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# Interethnic Union Formation among 1.5- and Second-generation Immigrants: The Role of Cultural Proximity

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## **Interethnic Union Formation among 1.5- and Second-generation Immigrants: The Role of Cultural Proximity**

### **Abstract**

We examine 1.5- and second-generation immigrants' union formation patterns in Denmark and how they relate to the cultural proximity between their countries of origin and Denmark as indicated by religion, values, and language. Drawing on administrative register data on 71,122 1.5- and second-generation immigrants from 120 different countries of origin, we use multilevel discrete-time event history analysis to examine the nexus between cultural proximity and union formation patterns. These models rigorously control for time-varying individual factors and changes in opportunity structures in local partner markets. Our results suggest that religion strongly relates to the 1.5- and second-generation immigrants' union formation patterns. At the same time, this is not the case for the other cultural factors when we account for religion. Specifically, our results suggest that 1.5- and second-generation immigrants from non-Christian and especially from Muslim countries are less likely to form interethnic unions with natives and more likely to form intraethnic unions with same-country immigrants than their Protestant-background counterparts. Moreover, these patterns are most pronounced for women. Overall, we conclude that religion remains a strong predictor of interethnic union formation with natives among 1.5- and second-generation immigrants in Denmark and discuss the implications of this finding.

In the last 30–40 years, there has been rapid immigration from non-Western and predominantly Muslim countries to Western countries. In Western Europe (Pettigrew 1998b) and the United States (Rumbaut 2001), this development has led to lively academic and public debate about the extent to which these immigrants, and in particular their descendants, will become incorporated into the culture and structure of societies (Drouhot and Nee 2019).

Historical evidence indicates a strong link between the extent to which members of an immigrant group intermarries with natives and the group's broader cultural and structural incorporation into the destination society. Early studies thus suggest that intermarriage between European immigrants and native-born Americans marked and accelerated European immigrants' incorporation into American society during rapid immigration from European countries to the United States in the late 19th and early 20th centuries (Alba and Nee 1997; Gordon 1964; Warner and Srole 1945).

In contrast to classic studies that considered only legal marriages (Gordon 1964; Warner and Srole 1945), our focus is on union formation, including nonmarital cohabitation and legal marriage. We focus on union formation because nonmarital cohabitation—or living together in a marriage-like relationship—for many couples during the last decades has shifted status from a temporary phase that occurs before they enter matrimony to a permanent living arrangement (Sassler and Lichter 2020). Moreover, for immigrants, we distinguish between inter- and intraethnic union formation, with the former referring to unions where the partner is either a native or an immigrant from a different country than the immigrant him- or herself and the latter referring to unions where the partner is a same-country immigrant.

For several reasons, interethnic union formation, especially with natives, still marks and accelerates immigrants' incorporation into present-day receiving societies. First, widespread

interethnic union formation indicates that ethnic group boundaries are not strong enough to prevent the formation of intimate and trusting relationships between two people of different ethnic groups (Lichter, Qian, and Tumin 2015). Second, an ethnically mixed couple usually unites their family, friends, and relatives across ethnic groups (Van Leeuwen et al. 2019), which in turn may serve to increase interethnic social trust (Putnam 2007) and conversely reduce interethnic prejudice and conflict (Allport 1954; Pettigrew 1998a). Third, evidence from Western Europe suggests that immigrants who are part of interethnic unions with natives are more strongly connected to the labor market and enjoy higher earnings, suggesting that such unions aid immigrants' socioeconomic incorporation into society (Elwert and Tegunimataka 2016; Meng and Gregory, 2005; Nystedt and Dribe, 2015). Evidence also suggests that children of interethnic unions perform substantially better in the educational system (Smith, Helgertz, and Scott, 2018; Tegunimataka, 2021) and the labor market (Rooth and Eckberg, 2003). Fourth, a high interethnic union formation rate within an immigrant group may be self-reinforcing because mixed couples and their offspring contribute to a blurring of ethnic group boundaries (Alba, Beck, and Sahin 2018; Harris and Ono 2005).

In the contemporary United States (Alba and Nee, 2003) and Western Europe (Kulu and Gonzalez-Ferrer, 2014; Lanzieri 2012), however, it is evident that first- and second-generation immigrants' rates of inter- and intraethnic union formation vary depending on their country of origin. In the case of the United States, scholars have argued that this group-level variation in union formation patterns strongly links to color-coded racial boundaries because of the country's internal history of slavery and segregation laws (Lucassen and Laarman 2009). In Western Europe, on the other hand, the primary source of variation in first- and second-generation immigrants' union formation patterns appears to be religious rather than racial differences (Foner and Alba, 2008; Alba and Foner, 2015; Foner, 2015).

Against this background, we examine 1.5- and second-generation immigrants' union formation patterns in Denmark and how they relate to the cultural proximity between their countries of origin and Denmark as indicated by religion, values, and language. Here, 1.5-generation immigrants refer to those who immigrated before age 18, and second-generation immigrants refer to native-born persons of foreign parentage (Rumbaut, 2012). While previous studies have used either a longitudinal or a multilevel approach to study immigrants' union formation patterns, our study combines these two approaches. Thus, drawing on administrative register data on 71,122 1.5- and second-generation immigrants from 120 countries of origin in the 1986-2016 period, we use multilevel discrete-time event history analysis to examine the nexus between cultural proximity and union formation patterns. This cutting-edge approach allows us to examine how the cultural proximity between the 1.5- and second-generation immigrants' countries of origin and Denmark relates to their union formation patterns while controlling for time-varying individual-level factors and changing opportunity structures in local partner markets. The latter is essential because non-Western and predominantly Muslim immigrant groups in Denmark have grown faster than others, mainly due to the influx of new immigrants, meaning that the pool of potential same-country partners within these groups has expanded at a higher rate than in other groups. As a result, their opportunities for intraethnic union formation have increased over time, which, all else equal, probably makes them more likely to form intraethnic unions with same-country immigrants and less likely to form interethnic unions with natives.

