Ideal ages for family formation among immigrants in Europe

Jennifer A. Holland<sup>a</sup> holland@nidi.nl

Helga A.G. de Valk<sup>ab</sup> valk@nidi.nl

<sup>a</sup> Netherlands Interdisciplinary Demographic Institute, Lange Houtstraat 19, 2511 CV The Hague, The Netherlands.

<sup>b</sup> Vrije Universiteit Brussel, Interface Demography, Department of Sociology, Pleinlaan 5, 1050 Brussels, Belgium.

Corresponding author: Dr. Jennifer A. Holland, Netherlands Interdisciplinary Demographic Institute, Lange Houtstraat 19, 2511 CV The Hague, The Netherlands. E-Mail: holland@nidi.nl. Phone: +31 703 565 214. Fax: +31 703 647 187.

# Ideal ages for family formation among immigrants in Europe

### Abstract

This paper investigates ideal ages for marriage and parenthood among immigrants from over 160 countries origins living in 25 European countries. Ideals regarding the timing of family formation are indicative of how individuals perceive the family life course and provide insight into family-life aspirations and the meaning attached to these transitions. Using data from the European Social Survey (Round 3, 2006; N = 6,330) and a cross-classified multilevel modeling approach, we investigate associations between the influences of the dominant family formation timing patterns in countries of origin and settlement, individual-level characteristics, and ideal ages. We make innovative use of a standard demographic measure, the singulate mean age of marriage, to measure family formation patterns. Results suggests that residential context influences are associated with the timing ideals of all migrants, but origin influences seem to be associated with the ideals of only the most recent migrants.

Key words: family formation, ideals, immigrants, second generation, family change, Europe

Page 3 of 42

The timing and sequencing of events is central to the development and trajectory of life courses (Billari, 2005). Life course researchers have stressed the importance of context and time in shaping both the experience and perception of events in the life course (Elder Jr., 1985). Also in studies of immigrants, emphasis is placed on the contextual (socialization) effects of country of origin and settlement when it comes to life course transitions and preferences (De Valk, Wingens, Windzio, & Aybek, 2011). Timing preferences for family life transitions are likely determined by individual characteristics and experiences, but also influenced by dominant, macro-level family formation systems. However, comparative studies of the timing of family life events among those of immigrant origin are still largely lacking and existing work on timing preferences mainly focuses on one country or one migrant origin group (e.g. De Valk and Liefbroer, 2007; Giuliano, 2007). But with information on diverse migrant populations across a range of countries of settlement, we can shed light on the influences of family formation systems in both origin and destination that may shape timing preferences for family life transitions. In this paper we fill this gap in the literature and explore family formation ideals regarding the timing of marriage and childbearing among immigrants of diverse origins across Europe.

Forming a partnership, getting married, and bearing and raising children are significant transitions for individuals. Ideals regarding the timing of these events may be indicative of the meaning attached to these transitions and how they should best fit into the life course. Moreover, in the case of migrants, ideals may be a particularly useful measure of attitudes toward the family life course since the timing of actual family behaviors is often distorted by the act of migration (e.g. Andersson, 2004; Milewski, 2007; Toulemon, 2004). The perceived ideal timing of family events is governed by attitudes and values, and is transmitted at multiple levels, through family and community socialization, and institutions. As such, ideals may give us insight into identity,

individuals' understanding of their position in the social world, and processes of family change after migration among immigrant-background (first- and second-generation) populations.

Using data from the third round of the European Social Survey, covering 25 European countries, we explore factors shaping ideal ages for two key family life transitions, marriage and parenthood, among immigrants and their descendants. We analyze variation in ideal ages by individual attributes and develop a new proxy measure to capture the dominant family formation timing patterns in countries of origin and settlement. With this measure, we are able to assess the extent to which macro-level family formation regimes in countries of origin and settlement influence individual timing preferences, and the relative importance of these influences. Finally, we consider how the influences of macro-level family formation patterns are mediated by immigrant's duration of residence in their country of settlement and migrant generation. Results provide new insights into the influence of contexts on perceptions of family life, social distance, and family change among immigrant populations in European societies.

### Theory and hypotheses

First- and second-generation immigrants constitute a large and growing share of European populations (Castles & Miller, 2003; Eurostat, 2011). Questions of social distance and change between ethnic groups are at the core of academic and public discourses. It has been argued that while immigrants may integrate in the public domain (e.g. labor market and education), changes in the private domain, in particular regarding the family life course, is slower to occur. Thus, it may thus be particularly important to disentangle persistent cultural influences on social distance in the private domain (Gordon, 1964; Lesthaeghe, 2002). Research into family change among migrants has largely focused on actual behavior and, in particular, on intermarriage and fertility

(some exceptions are: De Valk & Liefbroer, 2007; Huschek, de Valk, & Liefbroer, 2011; Sassler & Qian, 2003). Although intermarriage may be the strongest indicator of the social distance between groups and the degree of incorporation in a new country of residence (see, for instance: Bean & Stevens, 2003; Kalmijn, 1998; Pagnini & Morgan, 1990), there is a well-documented tendency toward homogamy across a variety of characteristics (race, ethnicity, education, as well as nativity). If intermarriage is rare, it may not be an ideal measure of social distance (Sassler & Qian, 2003). Studies of fertility behavior have demonstrated that the act of migration is often closely bound up with family formation processes (Milewski, 2007; Stephen & Bean, 1992), and so it too may be a flawed measure of family change among first generation immigrants (Andersson, 2004; Sobotka, 2008; Toulemon, 2004).

Where private domain behaviors may be more resistant to influence and slower to occur (as with intermarriage) or be sensitive to the act of migration (as with fertility), family formation ideals may be an alternative indicator of social distance between groups in society. Ideals are "representation[s] of the attributes that someone (yourself or another) would like you, ideally, to possess (i.e., a representation of someone's hopes, aspirations, or wishes for you)" (Higgins, 1987, pp. 320-21). Ideals contribute to an individual's sense of self and identity, but also to one's understanding of the position of the self in the social world (Higgins, 1987). Along with individual behaviors, values, and norms, ideals regarding the timing of family-formation events may be indicative of the meaning attached to these transitions and how they should best fit into the life course. In addition to reflecting individual identity, ideals can be linked to behavior; for instance, according to the Theory of Planned Behavior, individual behaviors are the outcome of ideals and attitudes, subjective norms and perceived behavioral control (Ajzen, 1991; Lesthaeghe, 2002). As such, the ideal timing of family life events may give a more accurate

Page 6 of 42

understanding of immigrants' aspirations or wishes for their own family lives or for the family lives of other significant persons in their families, social networks, or communities.

Ideals may be shaped by community- or country-level influences, through family and community socialization, institutions, and social norms. Immigrants are unique from majority (non-immigrant-background) populations in that they occupy a sociocultural middle ground between their countries of origin and residence, with family-life ideals potentially shaped by influences on both sides (De Valk & Liefbroer, 2007; De Valk & Milewski, 2011; Foner, 1997; Glick, 2010; Nauck, 2001). The distinction between the influences of countries of origin and residence is often made when theorizing about the position of immigrants in their new home country and has been previously used to study structural integration (Van Tubergen, 2005, 2010). Cultural norms, practices, and behaviors associated with the dominant family life patterns in countries of origin may be transmitted and maintained by family and friends from the same origin, in both origin and settlement countries. Family formation patterns in the same origin, in both origin and settlement countries. Family formation patterns will be associated with ideal ages for family formation patterns in countries of origin of immigrants will be associated with ideal ages for family formation among immigrants from that origin (Hypothesis 1).

