. However, the data do not allow examination for potential changes in SM or ES. Previous evidence further suggests that associations between divorce and social personality indicators (positive) as well as ES (negative) are relatively robust across marriage cohorts (Boertien & Mortelmans, 2018).

Similar patterns emerge regarding cohabitation dissolution, i.e., low scores on both personality factors are linked with higher separation risks. Trends persist in within-family comparisons but with larger statistical uncertainty. Cohabitation analyses are restricted to couples who live in the same geographical unit and have a child together. This is a strong restriction due to two reasons: first, cohabitation has become a more common type of union in Sweden (Duvander & Kridahl, 2020) and childless cohabiters are neglected in this approach. Second, the presence of children is one of the strongest barriers to dissolution (Knoester & Booth, 2000; Todesco, 2011). Therefore, non-parents may face higher dissolution risks and a greater relevance of psychological factors for their relationship stability than parents.



23 Page 20 of 61 S. Peters

However, it remains speculative to which extent the personality-dissolution association is different among non-parents. For instance, men with low SM scores are characterized by, among others, low responsibility, and a child may confront such men with tasks that they do not feel ready for, which may lead to them ending the relationship. On the other hand, a joint child may be considered a barrier to dissolution, even among fathers with low SM, which may encourage them to stay with the

**Table 2** Personality mean values and standard deviations across counties

County	Social	Maturity	Emotion	al Stability	N
Number	Mean	Std. dev.	Mean	Std. dev.	
1	3.18	0.74	3.07	0.74	72,360
3	3.16	0.69	3.06	0.71	14,503
4	3.11	0.72	3.04	0.72	14,644
5	3.23	0.82	3.06	0.78	25,454
6	3.12	0.68	3.02	0.58	23,187
7	3.12	0.70	3.00	0.61	13,420
8	3.09	0.70	2.99	0.62	17,337
9	3.16	0.72	3.10	0.69	1,882
10	3.07	0.70	2.97	0.62	11,404
11	3.06	0.70	2.97	0.60	19,184
12	3.10	0.72	2.98	0.64	50,706
13	3.09	0.66	3.01	0.63	17,248
14	3.05	0.70	2.97	0.67	40,942
15	3.07	0.67	2.98	0.65	29,845
16	3.08	0.66	2.99	0.63	18,592
17	3.11	0.80	2.95	0.78	16,187
18	3.18	0.82	3.01	0.78	16,340
19	3.19	0.84	3.03	0.81	15,491
20	3.14	0.84	2.98	0.81	16,652
21	3.01	0.78	2.92	0.72	19,761
22	3.11	0.76	3.02	0.69	18,329
23	3.10	0.75	3.00	0.68	9,262
24	3.24	0.71	3.02	0.69	18,596
25	3.16	0.71	2.97	0.68	20,286
Missing	2.77	0.78	2.59	0.79	1,853
Total	3.12	0.74	3.00	0.70	523,465

Missing values on personality factors are excluded here, which reduces the sample size for these bivariate analyses to 523,465 men.



 Table 3
 Descriptive statistics—variables

Variable	Category	N	%
# Children	_	404 500	00.04
	0	134,520	20.64
	1 2	96,186 279,014	14.76 42.81
	3	108,887	16.71
	4	24,769	3.80
	5	5,877	0.90
	6	1,653	0.25
	7	486	0.07
	8	206	0.03
!	9 or more	192	0.03
Social Mat	turity		
	1	8,287	1.27
	2	77,435	11.88
	3	291,514	44.73
	4 5	135,717	20.82
	-	11,198	1.72 19.58
	Missing	127,639	19.56
Emotional	Stability		
	1	10,338	1.59
	2	87,557	13.43
	3	322,187	49.43
	4	96,840	14.86
	5 Minning	6,813	1.05
	Missing	128,055	19.65
Cognitive	Skills		
	1	21,083	3.23
	2	45,168	6.93
	3	69,775	10.71
	4	100,051	15.35
	5	154,061	23.64
	6	108,358	16.62
	7	80,304	12.32
	8 9	47,139	7.23
	<b>9</b>	25,851	3.97

## **Educational Level**

No Basic Education	694	0.11
Primary	53,460	8.20
Lower Secondary	203,209	31.18
Upper Secondary	148,959	22.85
Post-Secondary	98,556	15.12
Tertiary	137,998	21.17
Doctor	8,914	1.37



23 Page 22 of 61 S. Peters

Table 3 (continued)					
Birth Order					
	1	466,081	71.51		
	2	150,747	23.13		
	3	28,466	4.37		
	4	4,974	0.76		
	5	1,095	0.17		
	6	288	0.04		
	7 or higher	139	0.02		
Sibling Group Size	<b>;</b>				
	1	321,967	49.40		
	2	245,770	37.71		
	3	67,591	10.37		
	4	12,570	1.93		
	5	2,775	0.43		
	6	726	0.11		
	7	240	0.04		
	8 or more	151	0.02		
Civil Status					
	Never Married	266,842	40.94		
	Ever Married	384,948	59.06		
	Observations	Mean	Std.dev.	Min	Max
Income by age 39	651,790	132.61	110.15	-2,409.68	46,742.79
Birth Year	651,790	1971.24	4.11	1963	1979

partner. Men with high levels of SM, in turn, may be less likely to experience union dissolution when a child was born, as they may take the responsibility of childcare.

Similarly, ES may show different associations with dissolution risks among childless men compared to fathers. Childless males with low ES scores may be more likely to separate from a partner than fathers with low ES scores since fathers may consider having a child a stabilizing factor for the relationship. On the other hand, a child may be considered an additional burden and resource of stress that men with low ES scores may refrain from, indicating higher dissolution risks. Additional analyses in the present study based on divorce risks reveal no large differences in patterns by parental status, although divorce risks among non-parents are generally higher (Fig. 9). Lower personality scores among both parents and non-parents are associated with higher divorce risks, whereas the patterns flatten among higher scores of the parents, high personality factor scores among non-parents are also linked with higher divorce-risks, though. However, future studies are needed in order to identify differences in dissolution risks between cohabiting couples with and without children.



 Table 4 Linear probability model estimates (marriage), social maturity

Linear	ı proc	<i>J</i> <b>u</b> <i>O</i> 111			n-family		1114111	age),	3001	ai iiia	turity	Within-	family			
Variable		Mod	lel 1			Mod				Mod				Mod		
Social Ma	Beta aturity	SE	95%	6 CI	Beta	SE	95%	CI	Beta	SE	95%	CI	Beta	SE	95%	CI
1	-0.146						-0.075				-0.119				-0.076	
2	-0.096	0.002 (base)	-0.099	-0.092		0.002 (base)	-0.059	-0.051		0.005 (base)	-0.074	-0.055		0.005 (base)	-0.054	-0.036
4			0.082	0.088		0.002	0.057	0.063		0.004	0.041	0.055		0.004	0.028	0.042
5	0.137	0.005	0.128	0.146	0.093	0.005	0.084	0.102	0.043	0.011		0.064	0.022	0.011	0.001	0.043
Missing	0.000	0.002	-0.004	0.003	0.005	0.002	0.002	0.008	-0.001	0.004	-0.009	0.006	0.000	0.004	-0.007	0.008
Cognitive																
1 2	-0.071 -0.027		-0.079 -0.033				-0.036 -0.017				-0.081 -0.032				-0.047 -0.020	-0.012 0.005
3		(base)			0	(base)			0	(base)			0	(base)		
4 5	0.019	0.002	0.015	0.024	0.009	0.002	0.004	0.014	0.024	0.005	0.013	0.034	0.014	0.005	0.004	0.024
6	0.070	0.002	0.066	0.075	0.032	0.002	0.027	0.036	0.068	0.006	0.057	0.079	0.035	0.006	0.023	0.046
7 8	0.086	0.003	0.081	0.091 0.108	0.032	0.003	0.027	0.037	0.084	0.006	0.071	0.096	0.037	0.006	0.024	0.050
9		0.003		0.106	0.035	0.003	0.029	0.041 0.034	0.093			0.108	0.032	0.008	0.000	0.047
Education No Basic					-0.006	0.018	-0.041	0.030					-0.017	0.042	-0.099	0.064
Primary							-0.003						-0.008	0.006	-0.020	0.005
Lower Se Upper Se					0.001	0.002 (base)	-0.002	0.005						0.004 (base)	-0.009	0.007
Post Sec					0.031	0.002	0.027	0.035					0.026	0.005	0.016	0.035
Tertiary Doctor					0.074		0.070	0.078						0.005	0.060	0.078
Doctor					0.100	0.005	0.124	0.143					0.120	0.012	0.030	0.143
Birth Yea 1963		()				/h\				()				(h\		
1963		(base) 0.027	0.023	0.131		(base) 0.027	-0.016	0.089		(base) 0.062	-0.091	0.152	0.001	(base) 0.061	-0.118	0.121
1965	0.086	0.026	0.034	0.137	0.035			0.085	0.023	0.059	-0.093	0.139	-0.010	0.058	-0.124	0.104
1966 1967	0.082	0.026 0.026	0.031	0.134 0.123	0.020	0.026	-0.031	0.070	0.013		-0.103 -0.110	0.129 0.122	-0.029 -0.045	0.058	-0.143 -0.159	0.085
1968	0.064	0.026	0.012	0.115	-0.015	0.026	-0.066	0.035	-0.013	0.059	-0.129	0.103	-0.073		-0.188	0.041
1969 1970		0.026	0.012	0.116 0.110		0.026		0.026		0.059		0.101	-0.082 -0.094		-0.197 -0.209	0.032
1971			0.009	0.112	-0.047	0.026	-0.098	0.003	-0.022	0.060	-0.139	0.094	-0.107		-0.222	0.021
1972 1973		0.026	-0.001 -0.005		-0.061						-0.156 -0.161		-0.127 -0.137		-0.242 -0.253	
1974			-0.003										-0.153			
1975		0.026		0.072				-0.056		0.060		0.040			-0.297	
1976 1977		0.026		0.057 0.042	-0.126 -0.146		-0.176 -0.197		-0.093 -0.108	0.060	-0.211 -0.227	0.025	-0.200 -0.220		-0.317 -0.337	
	-0.030			0.022	-0.176	0.026	-0.226	-0.125	-0.130	0.061	-0.249	-0.011	-0.251	0.060	-0.368	-0.134
1979	-0.051	0.027	-0.103	0.002	-0.204	0.026	-0.255	-0.153	-0.151	0.062	-0.272	-0.030	-0.276	0.061	-0.396	-0.157
Birth Ord																
1 2		(base)	-0.007	0.000	-0.004	(base)	-0.007	-0.001		(base)	-0.002	0.013		(base) 0.004	-0.001	0.013
3	-0.011	0.004	-0.018	-0.004	-0.011	0.004	-0.018	-0.004	0.013	0.008	-0.002	0.029	0.012	0.008	-0.003	0.028
4 5	-0.026 -0.056		-0.042 -0.091		-0.027 -0.059	0.008	-0.043 -0.093	-0.010	0.018 0.022		-0.012 -0.034	0.048	0.015 0.017		-0.015 -0.039	0.044
6	-0.106		-0.174		-0.112		-0.179		-0.022		-0.120	0.076	-0.018		-0.114	0.072
7 8	-0.181		-0.302		-0.183		-0.300		-0.117		-0.292	0.058	-0.102		-0.275	0.070
	-0.177 -0.013		-0.375 -0.268		-0.198		-0.392 -0.278			0.139	-0.311 -0.378	0.235	-0.033 0.026		-0.302 -0.345	0.235
10	-0.048	0.355	-0.745	0.648	-0.041	0.348	-0.722	0.641	0.057	0.415	-0.757	0.872	0.131	0.409	-0.670	0.933
Income	Decile															
1					-0.234	0.003	-0.239 -0.127	-0.229					-0.232	0.006		-0.219 -0.118
2					-0.122 -0.066	0.003	-0.127	-0.117 -0.061					-0.130 -0.067	0.006		-0.118
4					-0.030	0.003		-0.025					-0.028		-0.039	-0.016
5						(base)								(base)		
6 7					0.022	0.003	0.017	0.027					0.018			0.030
8					0.040	0.003	0.062	0.073					0.064	0.006		0.032
9					0.095	0.003	0.090	0.100					0.079	0.006		0.091
10					0.131	0.003	0.125	0.136					0.119	0.007	0.106	0.132
Sibling	Group S	Size														
1		(base)			0	(base)							l			
2	0.020			0.023	0.016			0.019					l			
3			0.037				0.036						l			
5			0.042					0.070					l			
6	0.129	0.022	0.087	0.172	0.146	0.021	0.104	0.188					l			
7			0.079				0.103						l			
8 9			0.055 0.051				0.097 0.076						l			
10			-0.094				-0.052									
11			-0.565				-0.432						l			
lot																
Intercep		0 056	0.434	0 537	0.600	0.056	0.540	0.651	0 600	0 060	0.483	0.717	0.603	0.050	0.579	0 809
	0.400	0.020	0.404	0.001	0.000	0.020	0.048	0.001	0.000	0.000	0.403	J.111	0.000	0.008	0.010	0.508



 Table 5
 Linear probability model estimates (marriage), emotional stability

5	b Linear probability model estimates (marriage), emotional stability  Between-family Within-family																	
	Variable		Mod		3etwee	n-fam ily	Mod	el 2			Model 1 SE 95% CI 070 0.011 -0.092 -0.047 -0.045 0.004 -0.053 -0.036 -0 (base) 0 (base) 046 0.004 0.038 0.054 0.04 0.013 0.013 0.054				Mod	el 2		
		Beta	SE	95%	CI	Beta	SE		CI	Beta			CI	Beta	SE	95%	CI	
	Emotional																	
	3		(base)	-0.001	-0.010		(base)	-0.042	-0.000			-0.000	-0.000		(base)	-0.004	-0.017	
	4	0.084	0.002	0.081		0.057	0.002	0.053	0.060	0.046	0.004			0.034	0.004	0.026		
	5			0.110				0.065								-0.006		
	Missing	-0.006	0.002	-0.009	-0.003	0.002	0.002	-0.002	0.005	-0.003	0.004	-0.011	0.005	0.000	0.004	-0.007	0.008	
	Cognitive	Skills																
			0.004	-0.088	-0.073	-0.034	0.004	-0.041	-0.026	-0.070	0.009	-0.087	-0.053	-0.034	0.009	-0.051	-0.017	
				-0.037	-0.026			-0.020	-0.009	-0.022		-0.035	-0.009			-0.022	0.003	
	3		(base)	0.018	0.007		(base)	0.000	0.045		(base)	0.045	0.000		(base)	0.005	0.000	
	4 5			0.018						0.025 0.046						0.005 0.014		
	6									0.073						0.026		
	7									0.089						0.028		
	8 9			0.107						0.098			0.113 0.117			0.021		
	9	0.117	0.004	0.110	0.124	0.031	0.004	0.024	0.039	0.099	0.009	0.081	0.117	0.021	0.009	0.003	0.040	
	Education	1																
	No Basic							-0.048						-0.021			0.060	
	Primary							-0.007 -0.004								-0.022 -0.010		
	Lower Se Upper Se						(base)	-0.004	0.003						0.004 (base)	-0.010	0.006	
	Post Sec							0.028	0.036							0.017	0.036	
	Tertiary							0.073							0.005		0.080	
	Doctor					0.138	0.005	0.128	0.149					0.121	0.012	0.097	0.146	
	Birth Yea	r																
	1963		(base)			0	(base)			0	(base)			0	(base)			
	1964									0.036								
	1965	0.087	0.026	0.036	0.139	0.036	0.026	-0.014	0.087	0.026	0.059	-0.090	0.142	-0.007	0.058	-0.122	0.107	
	1966 1967	0.086	0.026	0.035	0.138	0.022	0.026	-0.028	0.073	0.016 0.010	0.059	-0.100	0.132	-0.026 -0.041	0.058	-0.140	0.088	
	1968									-0.008								
	1969	0.070	0.026	0.018	0.121	-0.021	0.026	-0.071	0.030	-0.010	0.059	-0.127	0.106	-0.078	0.058	-0.193	0.036	
	1970									-0.014								
	1971 1972	0.067								-0.017 -0.033								
	1973									-0.038								
	1974	0.041								-0.049				-0.150				
	1975	0.025								-0.074								
	1976									-0.088 -0.104				-0.198 -0.218				
										-0.125								
	1979	-0.046	0.027	-0.099	0.006	-0.204	0.026	-0.255	-0.153	-0.148	0.062	-0.269	-0.027	-0.275	0.061	-0.395	-0.156	
	Birth Ord	or																
	1		(base)			0	(base)			0	(base)			0	(base)			
	2	-0.005	0.002	-0.008	-0.001	-0.005	0.002	-0.008	-0.001	0.005	0.004	-0.003	0.012	0.006	0.004	-0.002		
	3	-0.012	0.004	-0.020	-0.005	-0.012	0.004	-0.019	-0.005	0.012 0.016 0.021	0.008	-0.004	0.027	0.011		-0.004		
	4 5	-0.027	0.009	-0.044	-0.010	-0.028	0.008	-0.044	-0.012	0.016	0.015	-0.014	0.046	0.013		-0.016 -0.040		
	6	-0.107	0.035	-0.174	-0.039	-0.113	0.034	-0.179	-0.023	0.021 -0.027	0.050	-0.125	0.071	-0.022		-0.118		
			0.062	-0.299	-0.057	-0.182	0.060	-0.300	-0.064	-0.116	0.090	-0.292	0.059			-0.275		
										-0.040						-0.303		
										0.000 0.045						-0.343 -0.671	0.397	
	Income D		0.000	0.701	0.011	0.007	0.010	0.120	0.010	0.010	0.110	0.110	0.000	0.101	0.100	0.07 1	0.002	
	1							-0.242								-0.246		
	2							-0.128 -0.072								-0.143 -0.079		
	4							-0.035						-0.027		-0.039		
	5						(base)	0.047	0.007						(base)	0.007	0.030	
	6 7					0.022		0.017	0.027					0.019	0.006	0.007		
	8							0.063						0.064		0.053		
	9 10							0.091 0.128						0.080		0.068		
	Sibling Gr		(base)			0	(base)											
	2	0.021	0.002	0.017		0.016	0.002	0.013										
	3			0.037 0.043				0.036										
	5		0.005					0.050										
	6	0.128	0.022	0.085	0.171	0.146	0.021	0.104	0.188									
	7 8	0.148	0.037	0.076	0.221			0.101										
	9	0.221	0.086	0.052	0.389	0.242	0.084	0.078	0.406									
	10 11		0.097	-0.122 -0.549	0.259		0.095	-0.068 -0.430	0.305									
		U. 122	0.042	0.040	5.133	5.220	0.000	5.450	0.002									
	Intercept	0.482	0.026	0.430	0.533	0.599	0.026	0.548	0.650	0.595	0.060	0.478	0.711	0.689	0.059	0.574	0.804	