This study's core contribution is thus that we examine how the cultural proximity between members of immigrant groups' countries of origin and their destination country shapes their union formation patterns while rigorously controlling for possible confounding factors, including time-varying individual factors and changing opportunity structures in local partner markets. In addition, our focus on Denmark is timely, as little previous research of this sort has been

conducted there. Our study thus helps assess whether earlier findings from other Western European countries apply in Denmark.

## **Theoretical Background and Previous Research**

The literature emphasizes that people are disproportionately likely to choose a partner similar to themselves and that these choices are shaped by personal preferences, opportunity structures in the marriage market, and third-party influences (Kalmijn 1998). Therefore, it is unsurprising that immigrants, including the second generation, frequently choose partners from their country of origin. However, previous research from the United States and Western Europe has documented that first- and second-generation immigrants from some countries of origin are more likely to form interethnic unions with natives or different-country immigrants than others (Alba and Nee, 2003; Dribe and Lundh, 2008, 2011; Kalmijn 1998; Kalmijn and van Tubergen, 2010; Kulu and Gonzalez-Ferrer, 2014; Lanzieri 2012; Wachter, 2022; Wiik, 2022). Understanding this variation in inter- and intraethnic union formation rates between first and second-generation immigrants from different countries of origin is the aim of cultural proximity theory.

### *Cultural Proximity Theory and Interethnic Union Formation*

Cultural proximity theory suggests that first- and second-generation immigrants' union formation patterns depend on the cultural proximity between their country of origin and the receiving country (Dribe and Lundh, 2011). Here, 'culture' broadly encompasses common norms, values, and beliefs across ethnic groups (Triandis, 1994). Cultural proximity theory thus recognizes the relational nature of union formation by focusing on the proximity or distance between cultures rather than on specific cultural traits that make inter- and intraethnic union formation more or less likely.

Religion is one of the most critical elements of a country's culture. The dominant religion in Denmark is Lutheran Protestantism, and although the constitution has ensured complete freedom of religion since 1849, the state still supports the state Evangelical–Lutheran Folk Church (Lodberg 2000). Nevertheless, low and decreasing levels of religiosity are characteristic of the native population in Denmark (Voas 2009). According to Statistics Denmark, the share of the population who are members of the Folk Church has decreased from approximately 88 percent to 73 percent in the 1986–2022 period (Statistics Denmark, 2022). Moreover, the Folk Church's membership rates have declined rapidly in urban areas such as Copenhagen and other large cities (Lund, Jørgensen, and Riis 2019).

In contrast to native Danes, many first- and second-generation immigrants who arrive in Western Europe are highly religious (Voas and Fleischmann 2012). Consequently, the union formation patterns of 1.5- and second-generation immigrants in Denmark are likely to relate directly and indirectly to the dominant religion in their countries of origin. Religion can affect the union patterns of 1.5 and second-generation immigrants directly because some communities within all major religions discourage interreligious unions. Most notably, while Muslim communities in Western Europe often accept unions or marriages between Muslim men and Christian women, they frequently discourage the opposite combination (Nasir, 2009). Moreover, immigrants from Muslim countries in Western Europe appear to have stronger religious identities than their counterparts from countries dominated by other religions.

Additionally, these religious identities appear to remain equally strong, or in some cases become even stronger, in the second generation (Bisin et al., 2008; Drouhot and Nee, 2021; Jacob, 2020). The reasons for this appear to be a mixture of cultural transmission from the country of origin, social inequality, and closure in the destination country. Moreover, in the case of second-generation immigrants from Muslim countries in Western Europe, a possible reaction to prejudice



from natives by increasing their religious involvement (Voas and Fleischmann 2012). The reasons notwithstanding, the strong religious identities of second-generation immigrants from Muslim countries in Western Europe make them more likely to follow religious rules such as those discouraging interethnic union formation. Consequently, 1.5- and second-generation immigrants from Muslim countries, and especially women, may be hesitant to form dating relationships with natives or members of other out-groups that could later lead to romantic relationships or union formation because they worry about the reactions to such relationships from their parents, other family members, or the religious community (Carol, 2013; Kalmijn and Kraaykamp, 2016; Wachter and de Valk, 2020). This hesitancy is likely to be particularly widespread among 1.5- and second-generation immigrants who belong to highly religious Muslim communities since evidence suggests that the level of religiosity is inversely associated with the disapproval of interethnic romantic relationships (Carol 2013; Carol, Ersanilli, and Wagner 2014).

A small-scale survey of young first- and second-generation immigrants from Denmark's largest Muslim immigrant groups supports the assumption that the partner's religion is crucial to many immigrants from Muslim countries in Denmark. The study's results thus suggested that approximately half of the members of these groups agree to some or a large extent that partners in a romantic relationship must share the same religion (Schmidt and Jakobsen 2004).

While members of immigrant groups from Muslim countries may be hesitant to establish dating relationships with natives for religious reasons, it is also likely that some native Danes deliberately refrain from engaging in dating relationships with immigrants from Muslim countries, possibly because of prejudice. Evidence from Denmark and most other Western European countries suggests that prejudices against first- and second-generation immigrants from Muslim countries are more widespread and worse than those against their counterparts from other countries (Strabac and Listhaug 2008). This disproportional antipathy against Muslims suggests that

parts of the native population in Denmark may view 1.5- and second-generation immigrants from Muslim countries as less attractive partners than their counterparts from other countries (Elwert 2020).

Based on all the above reasons, we expect that 1.5- and second-generation immigrants from non-Christian and predominantly Muslim countries will be less likely to form interethnic unions with natives or with members of other out-groups and more likely to form intraethnic unions. We further expect these patterns to be particularly pronounced for women, and we expect that second-generation immigrants from Muslim countries will be as likely to form intraethnic unions and as unlikely to form interethnic unions as their 1.5-generation counterparts.