Family life ideals may just as well be shaped by the dominant patterns and practices in the country of settlement. The past three decades have been a time of rapid change in European family systems, with respect to social norms, individual preferences, and behavior. Along with delayed home leaving, the emergence of non-marital cohabitation, increases in union dissolution and falling fertility rates, first marriage and first births occur at older ages (Aassve, Arpino, & Billari, 2013; Billari & Liefbroer, 2010; Sobotka & Toulemon, 2008). Although the experience of these changes has been nearly universal in Europe, the magnitude of change is varied across countries (Reher, 1998; Sobotka & Toulemon, 2008). These diverse family formation patterns within European country contexts likely shape the ideals held by all residents, irrespective of background. Therefore, we can expect: *Family formation patterns in countries of residence will be associated with ideal ages for family formation among immigrant populations residing in that country* (Hypothesis 2).

Although immigrants' timing preferences are expected to be shaped by influences of both the country of origin and country of destination, the relative importance may be related to immigrants' duration of residence in the settlement country, and to immigrant generation (Alba & Nee, 1997, 2003; Lieberson & Waters, 1988). A longer duration of residence implies longer exposure to the dominant timing patterns in the country of residence. The same holds for the children of immigrants (the second generation) who are socialized in their countries of residence across their entire life courses (Kasinitz, Mollenkopf, Waters, & Holdaway, 2008). According to classical theories on immigrant assimilation (Gordon, 1964), this would imply a growing influence of the dominant family formation patterns in the country of settlement with longer durations of residence and among the children of immigrants. It remains, however, an open question whether this reflects acculturation or adaptation to the institutional, economic, policy, or social situation within a country of residence, or if it is a result of a melding of the diverse cultural and family orientations of all members of a society (Alba, 2005; Rumbaut, 1999). At the same time the influence of dominant patterns of the timing of family formation in countries of origin would decline in their influence over duration of residence and among the second generation. We hypothesize that: Family formation patterns in the country of residence will be more important for ideal ages when the migrant has resided longer, or is of the second

Page 8 of 42

generation (Hypothesis 3a), whereas family formation patterns in the country of origin are less important with longer residence or second generation status (Hypothesis 3b).

Ideal ages for family formation are likely influenced by additional individual characteristics, apart from immigrant background. Men and women may have different perceptions of the ideal timing of family formation events, particularly since women tend to make larger relationship-specific investments, taking on the larger share of housework and childrearing responsibilities, even in more gender-equal societies (Baxter, 1997; Sundström & Duvander, 2002). Age may also influence perceptions of ideal ages for family formation. On the one hand, timing preferences may change as people grow older. On the other hand, age may capture cohort effects, reflecting changes in the standard timing of family (Furstenberg Jr., 2010; Settersten Jr. & Ray, 2010): older cohorts may tend to view younger family formation as ideal, as compared to younger cohorts that prefer to postpone family formation. Unfortunately, due to the limitations of cross-sectional data (as we use in this study), we cannot distinguish between the influences of age and cohort (Testa, 2006). While we acknowledge that these two interpretations may both be valid, because we account for several important life-course transitions strongly associated with age (educational enrollment, marital status, and having ever had a child), we will discuss age as a cohort effect.

Family life ideals are also likely influenced by socioeconomic status. More economically advantaged and highly educated individuals face higher opportunity costs associated with family building (Becker, 1991). As such they may prefer to postpone marriage and childbearing to later ages, after completing education and establishing themselves in the labor market. Having experienced the life course transitions under investigation (i.e. marrying and/or becoming a parent) may influence perceptions of the ideal timing for these events. To the extent that individuals may act according to the standard that they perceive as ideal or if individuals adjust

Page 9 of 42

their ideal to conform to their own lived experiences, we expect that individuals having already experienced marital and parental transitions should also prefer younger ages, on average. Finally, we account for religiosity, which has been shown to influence both family demographic behavior and the relative timing of family life events (Surkyn & Lesthaeghe, 2004).

#### Method

## Sample

We used data from the European Social Survey (Round 3, 2006), a cross-sectional survey of attitudes, beliefs and behavior patterns (European Social Survey, 2006, 2011; Jowell, 2007). Round 3 covered 25 European countries: Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and the United Kingdom. The ESS is representative of populations aged 15 or older, living in private households, and residing in the country for at least one year. In addition to the main survey, Round 3 included questions about ideal ages for a range of family life-course behaviors ("The Timing of Life" module).

In total there were 47,099 respondents, with approximately 1,000 to 3,000 respondents per country. Response rates ranged from 46.0% in France to 73.2% in Slovakia, with an average of 63.5%. In our analysis we include only those respondents with an immigrant background: those who migrated (first generation) and the children of immigrants (second generation) (n = 7,571). Further, we excluded respondents with missing information about immigrant status (n = 847; 1.8%), information on time since migration for first generation immigrants (n = 47; 0.1%), the indicator for whether ideal age questions were worded with reference to men or women (split

ballot assignment, discussed below) (n = 2; <0.1%), or information on other covariates (n = 345; 0.4%), for a pre-analysis sample of 6,330.

### Dependent Variables

We focused our analysis on respondents who provided a numeric response to the ideal age questions (marriage: N = 5,250; parenthood: N = 5,507). The ESS Timing of Life module had a split ballot design, whereby respondents received all questions worded in reference to either women or men. For instance, one half of the respondents received a question pertaining to the timing of marriage for women: "In your opinion, what is the ideal age for a girl or woman to get married and live with her husband?" The other half was asked the question pertaining to men. While average ages of marriage and parenthood differed by split ballot assignment (ideal ages for men were about 2 years older than for women, on average), the distribution of ages were quite similar (Table 1). We conducted exploratory analysis to determine if patterns of association between covariates and outcome variables were different by split ballot assignment, but the sign and magnitude of the associations were nearly identical. Consequently those who were assigned the male and female versions of the questionnaire were analyzed together. We accounted for whether questions referenced women or men with a dummy variable. To limit the influence of extremely low and high ages, we bottom and top coded the dependent variables at the 1<sup>st</sup> (18 years old) and 99<sup>th</sup> (35 years old) percentiles.

Although not specifically prompted, respondents could also reply that there was "no ideal age" or that the behavior was "never" acceptable (for details on proportion of non-numeric responses see Table 3). In order to account for potential selection bias due to the exclusion of individuals offering a non-numeric response, we followed the approach of Rijken and Billari

(2012), who investigated preferences for individual autonomy and the ideal age to become a parent using the same data (Round 3 of the European Social Survey). In line with their method, we predicted the probability of offering a non-numeric response using multilevel logistic regression, including an instrumental variable capturing the proportion of all ESS respondents offering a non-numeric response to ideal age for marriage and parenthood questions (respectively) per interviewer (range: 0 to 1; (Rijken & Billari, 2012, pp. 7-8), and covariates capturing demographic, socioeconomic, life course and religiosity characteristics (as detailed below). We predicted non-numeric response to questions about ideal age for marriage and parenthood separately (results not shown, but available upon request), and included the predicted values as coefficients in the subsequent models of ideal age for marriage and parenthood, respectively.

## Table 1. Descriptive Statistics of Ideal Ages for Family Formation Events

### Independent variables: Individual-level

In addition to covariates accounting for split ballot assignment and sample selection, we accounted for a host of individual-level characteristics likely to influence ideal ages for marriage and parenthood. We allowed for variation in ideal ages by second-generation-immigrant status (reference) and, for first generation immigrants, by duration of residence, measured in the survey with categories corresponding to: less than 5 years, 6 to 10 years, 11 to 20 years or more than 20 years.

We accounted for demographic characteristics of the respondents, controlling for the gender of the respondent and, to capture cohort changes in timing ideals, the respondent's age at

interview with a linear and a squared term. We accounted for respondent's socioeconomic status and background. Highest level of education completed by the respondent was standardized using the International Standard Classification for Education (ISCED) and specified categorically: less than secondary (reference), lower secondary, upper secondary or some post-secondary, and tertiary education. We included a dummy variable indicating whether the respondent's mother or father completed tertiary education. Finally, we accounted for economic activity by including two variables indicating educational enrollment and paid work in the seven days prior to interview. These last two variables were neither mutually exclusive nor collinear.