 Table 6
 Poisson regression model estimates (number of children), social maturity

	riegi	CSSIC					mum	DEI O	Within Model 1				in-family			
Variable	Beta	Mod SE			n-family Beta	Mod SE	el 2 95%	CI	Beta	Mod SE	el 1 95%		Beta	Mod SE	el 2 95%	CI
Social Ma		0.010	0.240	0.404	0.000	0.010	0.405	0.000	0.200	0.000	0.245	0.450	0.424	0.000	-0.180	0.000
	-0.200 -0.141				-0.086 -0.090					0.023					-0.180	
3		(base)				(base)				(base)				base)		
4 5	0.102		0.098 0.164	0.107	0.078	0.003	0.073 0.117	0.083		0.006 0.017					0.026	
Missing							-0.005								-0.031	
Cognitivo	Chille															
Cognitive 1		0.006	-0.131	-0.106	-0.066	0.007	-0.079	-0.054	-0.124	0.015	-0.154	-0.094	-0.078	0.015	-0.108	-0.047
			-0.033	-0.014	-0.008		-0.017	0.001			-0.062	-0.019	-0.026	0.011	-0.047	
3 4		(base)	-0.010	0.005	-0.008	(base)	-0.015	0.000		(base)	0.009	0 044		base)	0.000	0.035
5	-0.003	0.004	-0.010	0.004	-0.012	0.004	-0.019	-0.005	0.043	0.009	0.026	0.060			0.008	
					-0.023										0.007	
					-0.043 -0.056										-0.004 -0.017	
					-0.082								-0.006	0.016	-0.038	0.025
Education	1															
No Basic					0.191	0.030	0.132	0.250					-0.073	0.072	-0.215	0.069
Primary							0.088								0.026 0.020	
Lower Se Upper Se						(base)	0.045	0.056						base)	0.020	0.047
Post Sec					-0.004	0.003	-0.010						0.008	0.008	-0.008	
Tertiary Doctor							0.042						0.059		0.043	
Doctor					0.100	0.000	0.003	0.122					0.104	0.021	0.004	0.140
Birth Yea		(base)				(base)			_	(base)			0.	base)		
1963	0.012	0.043	-0.073	0.097	-0.048	0.043	-0.133	0.037	-0.229	0.101	-0.427	-0.030	-0.272	0.102	-0.471	-0.072
1965	0.014	0.042	-0.068	0.095	-0.048 -0.074 -0.093 -0.115	0.042	-0.156	0.008	-0.174	0.097	-0.363	0.015	-0.232	0.097	-0.422	-0.041
1966	0.010	0.042	-0.072	0.092	-0.093	0.042	-0.175	-0.011	-0.208	0.097	-0.398	-0.019	-0.278 -0.200	0.097	-0.469	-0.087
1968	-0.002	0.042	-0.098	0.066	-0.141 -0.153	0.042	-0.223	-0.059	-0.231	0.097	-0.421	-0.017	-0.230	0.097	-0.522	-0.140
1969	-0.016	0.042	-0.098	0.066	-0.153	0.042	-0.234	-0.071	-0.245	0.097	-0.435	-0.055	-0.353			
1970 1971	-0.018	0.042	-0.100 -0.104	0.064	-0.164 -0.170	0.042	-0.246 -0.252	-0.082 -0.088	-0.255 -0.245	0.097	-0.446 -0.436	-0.065 -0.054	-0.376 -0.379			
1972	-0.019	0.042	-0.100	0.063	-0.179	0.042	-0.261	-0.097	-0.267	0.097	-0.458	-0.076	-0.405			
					-0.184 -0.190								-0.416 -0.425			
					-0.190								-0.425 -0.453			
1976	-0.040	0.042	-0.122	0.042	-0.212	0.042	-0.294	-0.130	-0.309	0.099	-0.502	-0.116	-0.469	0.099	-0.663	-0.274
					-0.232 -0.264								-0.492 -0.539			
					-0.300								-0.544			
Birth Ord	or															
1	0	(base)				(base)				(base)			0 (	base)		
2	-0.023	0.003	-0.028	-0.017	-0.025	0.003	-0.030	-0.019	0.008	0.006	-0.005	0.020			-0.005	
3	-0.050 -0.110	0.006	-0.061 -0.135	-0.039	-0.052 -0.116	0.006	-0.064 -0.141	-0.041	0.016 -0.008	0.013	-0.010	0.041			-0.012 -0.064	
5	-0.143	0.026	-0.195	-0.092	-0.116 -0.158	0.026	-0.210	-0.106	-0.027	0.046	-0.116	0.063	-0.045	0.046	-0.135	0.045
6 7	-0.130	0.049	-0.225	-0.035	-0.146	0.049	-0.241	-0.051	0.000	0.075	-0.146	0.147			-0.146	
	-0.178				-0.183 -0.294					0.135					-0.359 -0.496	
9	-0.680	0.181	-1.034	-0.325	-0.717	0.181	-1.071	-0.363	-0.268	0.312	-0.879	0.344	-0.297	0.318	-0.921	0.326
10	-1.622	1.009	-3.599	0.355	-1.646	1.009	-3.623	0.331	-0.895	1.111	-3.072	1.282	-0.778	1.119	-2.971	1.414
Income De	ecile				0.400	0.005	0.440	0.40					0 40-	0.045	0 45	0 440
1 2							-0.440 -0.184									3 -0.412 3 -0.167
3					-0.085	0.004	-0.093	-0.076					-0.089	0.010	-0.109	-0.070
4							-0.041	-0.025								-0.012
5 6						(base) 0.004	0.030	0.046						(base) 0.010		2 0.050
7					0.067	0.004	0.059	0.075					0.067	0.010	0.048	0.086
8 9							0.090									0.118 0.150
10							0.124									0.130
Sibling Gr	oun Si															
Sibling Gr		(base)			0	(base)										
2	0.042	0.002			0.037	0.002			1							
	0.102								1							
	0.186 0.269						0.176									
6	0.396	0.030	0.336	0.455	0.416	0.030	0.357	0.475	1							
	0.317 0.348				0.349 0.405		0.246		1							
	0.963				0.994	0.094	0.808	1.179								
10	0.544	0.132	0.285	0.803	0.627	0.132	0.367	0.886								
11	0.526	0.447	-0.351	1.402	0.698	0.447	-0.178	1.575								
Intercept																
	0.550	0.042	0.468	0.632	0.679	0.042	0.596	0.761	I				I			



Table 7 Poisson regression model estimates (number of children), emotional stability

Poisso	ni ieg	16881					Hulli	Jei Oi	CIIIIC	11011).	, emo	Within-		шц		
Variable		Mod	lel 1	Model 2   SE   95% Cl   Beta   SE   95% Cl   Beta   SE   0.008   0.072   0.039   0.016   0.0111   0.067   0.003   0.073   0.061   0.084				Mod	el 1	vviciiii.	·	Mod	el 2			
	Beta	SE	95%	CI	Beta	SE	95%	CI	Beta	SE	95%	S CI	Beta	SE	95%	CI
Emotiona			0.170	0 127	0.056	0.000	0.072	0.020	0.160	0.020	0.100	0.120	0.100	0.020	0.120	0.060
3		(base)	0.120	0.111		(base)	0.010	0.001		(base)	0.000	0.000		(base)	0.010	0.010
4			0.101	0.112		0.003	0.073	0.084		0.007	0.039	0.065		0.007	0.024	0.051
5	0.165	0.009	0.148	0.182		0.009					0.035		0.049	0.021	0.008	0.090
Missing	-0.014	0.003	-0.019	-0.009	-0.004	0.003	-0.010	0.001	-0.021	0.007	-0.034	-0.008	-0.018	0.007	-0.031	-0.005
Cognitive	Skille															
	-0.130	0.006	-0.143	-0.118	-0.074	0.006	-0.086	-0.061	-0.132	0.015	-0.162	-0.103	-0.084	0.015	-0.114	-0.054
	-0.029								-0.045	0.011	-0.066	-0.023			-0.051	
3		(base)				(base)				(base)				(base)		
4			-0.007			0.004	-0.013	0.002	0.028	0.009	0.010	0.045			0.001	
5			-0.001			0.004					0.031				0.012	
6 7					-0.018						0.040	0.078			0.011	
	-0.012				-0.036						0.045				-0.013	
	-0.034											0.099			-0.034	
Education					0.400	0.000	0.400	0.044					0.000	0.070	0.000	0.000
No Basic Primary	;					0.030									-0.222 0.023	
Lower Se	condarv					0.004									0.023	
Upper Se						(base)	0.070	0.004						(base)	0.013	0.047
Post Sec					-0.003	0.003									-0.007	0.025
Tertiary	•				0.051	0.003	0.045	0.057					0.060	0.008	0.044	0.076
Doctor					0.110	0.008	0.094	0.126	l				0.107	0.021	0.066	0.147
Birth Yea	r				l				l				l			
1963	0	(base)			0	(base)			0	(base)			0	(base)		
1964	0.015	0.043	-0.070	0.099	-0.046	0.043	-0.131	0.039	-0.226	0.101	-0.425	-0.028	-0.270	0.102	-0.470	-0.070
1965	0.015	0.042	-0.067	0.096	-0.073	0.042	-0.155	0.009	-0.226 -0.175	0.097	-0.365	0.014	-0.232	0.097	-0.423	-0.042
1966	0.014	0.042	-0.068	0.096	-0.091	0.042	-0.173	-0.009	-0.209	0.097	-0.398	-0.019	-0.278	0.097	-0.469	-0.087
1967			-0.079		-0.112	0.042	-0.194	-0.030	-0.209 -0.206 -0.230	0.097	-0.396	-0.016	-0.290	0.097	-0.481	-0.099
	-0.011		-0.093		-0.138	0.042	-0.220	-0.056	-0.230	0.097	-0.419	-0.040	-0.330	0.097	-0.521	-0.139
	-0.009 -0.010	0.042	-0.091	0.073	0.149	0.042	-0.231	-0.067	-0.242 -0.252	0.097	-0.432	-0.052	-0.352		-0.543 -0.565	
	-0.010								-0.232						-0.569	
	-0.003				-0.176	0.042	-0.258	-0.094	-0.264	0.007	-0.455	-0.074	-0.404		-0.596	
	-0.011	0.042	-0.093	0.071	-0.181	0.042	-0.263	-0.099	-0.268	0.098	-0.459	-0.077			-0.607	
1974	-0.015															
	-0.027								-0.298							
	-0.037															
	-0.051															
	-0.067 -0.092															
7070	0.002	0.012	0.110	0.000	0.001	0.0 12	0.001	0.210	0.000	0.101	0.000	0.101	0.010	0.102	0.1 10	0.010
Birth Ord																
1		(base)	0.000	0.040		(base)	0.004	0.000		(base)	0.000	0.040		(base)	0.000	0.040
	-0.024 -0.052															
	-0.032															
	-0.112															
6	-0.131	0.049	-0.226	-0.036	-0.147	0.049	-0.242	-0.052	-0.005	0.075	-0.151	0.141	-0.004	0.075	-0.151	0.143
7	-0.172	0.088	-0.345	0.001	-0.181	0.088	-0.354	-0.008	-0.103	0.135	-0.368	0.162	-0.088	0.135	-0.352	0.176
	-0.258	0.138	-0.528	0.012	-0.295	0.137	-0.564	-0.025	-0.089	0.205	-0.491	0.313	-0.096	0.205	-0.499	0.306
9					-0.718	0.181	-1.072	-0.364	-0.257	0.312	-0.869	0.354			-0.913	
10	-1.623	1.009	-3.600	0.354	-1.632	1.009	-3.609	0.345	-0.943	1.106	-3.111	1.226	-0.800	1.116	-2.987	1.387
Income D	ecile															
1 2						0.005							-0.437		-0.460 -0.210	-0.414
3						0.004									-0.210	
4					-0.033	0.004							-0.031	0.010	-0.050	
5						(base)								(base)		
6 7					0.038	0.004	0.030						0.031		0.012	
8					0.067		0.059								0.048	
9					0.134	0.004	0.126	0.142					0.131	0.010	0.112	0.151
10					0.175	0.004	0.167	0.183					0.179	0.011	0.158	0.200
Sibling Gr																
1			0.007	0.047		(base)	0.000	0.040					l			
2			0.037			0.002							l			
4	0.103					0.004							l			
	0.266	0.016	0.234	0.298	0.284	0.016	0.252	0.316					l			
6 7	0.394			0.453	0.416	0.030		0.475					l			
7	0.312		0.209	0.416 0.518	0.347	0.053	0.244						l			
9	0.965	0.095	0.778	1.151	0.997		0.222	1.182					l			
10	0.505		0.246	0.764	0.604		0.344	0.864					l			
11	0.540	0.447	-0.336	1.417	0.695	0.447	-0.181	1.572					l			
Intercept					l				l				l			
	0.545	0.042	0.463	0.627	0.678	0.042	0.596	0.761								



 Table 8 Linear probability model estimates (childlessness), social maturity

Between-family Within-family																
Variable			lel 1		1	Mod				Mod				Mod		
Social Ma	Beta	SE	95%	6 CI	Beta	SE	95%	CI	Beta	SE	95%	CI	Beta	SE	95%	CI
Social IVE		0.005	0.133	0.151	0.064	0.004	0.055	0.072	0.123	0.011	0.102	0.143	0.079	0.010	0.059	0.099
2	0.102	0.002	0.099		0.065	0.002	0.062		0.074	0.004	0.066				0.047	0.062
3		(base)	0.070	0.005		(base)	-0.054	0.040		(base)	-0.042	0.020		(base)	-0.032	0.000
	-0.109		-0.070 -0.116		-0.051		-0.054				-0.042				-0.032	
Missing			0.008				0.001				0.009				0.007	
Cognitive 1		0.003	0.095	0 107	0.063	0.003	0.057	0.069	0.086	0.007	0.072	0.100	0.053	0.007	0.039	0.067
2			0.022						0.030						0.009	
3	0	(base)			0	(base)			0	(base)			0	(base)		
4 5			-0.009						-0.019						-0.020	
6									-0.032 -0.037							
7									-0.034							
8									-0.036							
9	0.046	0.003	0.040	0.052	0.073	0.003	0.067	0.079	-0.027	0.008	-0.042	-0.012	0.021	0.008	0.005	0.036
Education	n															
No Basic	:						-0.105						0.017		-0.049	
Primary Lower Se	oondor						-0.039 -0.029								-0.024 -0.027	
Upper Se						(base)	=0.025	-0.023						(base)	*0.021	-0.014
Post Sec							-0.007								-0.017	
Tertiary							-0.031								-0.048	
Doctor					-0.056	0.004	-0.064	-0.047					-0.057	0.010	-0.076	-0.037
Birth Yea	ar															
1963		(base)				(base)				(base)				(base)		
1964	-0.036	0.023	-0.080	0.009	0.003	0.022	-0.040	0.046	0.083 0.064	0.051	-0.017	0.183	0.109		0.011 0.004	0.207
	-0.049				0.018	0.021	-0.023	0.059	0.070	0.049	-0.026	0.166	0.112		0.018	
1967		0.022	-0.083	0.002	0.033	0.021	-0.009	0.074			-0.019				0.033	
	-0.036 -0.039				0.045	0.021	0.004 0.009	0.087	0.082		-0.014 -0.010					0.235 0.245
	-0.039				0.050	0.021	0.009	0.092	0.086		-0.010		0.151		0.057	
1971	-0.044	0.022	-0.087	-0.001	0.059	0.021	0.018	0.101	0.083	0.049	-0.014	0.179	0.162	0.048	0.068	0.256
	-0.044						0.020				-0.001				0.081	
	-0.048 -0.044				0.060	0.021	0.019	0.102			-0.003 0.001				0.083	
	-0.040								0.108						0.101	
1976	-0.036	0.022	-0.079	0.007	0.078	0.021	0.037	0.120	0.119	0.050	0.021	0.217			0.115	
	-0.029 -0.022						0.046				0.021				0.118 0.144	
	-0.022						0.062				0.039				0.151	
Birth Ord														, ,		
1 2		(base)	0.008	0.014		(base)	0.000	0.015	-0.007	(base)	-0.013	0.000		(base)	-0.012	0.000
3			0.000						-0.011							
4			0.026						-0.009							
5 6			0.014		0.051	0.014	0.023	0.079	-0.032 -0.001	0.024	-0.078	0.015	-0.023	0.023	-0.068	0.023
7	0.086	0.029	-0.006	0.106	0.000	0.026	-0.005	0.115	0.061	0.041	-0.084	0.000	0.050	0.040	-0.000	0.079
8	-0.055	0.084	-0.219	0.109	-0.031	0.081	-0.190	0.128	-0.045	0.115	-0.271	0.180	-0.050	0.112	-0.270	0.171
9									0.161						-0.166	
10	0.318	0.294	-0.258	0.895	0.325	0.285	-0.234	0.884	0.232	0.344	-0.441	0.905	0.163	0.335	-0.494	0.820
Income D	ecile															
1 2					0.257		0.252 0.117		l				0.254		0.244 0.112	
3					0.060		0.055						0.057	0.005	0.047	0.066
4					0.023	0.002	0.019	0.028					0.020	0.005 (base)	0.010	0.029
5 6						(base) 0.002	-0.027	-0.019							-0.028	-0.009
7							-0.048								-0.057	
8					-0.065	0.002	-0.070 -0.090	-0.061							-0.073 -0.086	
10					-0.108	0.002	-0.090 -0.112	-0.104							-0.114	
Sibling Gr	roun Size	,														
1	0	(base)			0	(base)			l				l			
2	-0.017	0.001	-0.019	-0.014	-0.013	0.001	-0.016	-0.011	1							
4	-0.033 -0.049	0.005	-0.058	-0.040	-0.054	0.004	-0.062	-0.045	1							
5	-0.059	0.009	-0.077	-0.041	-0.071	0.009	-0.089	-0.053	l				l			
	-0.113 -0.033								l				l			
8	-0.042	0.053	-0.146	0.062	-0.082	0.052	-0.183	0.019	l				l			
9	-0.115 -0.140	0.071	-0.254	0.024	-0.139	0.069	-0.274 -0.340	-0.005 -0.035	l				l			
	0.196								l				l			
Intercept																
= nercept		0.022	0.205	0.290	0.150	0.021	0.108	0.191	0.123	0.049	0.026	0.219	0.044	0.048	-0.051	0.139
									•							