While religion is a crucial element of a country's culture, its people's values may vary for many other reasons. Cross-national differences in core values can be conceptualized and measured in many ways, but one advantageous approach is found in the work of Inglehart and colleagues, who suggest that value orientations vary across national contexts along two critical dimensions because of differences in socioeconomic development (Inglehart, 1997; Inglehart and Welzel, 2005). First, a distinction is between traditional and secular-rational values. In this distinction, traditional values emphasize the importance of religion, parent-child ties, deference to authority, and traditional family values, whereas secular-rational values are characterized by less emphasis on these issues. Second, another distinction is between survival and self-expression values, with survival values emphasizing economic and physical security and characterized by an ethnocentric outlook and low levels of trust and tolerance. On the other hand, self-expression values are characterized by an emphasis on environmental protection, growing tolerance of foreigners, gender and sexual equality, and rising demand for participation in decision-making in economic and political life.

Based on data from the World Value Survey and European Value Survey, two indexes that capture the above-described value dimensions have been constructed (see Inglehart, 1997; Inglehart and Welzel, 2005). According to these indexes, widespread secular–rational and self-expression values characterize Danish culture. In the traditional vs. secular–rational values dimension, Denmark's most culturally proximate countries are New Zealand, Iceland, and Norway, whereas the most distant countries are Egypt, Zimbabwe, and Moldova. In the survival vs. self-expression values dimension, Denmark's most culturally proximate countries are Norway, Taiwan, and Sweden, whereas the most distant countries are Qatar, Ghana, and Tanzania.

Although our study population comprises only 1.5- and second-generation immigrants, who expectedly speak Danish themselves, we expect that language might still be a barrier to interethnic union formation. This expectation is because 1.5- and second-generation immigrants from countries where people generally do not speak or understand Danish or English may prefer partners with whom their families can easily communicate. We, therefore, expect that 1.5- and second-generation immigrants from countries where people speak Danish or English, which is a widespread second language in Denmark, will be most likely to form interethnic unions with natives and less likely to form intraethnic unions, followed by those from countries that use Latin or relatively similar alphabets such as Greek or Cyrillic.

### *Opportunity Structures and Interethnic Unions Formation*

Evidence suggests that first- and second-generation immigrants' union formation patterns are related not only to their cultural background but also to their opportunities to find a same-country partner who satisfies their preferences in their destination country (Kalmijn 1998). The study of the link between opportunity structures in local partner markets and immigrants' union formation patterns

was pioneered by Blau and colleagues, who found that the relative size of an immigrant group was negatively related to its members' likelihood of interethnic union formation with the native population in the United States (Blau 1977; Blau, Blum, and Schwartz 1982). On these grounds, Blau and colleagues theorized that this was because members of large immigrant groups have a greater pool of potential same-country partners to choose from and because in-group norms that discourage interethnic union formation are more challenging to maintain in small groups given that the alternative is singlehood. Later, cross-sectional evidence from the United States and various Western European countries supported the purported negative relationship between relative group size and immigrants' likelihood of interethnic union formation with the native population (Kalmijn and Van Tubergen 2010; Lichter, Carmalt, and Qian 2011; Muttarak and Heath 2010; Qian and Lichter 2007).

The within-group sex ratio and socioeconomic similarity are other important opportunity structures that evidence suggests shape first- and second-generation immigrants' likelihood of interethnic union formation (Kalmijn and Van Tubergen 2010). The former is important because the opportunities for finding a partner from one's own national-origin group are greater for females if men dominate the group, and vice versa. The latter is decisive because people usually find partners who are like themselves regarding socioeconomic factors such as education (Blossfeld 2009; Mare, 1991; Schwartz and Mare 2005).

In recent decades, an innovative body of work has investigated how changes in opportunity structures are related to changes in immigrants' union formation patterns. Within this body of research, Qian and Lichter (2007), for example, provided evidence that the arrival of new Asian and Hispanic immigrants from 1990 to 2000 in the United States decreased the likelihood of interethnic union formation between native-born Asian Americans and Hispanic Americans and white Americans because it increased their opportunities for intraethnic union formation (see also

Lichter et al. 2011). Spörlein et al. (2014) also provided evidence, using a dataset from the United States that covered an extraordinarily long period from 1880 to 2011, that immigrants became more likely to marry outside of their ethnic group if the size of their national origin group decreased if its sex ratio grew less balanced and if it became increasingly educationally diverse. Overall, the study thus suggests that the relationship between opportunity structures and immigrants' union formation patterns is symmetrical. In Denmark, we expect to find that opportunity structures shape the union formation patterns of 1.5- and second-generation immigrants, as previous research from other contexts suggests.

### **Changes in Opportunity Structures: The Case of Denmark**

Until the 1960s, Denmark was ethnically and culturally homogenous (Togeby 1998). Actually, it experienced more emigration than immigration until the mid-twentieth century, and most of the immigrants who came were from other European countries, primarily other Nordic countries (Nusche, Wurzburg, and Naughton 2010). The influx of immigrants to Denmark began in the 1960s when Denmark experienced close to full employment. Consequently, like other Western European countries, Denmark welcomed guest workers from non-Western countries such as Turkey, the former Yugoslavia, and Pakistan. Although the influx of guest workers stopped after the oil crisis struck in 1974, immigration to Denmark continued because many guest workers settled in Denmark and were granted family reunification.

The influx of non-Western immigrants markedly increased in the mid-1980s partly because of family reunifications and partly because the number of refugees increased greatly from war-torn countries, such as Iran, Iraq, and Sri Lanka. In the 1990s and 2000s, the influx of immigrants and refugees continued, and they currently include greater numbers of immigrants from

African countries, such as Somalia, and from Middle Eastern countries, such as Syria. In total, because of the rapid influx of immigrants from different countries, the Danish population's share of first- and second-generation immigrants grew from 3 percent to 14 percent from 1980 to 2018 (DST 2018).

While the Danish population's share of first- and second-generation immigrants has grown since the 1980s, some immigrant groups have grown faster than others. For example, from 1988 to 2018, the number of immigrants from Western countries – referring to immigrants from EU countries and Iceland, Norway, Andorra, Liechtenstein, Monaco, San Marino, Switzerland, the Vatican State, Canada, USA, Australia, and New Zealand – doubled. However, non-Western immigrants – referring to immigrants from all other countries – increased more than fourfold (DST 2018). Moreover, during the same period, the number of second-generation immigrants from Western countries increased threefold, whereas the number of second-generation immigrants from non-Western countries increased eightfold (DST 2018). Figures 1 and 2 show the relative size per thousand of the ten largest national origin groups from Western and non-Western national origin groups in Denmark, respectively.