Because respondent's stage in the family life course may influence or reflect ideal age preferences, we distinguished respondent's marital status as never married or in a civil partnership (reference), currently married or in a civil partnership, or previously married or in a civil partnership. This last category included both the widowed and divorced. We included an indicator for whether the respondent ever had children.

Finally, we accounted for religiosity with a composite measure reflecting responses to three questions pertaining to frequency of religious practice and self-assessed religiosity. Frequency of religious service attendance and frequency of prayer were measured with a seven point scale, with categories corresponding to: (1) every day, (2) more than once a week, (3) once a week, (4) at least once a month, (5) only on special holy days, (6) less often, and (7) never. The mean value for attendance was 4.5 (SD = 2.5) and for prayer was 4.9 (SD = 3.0). Respondents were also asked to assess how religious they are, with 11-point, ordered response scale, ranging from 0 ("not at all religious") to 10 ("very religious"). The average self-assessed religiosity score was 5.5 (SD = 1.5). Principle component factor analysis indicated that the three questions loaded onto a single factor, which accounted for 73.6% of the variation across the three

variables. The combined religiosity factor score was included in the analyses. Higher scores corresponded to higher levels of religiosity. Descriptive statistics for all individual characteristics can be found in Table 2.

### Table 2: Descriptive Statistics, Individual characteristics

## Independent variables: Country-of-origin- and country-of-residence-level

To measure the influences of diverse family life course patterns across countries of origin and countries of residence, we used the singulate mean age of marriage (SMAM). The SMAM captures the average number of years spent single among those who marry before age 50 (Hajnal, 1953; Preston, Heuveline, & Guillot, 2001). The measure is available for women and men in 214 countries across a range of years in the United Nations World Marriage Data 2008 database (United Nations Department of Economic and Social Affairs Population Division, 2009). Because of the temporal link between marriage and first birth (Mensch, Singh, & Casterline, 2005), the SMAM is a useful macro-level proxy for the country-specific "standard" timing of family formation. Global trends in marriage are mirrored by a rising age of first birth (Mensch et al., 2005; Singh, 1998; Sobotka & Toulemon, 2008) and factors driving trends in the age of first marriage and first birth are largely the same (Lesthaeghe, 2010; Mensch et al., 2005).

Capturing the dominant family formation patterns in the 25 countries of residence was straightforward: we used the SMAM measure from the year closest or prior to the ESS survey year (2006). To account for the dominant family formation patterns in countries of origin, we used information about respondent's country of birth (first generation). In the case of the second generation, following the convention of statistical bureaus across Europe, we used the country of

Page 14 of 42

birth of the mother and, if the mother was born in the country of residence, the country of birth of the father. Immigrants and their descendants originated in a diverse range of countries: approximately 70% from countries in continental Europe, 7% from Anglophone countries (including the United Kingdom and Ireland, the United States, Canada, Australia and New Zealand), 8% from African countries, 12% from Asia, and 3.5% from Latin America and the Caribbean. Unfortunately, we could not identify the year a first-generation immigrant or the parent(s) of a second generation individual left their country of origin. Therefore, we used information on duration of residence, for the first generation, and year of birth for the second generation to choose the closest single-year value of the SMAM for the country of origin. For 12 origin countries (404 individuals) no values of the SMAM were available in the World Marriage database. For these cases, we supplemented the database with average ages of marriage from other sources, assigned the SMAM the nearest geographical and sociocultural neighbor or, in the case of former countries, we assigned historical values of SMAM of the present-day territories.

Both the SMAM of country of residence and country of origin were centered at their means, which allowed us to interpret regression effects relative to persons residing or originating in countries with average levels of SMAM, respectively. We tested categorical, linear, and quadratic specifications of the SMAM for both countries of origin and residence variables (not shown) and linear specifications best fit the data. There were notably different distributions of the SMAM in countries of residence and the more diverse countries of origin (Table 3).

Table 3: Descriptive Statistics: Family Formation Regimes

### Procedure

Page 15 of 42

Respondents were nested in 25 countries of residence: 36% percent in Western and Eastern Europe respectively, 12% in Northern Europe, 9% in Anglophone countries, and 6% in Southern Europe). At the same time, they were nested in over 160 countries of (parent's) origin. Consequently, we conducted cross-classified multilevel regression analysis, using the maximum likelihood method to estimate the variance components (Hox, 2010; Rabe-Hesketh & Skrondal, 2012). We assessed how ideals are shaped by influences at both the individual-, country-ofresidence-, and country-of-origin-levels. Our baseline model (Model 1) accounted only for structural characteristics of the data: the variable accounting for sample selection (predicted probability of offering a non-numeric response), an indicator for being assigned questions pertaining to women (vs. men, i.e. split ballot assignment), as well as country of origin, country of residence and residual variance components. In Model 2, we accounted for immigrant generation and duration of residence, individual demographic, socioeconomic, and life course stage characteristics, and religiosity. Model 3 further incorporated the influences of family formation regimes in countries of origin and residence (SMAM). Finally, in Model 4, we allowed for the influences of the family formation regimes to vary by immigrant generation and duration of residence by incorporating interaction terms.

#### Results

# Ideal ages for Marriage

Table 4a and 4b present estimates from cross-classified multilevel regression models of ideal age for marriage. Model 1 was a baseline model, accounting only for structural characteristics of the data: an indicator for being assigned questions pertaining to women (vs. men, i.e. split ballot assignment), our variable accounting for sample selection (predicted probability of offering a non-numeric response), as well as country of origin, country of residence and residual variance components. The ideal age for marriage for women was about two years younger than men. In this model without covariates, there was evidence of selection bias—those with a higher predict likelihood of offering a non-numeric response to questions about ideal ages of marriage tend to prefer 10 month younger ideal age for marriage. Turning to the random effects, the estimated residual standard deviation of the intercept (i.e. average ideal age for marriage) across countries of origin was a little over 6 months ( $\sqrt{0.306} = 0.55$  years), and this variation accounted for about 2.5% ( $\frac{0.306}{(0.306 + 0.920 + 10.852)} = 0.025$ ) of the total variation in ideal ages for marriage. The estimated residual standard deviation of the intercept across countries of residence was 11.5 months ( $\sqrt{0.920} = 0.959$  years), and it accounted for 7.6% of the total variation in ideal ages for marriage. The remaining residual standard deviation, not due to the additive effects of countries of origin and residence, was estimated as 3.3 years ( $\sqrt{10.852}$ ) (90.0% of the variation in the ideal age for marriage).

# Table 4a: Cross-Classified Multilevel Models Predicting Ideal Ages for Marriage

In Model 2, individual characteristics were introduced into the model. The two year difference in ideal ages for men and women remained, but selection bias due to the exclusion of respondents who offer non-numeric responses was fully accounted for by individual characteristics. There is a positive gradient in marriage ideals and immigrant generation and time since arrival. Second generation immigrants preferred the oldest ages for marriage but were statistically indistinguishable from their long duration of residence (>20 year), first generation counterparts. The most recent immigrants (those arriving in the 5 years previous to the survey)

Page 17 of 42

preferred the youngest ages for marriage, 11 months younger than their second generation counterparts.

Female respondents tended to prefer older ages of marriage, net of whether they receive questions worded about men or women (split ballot assignment). Age was positively associated with ideal age preferences and this positive association increased at older ages, as indicated by the positive and statistically significant coefficient on the polynomial term. Respondent's education, parent's tertiary education, and employment were also positively associated with ideal ages for marriage. While the coefficient was positive, being enrolled in education in the 7 days prior to the survey was not statistically significantly associated with marriage timing preferences. Having ever married was negatively associated with ideal ages for marriage: the currently married reported 10 month younger ideal ages as compared to the never married, while the previously married (either divorced or widowed) reported 5.5 months younger ideal ages. Ever having children was not statistically significantly associated with ideal age for marriage, although the coefficient was negative, as expected. Finally, religiosity was negatively associated with ideal age preferences, although the magnitude of the coefficient was not large: a onestandard-deviation increase in a respondent's religiosity was associated with an approximately 2 month decrease in the ideal age for marriage. Including these individual covariates reduced the estimate of the residual standard deviation of the intercept across countries of origin, from 6.6 months to about 5 months (1.7% of the total variation in the ideal age for marriage), however variation across countries of residence actually increased from 11.5 to 13 months (10.2% of the total variation). The remaining residual standard deviation of the average ideal age for marriage, not due to the additive effects of countries of origin and residence, was reduced slightly to about 3.1 years (88.0% of the total variation).