Table 9 Linear probability model estimates (childlessness), emotional stability

Between-								ciiiai	essne	288), 6	HIOU	onai	Stabi. Within				
	Variable		Mod	lel 1			Mod			_	Mod			-iaiiiiy	Mod	el 2	
	For Normal	Beta	SE	95%	S CI	Beta	SE	95%	CI	Beta	SE	95%	CI	Beta	SE	95%	CI
	Emotional			0.103	0.119	0.043	0.004	0.035	0.051	0.092	0.009	0.073	0.110	0.052	0.009	0.034	0.071
	2			0.082	0.089			0.047	0.053	0.059	0.004	0.051		0.040		0.033	0.047
	3		(base)	-0.078	0.070		(base)	-0.058	0.050		(base)	-0.045	0.000		(base)	0.000	0.000
				-0.078				-0.058				-0.045		-0.029 -0.030		-0.036 -0.051	
	Missing			0.011				0.003				0.010				0.006	
	Cognitive 1		0.003	0.103	0.115	0.068	0.003	0.062	0.074	0.092	0.007	0.078	0.106	0.057	0.007	0.043	0.071
	2			0.025				0.012				0.022				0.011	
	3		(base)	0.044	0.000		(base)	0.005	0.000		(base)	0.000	0.044		(base)	0.004	0.004
	4 5			-0.011 -0.017				-0.005 -0.006		-0.020		-0.029 -0.043				-0.021 -0.029	
	6	-0.007	0.002	-0.011	-0.003	0.009	0.002	0.005	0.013	-0.040	0.005	-0.050	-0.031	-0.019		-0.028	
	7			0.001						-0.038						-0.019	
	8 9	0.016		0.011						-0.040 -0.030						-0.013 0.004	0.012
	_		0.000	0.000	0.010	0.070	0.000	0.001	0.070	0.000	0.000	0.011	0.010	0.010	0.000	0.001	0.000
	Education	1															
	No Basic Primary							-0.099 -0.036								-0.045 -0.022	
	Lower Se	condary						-0.027								-0.027	
	Upper Se						(base)								(base)		
	Post Sec Tertiary	ondary						-0.007 -0.033								-0.017 -0.048	
	Doctor							-0.067								-0.077	
	Birth Yea 1963		(base)			0	(base)			0	(base)			0	(base)		
				-0.082	0.007			-0.041	0.045	0.078		-0.022	0.179		0.050	0.007	0.204
				-0.084						0.061						0.001	
				-0.095 -0.086				-0.025 -0.011		0.067		-0.029 -0.023				0.015	
				-0.083		0.043	0.021	0.001	0.084	0.078	0.049	-0.019	0.174	0.137	0.048	0.043	0.231
				-0.086				0.006				-0.015				0.053	
				-0.088 -0.092				0.011 0.015				-0.010 -0.020				0.065	
				-0.092		0.058	0.021	0.017	0.100			-0.020	0.174			0.004	
				-0.096				0.016				-0.009				0.079	
		-0.050 -0.044		-0.092 -0.087				0.022			0.050	-0.006	0.189	0.180			
				-0.081				0.028				0.006	0.200	0.193		0.096	
	1977	-0.033	0.022	-0.076	0.010	0.087	0.021	0.045	0.128	0.114	0.050	0.016	0.212			0.115	
				-0.069 -0.066				0.062				0.033				0.140 0.149	
	1919	-0.023	0.022	-0.000	0.021	0.114	0.021	0.072	0.130	0.135	0.031	0.033	0.235	0.241	0.030	0.145	0.545
	Birth Orde																
	1 2		(base)	0.009	0.016		(base)	0.010	0.015		(base)	0.012	0.000	-0.005	(base)	0.011	0.001
	3													-0.007			
	4	0.041	0.007	0.027	0.055	0.044	0.007	0.031	0.058	-0.007	0.013	-0.032	0.018	-0.002	0.012	-0.026	0.022
	5 6	0.044		0.015	0.073									-0.021 0.005			
	7			-0.005						0.060						-0.075	
						-0.033	0.081	-0.193	0.126	-0.045	0.115	-0.271	0.181	-0.050			
	9 10			-0.136 -0.258						0.158 0.253						-0.169 -0.486	
	Income De		0.233	-0.200	0.007	0.514	0.200	-0.240	0.075	0.200	0.044	-0.420	0.521	0.172	0.000	-0.400	0.023
	income De	ecne				0.258	0.002	0.254	0.263					0.256	0.005	0.245	0.266
	2					0.122 0.060		0.118						0.123 0.057		0.114	
	4					0.060		0.056 0.019						0.057		0.048	0.067
	5						(base)								(base)		
	6 7					-0.023		-0.028 -0.048						-0.019		-0.028 -0.057	
	8							-0.070						-0.064 -0.077		-0.073	
	9 10					-0.087 -0.109		-0.091 -0.114						-0.077	0.005	-0.087 -0.115	-0.067
	Sibling Gr 1		(base)			0	(base)										
	2	-0.017	0.001	-0.019		-0.013	0.001										
	3 4	-0.033 -0.050	0.002	-0.037 -0.059	-0.029 -0.041	-0.031 -0.055	0.002	-0.035 -0.063	-0.027 -0.046								
	5	-0.057	0.009	-0.076	-0.039	-0.070	0.009	-0.063 -0.088	-0.052								
				-0.147 -0.090													
	8	-0.036	0.053	-0.140	0.068	-0.079	0.052	-0.180	0.022								
				-0.255 -0.270		-0.140 -0.171	0.069	-0.275 -0.324	-0.005 -0.018								
	11	0.185	0.283	-0.371	0.740	0.087	0.275	-0.324 -0.452	0.625								
	Intercept																
		0.252	0.022	0.209	0.295	0.152	0.021	0.110	0.193	0.128	0.049	0.032	0.225	0.049	0.048	-0.046	0.143



 Table 10 Cox proportional hazards model estimates (divorce), social maturity

10 Cox	c proj	201110			S IIIOC n-family		шиац	es (ui	voice	), soc	iai iii	Within				
Variable		Mod		between	n-rannin	Mode	el 2			Mod	el 1	WILIIII	·raminy	Mod	el 2	
	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI
Social Ma	turity 1.812	0.053	1.712	1.918	1.580	0.046	1.492	1.673	1.478	0.170	1.167	1.871	1.372	0.167	1.081	1.741
2	1.360	0.055	1.332	1.390	1.263	0.046	1.237	1.291	1.087	0.178 0.045	1.002	1.179	1.054	0.167 0.044	0.970	1.144
3		(base)				(base)				(base)				(base)		
4	0.958	0.008	0.942	0.974	1.003	0.009	0.986	1.020	1.011	0.031	0.951	1.074	1.021	0.032	0.960	1.086
5 Maning	1.009	0.024	0.963	1.058	1.076	0.026	1.027 1.074	1.128	1.038	0.084	0.886	1.216	1.050	0.086	0.895	1.232
Missing	1.101	0.010	1.082	1.121	1.094	0.010	1.074	1.113	1.002	0.034	0.938	1.071	1.001	0.034	0.936	1.070
Cognitive	Skills															
1	1.292	0.025	1.244	1.342	1.164	0.023	1.120	1.210	1.465	0.114	1.258	1.706	1.378	0.108	1.182	1.608
2	1.108	0.017 (base)	1.076	1.141	1.061	0.016 (base)	1.030	1.093	1.139	0.064 (base)	1.020	1.271	1.113	0.063 (base)	0.996	1.243
4	0.885	0.011	0.863	0.906	0.925	0.011	0.903	0.948	0.964	0.044	0.881	1.054	0.977	0.045	0.892	1.069
5	0.804	0.009	0.786	0.822	0.894	0.010	0.874	0.915	0.884	0.039	0.811	0.964	0.925	0.041	0.847	1.010
6	0.727	0.009	0.709	0.745	0.876	0.011	0.854	0.898	0.834	0.041	0.757	0.918	0.905	0.046	0.819	0.999
7 8	0.643	0.009	0.626	0.660 0.610	0.832	0.012 0.014	0.809 0.787	0.856 0.841	0.777	0.042	0.699 0.627	0.865 0.801	0.874	0.050 0.054	0.782 0.721	0.977
9	0.538	0.009	0.518	0.559	0.782	0.014	0.750	0.815	0.709	0.053	0.574	0.782	0.798	0.066	0.721	0.934
Education																
No Basic Primary					1.414 1.358	0.122 0.017	1.195 1.324	1.674 1.392					1.374 1.224	0.549	0.627 1.106	3.008 1.355
Lower Se	condary				1.095	0.017	1.075	1.116					1.062	0.003	0.990	1.140
Upper Se						(base)								(base)		
Post Sec	ondary				0.853	0.010	0.834	0.872					0.999	0.042	0.921	1.084
Tertiary					0.666	0.008	0.651	0.681					0.732	0.032	0.672	0.797
Doctor					0.654	0.021	0.614	0.697					0.705	0.080	0.565	0.881
Birth Year	r															
1963		(base)			1	(base)			1	(base)			1 (	(base)		
1964	0.685	0.075	0.552	0.849	0.714	0.078	0.576	0.886	0.430	0.227	0.153	1.209	0.459	0.243	0.163	1.294
1965	0.647	0.068	0.527	0.795	0.666	0.070	0.542	0.818	0.556	0.281	0.206	1.497	0.596	0.302	0.221	1.608
1966	0.627	0.066	0.510	0.770	0.652	0.068	0.530	0.801	0.503	0.255	0.186	1.357	0.541	0.275	0.200	1.463
1967 1968	0.629	0.066	0.512 0.517	0.773	0.655 0.666	0.069	0.533 0.542	0.804 0.818	0.523 0.524	0.265 0.265	0.193	1.413 1.414	0.562	0.286	0.208 0.210	1.524
1969	0.624	0.065	0.508	0.766	0.658	0.069	0.535	0.808	0.504	0.256	0.186	1.365	0.545	0.278	0.201	1.479
1970	0.607	0.064	0.494	0.746	0.644	0.068	0.524	0.791	0.538	0.273	0.198	1.457	0.583	0.297	0.215	1.584
1971	0.583	0.061	0.475	0.716	0.633	0.066	0.515	0.778	0.499	0.254	0.184	1.356	0.550	0.281	0.202	1.498
1972	0.586	0.062	0.477	0.720	0.640	0.067	0.521	0.786	0.501	0.256	0.184	1.364	0.552	0.283	0.202	1.507
1973 1974	0.579	0.061	0.471	0.711	0.637	0.067	0.518 0.522	0.783	0.482	0.247	0.177	1.314	0.535 0.549	0.275	0.196 0.200	1.465
1975	0.585	0.062	0.476	0.719	0.662	0.070	0.539	0.814	0.553	0.285	0.202	1.516	0.620	0.320	0.225	1.706
1976	0.585	0.062	0.476	0.719	0.661	0.070	0.537	0.813	0.579	0.299	0.210	1.595	0.657	0.341	0.238	1.817
1977	0.604	0.064	0.491	0.743	0.681	0.072	0.553	0.837	0.542	0.281	0.196	1.498	0.601	0.313	0.216	1.668
1978	0.594	0.063	0.483	0.731	0.664	0.070	0.540	0.818	0.569	0.297	0.205	1.583	0.624	0.327	0.224	1.743
1979	0.624	0.069	0.502	0.775	0.688	0.076	0.554	0.854	0.601	0.322	0.210	1.715	0.656	0.353	0.229	1.881
Birth Orde	er															
1	1	(base)				(base)				(base)				(base)		
2	0.956	0.009	0.938	0.974	0.951	0.009	0.934	0.969	0.921	0.030	0.864	0.980	0.922	0.030	0.866	0.983
3	1.004	0.019	0.967	1.043	0.998	0.019	0.961	1.036	0.913	0.060	0.803	1.037	0.913	0.060	0.803	1.039
4 5	0.981	0.043	0.901 0.776	1.069	0.976 0.906	0.043	0.896 0.761	1.063	0.923 0.748	0.114 0.166	0.724 0.485	1.176 1.155	0.938 0.765	0.117 0.170	0.735 0.494	1.197
6	0.981	0.167	0.703	1.369	0.971	0.165	0.696	1.354	1.218	0.454	0.586	2.528	1.185	0.445	0.568	2.473
7	1.124	0.364	0.596	2.121	1.106	0.358	0.586	2.087	2.269	1.649	0.546	9.428	2.229	1.633	0.531	9.365
8	0.551	0.343	0.162	1.867	0.509	0.318	0.150	1.728	2.067	3.647	0.065	65.614	3.063	5.449	0.094 1	00.046
Income De	ecile															
1					1.679	0.024	1.633	1.726					1.396			1.556
2					1.310	0.019	1.273	1.347					1.127		1.014	1.253
3 4					1.079 1.020	0.016 0.015	0.991	1.110 1.050					0.986 0.904		0.891 0.818	1.092 0.999
5						(base)	0.551	1.000						(base)	0.010	0.555
6					0.972	0.014	0.945	1.000					0.882		0.798	0.975
7					0.946	0.014	0.919	0.974					0.853			0.942
8					0.957	0.014	0.930	0.985					0.887			0.979
9 10					0.986	0.014	0.958	1.015					0.914		0.828 1.006	1.010
10					1.100	0.016	1.13/	1.201					1.113	0.008	1.000	1.232
Sibling Gro																
	1					(base)										
			0.925			0.008										
			0.887 0.810			0.012 0.024										
			0.814			0.024										
			0.733		0.870	0.088	0.714	1.060								
			0.443		0.651	0.130	0.440	0.962								
			0.704			0.297										
			0.313		0.743	0.307										
10	0.090	0.302	0.177	1.903	0.094	0.300	0.177	1.98/	l				1			



Table 11 Cox proportional hazards model estimates (divorce), emotional stability

111 C	ox pro	portic			S IIIOC n-family		шпас	es (ui	voice	), em	ouon	Within-	-			
Varial	ole	Mod	del 1	2011100	uy	Mode	el 2			Mod	el 1	*************	lailing	Mode	el 2	
	HR	SE	95%	G CI	HR	SE	95%	CI	HR	SE	95%	6 CI	HR	SE	95%	CI
Emotio	nal Stabili		4 505							0.400	4 450	4 700		0.450		4 700
	1 1.668 2 1.354		1.585 1.328	1.754 1.381	1.477 1.267	0.038	1.403 1.242	1.554 1.292	1.440 1.130	0.160 0.044	1.159 1.047	1.790 1.218	1.368 1.103	0.153 0.043	1.099	1.702
		(base)	1.320	1.301		(base)	1.242	1.232		(base)	1.047	1.210		(base)	1.022	1.191
	4 0.944		0.926	0.961	0.987	0.010	0.969	1.006	0.985	0.034	0.922	1.053	0.994	0.034	0.929	1.063
	5 1.015	0.031	0.955	1.078	1.072	0.033	1.009	1.138	1.141	0.116	0.935	1.392	1.169	0.120	0.955	1.429
Missin	g 1.110	0.010	1.091	1.130	1.097	0.010	1.078	1.116	1.004	0.034	0.940	1.072	1.004	0.034	0.939	1.072
Cognit	ive Skills															
Cogriii	1 1.305	0.025	1.256	1.356	1.170	0.023	1.126	1.216	1.455	0.113	1.250	1.695	1.368	0.107	1.173	1.596
	2 1.114		1.082	1.147	1.064	0.016	1.034	1.096	1.142	0.064	1.023	1.274	1.114	0.063	0.998	1.245
	3 1	(base)			1	(base)			1	(base)			1	(base)		
	4 0.885		0.863	0.906	0.926	0.011	0.904	0.949	0.967	0.044	0.884	1.058	0.980	0.045	0.896	1.073
	5 0.800 6 0.725		0.782 0.707	0.818 0.743	0.893 0.876	0.010	0.873 0.854	0.913 0.898	0.887 0.838	0.039	0.814	0.967 0.922	0.929	0.042 0.046	0.851 0.825	1.014
	7 0.642		0.625	0.659	0.834	0.011	0.811	0.857	0.782	0.041	0.704	0.922	0.881	0.046	0.788	0.984
	8 0.592		0.574	0.610	0.816	0.014	0.789	0.843	0.714	0.045	0.632	0.807	0.827	0.055	0.727	0.941
	9 0.538	0.011	0.518	0.559	0.785	0.016	0.753	0.817	0.676	0.053	0.579	0.789	0.805	0.067	0.685	0.947
Educat					1.441	0.124	1 217	1 705					1 200	0.547	0.605	2.995
No Ba Primar					1.361	0.124	1.217 1.328	1.705 1.396					1.368	0.547	0.625 1.103	1.351
	, Secondar	v			1.096	0.010	1.075	1.116					1.061	0.038	0.989	1.139
	Secondar				1	(base)							1	(base)		
	econdary				0.855	0.010	0.836	0.874					1.000	0.042	0.921	1.085
Tertia					0.668	0.008	0.653	0.683					0.731	0.032	0.671	0.796
Doctor	•				0.655	0.021	0.615	0.698					0.705	0.080	0.564	0.881
Birth Y	ear															
196		(base)			1	(base)			1	(base)			1	(base)		
196	4 0.699		0.564	0.867	0.728	0.080	0.587	0.903	0.431	0.227	0.153	1.210	0.460	0.243	0.163	1.296
196			0.542	0.818	0.683	0.072	0.556	0.839	0.558	0.282	0.207	1.503	0.599	0.303	0.222	1.616
196			0.521	0.787	0.665	0.070	0.541	0.817 0.823	0.503	0.255	0.187	1.358	0.542	0.275	0.201	1.466
196 196			0.525 0.529	0.792 0.798	0.670 0.681	0.070 0.072	0.545 0.554	0.823	0.524 0.524	0.266 0.265	0.194 0.194	1.416 1.414	0.564 0.571	0.287 0.290	0.208 0.211	1.529
196			0.518	0.782	0.671	0.072	0.546	0.824	0.504	0.256	0.186	1.366	0.546	0.278	0.201	1.482
197			0.503	0.759	0.656	0.069	0.534	0.806	0.536	0.273	0.198	1.452	1	0.297	0.215	1.582
197			0.482	0.728	0.644	0.068	0.524	0.791	0.497	0.253	0.183	1.348	0.549	0.280	0.202	1.494
197			0.485	0.732	0.651	0.068	0.530	0.800	0.498	0.254	0.183	1.355	0.550	0.282	0.202	1.501
197 197			0.478 0.476	0.721 0.719	0.646 0.652	0.068	0.526 0.530	0.795 0.801	0.478 0.488	0.245	0.175 0.178	1.303	0.533 0.545	0.274 0.280	0.195 0.199	1.458
197			0.484	0.713	0.673	0.003	0.548	0.828	0.547	0.282	0.176	1.500	0.615	0.200	0.133	1.692
197			0.484	0.731	0.672	0.071	0.547	0.827	0.572	0.296	0.208	1.576	0.651	0.338	0.236	1.800
197	7 0.613	0.065	0.498	0.754	0.690	0.073	0.561	0.850	0.534	0.277	0.193	1.476	0.594	0.310	0.214	1.649
197			0.489	0.740	0.673	0.071	0.547	0.829	0.563	0.294	0.203	1.567	0.620	0.324	0.222	1.729
197	9 0.633	0.070	0.510	0.786	0.699	0.077	0.562	0.868	0.595	0.319	0.208	1.699	0.652	0.350	0.227	1.868
Birth C	order															
		(base)			1	(base)			1	(base)			1	(base)		
	2 0.956		0.938	0.974	0.951	0.009	0.933	0.969	0.922	0.030	0.866	0.982	0.924	0.030	0.867	0.984
	3 1.004		0.967	1.043	0.997	0.019	0.960	1.035	0.917	0.060	0.807	1.042	0.916	0.060	0.806	1.042
	4 0.982		0.901	1.070	0.977	0.043	0.897	1.064	0.923	0.114	0.725	1.176	0.938	0.117	0.735	1.197
	5 0.917 6 0.965		0.770 0.692	1.092	0.900	0.080	0.756 0.687	1.071	0.758 1.215	0.168 0.454	0.491	1.170 2.525	0.773 1.182	0.172 0.444	0.500 0.566	1.195 2.469
	7 1.092		0.578	2.064	1.080	0.350	0.572	2.040	2.340	1.706	0.561	9.769	2.276	1.670	0.540	9.588
	8 0.508		0.150	1.721	0.482	0.300	0.142	1.633	2.163	3.743		64.278	3.160	5.543	0.101	
Income	Dooile															
	Declie 1				1.677	0.024	1.631	1.724					1.396	0.077	1.253	1.557
	2				1.308	0.019	1.271	1.345					1.127			
	3				1.078	0.016	1.047	1.109					0.986			
	4				1.020	0.015	0.991	1.049					0.905	0.046	0.819	1.000
	5					(base)								(base)		
	6				0.972	0.014	0.945	1.000					0.884			
	7 8				0.947	0.014	0.920	0.974					0.855			
	9				0.987	0.014	0.960	1.016					0.916			
1						0.017		1.204								1.235
	Group Siz								l							
	1 1		0.005	0.050		(base)	0.000	0.001	l							
	2 0.940 3 0.912					0.008										
	4 0.857					0.012										
	5 0.909				0.874	0.048	0.785	0.974	l							
	0.894					0.088			l							
	7 0.667					0.132			l							
		0.335				0.303										
	9 0.703 0 0.577					0.305			l							
/	. 0.011	0.004	0.173	1.323	0.000	0.001	0.173	1.503	1				ı			