The rapid growth of immigrant groups from non-Western and predominantly Muslim countries suggests that their opportunities for intraethnic union formation have increased more over time than for other groups. Consequently, this disproportional growth in group size may confound the relationship between religion and union formation patterns. The reason is that 1.5- and second-generation immigrants from Muslim countries may be less likely to form interethnic unions and more likely to form intraethnic unions not only because of their religion but also because their opportunities for finding a same-country partner have increased over time. Consequently, we expect the magnitude of the relationship between being from a Muslim country and union formation

patterns among 1.5- and second-generation immigrants will be smaller when we control for changes in relative group sizes and other opportunity structures in local partner markets.

Figure 1 here

Figure 1. Relative Sizes of the Ten Largest National Origin Groups from Western Countries in Denmark

Figure 2 here

Figure 2. Relative Sizes of the Ten Largest National Origin Groups from Non-Western Countries in Denmark

### **Data, Measures, and Analytical Strategy**

Our study uses data from different administrative registers maintained by Statistics Denmark. It is possible to merge information from different administrative registers in Denmark because the Danish Civil Registration System requires all people who take residence in Denmark to hold a unique personal identification number that is available anonymized to approved researchers through protected servers at Statistics Denmark. Therefore, the data include all registered marriages and cohabiting unions in the 1986–2016 period. Cohabiting unions are defined as two persons living at the same address with a common child or as two people of different sexes whose age difference is less than fifteen years who share the same address without being related to each other by kinship. Because we use a proxy to capture union formation without a common child, we may, in rare cases where two people of different sexes of the same age share the same address without being related by kinship, wrongly classify roommates as cohabiting unions. However, considering the rise of cohabitation, we consider this possible misclassification a smaller problem than excluding cohabiting unions without common children. There are two main reasons why we consider it crucial to include all cohabiting unions, including those without common children. First, if members of

some national origin groups are more likely to marry or have children later in life than others, excluding cohabiting unions without common children could lead to misleading results. Second, time-varying opportunity structures, such as relative group size, are theorized to affect union formation. However, if we only considered unions with cohabiting children, we would risk relating opportunity structures to the event of a cohabiting couple marrying or having their first child, although they may have been a cohabiting union for several years.

The study population is limited to 1.5- and second-generation immigrants. The 1.5-generation immigrants were born from 1966 to 1986 and were between 0 and 17 years old when they arrived in Denmark. Moreover, they resided in Denmark at age eighteen. Second-generation immigrants are children born in Denmark between 1966 and 1986 to immigrant parents, neither of whom were Danish citizens nor were born in Denmark. In total, our study includes 535,878 person-years based on 71,122 1.5- and second-generation immigrants from 120 national origin groups.

In the case of country mergers (e.g., East and West Germany) or splits (e.g., Yugoslavia), we code coherent units that we retain throughout the analysis. The former Soviet Union is merged with 'Russia.' The former Yugoslavia, Serbia, and Montenegro are merged into one unit, 'Serbia Montenegro,' while Slovenia, Croatia, and Bosnia are kept separate. The reason is that Serbia and Montenegro agreed to remain the Federal Republic of Yugoslavia after the country's collapse in the 1990s. Finally, Czechoslovakia is merged with the Czech Republic. Finally, East and West Germany are kept together as Germany.

### *Outcomes*

For the 1.5- and second-generation immigrants, we consider three types of union formation: 1) an interethnic union with a native (i.e., the partner and his or her parents were born in Denmark), 2) an



interethnic union with an immigrant from another country of origin (i.e., the partner is also an immigrant or second-generation immigrant, but he or she or his or her parents are or were from a different country of origin than him- or herself), and 3) an intraethnic union (i.e., the partner is also an immigrant or second-generation immigrant from the same country of origin as him- or herself).

The individuals in the study population are assumed to enter the risk set upon turning 18 if they were not already part of a union. They are followed until they form their first union or until right censoring occurs. Their data are right censored if they died, migrated, or reached age 40 or the observation period ended. We consider only the first union formation and not second or higher-order union formations.

### *Measures of Cultural Proximity*

Our analyses rely on three measures of cultural proximity measured at the country level: religion, values, and language. It relies on country-level measures because individual measures for religion and cultural traits are unavailable in administrative registers. We recognize that such measures are imperfect because immigrants, to varying degrees, are selected subsamples of the populations in their countries of origin (Ichou 2014).

*Religion* is the dominant religion in the 1.5- and second-generation immigrants' countries of origin, according to data from the Pew Research Center (see Pew Research Center 2015). We code the 1.5- and second-generation immigrants' countries of origin into five groups: 1) Protestant; 2) Catholic; 3) other Christian; 4) Muslim; and 5) Hindu, Buddhist, or other religions.

*Values* are measured with the two indexes developed by Inglehart and colleagues that capture traditional vs. secular-rational values and survival vs. self-expression values (Inglehart, 1997; Inglehart and Welzel, 2005). The two scales range from -2 to +2, with a few countries,

including Denmark, reaching a score of +3 in the survival vs. self-expression dimension. Our measures are the scores used to draw the Inglehart-Welzel Cultural Map of the World 2022, which relied on cross-national data from the 2005-2022 period (WVS 2022). We prefer the recent version over the previous ones because it includes the highest number of countries. Nevertheless, no indexes are available for approximately 25 percent of the countries included in our analyses. For these countries, we extrapolate information from one of their neighboring countries. To capture the proximity between the values of 1.5- and second-generation immigrants' countries of origin and Denmark, we compute the absolute value of the difference between the score of the country and that of Denmark. This computation means that a low number on the value variable indicates that the country is culturally proximate to Denmark in terms of values, whereas a high value indicates that it is culturally distant.