In Model 3 we introduced the SMAM measures, corresponding to the dominant family formation timing patterns in countries of origin and of residence. The estimate of the association between SMAM in country of origin and ideal age for marriage was small and statistically insignificant; thus, we fail to confirm our Hypothesis 1. However, we found evidence of a positive association between family formation regime in countries of residence and ideal ages: a one year increase in the SMAM of an immigrant's country of settlement was associated with a 2.5 month increase in ideal ages for marriage, consistent with Hypothesis 2. By and large, accounting for family formation regimes in countries of origin and residence did not significantly influence the associations between individual characteristics and ideal ages for marriage, as estimated in Model 2. The residual standard deviation across countries of residence was reduced from 13 months to 11 months and accounted for 7.9% of the total variation in the ideal age for marriage. Given the small and statistically insignificant estimate of the association between the SMAM in countries of origin and ideal ages, it is unsurprising that the residual standard deviation of the average ideal age for marriage attributable to countries of origin was not greatly reduced when comparing Model 2 and 3.

## Table 4b: Cross-Classified Multilevel Models Predicting Ideal Ages for Marriage

In Model 3, the association between family formation regimes in countries of origin and residence and ideal ages for marriage was an average effect, across all respondents regardless of generation and time since immigration. In Model 4, we relaxed that assumption, including interactions between immigrant background characteristics and the SMAM of origin and residence, respectively, in our random coefficient model. Allowing for the influence of family

Page 19 of 42

formation patterns of the country of origin to vary by time since immigration and generation revealed a clear negative gradient of the influence of this macro-level factor on ideal ages for marriage. For those who had recently arrived in their country of settlement (in the 5 years prior to survey), a one year older country-of-origin SMAM was associated with a 2 month older ideal age preference for marriage (as compared to those of the second generation). For those who arrived in the previous 6 to 10 years, the association between the SMAM and ideal ages was reduced to about 1.7 months. For longer residing first generation immigrants, the coefficients were reduced to non-significance, suggesting that family formation patterns in countries of origin were not associated with the ideals of these respondents nor the second generation. This is consistent with our Hypothesis 3a. In contrast, we did not find evidence that duration of residence and ideal ages for marriage: no individual interaction term reached statistical significance, nor did the inclusion of the interaction terms improve the fit of the model (Wald test; not shown). This finding stands in contrast to our Hypothesis 3b.

## Ideal ages for Parenthood

Findings regarding ideal ages to become a parent, presented in table 5a and 5b, are very similar to those for ideal ages for marriage. Consequently, we discuss only key results and those results that differ from models of marriage ideals. Similarly to models of marriage, the ideal age for becoming a parent was two years younger for women than for men. In the case of parenthood, excluding those respondents who offered non-numeric responses did not seem to be associated with bias in reported ideal ages. The estimated residual standard deviation of the intercept (i.e. average ideal age for parenthood) across countries of origin was smaller than found for marriage,

just under 5 months ( $\sqrt{0.159} = 0.40$  years) and accounted for 1.4% of the total variation in the ideal age for parenthood. The estimated residual standard deviation across countries of residence was about 12 months ( $\sqrt{1.039} = 1.02$  years), and accounted for about 8.9% of the variation in the total variation. The remaining residual standard deviation of the intercept, not due to the additive effects of countries of origin and residence, was estimated to be 3.3 years ( $\sqrt{10.459}$ ; 90.0% of the total variation).

### Table 5a: Cross-Classified Multilevel Models Predicting Ideal Ages for Parenthood

Model 2 incorporated the individual characteristics of respondents. Associations between these characteristics and ideal ages for parenthood were very similar to those found for ideal ages for marriage. Again, we found a positive gradient in the ideal ages for parenthood and immigrant generation and time since arrival, although only the coefficient for the most recent arrivals (within the 5 years prior to the survey) reached statistical significance (about 6 months younger than second generation respondents). The second generation reported the oldest ideal ages for parenthood, all else equal. Unlike with the ideal age for marriage, we found that enrollment status was significantly associated with preferring older ages for parenthood. As with marriage, having ever been married was negatively associated with ideal ages for parenthood, although only the coefficient for currently married reached statistical significance. Having children was negatively and statistically significantly associated with parenthood timing preferences. Including individual covariates reduced the residual standard deviation of the average ideal age for parenthood across countries of origin, from 5 months to about 3.5 months (0.8% of the total variation in the ideal age for parenthood), but slightly increased the standard deviation across countries of residence, from 12 to 13 months (10.6% of the total variation). The remaining residual standard deviation of the intercept, not due to the additive effects of countries of origin and residence, was marginally reduced, by about 1.4 months to 3.1 years (88.6% of the variation).

In Model 3 we introduced variables capturing country of origin and country of residence dominant family formation timing patterns. As with marriage, we did not find evidence that the SMAM in country of origin was strongly associated with the ideal age for a first birth, in contrast to Hypothesis 1. Again, there was a positive association between family formation timing in countries of residence and ideal ages: a one year increase in the SMAM of an immigrant's country of settlement was associated with an almost 3 month increase in ideal ages for parenthood, consistent with Hypothesis 2. The residual standard deviation of the average ideal age for parenthood across countries of origin was reduced only marginally, while the residual standard error across countries of residence was reduced from 13 months to 11.3 months, accounting for about 8.5% of the total variation in the ideal age for parenthood.

# Table 5b: Cross-Classified Multilevel Models Predicting Ideal Ages for Parenthood

In Model 4, we tested whether the influences of macro-level family formation patterns in countries of origin and residence were constant across respondents regardless of their generation and time since immigration. As with marriage, we found a negative gradient in the influence of origin across duration of residence: for each year increase in the SMAM in the country of origin, ideal ages for parenthood among recent migrants (arriving in the five years prior to the survey) increased by about 1.7 months. This association declined with duration of residence, although

no other interaction coefficient reached statistical significance. Also in parallel to the results for marriage ideals, duration of residence and generation did not influence the association between the macro-level family formation pattern in a respondent's country of residence and individual-level ideal ages for parenthood. These findings conform to our Hypothesis 3a but we fail to confirm Hypothesis 3b.

## Discussion

In this paper we examined ideal ages for two key life course events, marriage and parenthood, among immigrant-background individuals in 25 European countries. Ideals regarding the timing of family formation provide insight into individual preferences and understanding about family life among migrants. In particular this investigation highlights the importance of both individual characteristics as well as broader, macro-level family formation timing patterns in shaping ideals. We investigated the influence of family formation context in origin and destination, utilizing a standard demographic measure, the singulate mean age of marriage (SMAM), as a proxy for dominant family formation patterns. By having a complimentary measure of the family formation patterns in both countries of residence and origin, we show the importance of both spheres of influence on individual ideals for family life, improving upon studies considering migrants within one country of residence or a single migrant group across different countries of residence.