Table 12 Cox proportional hazards model estimates (cohabitation dissolution), social maturity

12 Cox	k proj	ortio			S MOC n-family		ımate	es (co	habita	ation (		lution Within-		ial m	aturit	У
Variable		Mod		betwee	n-rannny	Mod	el 2			Mode		vvitriiri-	laililly	Mode	el 2	
	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI
Social Ma		0.054	1.442	1 055	1 200	0.049	1 200	1.479	1.206	0.202	0.751	1 020	1.153	0.281	0.715	1.860
1 2	1.545	0.054	1.238	1.655 1.306	1.380	0.049	1.288	1.234	1.161	0.292	0.751	1.939 1.358	1.144	0.092	0.715 0.977	1.340
3		(base)				(base)				(base)				(base)		
4	0.965	0.012	0.941	0.990	1.005	0.013	0.979	1.030	0.934	0.071	0.805	1.083	0.952	0.073	0.819	1.106
5	1.019	0.043	0.937	1.108	1.074	0.046	0.988	1.167	0.976	0.224	0.622	1.531	1.017	0.239	0.642	1.610
Missing	1.099	0.014	1.073	1.127	1.088	0.014	1.062	1.115	1.129	0.084	0.976	1.305	1.140	0.086	0.984	1.321
Cognitive	Skills															
1	1.230	0.030	1.172	1.291	1.145	0.028	1.091	1.202	1.379	0.212	1.020	1.864	1.357	0.211	1.000	1.841
2	1.084	0.020	1.045	1.123	1.054	0.019	1.016	1.092	1.146	0.120	0.934	1.406	1.147	0.121	0.933	1.410
3 4	0.942	(base) 0.015	0.914	0.971	0.970	(base) 0.015	0.941	1.000	1.098	(base) 0.098	0.923	1.307	1.126	(base) 0.101	0.944	1.342
5	0.881	0.013	0.856	0.907	0.946	0.013	0.918	0.974	0.912	0.080	0.768	1.082	0.963	0.086	0.809	1.146
6	0.802	0.013	0.776	0.829	0.908	0.016	0.878	0.940	0.879	0.090	0.720	1.073	0.935	0.098	0.761	1.148
7	0.751	0.015	0.723	0.779	0.900	0.018	0.865	0.937	0.801	0.098	0.630	1.019	0.886	0.113	0.690	1.138
8	0.679	0.017	0.646	0.714	0.869	0.023	0.825	0.916	0.654	0.108	0.474	0.902	0.741	0.127 0.156	0.530	1.036
9	0.632	0.023	0.589	0.678	0.836	0.032	0.795	0.922	0.467	0.120	0.282	0.773	0.587	0.156	0.349	0.987
Education																
No Basic					1.324	0.159	1.046	1.674					2.554	2.178	0.480	
Primary					1.232	0.020	1.193	1.272					1.030	0.107	0.841	1.262
Lower Se					1.033	0.013	1.007	1.059					1.006	0.077	0.867	1.168
Upper Se Post Sec					0.875	(base) 0.015	0.847	0.905					0.912	(base) 0.094	0.745	1.117
Tertiary	orradi y				0.693	0.012	0.669	0.717					0.827	0.092	0.664	1.028
Doctor					0.642	0.045	0.559	0.737					0.523	0.295	0.173	1.578
Dieth V	_															
Birth Yea 1963		(base)			1	(base)			1	(base)			1	(base)		
1964	0.729	0.135	0.508	1.047	0.755	0.139	0.526	1.084	0.519	0.667	0.042	6.437	0.584	0.755	0.046	7.352
1965	0.720	0.126	0.511	1.015	0.739	0.129	0.525	1.041	0.482	0.595	0.043	5.425	0.540	0.670	0.047	6.150
1966	0.724	0.127	0.514	1.020	0.750	0.131	0.532	1.057	0.403	0.497	0.036	4.519	0.457	0.567	0.040	5.192
1967 1968	0.777 0.752	0.136 0.132	0.552 0.534	1.095 1.059	0.803 0.778	0.140 0.136	0.570 0.552	1.131	0.480 0.461	0.594	0.043	5.416	0.537 0.525	0.667 0.650	0.047	6.124 5.955
1969	0.752	0.132	0.534	1.058	0.778	0.136	0.552	1.097 1.097	0.380	0.569 0.470	0.034	5.180 4.290	0.525	0.519	0.046	4.764
1970	0.761	0.133	0.540	1.072	0.792	0.139	0.562	1.117	0.474	0.587	0.042	5.365	0.525	0.652	0.046	6.005
1971	0.748	0.131	0.531	1.054	0.788	0.138	0.559	1.110	0.373	0.461	0.033	4.211	0.415	0.516	0.036	4.743
1972	0.727	0.127	0.516	1.024	0.766	0.134	0.544	1.080	0.397	0.492	0.035	4.504	0.444	0.554	0.039	5.104
1973 1974	0.716 0.733	0.125 0.128	0.508 0.520	1.010 1.033	0.758 0.782	0.133	0.538 0.555	1.068 1.102	0.314	0.390 0.414	0.028	3.578 3.811	0.344	0.429 0.454	0.030	3.968 4.205
1974	0.756	0.120	0.520	1.066	0.762	0.137	0.555	1.148	0.384	0.414	0.029	4.414	0.430	0.434	0.037	4.205
1976	0.759	0.133	0.538	1.069	0.816	0.143	0.579	1.151	0.398	0.497	0.034	4.599	0.443	0.556	0.038	5.190
1977	0.755	0.132	0.536	1.064	0.810	0.142	0.574	1.142	0.367	0.460	0.032	4.272	0.394	0.496	0.033	4.645
1978	0.714	0.125	0.507	1.007	0.756	0.133	0.536	1.066	0.307	0.386	0.026	3.604	0.331	0.418	0.028	3.933
1979	0.756	0.135	0.533	1.073	0.799	0.143	0.563	1.133	0.216	0.274	0.018	2.602	0.236	0.302	0.019	2.888
Birth Orde	er															
1		(base)				(base)				(base)				(base)		
2	0.952	0.013	0.927	0.977	0.949	0.013	0.924	0.974	1.090	0.075	0.953	1.248	1.089	0.076	0.950	1.249
3	0.974	0.027	0.923	1.028	0.977	0.027	0.926	1.030	1.324	0.187	1.004	1.747	1.310	0.187	0.990	1.733
4 5	0.898	0.056	0.795 0.724	1.014 1.197	0.889	0.055 0.119	0.787 0.724	1.004 1.197	1.418 2.030	0.368 0.984	0.852 0.785	2.360 5.251	1.378 2.066	0.362 1.016	0.824	2.305 5.414
6	0.956	0.221	0.608	1.503	1.006	0.233	0.639	1.582	3.244	2.723	0.626		3.393	2.893		18.045
7	0.451	0.205	0.185	1.101	0.471	0.214	0.193	1.149	3.950	4.330	0.461		3.338	3.696		29.244
. 8	0.602	0.367	0.182	1.988	0.679	0.412	0.207	2.230	3.569	5.600	0.165	77.283	3.457	5.442	0.158	75.660
Income De	ecile				1.390	0.026	1.341	1.442					1.548	0.173	1.244	1.927
2					1.206	0.023	1.162	1.252					1.378	0.150	1.114	1.705
3					1.061	0.021	1.021	1.102					1.038	0.114	0.838	1.286
4					1.000	0.020	0.962	1.040					1.024	0.110	0.829	1.265
5						(base)	0.044	4.000						(base)	0.740	4.455
6 7					0.982	0.020	0.944 0.937	1.022 1.015					0.929	0.103 0.103	0.748 0.746	1.155 1.152
8					0.967	0.020	0.929	1.007					0.918	0.103	0.737	1.145
9					0.986	0.021	0.947	1.027					1.029	0.124	0.812	1.303
10					0.964	0.021	0.925	1.005					0.758	0.098	0.588	0.976
Sibling Gr	oup Size	э														
		(base)			1	(base)										
2	0.962	0.011			0.965											
		0.019				0.019										
4		0.040 0.082				0.039 0.079										
		0.062				0.079										
		0.291				0.266										
		0.901			1.726	0.785										
9	0.000		. 0 500	. , ,,,,	0.000 1.387	. 0.740	0.404	4 000								
10	1.541	0.836	0.532	4.460	1.387	U./49	U.481	4.000				ļ				



 Table 13 Cox proportional hazards model estimates (cohabitation dissolution), emotional stability

13 Cox	prop	oruo					mate	s (co	паон	ation	uisso	Within-		onon	ai sta	omity
Variable		Mod		setwee	n-family	Mod	el 2			Mod	el 1	witnin-	ramııy	Mode	el 2	
	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI	HR	SE	95%	CI
Emotional			4 000	4 574	4 0 4 0	0.040	4.050	4 400	0.000	0.400	0.000	4.407	0.004	0.405	0.007	4.450
1 2	1.477	0.047	1.388 1.209	1.571 1.272	1.340 1.176	0.043 0.015	1.259 1.146	1.426 1.206	0.999	0.196 0.089	0.680 0.971	1.467 1.323	0.984 1.112	0.195 0.089	0.667 0.951	1.452 1.300
3		(base)	1.203	1.272		(base)	1.140	1.200		(base)	0.571	1.020		(base)	0.551	1.500
4	0.930	0.014	0.903	0.957	0.966	0.014	0.939	0.995	0.866	0.075	0.731	1.025	0.897	0.078	0.756	1.065
5	1.022	0.054	0.921	1.134	1.075	0.057	0.969	1.193	0.891	0.259	0.504	1.576	0.915	0.270	0.513	1.631
Missing	1.093	0.014	1.067	1.120	1.079	0.013	1.053	1.105	1.110	0.082	0.960	1.283	1.120	0.084	0.967	1.297
Cognitive	Skills															
1	1.244	0.030	1.185	1.305	1.152	0.028	1.098	1.210	1.412	0.215	1.047	1.905	1.385	0.214	1.023	1.875
2	1.090	0.020	1.052	1.130	1.058	0.019	1.020	1.097	1.146	0.120	0.934	1.406	1.147	0.121	0.933	1.411
3		(base)				(base)				(base)				(base)		
4 5	0.941 0.877	0.015	0.913 0.852	0.970 0.903	0.970 0.944	0.015 0.014	0.941 0.917	1.001 0.972	1.094 0.906	0.097	0.919	1.303 1.075	1.122 0.958	0.101 0.085	0.940 0.804	1.338 1.140
6	0.799	0.013	0.032	0.825	0.907	0.014	0.877	0.938	0.876	0.079	0.764	1.075	0.933	0.003	0.760	1.146
7	0.748	0.014	0.721	0.777	0.901	0.018	0.866	0.937	0.802	0.098	0.631	1.020	0.887	0.113	0.690	1.139
8	0.678	0.017	0.645	0.712	0.871	0.023	0.826	0.917	0.652	0.107	0.473	0.900	0.739	0.126	0.529	1.034
9	0.631	0.023	0.587	0.677	0.858	0.032	0.797	0.924	0.474	0.122	0.287	0.784	0.596	0.157	0.355	1.000
Education																
No Basic	ļ!				1.340	0.161	1.059	1.695					2.524	2.152	0.475	13.426
Primary					1.237	0.020	1.198	1.277					1.039	0.107	0.848	1.272
Lower Se					1.034	0.013	1.008	1.060					1.008	0.077	0.868	1.170
Upper Se						(base)	0.040							(base)	0.740	
Post Seco	ondary				0.877	0.015 0.012	0.849 0.670	0.906 0.717					0.909 0.828	0.094	0.742 0.666	1.112
Doctor					0.645	0.012	0.562	0.717					0.529	0.092	0.000	1.590
Doctor					0.040	0.040	0.002	0.741					0.023	0.231	0.170	1.000
Birth Yea																
1963		(base)	0.500	4 004		(base)	0.500	4.070		(base) 0.698	0.040	0.774	0.603	(base) 0.781	0.040	7.044
1964 1965	0.718 0.717	0.133 0.125	0.500	1.031 1.010	0.747 0.736	0.138	0.520 0.523	1.072	0.542 0.510	0.698	0.043	6.771 5.786	0.603	0.781	0.048	7.641 6.480
1966	0.717	0.126	0.510	1.014	0.747	0.123	0.530	1.052	0.430	0.532	0.043	4.857	0.482	0.599	0.043	5.509
1967	0.773	0.135	0.548	1.089	0.800	0.140	0.568	1.127	0.508	0.630	0.045	5.770	0.561	0.699	0.049	6.451
1968	0.747	0.131	0.530	1.052	0.775	0.136	0.550	1.092	0.489	0.605	0.043	5.532	0.549	0.683	0.048	6.284
1969	0.744	0.130	0.528	1.049	0.774	0.135	0.549	1.091	0.401	0.497	0.035	4.557	0.435	0.543	0.038	5.008
1970	0.752	0.131	0.533	1.059 1.041	0.786 0.782	0.138	0.558	1.108	0.505	0.627	0.044	5.753 4.486	0.552 0.434	0.689	0.048	6.367
1971 1972	0.739	0.129	0.524	1.041	0.782	0.137 0.133	0.555 0.539	1.101 1.070	0.394	0.489	0.035	4.486	0.434	0.542 0.580	0.038	5.001 5.369
1973	0.707	0.124	0.502	0.996	0.752	0.132	0.533	1.059	0.330	0.411	0.029	3.788	0.358	0.448	0.031	4.163
1974	0.721	0.126	0.511	1.015	0.773	0.135	0.548	1.089	0.354	0.441	0.031	4.074	0.382	0.478	0.033	4.449
1975	0.748	0.131	0.531	1.054	0.809	0.142	0.574	1.140	0.406	0.508	0.035	4.700	0.450	0.565	0.038	5.274
1976	0.751	0.132	0.533	1.059	0.811	0.142	0.575	1.144	0.424	0.531	0.036	4.936	0.467	0.588	0.040	5.514
1977 1978	0.746 0.705	0.131	0.529	1.051 0.994	0.803 0.749	0.141 0.131	0.569	1.132 1.057	0.390	0.490 0.415	0.033	4.579 3.894	0.414 0.350	0.524 0.444	0.035	4.929 4.194
1976	0.748	0.124	0.500 0.528	1.062	0.749	0.142	0.531 0.559	1.126	0.330	0.415	0.028	2.784	0.330	0.317	0.029	3.051
Birth Orde		, ,				,, ,							١.			
1 2	0.951	(base) 0.013	0.927	0.976	0.948	(base) 0.013	0.924	0.973	1.091	(base) 0.075	0.954	1.249	1.090	(base) 0.076	0.951	1.249
3	0.975	0.013	0.924	1.028	0.977	0.013	0.926	1.031	1.331	0.188	1.009	1.756	1.316	0.188	0.995	1.741
4	0.896	0.056	0.793	1.012	0.888	0.055	0.786	1.003	1.426	0.371	0.857	2.374	1.385	0.364	0.828	2.317
5	0.937	0.120	0.728	1.205	0.936	0.120	0.727	1.203	2.075	1.003	0.804	5.353	2.095	1.027	0.802	5.476
6	0.966	0.223	0.614	1.520	1.011	0.234	0.642	1.591	3.373	2.820		17.365	3.523	2.993		18.622
7 8	0.450 0.634	0.205 0.385	0.184	1.099 2.082	0.469	0.213 0.426	0.193 0.216	1.144 2.306	3.884	4.234 5.301		32.889 72.922	3.266 3.278	3.601 5.155	0.376 0.150	28.347
		0.303	0.155	2.002	0.700	0.420	0.210	2.300	3.304	3.301	0.137	12.522	3.270	3.133	0.150	71.434
Income De	ecile				1.389	0.026	1.340	1.441					1.553	0.173	1.247	1.933
2					1.205	0.026	1.161	1.251					1.373	0.173	1.110	
3					1.060	0.021	1.021	1.102					1.036	0.113	0.836	
4					1.000	0.020	0.962	1.040					1.029	0.111	0.833	1.270
5						(base)								(base)		
6					0.982	0.020	0.944	1.022					0.930	0.103	0.748	
7 8					0.975	0.020	0.937	1.015					0.928	0.103 0.104	0.747 0.738	1.154 1.148
9					0.988	0.020	0.949	1.029					1.037	0.104	0.730	1.313
10						0.021								0.099		
0.1.1													l			
Sibling Gr	oup Size				1	(base)							1			
			0.940	0.984		0.011	0.943	0.987								
			0.933		0.960	0.019	0.925	0.998					l			
			0.936			0.039							l			
			0.839			0.080							l			
			0.840			0.165							l			
7 8			0.576 0.816			0.265 0.783										
	0.000		. 0.010			. 0.703										
10	1.602		0.548		1.432	0.779	0.493	4.160					l			



Tow percentages							
SM	1	2	3	4	5	Missing	Total
ES							
1	4,771	4,726	782	54	3	2	10,338
	46.15	45.71	7.56	0.52	0.03	0.02	100
2	3,313	43,987	36,874	3,295	48	40	87,557
	3.78	50.24	42.11	3.76	0.05	0.05	100
3	190	28,328	226,935	65,742	822	170	322,187
	0.06	8.79	70.44	20.40	0.26	0.05	100
4	2	290	26,373	63,682	6,436	57	96,840
	0.00	0.30	27.23	65.76	6.65	0.06	100
5	0	2	233	2,707	3,870	1	6,813
	0.00	0.03	3.42	39.73	56.80	0.01	100
Missing	11	102	317	237	19	127,369	128,055
	0.01	0.08	0.25	0.19	0.01	99.46	100
Total	8,287	77,435	291,514	135,717	11,198	127,639	651,790
	1.27	11.88	44.73	20.82	1.72	19.58	100

**Table 14** Descriptive statistics, frequency table with social maturity (SM) and emotional stability (ES), row percentages

## 4.2 Strengths and Limitations

This study has certain limitations. For instance, no personality information has been available for women although previous research has suggested gender differences in the link between personality and family formation (Jokela et al., 2011; Peters, 2023). Including women in the analyses would also allow to examine couples' behavior. Recent research has shown that large social personality differences between partners increase dissolution risks, in particular among lower educated groups (Hofmann & Krapf, 2024). These associations may further be examined, and even extended to marital and fertility behavior.