*Language* is based on the countries' primary spoken language and primary writing system. We distinguish among four groups of countries: 1) Scandinavian; 2) the core Anglosphere where English is natively spoken, including the United States, Great Britain, Canada, Australia, New Zealand, Ireland, and Northern Ireland; 3) other English-speaking countries and countries where the Latin, Cyrillic, or Greek alphabet is used; and 5) other countries.

### *Measures of Opportunity Structures*

While many studies on the role of opportunity structures in shaping union formation patterns have measured opportunity structures at the national level, scholars have emphasized that it is more accurate to measure them within smaller geographical units or local partner markets (Harris and Ono 2005). This study considers changing opportunity structures within local partner markets defined by the eleven provinces of Denmark. The definition of provinces follows the Nomenclature

of Territorial Units for Statistics (NUTS), a harmonized method of subdividing EU Member States into territorial units. The eleven provinces of Denmark are classified according to NUTS level 3, where the population threshold is between 150,000 and 800,000 individuals. The eleven provinces are North Jutland, East Jutland, West Jutland, South Jutland, Funen, Bornholm, West and South Zealand, East Zealand, North Zealand, Copenhagen City, and Copenhagen Surroundings, as shown in Figure 3.

Figure 3 here

Figure 3. Map of the 11 Provinces in Denmark

*Relative group size* is a time-varying variable that captures the number of individuals from particular countries of origin per thousand of the population aged 18–40 years in the province. For example, for a 1.5- or second-generation immigrant from Turkey, group size is measured as the number of individuals per thousand of the population aged 18–40 in the individuals' province of residence who are first- or second-generation immigrants from Turkey. The *within-group sex ratio* is measured as the proportion of men aged 18–40 divided by the proportion of women aged 18–40 in the national origin group in the province of residence multiplied by 100. Consequently, a number greater than 100 indicates that there are more men than women in the immigrant group in the local partner market. Conversely, a number below 100 indicates that there are more women than men in the immigrant group in the province of residence. The *educational similarity* is the percentage of all opposite-sex members aged 25–40 in the national origin group who have the same educational level as the individual in the province of residence. We set the lower age limit to 25 instead of 20 to ensure that the measure is not biased by differences in the number of young people still enrolled in school within the groups. We distinguish among three levels of education: 1) no education leading

to a vocational/professional qualification, 2) vocational or short-cycle tertiary education, and 3) medium- or long-cycle tertiary education.

### *Individual-level Control Variables*

To account for compositional differences between the immigrant groups, we control for several individual factors, including the first year of observation, generational status, and educational attainment. *The first year of observation* indicates the first year the individual is observed in the dataset, equivalent to the year in which the individual turned eighteen within the investigation period. We control for the first year of observation partly to purge a possible period effect and partly to account for changes in family reunification rules during the investigation period. These changes tightened the rules for non-EU immigrants who planned to seek asylum- or family-based residence. These law changes imply that immigrants and second-generation immigrants observed in recent periods were subject to tighter family reunification rules than those observed earlier. The most far-reaching of these changes, the '24-year rule', was introduced in 2002. This rule dictates that spouses must be 24 years old to obtain marriage-based residency. This change aimed to reduce the possibility for young immigrants to import spouses because of concern regarding forced marriages. Empirical evidence on the effect of the 24-year rule suggests that the proportion of non-Western immigrants who married between 18 and 24 dropped significantly after the rule's implementation (Schultz-Nielsen and Tranæs 2009).

*Generational status* is controlled for because second-generation immigrants are expected to be more likely to form interethnic unions with natives than 1.5-generation immigrants (Andersson, Obućina, and Scott 2015; Dribe and Lundh 2011). Moreover, the generational composition of an immigrant group depends on its immigration history. Because immigrants from

Turkey, the former Yugoslavia, and Pakistan arrived in the 1960s, we find larger proportions of second-generation immigrants in these groups than in other immigrant groups in Denmark. Among 1.5-generation immigrants, we distinguish among immigrants who were 1) 0–5 years old, 2) 6–11 years old, and 3) 12–17 years old when they arrived because we expect that those who were younger when they arrived will be more likely to form interethnic unions with natives than those who were older. Moreover, we include a separate indicator variable equal to one if information regarding age on arrival is missing (1%) and zero otherwise. Following the classification of Statistics Denmark, a first-generation immigrant is defined as a person born outside Denmark and whose parents are not Danish citizens or were born outside Denmark. A second-generation immigrant is a person born in Denmark and whose parents are immigrants or immigrant descendants who are not Danish citizens. Our analysis retains the immigrant's generational status from age 18 onward, which means that a second-generation immigrant does not change generational status in the rare event that one of the parents of a second-generation immigrant was granted citizenship during the investigation period.

*Educational attainment* is controlled for because 1.5- and second-generation immigrants with a higher educational level are expected to be more likely to form interethnic unions with natives than their counterparts with lower levels of education. There are several reasons for this. First, evidence suggests that educational attainment is associated with a weaker preference for a partner based on ascribed characteristics such as ethnicity (van Tubergen and Maas, 2006). Second, the native Danish population is, on average, highly educated, suggesting that highly educated immigrants will be more attractive partners for the native population (Elwert, 2020). *Education* is a time-varying variable that indicates the individual's highest level of educational attainment in six groups: 1) primary/secondary education, 2) gymnasium/high school, 3) vocational education, 4) short-cycle tertiary, 5) medium-cycle tertiary, and 6) long-cycle tertiary. Unfortunately, information

about education is missing for approximately 20 percent of the analysis sample. We, therefore, include education: missing as a separate category.

Table 1 provides descriptive statistics for all the variables in our models.

Table 1 here

### *Analytical Strategy*

In our multivariable analysis, we use multilevel discrete-time event history analysis because union formation is an event that occurs at different stages of people's lifecycles and because we include variables at both the group and individual levels. We estimate two-level models with 1.5- and second-generation immigrants (level 1) nested in national origin groups (level 2). We do not use three-level models to account for local partner market variance because there are only eleven provinces, which is too few to obtain reasonable variance estimates (Bryan and Jenkins, 2016).