We found that the contextual influence of the country of residence matters for family formation ideals. There was a positive association between dominant family formation patterns across countries of residence and ideal ages, consistent with Hypothesis 2. Although we did not fully account for cross-country-of-residence variance in ideals and there was not a one-to-one

Page 23 of 42

relationship between family formation patterns and ideal ages, the SMAM in countries of residence did in part explain differences across European countries. Contrary to our Hypothesis 3b, however, we did not find that the influence of family formation patterns in the country of residence varies by time since arrival or immigrant generation; rather this association was proportional in its influence on ideal ages for marriage and parenthood. This stands in contrast with classical theories of assimilation, which would predict a growing influence of the dominant family formation patterns in the country of residence with longer durations of residence and among the children of immigrants. As noted in recent theoretical debates, straight-line theories of assimilation neglect the possibility that (particularly within diverse societies) immigrants may not adapt to become indistinguishable from the majority population. Rather, more complex processes of social change may occur, with both immigrant-background and majority populations interacting to produce new, hybrid family systems (Alba, 2005; Rumbaut, 1999). As such, the SMAM in countries of residence may reflect an averaging of a multitude of diverse family behaviors, and thus be proportionally associated with immigrants' ideals, regardless of duration of residence.

At the same time, the fact that we found no differentiation between immigrants by durations of residence could reflect selection processes associated with migration flows and stages. Network theories of migration suggest that interpersonal relationships and shared cultural or ideational ties, will preserve and perpetuate migration flows (Massey et al., 1998). Individual migrants may thus select destination countries based on values and norms they share with (or that are similar to) established immigrant communities and/or majority populations within a country of settlement (Van Tubergen, 2010). So too might selection operate through differential survey non-contactability and non-response due to residential mobility, issues of

legal status, a lack of trust, language difficulties, or other sources of social exclusion (Barnes, 2008; Stoop, Billiet, & Koch, 2010). As a consequence, we may overestimate the positive association between macro-level family formation timing patterns in the country of residence and individual ideal age preferences.

Our findings regarding the association between macro-level family formation patterns in countries of origin and ideal ages for marriage and parenthood were more consistent with theories predicting a declining influence of origin over time and generation. There was no evidence that origin family formation regimes had an average influence on immigrants (in contrast to Hypothesis 1); this influence was only evident in relation to the ideals of the most recent migrants, consistent with Hypothesis 3a. However, also here it seems that a straight-line assimilation view is too simple and it may be only those who recently arrived for whom country of origin remains crucial for their ideals. Changes in migrant flows across time likely produce different country-of-origin compositions across categories of duration of residence in our sample. This might imply that we capture the influences of different countries of origin rather than a change across duration of residence and generation. This is underscored by the fact that including the interactions between duration of residence and generation and the dominant family formation patterns of countries of origin and destination actually increases the gradient found for the main effect of duration of residence and generation. Unfortunately we cannot disentangle the differential influences of countries of origin and duration of residence on family formation ideals without having longitudinal data for immigrants of diverse origin residing in Europe. In the case of country of origin influences, it is likely that our estimates are conservative, since the processes of selection in survey response discussed above may mean that those most closely holding to the family formation scripts of their countries of origin may be under-represented in the sample.

Page 25 of 42

However, selection operating through differential migration flows (i.e. as predicted by network theory) would not influence the estimates.

Issues of selection notwithstanding, these findings are notable in that they highlight the unique position of immigrants, whose family life ideals are shaped by the dominant family formation patterns of both countries of origin and residence. We are not able to disentangle processes underlying the associations demonstrated here. Indeed, it is likely that institutional characteristics, such as the labor market, educational structures, housing markets, etc., which have been shown to influence the family behaviors of non-immigrant-background populations, underlie individual ideal age preferences of immigrants. These factors also play a role in shaping the broader, macro-level patterns of family formation captured in our SMAM measures. Future research investigating the relative influences of these other society-level influences on the family life ideals and behaviors of immigrants, relative to their non-immigrant-background peers, will help us understand family life transitions among diverse populations of Europe.

Finally, we aimed to assess the relative importance of contextual and individual characteristics for timing ideals. Respondent's demographic characteristics, socioeconomic status, stage in the family life course, and religiosity all contribute to our understanding of family life ideals among immigrant groups. We found that the magnitude of these influences on ideals was quite similar to that of our contextual measures of patterns of family formation, underscoring the importance of giving attention to the influences of both contextual- and individual-level influences in shaping immigrant's views of the life course.

The strength of the European Social Survey data is that it provides a broad overview of the great diversity of backgrounds, attitudes, ideals, and opinions among European populations. These data are unique, offering us the possibility to explore family life course ideals across Europe, among immigrant subgroups with origins in a global range of countries. At the same time, we were limited in our ability to explore individual country-of-origin and sub-country-of-origin patterns of ideal ages by small sample sizes. Moreover, our contextual measure, the singulate mean age of marriage (SMAM), is available only for countries, not for sub-regions or sub-populations, limiting the precision with which we can measure these contextual influences. As immigrants constitute an ever larger share of Western populations, future research into immigrant family life and family change necessitates better attention to maximize response-rates and oversampling immigrant sub-populations. Nevertheless, the results presented here offer a valuable starting point for cross-national investigations of immigrant population ideals, attitudinal and value orientations toward the life course, and family change.

Page 27 of 42

# Acknowledgements

This work is supported by the European Research Council Starting Grant project "Families of migrant origin: a life course perspective" (project no. 263829). The authors gratefully acknowledge helpful suggestions from Elizabeth Thomson, Dana Garbarski, Kimberly Turner, and two anonymous reviewers. A previous version of this paper was presented at the EUROCORES (ESF) Cross-National and Multi-Level Analysis of Human Values, Institutions and Behaviour Programme (HumVIB) Final Conference (Berlin September 2011), the Dutch Demography Day (Utrecht November 2011), and the 4<sup>th</sup> Dutch ESS Workshop (the Hague September 2012)..

# References

- Aassve, A., Arpino, B., & Billari, F.C. (2013). Age norms on leaving home: Multilevel evidence from the european social survey. *Environment and Planning A*, 45(2), 383-401. doi: http://dx.doi.org/10.1068/a4563
- Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211. doi: http://dx.doi.org/10.1016/0749-5978(91)90020-T
- Alba, R. (2005). Bright vs. Blurred boundaries: Second-generation assimilation and exclusion in france, germany, and the united states. *Ethnic and Racial Studies*, 28(1), 20-49. doi: http://dx.doi.org/10.1080/0141987042000280003
- Alba, R., & Nee, V. (1997). Rethinking assimilation for a new era of immigration. International Migration Review, 31, 826-874. doi: http://dx.doi.org/10.2307/2547416
- Alba, R., & Nee, V. (2003). *Remaking the american mainstream: Assimilation and contemporary immigration*. Cambridge: Harvard University Press.
- Andersson, G. (2004). Childbearing after migration: Fertility patterns of foreign-born women in sweden. *International Migration Review*, 38(2), 747-774. doi: http://dx.doi.org/10.1111/j.1747-7379.2004.tb00216.x
- Barnes, W. (2008). Improving the participation of migrants in the labour force survey: A review of existing practices in eu member states. *Survey Methodology Bulletin 63*, 25-38.
- Baxter, J. (1997). Gender equality and participation in housework: A cross-national perspective. *Journal of Comparative Family Studies*, *28*(3), 220.
- Bean, F.D., & Stevens, G. (2003). *America's newcomers and the dynamics of diversity*. New York: Russell Sage Foundation.
- Becker, G.S. (1991). *A treatise on the family* (Enl. ed.). Cambridge, Mass.: Harvard University Press.
- Billari, F.C. (2005). Life course analysis: Two (complementary) cultures? Some reflections with examples from the analysis of the transition to adulthood. Advances in Life Course Research, 10, 261-281. doi: http://dx.doi.org/10.1016/S1040-2608(05)10010-0
- Billari, F.C., & Liefbroer, A.C. (2010). Towards a new pattern of transition to adulthood? Advances in Life Course Research, 15(2-3), 59-75. doi: http://dx.doi.org/10.1016/j.alcr.2010.10.003

Castles, S., & Miller, M.J. (2003). *The age of migration*. New York: Guilford Press.