Additionally, there is a non-neglectable proportion of missing values for the personality measures (SM: 19.58%; ES: 19.65%), which is still included in the analyses. It remains unclear why one fifth of the men has not been assessed on the personality traits. Additional descriptive analyses show that more than 99% of the men with missing value on one personality factor have not received an evaluation on the other either (Table 14). Furthermore, 26.06% of the males with missing values on leadership skills were not evaluated on personality factors but males were assessed on their personality scores throughout all IQ categories (Table 15). Large proportions of men with low hearing test scores (around 50%) as well as missing values on hearing (24.28%) and technical skills tests (28.94%) completed the conscription without personality assessments (Table 16). This may be linked with the selection of potential candidates for all military, but especially officer positions who need to show certain levels of SM, ES, and leadership skills (Ludvigsson et al., 2022). Males with missing SM and ES values do not differ substantially regarding marriage or fertility probabilities from the reference group (score 3), but they show higher separation and divorce risks.

Furthermore, the purposes of measuring personality may differ between the military and demographic or psychological surveys. The measures from this study



**Table 15** Descriptive statistics, frequency table with social maturity (SM) and leadership skills (LS)/cognitive skills, row percentages

SM	1	2	3	4	5	Missing	Total
LS 1	1,258	1,617	134	5	0	688	3,702
-	33.98	43.68	3.62	0.14	0.00	18.58	100
2	631	8,862	2,605	66	1	2,222	14,387
_	4.39	61.60	18.11	0.46	0.01	15.44	100
3	65	11,437	14,882	600	19	4,774	31,777
•	0.20	35.99	46.83	1.89	0.06	15.02	100
4	5	6,841	46,696	2,252	39	10,080	65,913
•	0.01	10.38	70.84	3.42	0.06	15.29	100
5	1	1,317	78,414	12,529	63	16,667	108,991
-	0.00	1.21	71.95	11.50	0.06	15.29	100
6	0.00	128	36,990	41,060	328	14,640	93,146
U	0.00	0.14	39.71	44.08	0.35	15.72	100
7	0.00	4	7,445	42,093	2,014	10,100	61,656
1	0.00	0.01	1,443 12.08	68.27	3.27	16,100	100
8							
•	0	0	438	12,748	5,072	3,620	21,878
•	0.00	0.00	2.00	58.27	23.18	16.55	100
9	0	1	12	784	2,593	671	4,061
	0.00	0.02	0.30	19.31	63.85	16.52	100
Missing	6,327	47,228	103,898	23,580	1069	64,177	246,279
	2.57	19.18	42.19	9.57	0.43	26.06	100
Total	8,287	77,435	291,514	135,717	11,198	127,639	651,790
	1.27	11.88	44.73	20.82	1.72	19.58	100
Cognitive Skills							
1	1,965	7,612	5,703	356	11	5,436	21,083
	9.32	36.10	27.05	1.69	0.05	25.78	100
2	1,676	12,297	18,163	2,279	65	10,688	45,168
	3.71	27.23	40.21	5.05	0.14	23.66	100
3	1,474	13,468	32,375	6,468	253	15,737	69,775
	2.11	19.30	46.40	9.27	0.36	22.55	100
4	1,222	13,909	48,084	14,702	764	21,370	100,051
	1.22	13.90	48.06	14.69	0.76	21.36	100
5	1,003	14,548	77,165	31,336	1,965	28,044	154,061
	0.65	9.44	50.09	20.34	1.28	18.20	100
6	448	7,484	50460	28,611	2,102	19,253	108,358
	0.41	6.91	46.57	26.40	1.94	17.77	100
7	285	4,445	33,557	25,601	2,428	13,988	80,304
•	0.35	5.54	41.79	31.88	3.02	17.42	100
8	131	2,388	17,457	16,774	2,000	8,389	47,139
<del>-</del>	0.28	5.07	37.03	35.58	4.24	17.80	100
9	83	1,284	8,550	9,590	1,610	4,734	25,851
	0.32	4.97	33.07	37.10	6.23	18.31	100
Total	8,287	77,435	291,514	135,717	11,198	127,639	651,790

come from interviews, and these usually produce less stable personality levels than self-reports from questionnaires (Hopwood & Bleidorn, 2018). This may be particularly problematic since personality may change after certain life events (e.g., the



**Table 16** Descriptive statistics, frequency table with social maturity (SM) and hearing test scores/technical skills test scores, row percentages

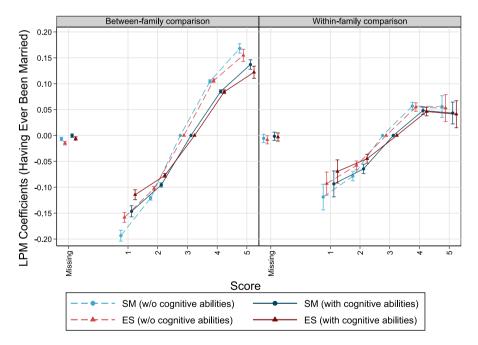
SM	w percentag	2	3	4	5	Missing	Total
Hearing	'	2	3	7	3	wiissiiig	I Otal
1	29	154	204	75	5	593	1,060
	2.74	14.53	19.25	7.08	0.47	55.94	100
2	50	196	338	115	3	764	1,466
	3.41	13.37	23.06	7.84	0.20	52.11	100
3	36	211	498	184	16	852	1,797
	2.00	11.74	27.71	10.24	0.89	47.41	100
4	56	256	515	157	11	648	1,643
	3.41	15.58	31.35	9.56	0.67	39.44	100
5	90	527	1,011	351	25	692	2,696
	3.34	19.55	37.50	13.02	0.93	25.67	100
6	216	1,117	2,209	790	67	1,118	5,517
	3.92	20.25	40.04	14.32	1.21	20.26	100
7	418	2,423	5,401	2,230	197	2,483	13,152
	3.18	18.42	41.07	16.96	1.50	18.88	100
8	425	2,766	6,818	2,677	240	2,725	15,651
	2.72	17.67	43.56	17.10	1.53	17.41	100
9	4,341	40,242	138,887	68,012	6,518	43,024	301,024
	1.44	13.37	46.14	22.59	2.17	14.29	100
Missing	2,626	29,543	135,633	61,126	4,116	74,740	307,784
J	0.85	9.60	44.07	19.86	1.34	24.28	100
Total	8,287	77,435	291,514	135,717	11,198	127,639	651,790
	1.27	11.88	44.73	20.82	1.72	19.58	100
Technical Skills							
1	1,091	4,728	5,136	664	18	2,958	14,595
	7.48	32.39	35.19	4.55	0.12	20.27	100
2	1,009	7,414	13,782	2,749	117	6,082	31,153
	3.24	23.80	44.24	8.82	0.38	19.52	100
3	1,007	9,866	26,962	7,187	343	10,500	55,865
	1.80	17.66	48.26	12.86	0.61	18.80	100
4	991	11,906	43,591	14,769	844	15,342	87,443
	1.13	13.62	49.85	16.89	0.97	17.55	100
5	822	10,691	52,084	22,671	1,500	17,222	104,990
	0.78	10.18	49.61	21.59	1.43	16.40	100
6	457	7,347	45,253	25,075	1,942	14,534	94,608
	0.48	7.77	47.83	26.50	2.05	15.36	100
7	240	3,978	29,219	20,660	1,958	10,026	66,081
	0.36	6.02	44.22	31.26	2.96	15.17	100
8	71	1,393	10,252	8,915	1,070	3,819	25,520
	0.28	5.46	40.17	34.93	4.19	14.96	100
9	41	873	6,610	6,554	864	2,597	17,539
	0.23	4.98	37.69	37.37	4.93	14.81	100
Missing	2,558	19,239	58,625	26,473	2,542	44,559	153,996
<del>-</del>	1.66	12.49	38.07	17.19	1.65	28.94	100
Total	8,287	77,435	291,514	135,717	11,198	127,639	651,790
	1.27	11.88	44.73	20.82	1.72	19.58	100



23 Page 36 of 61 S. Peters

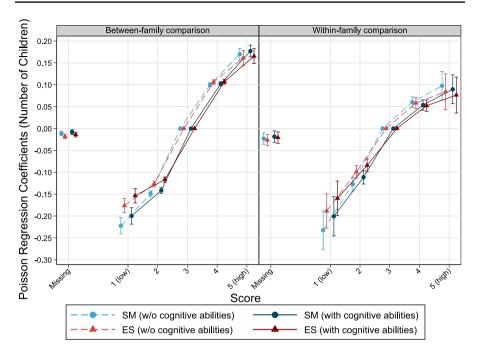
transition to first romantic relationship or from school to work/college) (Bleidorn et al., 2018), or when longer time periods are considered (Harris et al., 2016; Hopwood & Bleidorn, 2018). However, other studies indicate a relatively high stability of personality over the life course (Damian et al., 2015; Lucas & Donnellan, 2011), and life events do not lead to large personality changes (Costa Jr. et al., 2000; Neyer & Asendorpf, 2001), in particular not in the long-term (Allemand et al., 2015). Although the degree of stability in ES and SM from this data over time is uncertain, the prospective design avoids any reverse causality, at least.

On the other hand, this study also reveals strengths. Population-wide administrative register data allow to link personality factors from young ages to demographical events on a population level. Furthermore, sibling comparisons rule out the confounding effects from shared family background factors. Register data face fewer selection problems than surveys since survey participation is voluntary. As one example, disadvantaged males might be less likely to participate in a survey, and to have offspring or to marry. The analyses, however, include the vast majority of Swedish males from birth cohorts 1963–1979—also men who would reject survey participation. Therefore, less bias in the findings compared to studies using survey data can be assumed.



**Fig. 6** The relationship between social maturity measured at ages 17–20 and the probability to get married by age 39 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without cognitive abilities control for birth year, birth order, and in case of between-family considerations for sibling group size. Models with cognitive abilities include cognitive abilities, additionally





**Fig. 7** The relationship between personality factors measured at ages 17–20 and number of children by age 39 and higher among Swedish men born 1963–1979. Poisson regression models, error bars are 95% confidence intervals. *Note* Models without cognitive abilities control for birth year, birth order, and in case of between-family considerations for sibling group size. Models with cognitive abilities include cognitive abilities, additionally

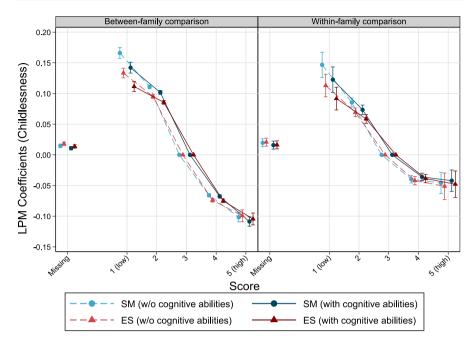
## 4.3 Implications and Outlook

The findings have a number of practical implications. For instance, high SM and ES scores may be beneficial for union formation resulting in inequalities on the partner market. Males may or may not enter one or more stable partnership unions over the life course. The findings of this study show that males with higher ES and SM scores are more likely to get married suggesting inequalities in partnering processes. This may be partly based on partner preferences. For instance, previous research has shown that females with higher conscientiousness prefer men with higher social factor levels, whereas more extraverted females search for men with lower social skills (Dupuy & Galichon, 2014). This results in men facing difficult trade-offs depending which type of women they would like to attract.

Moreover, partnering inequalities may also affect health outcomes. Singles show higher mortality risks (e.g., Roelfs et al., 2011) and worse well-being (e.g., Wright & Brown, 2017), whereas partnered individuals show better mental health (e.g., Willitts et al., 2004). Therefore, men with lower SM & ES scores (i.e., lower marriage probabilities, higher dissolution risks), may also suffer from worse health outcomes. Similar effects may emerge from findings of fertility analyses of this study.



23 Page 38 of 61 S. Peters



**Fig. 8** The relationship between personality factors measured at ages 17–20 and childlessness by age 39 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without cognitive abilities control for birth year, birth order, and in case of between-family considerations for sibling group size. Models with cognitive abilities include cognitive abilities, additionally

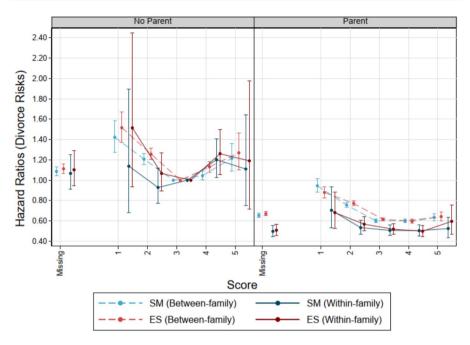
More research on the prospective association between personality and family formation is needed, in particular since previous research suggests an increasing relevance of psychological factors for family formation processes (Aldén et al., 2022). It will be interesting to examine the link between personality and family formation among women based on observed gender differences in previous studies (Jokela, 2012; Jokela et al., 2011). The personality-family formation link may also be studied in other cultural contexts, in particular regarding the positive association between SES and fertility, which is a specific characteristic of Nordic countries.

# **Appendix**

#### Additional Information on the Swedish Military Conscription

Some information has already been provided in the manuscript. Although several parts of the psychological interviews remain classified (e.g., the specific guidelines for the psychologists), some more details around the interviews and the military conscription have been made available by previous research (e.g., Lindqvist & Vestman, 2011; Nyberg et al., 2020).





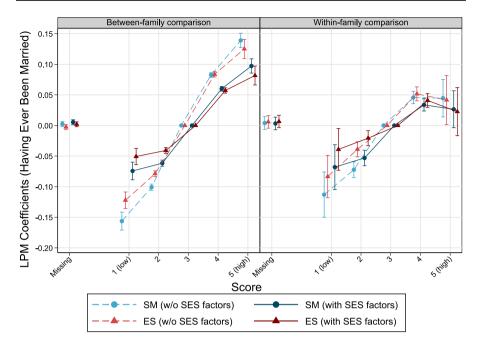
**Fig. 9** The relationship between personality factors measured at ages 17–20 and divorce risks by age 39 and higher among Swedish men born 1963–1979. Cox Proportional Hazards models by parental status, error bars are 95% confidence intervals. *Note* Models control for cognitive abilities, income, education, birth year, birth order, and in case of between-family considerations for sibling group size

For instance, Lindqvist and Vestman (2010, 2011) sketch the development of the psychological conscription interviews in the historical context and their relevance for the Swedish army (Tables 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16). They report that psychological factors have been collected in the Swedish military since the early 1940's when several tests (on IQ, physical health, psychological factors) were introduced for the entire cohort of recruits (Lindqvist & Vestman, 2010, 2011). The Swedish army has used prior experiences from Germany and the US to develop and establish the psychological assessment during military conscription (Lindqvist & Vestman, 2011). In the first years, psychological measures, by at that time advanced psychometric methods, should predict the recruits' performances during military service (Lindqvist & Vestman, 2011), and indeed, the recruits' skills were tested at later stages of the military service to examine the reliability of the psychological tests (Lindqvist & Vestman, 2010). Based on these first experiences, psychological interviews of around 10-20 min were introduced by 1950 in order to assess the psychological suitability of the young males for the military service (Lindqvist & Vestman, 2010). Regarding the birth cohorts that were used for this study (1963–1979), psychological interviews were already well-established, stemmed from 1970 and did not change before 1995 when only minor changes occurred (Lindqvist & Vestman, 2010, 2011; Ludvigsson et al., 2022).

All men of the analyzed sample (birth cohorts 1963–1979) had to attend the military conscription, typically when they were 18 or 19 years old (Lindqvist &



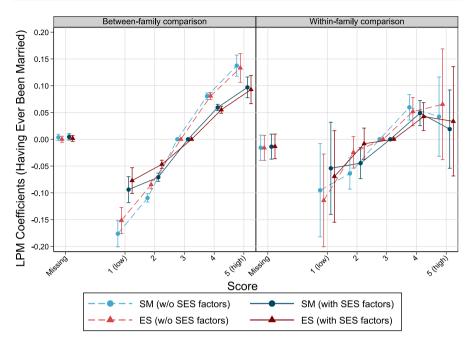
23 Page 40 of 61 S. Peters



**Fig. 10** The relationship between personality factors measured at ages 17–20 and the probability to get married by age 45 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

Vestman, 2011), which lasted one or two days at the maximum (Mönstringshandboken, 2021). Using results from tests on several facets (e.g., IQ, physical health, psychological factors), one of the main goals of the psychological interviews was it to evaluate the recruit's capacity to cope with mental stress that may appear during the military service (Carlstedt, 2000; Lindqvist & Vestman, 2011) without producing severe mental damages (Nyberg et al., 2020). Additionally, the psychologists may have detected psychological concerns regarding the mental health of the recruits leading to exclusion from military service (Nilsson et al., 2001). Reasons to exclude men from the military service were bad health, undemocratic attitudes, anti-social disorders, or obsession with the army (Ludvigsson et al., 2022). Low scores on cognitive (from IQ tests) or non-cognitive abilities (from psychological interviews) did not belong to the exclusion criteria but they were used to select males for certain positions within different fields of the military (Lindqvist & Vestman, 2011). Furthermore, first signs of poor mental health detected by the psychologist were further examined by conscription physicians who may have diagnosed males with mental diseases according to the ICD-code of the WHO (Nyberg et al., 2020).