After the data are restructured into the person–period format, the model can be fitted as separate multilevel logistic regression models in which time is included as a covariate (Steele 2008). Because we consider transitions from being single to three different types of unions (i.e., an interethnic union with a native, an interethnic union with another immigrant, and an intraethnic union), we rely on a competing risks approach.

We use a multivariate binary response approach to set up our competing risks model. In a multivariate binary response approach, independent binary logistic regression models model event-specific discrete-time hazards (Steele 2011). In this case, event-specific discrete-time hazards can be defined as the probability that individual  $i$  belonging to group  $g$  experiences event type  $r$  rather than any other event in time interval  $t$  or is censored (i.e., they died, migrated, or reached age 40, or the period of observation ended) given that no event occurred before the start of  $t$ , i.e.,

$p_{tig}^{(r)} = \Pr(y_{tig} = r \mid y_{t-1,ig} = 0)$ ,  $r = 1, 2, 3$ . Under the assumptions of independent and noninformative censoring (i.e., the censoring mechanism does not depend on the time of the events or their distributions), we use three separate multilevel logistic regression models to model the event-specific discrete-time hazards:

$$\log\left(\frac{p_{tig}^{(r)}}{1 - p_{tig}^{(r)}}\right) = \alpha_0^{(r)} + \alpha_1^{(r)}t + \alpha_2^{(r)}t^2 + \boldsymbol{\beta}^{(r)}' \mathbf{x}_{tig} + \boldsymbol{\gamma}^{(r)}' \mathbf{c}_g + \boldsymbol{\theta}^{(r)}' \mathbf{o}_{tigp} + sy_t^{(r)} + v_p^{(r)} + u_g^{(r)} + \varepsilon_{tig}, \quad r = 1, 2, 3$$

Where the baseline logit hazard is modeled as a function of  $t$  and  $t^2$  because most people marry in their mid-twenties, implying that the baseline logit hazard is inversely U-shaped. Moreover,  $\mathbf{x}_{tig}$  is a vector of individual-level covariates that varies over time, individuals, and groups;  $\mathbf{c}_g$  is a vector of cultural factors that vary only between groups;  $\mathbf{o}_{tigp}$  is a vector of opportunity structures that for within-group educational similarity varies over time, individuals, groups, and provinces and over time, groups, and provinces for relative group size and within-group sex ratio;  $sy_t$  are indicators for starting year;  $v_p$  are indicators for the province;  $u_g$  is a random intercept across national origin groups; and  $\varepsilon_{tig}$  is an error term. The opportunity structure variables are measured by January 1 in  $t$ , meaning that opportunity structures measured on the first day of the year are related to unions formed during the following year.

Because we implement the competing risks model with a multivariate binary response approach rather than a multinomial logistic regression approach, the estimated coefficients provide associations between the included variables and the log odds of a specific event relative to the reference category 'no event of that specific type.' If we instead implemented the competing risks model with a multinomial logistic regression, the reference category would be 'no event.' While the two approaches are frequently used interchangeably, we prefer the multivariate binary response

approach because the estimated event-specific coefficients in this approach are independent of the composition of the other events. This independence of the models is important because the division between interethnic union formation with another immigrant and intraethnic union formation is unclear. For example, our model does not classify unions between Sri Lankans and Indians as intraethnic, although they may descend from the same South Indian state, Tamil Nadu.

Consequently, the multinomial approach risks underestimating the likelihood of interethnic union formation with natives and intraethnic union formation depending on the proportion of immigrants and second-generation immigrants from the national origin group who form interethnic unions with immigrants from countries other than their own. We estimate separate models for men and women because union formation patterns of 1.5- and second-generation immigrants in Denmark have been found to differ by gender (Schultz-Nielsen 2021).

## **Results**

### *Descriptive Results*

We begin our analysis by presenting descriptive results on inter- and intraethnic union formation rates across the immigrant groups. Table 2 shows the shares of 1.5- and second-generation immigrants who formed an interethnic union with a native formed an interethnic union with another immigrant, formed an intraethnic union, or were censored (i.e., they died, migrated, or reached age 40, or the period of observation ended) by country of origin in the 1986–2016 period.

The table shows substantial differences in inter- and intraethnic union formation rates across immigrant groups. Generally, we find a higher rate of interethnic union formation with natives in groups of Western origin than in groups of non-Western origin. However, there is considerable variation within these broad categorizations. For example, the lowest rates of



interethnic union formation with a native are found in some of the largest immigrant groups in Denmark, including Turkey, Pakistan, and Somalia. Within these relatively large groups, only 4, 5, and 6 percent of the women formed an interethnic union with a native during the investigation period, respectively, with the rates being slightly higher for men. Conversely, we also find high rates of intraethnic union formation within these groups, as 72, 57, and 43 percent of the women formed intraethnic unions, respectively. Other groups with high rates of intraethnic union formation are those from Vietnam, Sri Lanka, and Bosnia, of whom 49 and 48 percent of the women formed intraethnic unions, respectively. The highest rates of interethnic union formation with natives are found for 1.5- and second-generation immigrants from Sweden, Poland, and the Netherlands. In these groups, 66, 60, and 51 percent of the women formed interethnic unions with natives during the investigation period, respectively.

Table 2 here

As shown in Table 3, there are stark differences in the rates of union formation that resulted from nonmarital cohabitation and legal marriages. Of all the intraethnic union formations, almost two-thirds resulted from legal marriages. In contrast, of all the interethnic union formations that included a native, only approximately one of twenty and one of ten resulted from legal marriages, while the vast majority resulted from cohabitation without common children. This pattern suggests that while nonmarital cohabitation is common among immigrants who form unions with natives, legal marriage remains the dominant living arrangement among immigrants who form unions with same-country immigrants.

Table 3 here

### *Multivariable Results*

The results of our multilevel discrete-time event history models that predict the likelihood of inter- and intraethnic union formation for men and women are presented in Table 4. Except for the categorical variables, all the variables are standardized to allow the comparison of coefficient sizes.