- De Valk, H.A.G., & Liefbroer, A.C. (2007). Parental influence on union formation preferences among turkish, moroccan, and dutch adolescents in the netherlands. *Journal of Cross-Cultural Psychology*, 38(4), 487-505. doi: http://dx.doi.org/10.1177/0022022107302316
- De Valk, H.A.G., & Liefbroer, A.C. (2007). Timing preferences for women's family-life transitions: Intergenerational transmission among migrants and dutch. *Journal of Marriage and Family, 69*(1), 190-206. doi: http://dx.doi.org/10.1111/j.1741-3737.2006.00353.x
- De Valk, H.A.G., & Milewski, N. (2011). Family life transitions among children of immigrants: An introduction. Advances in Life Course Research, 16(4), 145-151. doi: http://dx.doi.org/10.1016/j.alcr.2011.10.001
- De Valk, H.A.G., Wingens, M., Windzio, M., & Aybek, C. (2011). Immigrant settlement and the life course: An exchange of research perspectives and outlook for the future. In M.

Wingens, M. Windzio, H. De Valk & C. Aybek (Eds.), *A life-course perspective on migration and integration*. Dordrecht, NL: Springer Publishers.

- Elder Jr., G.H. (1985). Perspectives on the life course. In G. H. Elder Jr. (Ed.), *Life course dynamics* (pp. 23-49). Ithaca, NY: Cornell University Press.
- European Social Survey. (2006). *Ess round 3: European social survey round 3 data. Data file edition 3.3.* Retrieved from: http://www.europeansocialsurvey.org/
- European Social Survey. (2011). Ess round 3: European social survey (2011): Ess-3 2006 documentation report. Edition 3.3.
- Eurostat. (2011). Migrants in europe a statistical portrait of the first and second generation Luxembourg: Publications Office of the European Union.
- Foner, N. (1997). The immigrant family: Cultural legacies and cultural changes. *International Migration Review*, *31*(4), 961-974.
- Furstenberg Jr., F.F. (2010). On a new schedule: Transitions to adulthood and family change. *Transition to Adulthood 20*(1).
- Giuliano, P. (2007). Living Arrangements in Western Europe: Does Cultural Origin Matter? Journal of the European Economic Association, 5(5), 927-52. doi: http://dx.doi.org/10.1162/JEEA.2007.5.5.927
- Glick, J.E. (2010). Connecting complex processes: A decade of research on immigrant families. *Journal of Marriage and Family*, 72(3), 498-515. doi: http://dx.doi.org/10.1111/j.1741-3737.2010.00715.x
- Gordon, M.M. (1964). Assimilation in american life. New York: Oxford University Press.
- Hajnal, J. (1953). Age at marriage and proportions marrying. *Population Studies*, 7(2), 111-136. doi: http://dx.doi.org/10.1080/00324728.1953.10415299
- Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological review*, *94*(3), 319.
- Hox, J. (2010). Multilevel analysis: Techniques and applications. New York: Routledge.
- Huschek, D., de Valk, H.A.G., & Liefbroer, A.C. (2011). Gender-role behavior of secondgeneration turks: The role of partner choice, gender ideology and societal context. *Advances in Life Course Research*, 16(4), 164-177. doi: http://dx.doi.org/10.1016/j.alcr.2011.09.005
- Jowell, R. (2007). European social survey 2006/2007: Technical report. London: Centre for Comparative Social Surveys, City University.
- Kalmijn, M. (1998). Intermarriage and homogamy: Causes, patterns, trends. *Annual Review* of Sociology, 24, 395-421. doi: http://dx.doi.org/10.1146/annurev.soc.24.1.395
- Kasinitz, P., Mollenkopf, J., Waters, J., & Holdaway, J. (2008). *Inheriting the city: The children of immigrants come of age*. Cambridge: Harvard University Press.
- Lesthaeghe, R. (Ed.). (2002). *Meaning and choice: Value orientations and life course decisions*. The Hague, The Netherlands: NIDI/CBGS.
- Lesthaeghe, R.J. (2010). The unfolding story of the second demographic transition. *Population and Development Review*, *36*(2), 211-251. doi: http://dx.doi.org/10.1111/j.1728-4457.2010.00328.x
- Lesthaeghe, R.J. (Ed.). (2002). *Meaning and choice: Value orientations and life course decisions*. The Hague, The Netherlands: NIDI.
- Lieberson, S., & Waters, M.C. (1988). From many strands: Ethnic and racial groups in contemporary america. New York: Russell Sage Foundation.
- Massey, D.S., Arango, J., Hugo, G., Kouaouchi, A., Pellegrino, A., & Taylor, J.E. (1998). *Worlds in motion: Understanding international migration at the end of the millennium.* Oxford: Clarendon Press.
- Mensch, B., Singh, S., & Casterline, J. (2005). Trends in the timing of first marriage among men and women in the developing world. In C. B. Lloyd, J. R. Behrman, N. P.

Stromquist & B. Cohen (Eds.), *The changing transitions to adulthood in developing countries: Selected studies* (pp. 118-171). Washington, D.C.: The National Academies Press.

- Milewski, N. (2007). First child of immigrant workers and their descendants in west germany: Interrelation of events, disruption, or adaptation? *Demographic Research*, *17*(29), 859-896. doi: http://dx.doi.org/10.4054/DemRes.2007.17.29
- Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross-Cultural Psychology*, *32*(2), 159-173. doi: http://dx.doi.org/10.1177/0022022101032002004
- Pagnini, D.L., & Morgan, S.P. (1990). Intermarriage and social distance among u.S.
   Immigrants at the turn of the century. *The American Journal of Sociology*, 96(2), 405-432.
- Preston, S.H., Heuveline, P., & Guillot, M. (2001). *Demography: Measuring and modeling population processes*. Malden, MA, USA: Blackwell Publishing.
- Rabe-Hesketh, S., & Skrondal, A. (2012). *Multilevel and longitudinal modeling using stata, third edition* (Vol. 3). College Station, TX: Stata Press.
- Reher, D.S. (1998). Family ties in western europe: Persistent contrasts. *Population and Development Review*, 24(2), 203-234. doi: http://dx.doi.org/10.1007/1-4020-2837-7 3
- Rijken, A., & Billari, F. (2012). *Individual autonomy and timing of childbearing: A crosseuropean comparison*. Paper presented at the European Population Conference, Stockholm, Sweden. http://epc2012.princeton.edu/abstracts/120223
- Rumbaut, R. (1999). Assimilation and its discontents: Ironies and paradoxes. *The handbook* of international migration, 172-195.
- Sassler, S., & Qian, Z. (2003). Marital timing and marital assimilation: Variation and change among european americans between 1910 and 1980. *Historical Methods*, 36(3), 131. doi: http://dx.doi.org/10.1080/01615440309601606
- Settersten Jr., R.A., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *Transition to Adulthood 20*(1).
- Singh, S. (1998). Adolescent childbearing in developing countries: A global review. *Studies in Family Planning, 29*(2), 117-136.
- Sobotka, T. (2008). Overview chapter 7: The rising importance of migrants for childbearing in europe. *Demographic Research, 19*(9), 225-248. doi: http://dx.doi.org/10.4054/DemRes.2008.19.9
- Sobotka, T., & Toulemon, L. (2008). Changing family and partnership behaviour: Common trends and persistent diversity across europe. *Demographic Research*, 19(6), 85-138. doi: http://dx.doi.org/10.4054/DemRes.2008.19.6
- Stephen, E.H., & Bean, F.D. (1992). Assimilation, disruption and the fertility of mexicanorigin women in the united states. *International Migration Review*, 26(1), 67-88.
- Stoop, I.A.L., Billiet, J., & Koch, A. (2010). *Improving survey response: Lessons learned from the european social survey*. Chichester, UK: John Wiley & Sons Ltd.
- Sundström, M., & Duvander, A.Z.E. (2002). Gender division of childcare and the sharing of parental leave among new parents in sweden. *European Sociological Review*, 18(4), 433-447. doi: http://dx.doi.org/10.1093/esr/18.4.433
- Surkyn, J., & Lesthaeghe, R.J. (2004). Value orientations and the second demographic transition (sdt) in northern, western and southern europe: An update. *Demographic Research*, S3(3), 45-86. doi: http://dx.doi.org/10.4054/DemRes.2004.S3.3
- Testa, M.R. (2006). Childbearing preferences and family issues in europe Special Eurobarometer (Vol. 253/Wave 65.1 - TNS Opinion & Social). Brussels: European Commission.