**Fig. 11** The relationship between personality factors measured at ages 17–20 and the probability to get married by age 50 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

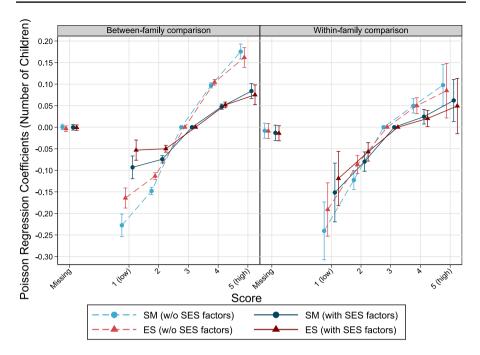
#### **Psychological Measures**

Psychologists were asked to rate several psychological factors such as social maturity, psychological energy, intensity, and emotional stability (Bihagen et al., 2013) on a scale from 1 to 5 (Lindqvist & Vestman, 2011). Perseverance, the capacity to maintain attention, and the ability to carry out goals are examples of psychological energy (Mood et al., 2012). Intensity is defined as the degree and regularity of one's leisure activities, as well as one's capacity to motivate oneself internally without assistance from others (Mood et al., 2012). Social maturity and emotional stability have received particularly high attention in previous research and are of particular high interest for the military, as shown in the sections below. The personality factor measures are generally based on questions about behaviors rather than attitudes (Bihagen et al., 2013; Mood et al., 2012).

The evaluation on the personality factors should serve as support for the assessment of the overall military aptitude (scores 1–9) (Lindqvist & Vestman, 2011; Mood et al., 2012). Higher scores on this scale stand for a better mental health and a higher military aptitude (Nilsson et al., 2001), and were assigned to men with relatively high levels of extraversion, independence, emotional stability, responsibility and persistence (Lindqvist & Vestman, 2011; Ludvigsson et al., 2022). This already indicates that two psychological fields were of particular interest for the Swedish



23 Page 42 of 61 S. Peters

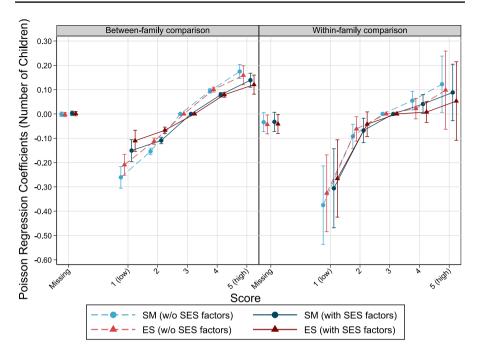


**Fig. 12** The relationship between personality factors measured at ages 17–20 and number of children by age 45 and higher among Swedish men born 1963–1979. Poisson regression models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

military: (1) social skills, and (2) emotional stability and stress resilience. Therefore, psychological capacities and facets in relation to these factors were prominent in the psychological interviews. For instance, social relationships were subject of the interviews (Ministry of Defense Sweden, 1984) as well as the abilities to adapt to new circumstances and social surrounding (Lindqvist & Vestman, 2011; Ludvigsson et al., 2022). Moreover, certain emotional capacities were discussed including stress resilience (Nyberg et al., 2020) and fears such as claustrophobia or the fear of heights (Ludvigsson et al., 2022).

Apart from the personality factors described above, recruits were also assessed according to their leadership skills (LS). Although LS have been assessed independently of military aptitude and personality traits, it remains highly correlated with these other psychological factors (Mood et al., 2012). According to Ministry of Defense Sweden (1984), the leadership measure is based on a number of characteristics, including responsibility, mental acuity, and dominance (Figs. 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24). During the interview, young men were also questioned about their personal capacity to mentor their friends (Lindqvist & Vestman, 2010). Men selected for officer positions were required to undergo leadership training, regardless of their desire to become





**Fig. 13** The relationship between personality factors measured at ages 17–20 and number of children by age 50 and higher among Swedish men born 1963–1979. Poisson regression models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

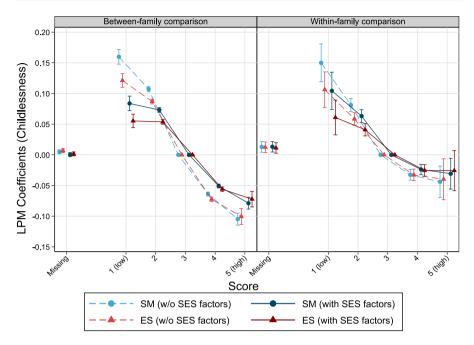
an officer in the army, based on their LS scores from the conscription interview (Ministry of Defense Sweden, 1984).

But not every person has had their LS measured during the military conscription. According to Carlstedt (1998), the majority of males who scored on LS had previously completed cognitive tests during the conscription process and performed reasonably well (at least receiving a five on a scale of one to nine). This means that these men fall into the upper half of the IQ distribution (Carlstedt, 2000; Lindqvist & Vestman, 2010; Mårdberg & Carlstedt, 1998). As a result, in order to be considered for military officer posts (such as sergeants and lieutenants), applicants had to be somewhat clever and receive exceptionally high LS scores from qualified psychologists. For example, subsequent sergeants had to have received an IQ score of six or higher during the conscription, while lieutenants had to receive a score of seven or higher (Ludvigsson et al., 2022).

Psychologists were further required to produce a formal report on all measured psychological factors (Nilsson et al., 2001). Performing well during the military conscription, e.g., receiving high scores on social maturity, emotional stability, and LS from the psychological interviews, or high IQ scores from the cognitive tests, is positively linked with a number of later life outcomes. For instance,



23 Page 44 of 61 S. Peters



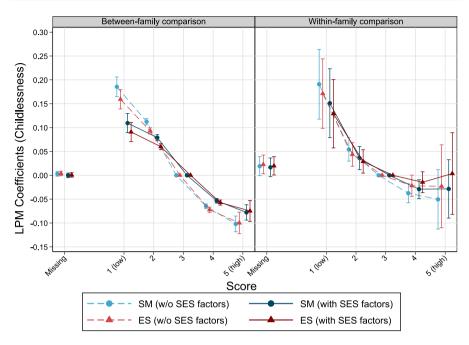
**Fig. 14** The relationship between personality factors measured at ages 17–20 and childlessness by age 45 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

high scores on social maturity and emotional stability are positively linked with receiving higher income in later career outside the military (Bihagen et al., 2013). Furthermore, conscription-test-derived cognitive skills have been positively correlated with the likelihood of holding a managerial position following military service in the 30- to 40-year-old age range (Grönqvist & Lindqvist, 2015). Additionally, both having served as a higher officer in the military and having high cognitive skills evaluated during conscription are positively correlated with the likelihood of completing postsecondary education (Grönqvist & Lindqvist, 2015). As a result, military commanders may profit from their knowledge and expertise in the civilian workforce as well. This may have an impact on family formation processes by ensuring stable employment and making resources for family assistance available.

### The Role of the Recruits' Psychological Constitution for the Swedish Military

The psychological evaluation of the recruits has been of particular interest for the Swedish army for many decades (Lindqvist & Vestman, 2010). For instance, stress resilience of the young men was an essential capability to evaluate for the military. High stress resilience has been characterized by high emotional stability, persistence,





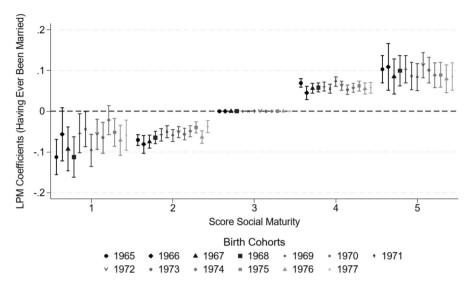
**Fig. 15** The relationship between personality factors measured at ages 17–20 and childlessness by age 50 and higher among Swedish men born 1963–1979. Linear probability models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

social skills, and independence, whereas opposite factors such as introversion, neuroticism, or adaptation difficulties have represented low stress resilience (Nyberg et al., 2020). Stress resilience has been considered as general indicator for general personality since it may be associated with a set of personality factors (e.g. emotional stability, extraversion, or conscientiousness), as argued by previous research (Falkstedt et al., 2013; Nyberg et al., 2020). This may be one reason for the essential role of stress resilience for military considerations.

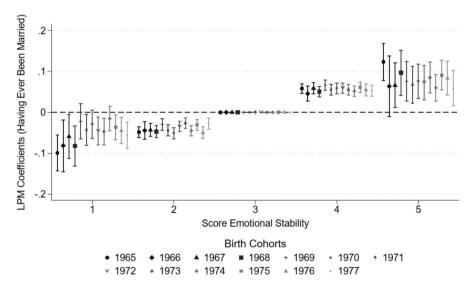
Leadership skills (LS) and personality traits have been measured to choose suitable candidates for officer or other military roles (Lindqvist & Vestman, 2010; Ministry of Defense Sweden, 1984). The Swedish army may specifically target improving team performance in relation to officer candidates if team leaders exhibit qualities deemed appropriate for roles with greater responsibility (Grönqvist & Lindqvist, 2015). For example, prior studies have demonstrated that leaders who score higher on positive traits (such compassion and self-assurance) outperform their peers when it comes to team coordination (Chidester et al., 1991). Additionally, some evidence indicates a positive correlation between a team leader's social abilities and the team's effectiveness (Chidester et al., 1990).



23 Page 46 of 61 S. Peters

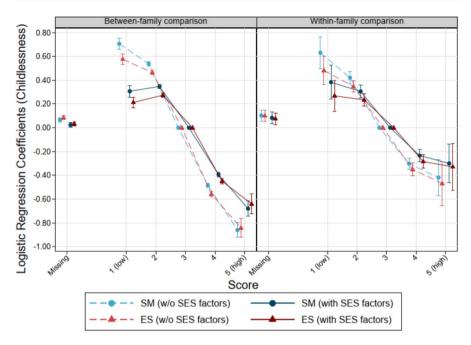


**Fig. 16** Coefficients of social maturity scores measured at ages 17–20 on marital status by age 39 and higher among Swedish men born 1965–1977 across birth cohorts. Linear probability models, error bars are 95% confidence intervals. *Note* Models control for cognitive abilities, birth order, sibling group size, income and education. Birth cohorts 1963, 1964, 1978, and 1979 are not shown due to high statistical uncertainty (too few cases and too large confidence intervals). Coefficients from the category of missing values are not shown for the same reason



**Fig. 17** Coefficients of emotional stability scores measured at ages 17–20 on marital status by age 39 and higher among Swedish men born 1965–1977 across birth cohorts. Linear probability models, error bars are 95% confidence intervals. *Note* Models control for cognitive abilities, birth order, sibling group size, income and education. Birth cohorts 1963, 1964, 1978, and 1979 are not shown due to high statistical uncertainty (too few cases and too large confidence intervals). Coefficients from the category of missing values are not shown for the same reason





**Fig. 18** The relationship between personality factors measured at ages 17–20 and childlessness by age 39 and higher among Swedish men born 1963–1979. Logistic regression models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

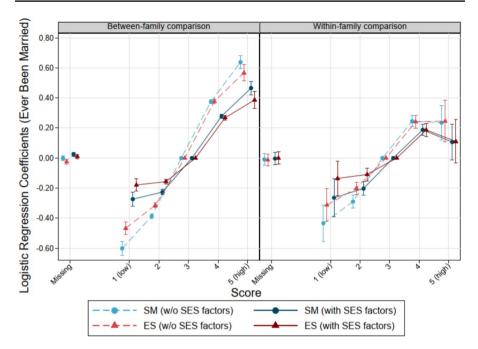
#### **Five Topics in the Interviews**

Psychological interviews should address five topics about experiences, behaviors and circumstances in life (Lindqvist & Vestman, 2011). By examining these topics, the military has aimed to get assessments on the recruits' capability to adopt to new situations and environments (Nyberg et al., 2020). Accordingly, the young males were asked about behavioral experiences such as quitting school or work, or confrontations with supervisors (Lindqvist & Vestman, 2010; Nyberg et al., 2020). The interviews should provide the military with accurate judgements on the psychological constitution of the recruits, with particular focus on social skills, responsibility, independence, or other capabilities that may be beneficial for the military service and, in worst case, for war (Nyberg et al., 2020).

As first topic, the school experience was recorded, including academic successes as well as encounters with the school's social environment and individual experiences (Lindqvist & Vestman, 2010; Nyberg et al., 2020). The military, for example, sought to find out if the conscript had to repeat any classes, had to drop out of school, or had to stop altogether (Lindqvist & Vestman, 2010; Nyberg et al., 2020).



23 Page 48 of 61 S. Peters

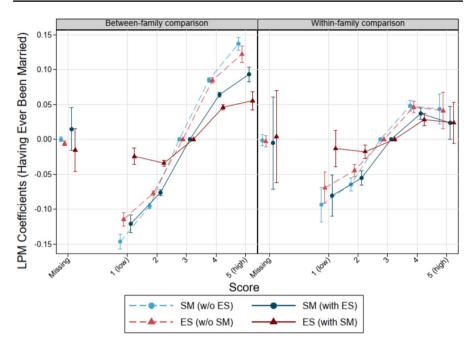


**Fig. 19** The relationship between personality factors measured at ages 17–20 and the probability to get married by age 39 and higher among Swedish men born 1963–1979. Logistic regression models, error bars are 95% confidence intervals. *Note* Models without SES factors control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with SES factors include income and education, additionally

Second, in order to assess the recruits' capacity to adapt to the workplace, interviews should focus on the men's work experience (Lindqvist & Vestman, 2010; Nyberg et al., 2020). As with school experiences, behavioral aspects rather than views were of interest, such as conflicts with coworkers or supervisors, past firings, and past resignations from employment (Lindqvist & Vestman, 2010; Nyberg et al., 2020). Psychologists should assess the recruits based on their future career intentions (e.g., whether they exist, how feasible they are, etc.) if they had little to no job experience (Lindqvist & Vestman, 2010).

Third, the subjects of the interviews discussed their free time (Ministry of Defense Sweden, 1984; Nyberg et al., 2020). Specifically, the interviews focused on the recruits' fervent and active pursuit of interests and hobbies (Lindqvist & Vestman, 2010). The psychologist considers a number of aspects of these activities, such as whether they show more extraversion or introversion, if they participate in team sports or not, how diverse the activities are, and whether the recruits could fit in well in a particular situation (Lindqvist & Vestman, 2010; Nyberg et al., 2020). The question about recruits' perceptions of their own capacity to lead peers must be included in this field. This is a crucial indicator for psychologists assessing the male recruits' leadership abilities (Lindqvist & Vestman, 2010).





**Fig. 20** The relationship between personality factors measured at ages 17–20 and the probability to get married by age 39 and higher among Swedish men born 1963–1979 (both personality factors). Linear probability models, error bars are 95% confidence intervals. *Note* Models without the other personality factor control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with the other personality factor include SM or ES, additionally

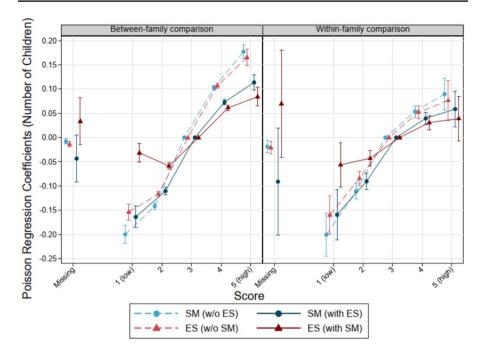
The fourth theme is on family history, including interactions with parents and siblings (Lindqvist & Vestman, 2010; Ministry of Defense Sweden, 1984). Here, the recruits' subjective reports and experiences about their living arrangements are particularly interesting because the objective is to assess how effectively the men can adjust to challenging circumstances and how much they rely on their parents (Lindqvist & Vestman, 2010; Nyberg et al., 2020). How frequently the recruit consumes alcohol is one essential question to ask in this part of the interview (Lindqvist & Vestman, 2010).

The final subject is the recruits' emotional stability (Lindqvist & Vestman, 2010; Nyberg et al., 2020). Additionally, the interviewer gets the chance to revisit remarks made earlier in the session or specific responses from test results from previous phases of the conscription process (Lindqvist & Vestman, 2010). The psychologist may consider the degree of maturity and the self-knowledge of the recruits (Lindqvist & Vestman, 2010; Nyberg et al., 2020).

Throughout the interview, the psychologists were asked to talk in a civilian and neutral manner, and avoid interrupting the recruits (Lindqvist & Vestman, 2010). The psychologist should also refrain from giving the impression that the interview's purpose is only to screen the men according to their psychological capabilities but



23 Page 50 of 61 S. Peters



**Fig. 21** The relationship between personality factors measured at ages 17–20 and number of children by age 39 and higher among Swedish men born 1963–1979 (both personality factors). Poisson regression models, error bars are 95% confidence intervals. *Note* Models without the other personality factor control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with the other personality factor include SM or ES, additionally

rather emphasize that the psychologist may provide mental support (Lindqvist & Vestman, 2010). Finally, the psychologists had access to information from prior steps of the conscription procedure such as the IQ test results (Ludvigsson et al., 2022; Nyberg et al., 2020), physical health, or replies to questionnaires on family, friends and hobbies (Lindqvist & Vestman, 2011; Ludvigsson et al., 2022). Moreover, psychologists had school grades, marital status and previous work experience of the recruits available (Lindqvist & Vestman, 2010; Nyberg et al., 2020).

### **Advantages of Psychological Interviews Over Standardized Questionnaires**

Psychological interviews have been a useful tool for the military to reach its goals of selecting suitable candidates for different positions in the army, and deselecting unsuitable ones (e.g., neurotics, psychopaths) (Ludvigsson et al., 2022). When filtering unsuitable men out, standardized pen-and-paper questionnaires have the disadvantage that intelligent (but unsuitable) persons may manipulate their answers relatively easily (Lindqvist & Vestman, 2011), i.e., they may simply tick answers that promise higher chances to get accepted. Qualified and trained psychologists have



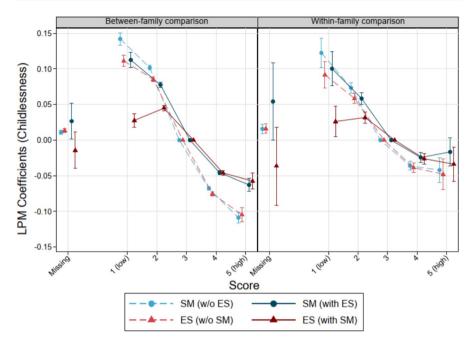


Fig. 22 The relationship between personality factors measured at ages 17–20 and childlessness by age 39 and higher among Swedish men born 1963–1979 (both personality factors). Linear probability models, error bars are 95% confidence intervals. Note: Models without the other personality factor control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with the other personality factor include SM or ES, additionally

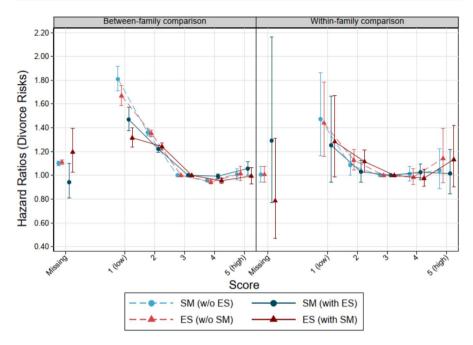
the chance to recognize males with severe mental disorders or undemocratic values during the personal interview (Ludvigsson et al., 2022). Similarly, the selection of suitable candidates for officer (Larsson & Kallenberg, 2006; Lindqvist & Vestman, 2010) or other military positions (Carlstedt, 1998, 2000) has been of high priority, and professional evaluations by experts may be more promising than self-reports to reach this goal.