As expected, our models suggest that religion powerfully shapes the union formation patterns of 1.5- and second-generation immigrants to Denmark. For male 1.5- and second-generation immigrants from Muslim countries, the odds of interethnic union formation with natives are close to half that of their counterparts from Protestant countries. For female 1.5- and second-generation immigrants from Muslim countries, the odds of interethnic union formation with natives are approximately one-third of those for their counterparts from Protestant countries. Conversely, for male and female 1.5- and second-generation immigrants from Muslim countries, the odds of intraethnic union formation are approximately three times higher than those of their Protestant counterparts.

Our results suggest that male 1.5- and second-generation immigrants from countries dominated by Hinduism, Buddhism, or other religions are also less likely to form interethnic unions with natives and more likely to form intraethnic unions. For male 1.5- and second-generation immigrants from these countries, the odds of interethnic union formation are approximately half of those for their counterparts from Protestant countries. Conversely, their odds of intraethnic union formation are more than three times those of their counterparts from Protestant countries. We also see modest differences in union formation patterns across different types of Christians. In particular, the odds of interethnic union formation are approximately one-third lower for 1.5- and second-generation immigrants from Orthodox Christian countries than for their counterparts from Protestant countries.

While religion appears to powerfully shape the 1.5- and second-generation immigrants' union formation patterns, our results suggest that when religion is adjusted for this is not the case for the other cultural factors. This primacy of religion suggests that for 1.5 and second-generation immigrants who have spent most of their upbringing or were born in Denmark, the dominant values in their countries of origin have little if any bearing on their union formation patterns when we account for religion. Likewise, we find no evidence that language differences across countries of origin are related to the 1.5- and second-generation immigrants' union formation patterns when we control for the other cultural factors.

Table 4 here

Our results also demonstrate how opportunity structures in local partner markets shape 1.5- and second-generation immigrants' union formation patterns. As expected, for both male and female 1.5- and second-generation immigrants, the models suggest that relative group size is negatively related to the odds of interethnic union formation with natives and positively related to intraethnic union formation. The estimated odds ratios suggest that a one-standard-deviation increase in relative group size is associated with 13 and 25 percent decreases in the odds of interethnic union formation with a native for men and women, respectively. Conversely, we find that a one-standard deviation increase in relative group size is associated with 5 and 11 percent increases in the odds of intraethnic union formation for men and women, respectively.

For male 1.5- and second-generation immigrants, a skewed sex ratio within the group is also modestly related to the likelihood of interethnic union formation with natives and intraethnic union formation. A one-standard-deviation increase in the within-group sex ratio, indicating that there are more men than women in the group in the local partner market, is associated with a 3-percent increase in the odds of interethnic union formation with natives and a 14-percent decrease

in the odds of intraethnic union formation. For women, we find no evidence that a skewed sex ratio is related to the likelihood of inter or intraethnic union formation.

Regarding the role of within-group educational similarity, we find it is modestly related to the 1.5- and second-generation immigrants' union formation patterns. For male 1.5- and second-generation immigrants, we find no evidence that within-group educational similarity is related to their likelihood of interethnic union formation with a native. However, a one-standard-deviation increase in within-group educational similarity in the local partner market is associated with a 28-percent increase in the odds of intraethnic union formation. For female 1.5- and second-generation immigrants, a one-standard-deviation increase in within-group educational similarity in the local partner market is associated with a 9-percent decrease in the odds of interethnic union formation with a native and a 14-percent increase in the odds of intraethnic union formation.

Although we focus on cultural proximity and opportunity structures in local partner markets, we briefly report results regarding the role of individual-level factors. The results of models like those in Table 4 but also presenting odds ratios for the time-varying individual factors are presented in Table A1 in the online supplementary material. As expected, the odds ratios for time and time squared suggest that the relationship between time and union formation is inverse U-shaped, meaning that 1.5- and second-generation immigrants' likelihood of forming their first union generally increases from age eighteen until approximately the mid-twenties, after which it levels off. Moreover, and as expected, the models suggest that 1.5-generation immigrants are less likely to form interethnic unions with natives and more likely to form intraethnic unions than second-generation immigrants. Moreover, examining the odds ratios for education, we find that immigrants who are more highly educated are more likely to form inter- and intraethnic unions than their less-educated counterparts, reflecting that education increases the likelihood of transitioning out of singlehood.

Finally, the group-level variances significantly differ from zero in all six models, indicating that there is still residual variance in the odds of the outcome between the immigrant groups when we include all individual and group-level variables.

#### *Additional Analyses and Robustness Checks*

We conduct additional analyses and robustness checks to assess our results' robustness. First, to examine whether cultural proximity between second-generation immigrants' countries of origin and Denmark is weaker related to their union formation patterns than for 1.5-generation immigrants, we exclude 1.5-generation immigrants and rerun our primary analysis (see Table A2 in the online supplementary material). Regarding interethnic union formation with natives for second-generation immigrants from Muslim countries, these models provide results similar to those presented in the primary analysis. Accordingly, second-generation male immigrants from Muslim countries' odds of interethnic union formation with natives are close to half that of their counterparts from Protestant countries. For second-generation female immigrants from Muslim countries, the odds of interethnic union formation with natives are approximately one-third of those for their counterparts from Protestant countries.

Regarding intraethnic union formation, we find much larger religion-related differences. These differences primarily reflect that second-generation immigrants from Protestant countries are unlikely to form intraethnic unions and, secondly, that second-generation immigrants from Muslim countries are less likely to do so than their 1.5-generation counterparts. The latter is evident when we rerun our analysis while only including immigrants from Muslim countries (see Table A3 in the online supplementary material). Here, we learn that the opposite is true – second-generation immigrants from Muslim countries are more likely to form interethnic unions with natives and less likely to form intraethnic unions than their 1.5-generation counterparts. For

example, for male 1.5-generation immigrants from Muslim countries who arrived at age 12-16, the odds of interethnic union formation are only half of those for their second-generation counterparts. Conversely, their odds of intraethnic union formation are approximately one-half times those of their second-generation counterparts. Likewise, for female 1.5-generation immigrants from Muslim countries who arrived at age 12-16, the odds of interethnic union formation with natives are approximately one-third of those for their second-generation counterparts. In contrast, their odds of intraethnic union formation are approximately one-third higher than those of their second-generation counterparts. Overall, second-generation immigrants from Muslim countries are thus more likely to form interethnic unions with natives and less likely to form intraethnic unions than their 1.5-generation counterparts. Nevertheless, 1.5- and second-generation immigrants from Muslim countries are less likely to form interethnic unions with natives and more likely to form intraethnic unions than their counterparts from Protestant countries.