- Toulemon, L. (2004). Fertility among immigrant women: New data, new approach. *Population & Societies, 400* (April 2004), 1-4.
- United Nations Department of Economic and Social Affairs Population Division. (2009). World marriage data 2008 (pop/db/marr/rev2008).
- Van Tubergen, F. (2005). Self-employment of immigrants: A cross-national study of 17 western societies. *Social Forces*, 84(2), 709-732. doi: http://dx.doi.org/10.1353/sof.2006.0039
- Van Tubergen, F. (2010). Determinants of second language proficiency among refugees in the netherlands. *Social Forces*, 89(2), 515-534. doi: http://dx.doi.org/10.1353/sof.2010.0092

	Women					Men				
	$M^{\mathrm{a}}$	$SD^{a}$	Range <sup>a</sup>	% Non- numeric <sup>b</sup>	$M^{ m a}$	$SD^{a}$	Range <sup>a</sup>	% Non- numeric <sup>b</sup>		
Ideal age to marry and live with										
spouse	23.7	3.6	18.0 - 35.0	17.7	25.8	3.5	18.0 - 35.0	16.4		
Ideal age to become a parent	24.9	3.4	18.0 - 35.0	12.4	27.0	3.5	18.0 - 35.0	13.7		
Ν			3,224				3,106			

Table 1 Descriptive Statistics of Ideal Ages for Family Formation Events, by split ballot assignment (N = 6,330)

<sup>a</sup>Mean, standard deviation and range reflect only those providing numeric responses to questions on ideal ages.

<sup>b</sup>The non-numeric category includes reports of "no ideal age," "never," and refusal. Non-numeric categories were not prompted by the interviewer, but were accepted as valid responses.

Table 2 Descriptive Statistics, Individual characteristics ( $N = 6,330$ )						
	N	%				
Immigrant generation and time since immigration						
Second generation	2,980	47.1				
First generation	3,350	52.9				
Less than 5 years since migration	441	7.0				
6 - 10 years since migration	357	5.6				
11 - 20 years since migration	647	10.2				
More than 20 years since migration	1,905	30.1				
Demographic characteristics						
Age	Mean	SD				
	44.3	17.6				
	N	%				
Respondent Female	3,508	55.4				
Socioeconomic status						
Respondent's highest education completed						
Less than lower secondary	568	9.0				
Lower secondary	1,150	18.2				
Upper secondary	2,531	40.0				
Tertiary	2,081	32.9				
Respondent's mother or father completed tertiary						
education	1,561	24.7				
Enrolled in education	687	10.9				
In paid work	3,541	55.9				
Life course characteristics						
Marital and civil partnership status						
Never	1,699	26.8				
Currently	3,285	51.9				
Previously	1,346	21.3				
Children	4,358	68.8				
	Mean	SD				
Additional characteristics						
Religiosity scale	0.0	1.0				
Scale components						
Self-assessed religiosity <sup>a</sup>	5.5	1.5				
Frequency of religious service attendance <sup>b</sup>	4.5	2.5				
Frequency of prayer <sup>b</sup>	4.9	3.0				
N	6,330	100.0				

<sup>a</sup>Range: 0 ("not at all religious") - 10 ("very religious"); <sup>b</sup>Range: 1 ("every day") - 7 ("never").

		I	Women		Men		
	N	%	Range	М	SD	Range	
SMAM, countries of origin	23.1	3.0	15.6 - 33.3	26.6	3.1	21.1 - 37.5	
N, countries of origin			142			146	
SMAM, countries of							
residence	28.3	3.0	23.1 - 32.2	30.7	2.8	25.9 - 34.3	
N, countries of							
residence			25			25	
N, by split ballot assignment			3,224		3,106		

Table 3 *Descriptive Statistics: Family Formation Regimes, Countries of Origin and Residence, by gender* (N = 6,330)

	Me	odel 1		Moo	Model 2		lel 3	
-	β	SE		β	SE	β	SE	
Fixed effects								
Constant	26.58	0.360	***	24.25	0.540	24.27	0.528	***
Split ballot assignment: female-worded questions	-2.06	0.092	***	-2.05	0.088	-2.07	0.088	k 34 34
Predicted Probability of non-response	-0.83	0.309	**	-0.35	0.300	-0.36	0.299	
Country-of-origin-level								
SMAM, country of origin						0.04	0.024	
Country-of-residence-level								
SMAM, country of residence						0.21	0.067 *	***
Individual-level								
Migrant background								
2 <sup>nd</sup> generation				0.00	*	0.00		* * *
$1^{st}$ gen, $\leq 5$ years residence				-0.93	0.198	-1.04	0.206	• • •
1 <sup>st</sup> gen, 6 - 10 years residence				-0.41	0.207 *	-0.50	0.212 *	ł
1 <sup>st</sup> gen, 11 - 20 years residence				-0.38	0.157 *	-0.43	0.159 *	**
1 <sup>st</sup> gen, >20 years residence				-0.16	0.113	-0.18	0.114	
Female				0.75	0.092	0.75	0.092	***
Age				0.06	0.017	0.06	0.017	<b>▶ ギ </b>
Age <sup>2</sup>				0.00	0.000	0.00	0.000	k ** *

Table 4a Cross-Classified Multilevel Models Predicting Ideal Ages for Marriage from Individual-, Country-of-Origin-, and Country-of-Residence-Level Factors (N = 5,250)

Respondent's highest education completed								
Less than lower secondary			0.00			0.00		
Lower secondary			0.68	0.185	***	0.68	0.185	***
Upper secondary			1.04	0.174	***	1.04	0.174	***
Tertiary			1.53	0.182	***	1.54	0.182	***
Mother or father completed tertiary education			0.46	0.114	***	0.47	0.114	***
Enrolled in education			0.32	0.182		0.31	0.182	
In paid work			0.42	0.110	***	0.41	0.110	***
Marital status								
Never married			0.00			0.00		
Married			-0.83	0.156	***	-0.82	0.156	***
Previously married			-0.46	0.181	*	-0.46	0.181	*
Any children			-0.20	0.140		-0.19	0.140	
Religiosity			-0.14	0.047	**	-0.14	0.047	**
Random effects								
Variance (Country of Origin)	0.306	0.116	0.198	0.094		0.200	0.095	
Variance (Country of Residence)	0.920	0.305	1.158	0.367		0.848	0.281	
Variance (residual)	10.852	0.215	10.004	0.198		9.993	0.198	
Log likelihood	-13773.97		-13556.9	3		-13550.7	2	
Estimated parameters	6		23			25		

*Note*: Analysis samples include only those respondents offering numeric responses to questions about timing preferences for marriage.  $\beta$ -coefficients are unstandardized.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