Psychologists have been provided with certain guidelines on how to conduct the interviews (Nyberg et al., 2020) but specific details on these instructions have not been publicly available (Nilsson et al., 2001; Nyberg et al., 2020). Furthermore, the military did not provide the psychologists with specific question formulations so that the interviewers were free in how to phrase the questions (Nyberg et al., 2020).

Around 1–2% of the conscripts from each cohort was prohibited from military service due to psychological and medical concerns (Carlstedt, 1998, 2000) whereas approximately 10% did not end up in the actual military service (Lindqvist & Vestman, 2011), probably kept as training reserves (Carlstedt, 1998). This selection based on psychological assessments would not be similarly accurate using self-reports. Therefore, around 90% of the conscripted males had to attend the military service (Lindqvist & Vestman, 2011).



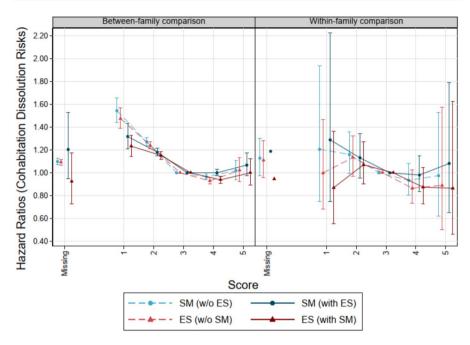
23 Page 52 of 61 S. Peters



**Fig. 23** The relationship between personality factors measured at ages 17–20 and divorce risks by age 39 and higher among Swedish men born 1963–1979 (both personality factors). Cox Proportional Hazards models, error bars are 95% confidence intervals. *Note* Models without the other personality factor control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with the other personality factor include SM or ES, additionally

The relevance for choosing officers as wisely as possible and the necessity of looking for suitable candidates among the recruits may lie in the hierarchical structure of the Swedish military. Around 90% of the Swedish military officers are low-level officers who leave the military after approximately one year (Grönqvist & Lindqvist, 2015). Approximately one third of each birth cohort of conscripted men receive training for the officer positions in the lower hierarchy (Grönqvist & Lindqvist, 2015). For instance, approximately 10% of the recruited males were trained for 12–18 months as non-commissioned officer in order to lead groups of platoon (Lindqvist & Vestman, 2011) or company size (30–120 recruits) (Carlstedt, 1998). However, most males that get an officer position (around 23% of the total recruits) were trained for around 10 months in order to lead smaller groups (squads) (Lindqvist & Vestman, 2011) with typically eight to ten recruits (Carlstedt, 1998). The other recruits that are not selected as officers (around 67%) served in the army for seven or eight months (Lindqvist & Vestman, 2011). Recruits typically started the army service one or two years after the conscription in assigned branches of the army according to psychological and physical abilities (Carlstedt, 1998).





**Fig. 24** The relationship between personality factors measured at ages 17–20 and cohabitation dissolution risks by age 39 and higher among Swedish men born 1963–1979 (both personality factors). Cox Proportional Hazards models, error bars are 95% confidence intervals. *Note* Models without the other personality factor control for cognitive abilities, birth year, birth order, and in case of between-family considerations for sibling group size. Models with the other personality factor include SM or ES, additionally. For visualization purposes, not all confidence intervals are shown in within-family comparisons

Acknowledgements I would like to thank my host institutes, the Max Planck Institute for Demographic Research (Rostock, Germany) and Stockholm University. I am particularly grateful for the great support that I have received from my supervisor Kieron Barclay whose suggestions have improved the quality of this study essentially. Furthermore, I thank Mikko Myrskylä and Gunnar Andersson as my supervisors/advisors who supported me in realizing this project in various ways. I am particularly grateful for receiving access to Swedish register data via Stockholm University and, in particular, Prof. Martin Hällsten. Special thanks go also to my colleagues at Stockholm University (Sweden)—Helen Eriksson, Martin Kolk, Elizabeth Thomson, Stefanie Möllborn, Sunnee Billingsley and others—who provided great support regarding data and conceptual issues.

**Funding** Open Access funding enabled and organized by Projekt DEAL. This paper was supported by the Strategic Research Council (SRC), FLUX consortium, decision numbers 345130 and 345131; and the European Union (ERC Synergy, BIOSFER, 101071773). Views and opinions expressed are, however, those of the author only and do not necessarily reflect those of the European Union or the European Research Council. Neither the European Union nor the granting authority can be held responsible for them. Furthermore, I gratefully acknowledge the resources provided by the International Max Planck Research School for Population, Health and Data Science (IMPRS-PHDS).

#### **Declarations**

Competing interests The authors have no competing interests to declare that are relevant to the content of this article.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <a href="http://creativecommons.org/licenses/by/4.0/">http://creativecommons.org/licenses/by/4.0/</a>.

#### References

- Ajzen, I., & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. Demographic Research, 29, 203–232. https://doi.org/10.4054/DemRes.2013.29.8
- Aldén, L., Boschini, A. D., & Sundström, M. (2022). Who becomes a father? The rising importance of non-cognitive ability. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4207533
- Allemand, M., Hill, P. L., & Lehmann, R. (2015). Divorce and personality development across middle adulthood: Divorce and personality development. *Personal Relationships*, 22(1), 122–137. https://doi.org/10.1111/pere.12067
- Allen, M. S. (2019). The role of personality in sexual and reproductive health. Current Directions in Psychological Science, 28(6), 581–586. https://doi.org/10.1177/0963721419862293
- Allen, M. S., & Desille, A. E. (2017). Personality and sexuality in older adults. *Psychology and Health*, 32(7), 843–859.
- Alvergne, A., Jokela, M., & Lummaa, V. (2010). Personality and reproductive success in a high-fertility human population. *Proceedings of the National Academy of Sciences of the United States of America*, 107(26), 11745–11750. https://doi.org/10.1073/pnas.1001752107
- Andersson, G., & Scott, K. (2007). Childbearing dynamics of couples in a universalistic welfare state: The role of labor-market status, country of origin, and gender. *Demographic Research*, 17, 897–938. https://doi.org/10.4054/DemRes.2007.17.30
- Angelov, N., Johansson, P., & Lindahl, E. (2016). Parenthood and the gender gap in pay. *Journal of Labor Economics*, 34(3), 545–579. https://doi.org/10.1086/684851
- Angrist, J. D., & Pischke, J.-S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton University Press.
- Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology*, 74(6), 1531–1544. https://doi.org/10.1037/0022-3514.74.6.1531
- Ashton, M. C., & Lee, K. (2005). Honesty-humility, the Big Five, and the Five-Factor model. *Journal of Personality*, 73(5), 1321–1354. https://doi.org/10.1111/j.1467-6494.2005.00351.x
- Avison, M., & Furnham, A. (2015). Personality and voluntary childlessness. *Journal of Population Research*, 32(1), 45–67. https://doi.org/10.1007/s12546-014-9140-6
- Barclay, K., & Kolk, M. (2020). The influence of health in early adulthood on male fertility. *Population and Development Review*, 46(4), 757–785. https://doi.org/10.1111/padr.12357
- Bihagen, E., Nermo, M., & Stern, C. (2013). Class origin and elite position of men in business firms in Sweden, 1993–2007: The importance of education, cognitive ability, and personality. *European Sociological Review*, 29(5), 939–954. https://doi.org/10.1093/esr/jcs070
- Bleidorn, W., Hopwood, C. J., & Lucas, R. E. (2018). Life events and personality trait change: Life events and trait change. *Journal of Personality*, 86(1), 83–96. https://doi.org/10.1111/jopy.12286
- Boertien, D., & Mortelmans, D. (2018). Does the relationship between personality and divorce change over time? A cross-country comparison of marriage cohorts. *Acta Sociologica*, 61(3), 300–316. https://doi.org/10.1177/0001699317709048
- Boertien, D., von Scheve, C., & Park, M. (2017). Can personality explain the educational gradient in divorce? Evidence from a nationally representative panel survey. *Journal of Family Issues*, *38*(10), 1339–1362. https://doi.org/10.1177/0192513X15585811



- Botwin, M. D., Buss, D. M., & Shackelford, T. K. (1997). Personality and mate preferences: Five factors in mate selection and marital satisfaction. *Journal of Personality*, 65(1), 107–136. https://doi.org/10.1111/j.1467-6494.1997.tb00531.x
- Boyce, C. J., Wood, A. M., & Ferguson, E. (2016). For better or for worse: The moderating effects of personality on the marriage-life satisfaction link. *Personality and Individual Differences*, 97, 61–66. https://doi.org/10.1016/j.paid.2016.03.005
- Bumpass, L. L., Castro Martin, T., & Sweet, J. A. (1991). The impact of family background and early marital factors on marital disruption. *Journal of Family Issues*, 12(1), 22–42.
- Buss, D. M. (1994). The strategies of human mating. American Scientist, 82(3), 238-249.
- Buss, D. M. (2006). Strategies of human mating. Psychological Topics, 15(2), 239–260.
- Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50(3), Article Article 3.
- Buyukkececi, Z., & Leopold, T. (2021). Sibling influence on family formation: A study of social interaction effects on fertility, marriage, and divorce. *Advances in Life Course Research*, 47, Article 100359. https://doi.org/10.1016/j.alcr.2020.100359
- Bygren, M., Gähler, M., & Magnusson, C. (2021). The constant gap: Parenthood premiums in Sweden 1968–2010. Social Forces, 100(1), 137–168. https://doi.org/10.1093/sf/soaa097
- Caldwell, D. F., & Burger, J. M. (1998). Personality characteristics of job applicants and success in screening interviews. *Personnel Psychology*, 51(1), 119–136. https://doi.org/10.1111/j.1744-6570.1998. tb00718.x
- Carlstedt, B. (2000). Cognitive abilities—Aspects of structure, process and measurement. University of Gothenburg.
- Carlstedt, B. (1998). Validation of psychological predictors in the Swedish enlistment system. Navy Advancement Center. https://doi.org/10.1037/e623442007-001
- Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. European Journal of Personality, 17(3), 237–250. https://doi.org/10.1002/per.473
- Chidester, R., Kanki, G., Research, A., Clayton, H., Dickinson, L., Park, M., & Bowles, V. (1990).
  Personality factors in flight operations: Volume I. Leader characteristics and crew performance in a full-mission air transport simulation. NASA Technical Memorandum, 102259.
- Chidester, T. R., Helmreich, R. L., Gregorich, S. E., & Geis, C. E. (1991). Pilot personality and crew coordination: Implications for training and selection. *The International Journal of Aviation Psychology*, *I*(1), 25–44. https://doi.org/10.1207/s15327108ijap0101\_3
- Cook, K. W., Vance, C. A., & Spector, P. E. (2000). The relation of candidate personality with selection-interview outcomes. *Journal of Applied Social Psychology*, 30(4), 867–885. https://doi.org/10.1111/j.1559-1816.2000.tb02828.x
- Cools, S., & Hart, R. K. (2017). The effect of childhood family size on fertility in adulthood: New evidence from IV estimation. *Demography*, 54(1), 23–44. https://doi.org/10.1007/s13524-016-0537-z
- Costa, P. T., Jr., Herbst, J. H., & McCrae, R. R. (2000). Personality at midlife: Stability, intrinsic maturation, and response to life events. Assessment, 7(4), 365–378.
- Cummins, D. (2006). Dominance, status, and social hierarchies. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 676–697). Wiley. https://doi.org/10.1002/9780470939376.ch23
- Dahlberg, J., & Kolk, M. (2018). Explaining Swedish sibling similarity in fertility: Parental fertility behavior vs. social background. *Demographic Research*, 39, 883–896. https://doi.org/10.4054/DemRes.2018.39.32
- Damian, R. I., Su, R., Shanahan, M., Trautwein, U., & Roberts, B. W. (2015). Can personality traits and intelligence compensate for background disadvantage? Predicting status attainment in adulthood. *Journal of Personality and Social Psychology*, 109(3), 473–489. https://doi.org/10.1037/pspp0 000024
- Donnellan, M. B., Conger, R. D., & Bryant, C. M. (2004). The big five and enduring marriages. *Journal of Research in Personality*, 38(5), 481–504. https://doi.org/10.1016/j.jrp.2004.01.001
- Dronkers, J., & Hox, J. (2006). The importance of the common family background for the similarity of divorce risks of siblings: A multi-level event history analysis. In *Research in multi level issues* (Vol. 5, pp. 217–238). Emerald (MCB UP). https://doi.org/10.1016/S1475-9144(06)05010-7
- Dupuy, A., & Galichon, A. (2014). Personality traits and the marriage market. *Journal of Political Economy*, 122(6), 1271–1319.
- Duvander, A.-Z., & Kridahl, L. (2020). Decisions on marriage? Couples' decisions on union transition in Sweden. *Genus*, 76(1), 1–21. https://doi.org/10.1186/s41118-020-00092-5



23 Page 56 of 61 S. Peters

Epifanio, M. S., Genna, V., De Luca, C., Roccella, M., & La Grutta, S. (2015). Paternal and maternal transition to parenthood: The risk of postpartum depression and parenting stress. *Pediatric Reports*. https://doi.org/10.4081/pr.2015.5872

- Eurostat. (2018). Marriage now more common in Sweden. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Marriages\_and\_births\_in\_Sweden&oldid=396647#More\_children\_per\_woman\_during\_the\_2000s.
- Falkstedt, D., Sorjonen, K., Hemmingsson, T., Deary, I. J., & Melin, B. (2013). Psychosocial functioning and intelligence both partly explain socioeconomic inequalities in premature death. A populationbased male cohort study. *PLoS ONE*, 8(12), Article e82031. https://doi.org/10.1371/journal.pone. 0082031
- Fieder, M., Huber, S., Bookstein, F. L., Iber, K., Schafer, K., Winckler, G., & Wallner, B. (2005). Status and reproduction in humans: New evidence for the validity of evolutionary explanations on basis of a university sample. *Ethology*, 111(10), 940–950. https://doi.org/10.1111/j.1439-0310.2005. 01129.x
- Figueredo, A. J., Sefcek, J. A., & Jones, D. N. (2006). The ideal romantic partner personality. *Personality and Individual Differences*, 41(3), 431–441. https://doi.org/10.1016/j.paid.2006.02.004
- Fisher, T. D., & McNulty, J. K. (2008). Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology*, 22(1), 112–122. https://doi.org/10.1037/0893-3200.22.1.112
- Frejka, T. (2008). Overview chapter 3: Birth regulation in Europe: Completing the contraceptive revolution. *Demographic Research*, 19, 73–84. https://doi.org/10.4054/DemRes.2008.19.5
- Frejka, T., Sobotka, T., Hoem, J. M., & Toulemon, L. (2008). Summary and general conclusions: Childbearing trends and policies in Europe. *Demographic Research*, 19, 5–14. https://doi.org/10.4054/DemRes.2008.19.2
- Friedman, D., Hechter, M., & Kanazawa, S. (1994). A theory of the value of children. *Demography*, 31(3), 375–401.
- Gershuny, B. S., & Sher, K. J. (1998). The relation between personality and anxiety: Findings from a 3-year prospective study. *Journal of Abnormal Psychology*, 107(2), 252–262.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. American Psychologist, 48(1), 26–34.
- Grönqvist, E., & Lindqvist, E. (2015). Kan man lära sig ledarskap? Befälsutbildning under värnplikten och utfall på arbetsmarknaden (4). Institutet för arbetsmaknads- och utbildningspolitisk utvärdering.
- Harris, M. A., Brett, C. E., Johnson, W., & Deary, I. J. (2016). Personality stability from age 14 to age 77 years. *Psychology and Aging*, 31(8), 862–874. https://doi.org/10.1037/pag0000133
- Hofmann, E., & Krapf, S. (2024). "Like two peas in a pod?" Homogamous personalities, education, and union dissolution. *Genus*, 80(1), 19. https://doi.org/10.1186/s41118-024-00229-w
- Holland, A. S., & Roisman, G. I. (2008). Big five personality traits and relationship quality: Self-reported, observational, and physiological evidence. *Journal of Social and Personal Relation-ships*, 25(5), 811–829. https://doi.org/10.1177/0265407508096697
- Hopcroft, R. L. (2006). Sex, status, and reproductive success in the contemporary United States. Evolution and Human Behavior, 27(2), 104–120. https://doi.org/10.1016/j.evolhumbehav.2005.07.004
- Hopwood, C. J., & Bleidorn, W. (2018). Stability and change in personality and personality disorders. *Current Opinion in Psychology*, 21, 6–10. https://doi.org/10.1016/j.copsyc.2017.08.034
- Hutteman, R., Bleidorn, W., Penke, L., & Denissen, J. J. A. (2013). It takes two: A longitudinal dyadic study on predictors of fertility outcomes: Dyadic predictors of fertility outcomes. *Journal of Per*sonality, 81(5), 487–498. https://doi.org/10.1111/jopy.12006
- Jalovaara, M. (2001). Socio-economic status and divorce in first marriages in Finland 1991–93. Population Studies, 55(2), 119–133. https://doi.org/10.1080/00324720127685
- Jalovaara, M. (2003). The joint effects of marriage partners' socioeconomic positions on the risk of divorce. *Demography*, 40(1), 67–81.
- Jalovaara, M. (2013). Socioeconomic resources and the dissolution of cohabitations and marriages. European Journal of Population = Revue Européenne De Démographie, 29(2), 167–193. https://doi.org/10.1007/s10680-012-9280-3
- Jalovaara, M., Neyer, G., Andersson, G., Dahlberg, J., Dommermuth, L., Fallesen, P., & Lappegård, T. (2019). Education, gender, and cohort fertility in the Nordic countries. European Journal of Population, 35(3), 563–586. https://doi.org/10.1007/s10680-018-9492-2