	Model 4			
	β	SE		
Fixed effects				
Constant	24.30	0.529	***	
Split ballot assignment: female-worded questions	-2.07	0.088	***	
Predicted Probability of non-response	-0.35	0.299		
Country-of-origin-level				
SMAM, country of origin	0.00	0.033		
SMAM, country of origin * Migrant background				
1 <sup>st</sup> gen, ≤5 years * SMAM, origin	0.17	0.066	**	
1 <sup>st</sup> gen, 6 - 10 years * SMAM, origin	0.14	0.064	*	
1 <sup>st</sup> gen, 11 - 20 years * SMAM, origin	0.05	0.053		
1 <sup>st</sup> gen, >20 years * SMAM, origin	-0.01	0.042		
Country-of-residence-level				
SMAM, country of residence	0.20	0.070	***	
SMAM, country of residence * Migrant background				
$1^{st}$ gen, $\leq 5$ years * SMAM, residence	-0.01	0.083		
1 <sup>st</sup> gen, 6 - 10 years * SMAM, residence	0.08	0.081		
1 <sup>st</sup> gen, 11 - 20 years * SMAM, residence	0.02	0.055		
1 <sup>st</sup> gen, >20 years * SMAM, residence	0.04	0.037		
Individual-level				
Migrant background				
2 <sup>nd</sup> generation	0.00			
$1^{st}$ gen, $\leq 5$ years residence	-1.23	0.239	***	
1 <sup>st</sup> gen, 6 - 10 years residence	-0.69	0.231	**	
1 <sup>st</sup> gen, 11 - 20 years residence	-0.42	0.161	**	
$1^{\text{st}}$ gen, >20 years residence	-0.15	0.116		
Female	0.75	0.092	***	
Age	0.05	0.017	**	
$Age^{2}$	0.00	0.000	***	

Table 4b Cross-Classified Multilevel Models Predicting Ideal Ages for Marriage from Individual-, Country-of-Origin-, and Country-of-Residence-Level Factors (N = 5,250)

Table 4b <i>continued</i>		
Respondent's highest education completed		
Less than lower secondary	0.00	
Lower secondary	0.67	0.185 ***
Upper secondary	1.03	0.174 ***
Tertiary	1.52	0.182 ***
Mother or father completed tertiary education	0.47	0.114 ***
Enrolled in education	0.33	0.183
In paid work	0.41	0.110 ***
Marital status		
Never married	0.00	
Married	-0.82	0.157 ***
Previously married	-0.46	0.181 *
Any children	-0.20	0.140
Religiosity	-0.13	0.047 **
Random effects		
Variance (Country of Origin)	0.208	0.096
Variance (Country of Residence)	0.866	0.286
Variance (residual)	9.962	0.197
Log likelihood	-135	43.65
Estimated parameters	3	33

*Note*: Analysis samples include only those respondents offering numeric responses to questions about timing preferences for marriage.  $\beta$ -coefficients are unstandardized.

\**p* <0.05; \*\**p*<0.01; \*\*\**p*<0.001.

	Mo	odel 1		Model 2			Model 3		
-	β	SE		β	SE		β	SE	,
Fixed effects									
Constant	27.13	0.389	***	25.09	0.543	***	25.11	0.532	***
Split ballot assignment: female-worded questions	-2.04	0.088	***	-2.04	0.085	***	-2.06	0.085	***
Predicted Probability of non-response	-0.20	0.339		-0.03	0.328		-0.03	0.328	
Country-of-origin-level									
SMAM, country of origin							0.02	0.020	
Country-of-residence-level									
SMAM, country of residence							0.23	0.067	***
Individual-level									
Migrant background									
2 <sup>nd</sup> generation				0.00			0.00		
$1^{st}$ gen, $\leq 5$ years residence				-0.49	0.187	**	-0.55	0.193	**
1 <sup>st</sup> gen, 6 - 10 years residence				-0.33	0.197		-0.39	0.201	
1 <sup>st</sup> gen, 11 - 20 years residence				-0.13	0.151		-0.16	0.152	
$1^{st}$ gen, >20 years residence				-0.02	0.108		-0.03	0.109	
Female				0.71	0.088	***	0.71	0.088	***
Age				0.04	0.017	**	0.04	0.017	**
Age <sup>2</sup>				0.00	0.000	***	0.00	0.000	***

Table 5a Cross-Classified Multilevel Models Predicting Ideal Ages for Parenthood from Individual-, Country-of-Origin-, and Country-of-Residence-Level Factors (N = 5,507)

Table 5a continued

Respondent's highest education completed							
Less than lower secondary			0.00		0.00		
Lower secondary			0.55	0.178	0.56	0.178	**
Upper secondary			0.94	0.167	0.94	0.167	***
Tertiary			1.57	0.175	1.57	0.174	***
Mother or father completed tertiary education			0.33	0.110	0.33	0.110	**
Enrolled in education			0.59	0.176 ***	0.57	0.176	***
In paid work			0.41	0.106 ***	0.40	0.106	***
Marital status							
Never married			0.00		0.00		
Married			-0.33	0.149 *	-0.33	0.149	*
Previously married			-0.12	0.171	-0.12	0.171	
Any children			-0.38	0.134 **	-0.37	0.134	**
Religiosity			-0.18	0.045 ***	-0.17	0.045	***
Random effects							
Variance (Country of Origin)	0.159	0.080	0.088	0.053	0.084	0.05	2
Variance (Country of Residence)	1.039	0.344	1.169	0.371	0.893	0.30	0
Variance (residual)	10.459	0.202	9.725	0.187	9.716	0.18	7
Log likelihood	-143	35.35	-14	130.27	-14	123.97	
Estimated parameters		5		23		25	

*Note*: Analysis samples include only those respondents offering numeric responses to questions about timing preferences for parenthood.  $\beta$ -coefficients are unstandardized.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

	Mo		
	β	SE	
Fixed effects			
Constant	25.13	0.532	***
Split ballot assignment: female-worded questions	-2.05	0.085	
Predicted Probability of non-response	-0.03	0.328	
Country-of-origin-level			
SMAM, country of origin	0.00	0.028	
SMAM, country of origin * Migrant background			
$1^{st}$ gen, $\leq$ 5 years * SMAM, origin	0.14	0.062	*
1 <sup>st</sup> gen, 6 - 10 years * SMAM, origin	0.09	0.061	
1 <sup>st</sup> gen, 11 - 20 years * SMAM, origin	0.05	0.050	
1 <sup>st</sup> gen, >20 years * SMAM, origin	-0.04	0.039	
Country-of-residence-level			
SMAM, country of residence	0.23	0.070	***
SMAM, country of residence * Migrant background			
$1^{st}$ gen, $\leq 5$ years * SMAM, residence	-0.04	0.080	
1 <sup>st</sup> gen, 6 - 10 years * SMAM, residence	0.01	0.078	
1 <sup>st</sup> gen, 11 - 20 years * SMAM, residence	0.01	0.053	
1 <sup>st</sup> gen, >20 years * SMAM, residence	0.03	0.036	
Individual-level			
Migrant background			
2 <sup>nd</sup> generation	0.00		
$1^{st}$ gen, $\leq 5$ years residence	-0.73	0.225	***
1 <sup>st</sup> gen, 6 - 10 years residence	-0.50	0.221	**
1 <sup>st</sup> gen, 11 - 20 years residence	-0.17	0.154	
$1^{st}$ gen, >20 years residence	-0.03	0.110	
Female	0.71	0.088	***
Age	0.04	0.017	**
Age <sup>2</sup>	0.00	0.000	***

Table 5b Cross-Classified Multilevel Models Predicting Ideal Ages for Parenthood from Individual-, Country-of-Origin-, and Country-of-Residence-Level Factors (N = 5,507)

Table 5b continued		
Respondent's highest education completed		
Less than lower secondary	0.00	
Lower secondary	0.54	0.178 **
Upper secondary	0.92	0.167 ***
Tertiary	1.55	0.175 ***
Mother or father completed tertiary education	0.33	0.110 **
Enrolled in education	0.59	0.176 ***
In paid work	0.40	0.106 ***
Marital status		
Never married	0.00	
Married	-0.32	0.149 *
Previously married	-0.12	0.171
Any children	-0.37	0.134 **
Religiosity	-0.17	0.045 ***
Random effects		
Variance (Country of Origin)	0.075	0.049
Variance (Country of Residence)	0.896	0.299
Variance (residual)	9.699	0.187
Log likelihood	-14	118.07
Estimated parameters		33

*Note*: Analysis samples include only those respondents offering numeric responses to questions about timing preferences for parenthood.  $\beta$ -coefficients are unstandardized.

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.