- Jockin, V., McGue, M., & Lykken, D. T. (1996). Personality and divorce: A genetic analysis. *Journal of Personality and Social Psychology*, 71(2), 288–299.
- Johns, S. E., Dickins, T. E., & Clegg, H. T. (2011). Teenage pregnancy and motherhood: How might evolutionary theory inform policy? *Journal of Evolutionary Psychology*, 9(1), 3–19. https://doi.org/10.1556/JEP.9.2011.37.1
- Johnson, A. B., & Rodgers, J. L. (2006). The impact of having children on the lives of women: The effects of children questionnaire. *Journal of Applied Social Psychology*, 36(11), 2685–2714. https://doi. org/10.1111/j.0021-9029.2006.00123.x
- Johnson, W., McGue, M., Krueger, R. F., & Bouchard, T. J. (2004). Marriage and personality: A genetic analysis. *Journal of Personality and Social Psychology*, 86(2), 285–294. https://doi.org/10.1037/ 0022-3514.86.2.285
- Jokela, M. (2012). Birth–cohort effects in the association between personality and fertility. *Psychological Science*, 23(8), 835–841. https://doi.org/10.1177/0956797612439067
- Jokela, M., Alvergne, A., Pollet, T. V., & Lummaa, V. (2011). Reproductive behavior and personality traits of the five factor model. *European Journal of Personality*, 25(6), 487–500. https://doi.org/10. 1002/per.822
- Jokela, M., Kivimäki, M., Elovainio, M., & Keltikangas-Järvinen, L. (2009). Personality and having children: A two-way relationship. *Journal of Personality and Social Psychology*, 96(1), 218–230. https://doi.org/10.1037/a0014058
- Jokela, M., Pekkarinen, T., Sarvimäki, M., Terviö, M., & Uusitalo, R. (2017). Secular rise in economically valuable personality traits. *Proceedings of the National Academy of Sciences of the United States of America*, 114(25), 6527–6532. https://doi.org/10.1073/pnas.1609994114
- Jonason, P. K., Koehn, M. A., Okan, C., & O'Connor, P. J. (2018). The role of personality in individual differences in yearly earnings. *Personality and Individual Differences*, 121, 170–172. https://doi. org/10.1016/j.paid.2017.09.038
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52(3), 621–652. https://doi.org/10.1111/j.1744-6570.1999.tb00174.x
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology*, 87(4), 797–807. https://doi.org/10.1037/0021-9010.87.4. 797
- Kandler, C., & Bleidorn, W. (2015). Personality Differences and development: Genetic and environmental contributions. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 884–890). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.25011-3
- Kandler, C. (2012). Nature and nurture in personality development: The case of neuroticism and extraversion. Current Directions in Psychological Science, 21(5), 290–296.
- Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology*, 72(5), 1075–1092.
- Knoester, C., & Booth, A. (2000). Barriers to divorce. When are they effective? When are they not? *Journal of Family Issues*, 21(1), 78–99.
- Kolk, M. (2015). The causal effect of an additional sibling on completed fertility: An estimation of intergenerational fertility correlations by looking at siblings of twins. *Demographic Research*, 32, 1409–1420. https://doi.org/10.4054/DemRes.2015.32.51
- Kolk, M. (2019). The relationship between lifecourse accumulated income and childbearing of Swedish men and women born 1940–1970. Stockholm Research Reports in Demography, 19, 1–31. https:// doi.org/10.1080/00324728.2022.2134578
- Kolk, M., & Barclay, K. (2019). Cognitive ability and fertility among Swedish men born 1951–1967: Evidence from military conscription registers. *Proceedings of the Royal Society b: Biological Sciences*, 286(1902), 20190359. https://doi.org/10.1098/rspb.2019.0359
- Kolk, M., & Barclay, K. (2021). Do income and marriage mediate the relationship between cognitive ability and fertility? Data from Swedish taxation and conscriptions registers for men born 1951– 1967. *Intelligence*, 84, 1–11. https://doi.org/10.1016/j.intell.2020.101514
- Kramarz, F., Rosenqvist, O., & Skans, O. N. (2021). How family background shapes the relationship between human capital and fertility. *Journal of Population Economics*. https://doi.org/10.1007/ s00148-021-00834-5
- Larsson, G., & Kallenberg, K. (2006). Direkt ledarskap. Förvarsmakten.



Lavner, J. A., Weiss, B., Miller, J. D., & Karney, B. R. (2018). Personality change among newlyweds: Patterns, predictors, and associations with marital satisfaction over time. *Developmental Psychology*, 54(6), 1172–1185. https://doi.org/10.1037/dev0000491

- Le, B., Dove, N. L., Agnew, C. R., Korn, M. S., & Mutso, A. A. (2010). Predicting nonmarital romantic relationship dissolution: A meta-analytic synthesis. *Personal Relationships*, 17(3), Article Article 3. https://doi.org/10.1111/j.1475-6811.2010.01285.x
- Leikas, S., & Salmela-Aro, K. (2015). Personality trait changes among young Finns: The role of life events and transitions: Personality change and life events. *Journal of Personality*, 83(1), 117– 126. https://doi.org/10.1111/jopy.12088
- Leone, C., & Hawkins, B. L. (2019). Cohabitation vs. marriage: Self-monitoring and self-selection to intimate relationships. *Journal of Psychology & Behavioral Science*. https://doi.org/10.15640/jpbs.v7n2a2
- Lesthaeghe, R. (2014). The second demographic transition: A concise overview of its development. Proceedings of the National Academy of Sciences, 11(51), 18112–18115.
- Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology*, 82(6), Article Article 6. https://doi.org/10.1037/0022-3514.82.6.947
- Lindqvist, E., & Vestman, R. (2010). Web appendix (B-F): The labor market returns to cognitive and noncognitive ability: Evidence from the Swedish enlistment. https://assets.aeaweb.org/asset-server/articles-attachments/aej/app/2009-0140\_app.pdf
- Lindqvist, E., & Vestman, R. (2011). The labor market returns to cognitive and noncognitive ability: Evidence from the Swedish enlistment. *American Economic Journal: Applied Economics*, 3(1), 101–128. https://doi.org/10.1257/app.3.1.101
- Lucas, R. E., & Donnellan, M. B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, 101(4), 847–861. https://doi.org/10.1037/a0024298
- Ludvigsson, J. F., Berglind, D., Sundquist, K., Sundström, J., Tynelius, P., & Neovius, M. (2022). The Swedish military conscription register: Opportunities for its use in medical research. *European Journal of Epidemiology*. https://doi.org/10.1007/s10654-022-00887-0
- Lundberg, S. (2012). Personality and marital surplus. IZA Journal of Labor Economics, 1(1), 1–21.
- Lyngstad, T. H. (2004). The impact of parent's and spouses' education on divorce rates in Norway. *Demographic Research*, 10, 121–142. https://doi.org/10.4054/DemRes.2004.10.5
- Lyngstad, T. H., & Prskawetz, A. (2010). Do siblings' fertility decisions influence each other? *Demogra-phy*, 47(4), 923–934. https://doi.org/10.1007/BF03213733
- Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The five-factor model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, 44(1), 124–127. https://doi.org/10.1016/j.jrp.2009.09.004
- Mårdberg, B., & Carlstedt, B. (1998). Swedish enlistment battery (SEB): Construct validity and latent variable estimation of cognitive abilities by the CAT-SEB. *International Journal of Selection and Assessment*, 6(2), 107–114. https://doi.org/10.1111/1468-2389.00079
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- McGue, M., & Lykken, D. T. (1992). Genetic influence on risk of divorce. *Psychological Science*, *3*(6), 368–373. https://doi.org/10.1111/j.1467-9280.1992.tb00049.x
- McLanahan, S., & Adams, J. (1987). Parenthood and psychological well-being. *Annual Review of Sociology*, 13(1), 237–257.
- McNulty, J. K. (2008). Neuroticism and interpersonal negativity: The independent contributions of perceptions and behaviors. *Personality and Social Psychology Bulletin*, 34(11), 1439–1450. https://doi.org/10.1177/0146167208322558
- Mencarini, L., Piccarreta, R., & Le Moglie, M. (2022). Life-course perspective on personality traits and fertility with sequence analysis. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 185(3), 1344–1369. https://doi.org/10.1111/rssa.12832
- Meyer, J., Fleckenstein, J., Retelsdorf, J., & Köller, O. (2019). The relationship of personality traits and different measures of domain-specific achievement in upper secondary education. *Learning and Individual Differences*, 69, 45–59. https://doi.org/10.1016/j.lindif.2018.11.005



- Miller, J. D., Lynam, D., Zimmerman, R. S., Logan, T. K., Leukefeld, C., & Clayton, R. (2004). The utility of the Five Factor Model in understanding risky sexual behavior. *Personality and Individual Differences*, 36(7), 1611–1626. https://doi.org/10.1016/j.paid.2003.06.009
- Miller, W. B. (1992). Personality traits and developmental experiences as antecedents of childbearing motivation. *Demography*, 29(2), 265–285. https://doi.org/10.2307/2061731
- Miller, W. B. (2011). Differences between fertility desires and intentions: Implications for theory, research and policy. Vienna Yearbook of Population Research, 9, 75–98.
- Ministry of Defense Sweden. (1984). *Conscription in the future* (71; Swedish Government Official Reports). https://lagen.nu/sou/1984;71?attachment=index.pdf&repo=soukb&dir=downloaded
- Mönstringshandboken. (2021). Plikt-och prövningsverket. https://pliktverket.se/download/18.3b29fb2617 91cde3ba045b1/1620048296684/Monstringshandboken-2021.pdf
- Mood, C., Jonsson, J. O., & Bihagen, E. (2012). Socioeconomic persistence across generations: Cognitive and noncognitive processes. In J. Ermisch, M. Jäntti, & T. Smeeding (Eds.), From parents to children. The intergenerational transmission of advantage (pp. 53–84). Russell Sage.
- Mood, C. (2010). Logistic regression: Why we cannot do what we think we can do about it. *European Sociological Review*, 26(1), 67–82. https://doi.org/10.1093/esr/jcp006
- Morosow, K., & Kolk, M. (2020). How does birth order and number of siblings affect fertility? A within-family comparison using Swedish register data. *European Journal of Population*, 36(2), 197–233. https://doi.org/10.1007/s10680-019-09525-0
- Nettle, D. (2005). An evolutionary approach to the extraversion continuum. *Evolution and Human Behavior*, 26(4), 363–373. https://doi.org/10.1016/j.evolhumbehav.2004.12.004
- Nettle, D. (2006). The evolution of personality variation in humans and other animals. *American Psychologist*, 61(6), 622–631. https://doi.org/10.1037/0003-066X.61.6.622
- Neyer, F. J., & Asendorpf, J. B. (2001). Personality–relationship transaction in young adulthood. *Journal of Personality and Social Psychology*, 81(6), 1190–1204. https://doi.org/10.1037/0022-3514.81.6.
- Nilsson, P. M., Nyberg, P., & Östergren, P.-O. (2001). Increased susceptibility to stress at a psychological assessment of stress tolerance is associated with impaired fetal growth. *International Journal of Epidemiology*, 30(1), 75–80. https://doi.org/10.1093/ije/30.1.75
- Nisén, J., Martikainen, P., Silventoinen, K., & Myrskylä, M. (2014). Age-specific fertility by educational level in the Finnish male cohort born 1940–1950. *Demographic Research*, 31, 119–136. https://doi. org/10.4054/DemRes.2014.31.5
- Noftle, E. E., & Shaver, P. R. (2006). Attachment dimensions and the big five personality traits: Associations and comparative ability to predict relationship quality. *Journal of Research in Personality*, 40(2), 179–208. https://doi.org/10.1016/j.jrp.2004.11.003
- Nyberg, J., Gustavsson, S., Åberg, M. A. I., Kuhn, H. G., & Waern, M. (2020). Late-adolescent risk factors for suicide and self-harm in middle-aged men: Explorative prospective population-based study. The British Journal of Psychiatry, 217(1), 370–376. https://doi.org/10.1192/bjp.2019.243
- Orth, U. (2013). How large are actor and partner effects of personality on relationship satisfaction? The importance of controlling for shared method variance. *Personality and Social Psychology Bulletin*, 39(10), 1359–1372.
- Orzeck, T., & Lung, E. (2005). Big-five personality differences of cheaters and non-cheaters. *Current Psychology*, 24(4), 274–286. https://doi.org/10.1007/s12144-005-1028-3
- Penke, L., Denissen, J. J. A., & Miller, G. F. (2007). The evolutionary genetics of personality. *European Journal of Personality*, 21(5), 549–587. https://doi.org/10.1002/per.629
- Penke, L., & Jokela, M. (2016). The evolutionary genetics of personality revisited. Current Opinion in Psychology, 7, 104–109. https://doi.org/10.1016/j.copsyc.2015.08.021
- Peters, S. (2023). The prospective power of personality for childbearing: A longitudinal study based on data from Germany. *Genus*, 79(1), 6. https://doi.org/10.1186/s41118-023-00184-y
- Pinquart, M., Stotzka, M., & Silbereisen, R. K. (2008). Personality and ambivalence in decisions about becoming parents. *Social Behavior and Personality*, 36(1), 87–96.
- Roberts, B. W., Chernyshenko, O. S., Stark, S., & Goldberg, L. R. (2005). The structure of conscientiousness: An empirical investigation based on seven major personality questionnaires. *Personnel Psychology*, 58(1), 103–139. https://doi.org/10.1111/j.1744-6570.2005.00301.x
- Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science*, 2(4), 313–345. https://doi.org/10.1111/j.1745-6916.2007.00047.x



23 Page 60 of 61 S. Peters

Roelfs, D. J., Shor, E., Kalish, R., & Yogev, T. (2011). The rising relative risk of mortality for singles: Meta-analysis and meta-regression. American Journal of Epidemiology, 174(4), 379–389. https://doi.org/10.1093/aje/kwr111

- Sandström, G., & Stanfors, M. (2020). Growing more equal and growing apart? Socioeconomic status and the rise of divorce in Sweden. Lund Papers in Economic Demography, 4, 1–45.
- Schmitt, D. P. (2004). The Big Five related to risky sexual behaviour across 10 world regions: Differential personality associations of sexual promiscuity and relationship infidelity. *European Journal of Personality*, 18(4), 301–319. https://doi.org/10.1002/per.520
- Schmitt, D. P., & Shackelford, T. K. (2008). Big Five Traits Related to Short-Term Mating: From Personality to Promiscuity across 46 Nations. *Evolutionary Psychology*, 6(2), 246–282. https://doi.org/10. 1177/147470490800600204
- Senia, J. M., Neppl, T. K., Gudmunson, C. G., Donnellan, M. B., & Lorenz, F. O. (2016). The intergenerational continuity of socioeconomic status: Effects of parenting, personality, and age at first romantic partnership. *Journal of Family Psychology*, 30(6), 647–656. https://doi.org/10.1037/fam0000171
- Skirbekk, V., & Blekesaune, M. (2014). Personality traits increasingly important for male fertility: Evidence from Norway: Personality traits and male fertility. European Journal of Personality, 28, 521–529. https://doi.org/10.1002/per.1936
- Skirbekk, V., Blekesaune, M., & Sunde, H. F. (2025). Personality and fertility dynamics in Norway across four decades—Findings from the HUNT survey. *Personality and Individual Differences*, 233, Article 112862. https://doi.org/10.1016/j.paid.2024.112862
- Sobotka, T. (2008). Overview chapter 6: The diverse faces of the Second Demographic Transition in Europe. *Demographic Research*, 19, 171–224. https://doi.org/10.4054/DemRes.2008.19.8
- Sobotka, T., & Toulemon, L. (2008). Overview chapter 4: Changing family and partnership behaviour: Common trends and persistent diversity across Europe. *Demographic Research*, 19, 85–138. https://doi.org/10.4054/DemRes.2008.19.6
- Solomon, B. C., & Jackson, J. J. (2014). Why do personality traits predict divorce? Multiple pathways through satisfaction. *Journal of Personality and Social Psychology*, 106(6), 978–996. https://doi. org/10.1037/a0036190
- Spikic, S., & Mortelmans, D. (2021). A preliminary meta-analysis of the Big Five personality traits' effect on marital separation. *Journal of Divorce & Remarriage*, 62(7), 551–571. https://doi.org/10.1080/10502556.2021.1993018
- Sutin, A. R., Stephan, Y., & Terracciano, A. (2018). Facets of conscientiousness and objective markers of health status. *Psychology & Health*, 33(9), 1100–1115. https://doi.org/10.1080/08870446.2018. 1464165
- Tavares, L. P. (2016). Who delays childbearing? The associations between time to first birth, personality traits and education. *European Journal of Population*, 32(4), 575–597. https://doi.org/10.1007/s10680-016-9393-1
- Thomson, E., & Eriksson, H. (2013). Register-based estimates of parents' coresidence in Sweden, 1969–2007. *Demographic Research*, 29, 1153–1186. https://doi.org/10.4054/DemRes.2013.29.42
- Todesco, L. (2011). A matter of number, age or marriage? Children and marital dissolution in Italy. *Population Research and Policy Review*, 30(2), 313–332. https://doi.org/10.1007/s11113-010-9190-1
- Todesco, L. (2013). Family social background and marital instability in Italy. Do parental education and social class matter? *The Social Science Journal*, 50(1), 112–126. https://doi.org/10.1016/j.soscij. 2012.09.005
- Uher, J. (2017). Open peer commentary and authors' response: Comments. European Journal of Personality, 31(5), 529–595. https://doi.org/10.1002/per.2128
- Usslepp, N., Hübner, N., Stoll, G., Spengler, M., Trautwein, U., & Nagengast, B. (2020). RIASEC interests and the Big Five personality traits matter for life success—But do they already matter for educational track choices? *Journal of Personality*, 88(5), 1007–1024. https://doi.org/10.1111/jopy. 12547
- van de Kaa, D. J. (1987). Europe's Second Demographic Transition. Population Bulletin, 42(1), 3-55.
- Van Gestel, S., & Van Broeckhoven, C. (2003). Genetics of personality: Are we making progress? *Molecular Psychiatry*, 8(10), 840–852. https://doi.org/10.1038/sj.mp.4001367
- Vukasović, T., & Bratko, D. (2015). Heritability of personality: A meta-analysis of behavior genetic studies. *Psychological Bulletin*, 141(4), 769–785. https://doi.org/10.1037/bul0000017



- Wiik, K. A., Bernhardt, E., & Noack, T. (2010). Love or money?: Marriage intentions among young cohabitors in Norway and Sweden. Acta Sociologica, 53(3), 269–287. https://doi.org/10.1177/ 0001699310374488
- Willitts, M., Benzeval, M., & Stansfeld, S. (2004). Partnership history and mental health over time. *Journal of Epidemiology and Community HealTh*, 58(1), 53–58. https://doi.org/10.1136/jech.58.1.53
- Wright, M. R., & Brown, S. L. (2017). Psychological well-being among older adults: The role of partner-ship status: Psychological well-being among older adults. *Journal of Marriage and Family*, 79(3), 833–849. https://doi.org/10.1111/jomf.12375
- Zare, B., Nasir, R., Mastor, K. A., & Shahrazad, W. S. W. (2013). Personality traits, the risk of divorce and marital satisfaction: An intrapersonal model. *The Social Sciences*, 8(5), 466–472.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