Additionally, we learn from Table A3 that country-level value differences significantly shape the 1.5 and second-generation immigrants from Muslim countries' likelihood of intramarriage. Specifically, we see that 1.5 and second-generation immigrants from Muslim countries with higher levels of self-expressive values are less likely to form intraethnic unions, at least among men.

Second, we replicated our analyses while controlling only for time-varying individual factors but not opportunity structures in local partner markets. The results suggest that the relationships between religion and the 1.5 and second-generation immigrants' union formation patterns are generally more pronounced when opportunity structures in local partner markets are ignored. This fact demonstrates that the relationship between religion and union formation patterns is slightly inflated if changes in opportunity structures in local partner markets are not adequately controlled (see Table A4 in the online supplementary material).

Third, to examine whether our results are distorted by the implementation of the 24-year rule in 2002, we rerun our primary analysis only for those who turned eighteen after 2002 (see Table A5 in the online supplementary material). While the results from these models show that the relationships between religion and the 1.5-generation immigrants' union formation patterns are slightly less pronounced, our overall conclusions remain unchanged.

Fourth, while we used a multivariate binary response approach for the reasons outlined in the methods section, a multinomial logistic regression approach is an obvious alternative. We, therefore, replicate our primary analysis using this approach (see Table A6 in the online supplementary material). The estimated odds ratios from the multinomial approach suggest that the magnitude of the relationships between religion and union formation patterns are more pronounced than those we report based on the multivariate binary response approach. Thus, if anything, compared to results from the multivariate binary response approach, results from the multinomial approach suggest that religion more strongly shapes the union formation patterns of 1.5- and second-generation immigrants.

## **Discussion and Conclusion**

This study of union formation patterns among 1.5- and second-generation immigrants in Denmark advances our understanding of how cultural proximity between members of immigrant groups' countries of origin and destination country shapes their union formation patterns. Unlike previous studies that have used either a longitudinal approach focusing on changes over time or a multilevel approach concerned with the role of opportunity structures in local marriage markets, our study combines these approaches. This innovative approach allows us to examine the role of cultural proximity between members of immigrant groups' countries of origin and destination country while controlling for important time-varying individual factors and changes in opportunity structures in

local partner markets. Moreover, by focusing on Denmark, our study also adds substantial new evidence to the literature from a context that has received little attention thus far.

Our results suggest that religion is strongly related to the 1.5- and second-generation immigrants' union formation patterns, while this is not the case when we control for the other cultural factors. Specifically, our results suggest that 1.5- and second-generation immigrants from non-Christian countries, especially those from Muslim countries, are less likely to form interethnic unions with natives and more likely to form intraethnic unions with same-country immigrants than their Protestant-background counterparts. These patterns are particularly pronounced for women.

Our results are also informative about how changing opportunity structures in local partner markets are related to 1.5- and second-generation immigrants' union formation patterns. Specifically, our findings suggest that relative group size is negatively related to the odds of interethnic union formation with natives and positively related to intraethnic union formation. This result suggests that, with all else equal, the growth of an immigrant group makes its members more likely to form intraethnic unions and less likely to form interethnic unions with natives because their opportunities for finding a same-country partner increase. We also find that other opportunity structural factors, including the within-group sex ratio and educational similarity, are modestly related to the 1.5- and second-generation immigrants' union formation patterns. However, while changes in opportunity structures indeed play a role in shaping the union formation patterns of 1.5- and second-generation immigrants in Denmark, they only confound the relationships between religion and union formation patterns to a limited extent. Our findings thus suggest that the magnitude of the relationships between religion and union formation patterns decreases slightly when changes in opportunity structures in local partner markets are controlled for but remain substantial and statistically significant. On these grounds, we conclude that religion remains a



crucial predictor of interethnic union formation among 1.5- and second-generation immigrants in Denmark.

Our findings supplement earlier studies from Western Europe, which have found that first- and second-generation immigrants from Muslim countries are less likely to form interethnic unions with natives and more likely to form intraethnic unions with same-country immigrants (Alba and Foner, 2015; Dribe and Lundh, 2011; Kalmijn and van Tubergen, 2006, 2010; Wachter, 2022). Compared to these studies, a key strength of our study is that the combination of longitudinal and multilevel approaches allows us to rigorously control for time-varying individual factors and changes in opportunity structures in local partner markets, ensuring the robustness of our results.

Because evidence suggests that interethnic union formation marks and accelerates immigrant groups' broader incorporation into their destination societies, it is concerning that religion appears to be such a solid barrier to interethnic union formation among 1.5- and second-generation immigrants in Denmark and other Western European countries. Moreover, our results suggest that the rapid influx of new immigrants to non-Western and predominantly Muslim immigrant groups will likely affect their members' likelihood of interethnic union formation negatively. On the other hand, our results simultaneously provide grounds for optimism, as we find that male and female second-generation immigrants from Muslim countries are more likely to form interethnic unions with natives and less likely to form intraethnic unions than their 1.5-generation counterparts. This result suggests that gender roles and family formation patterns among immigrants from Muslim countries in Denmark change from one generation to the next, implying that the religious boundaries that currently appear to obstruct the formation of interethnic unions will become more permeable over time. However, the speed of this development will depend on how much immigrants and natives mix and mingle in schools, workplaces, and associations, where friendship and romantic relationships can be formed (Foner, 2015; Larsen and Larsen, 2023).

Although our results provide some grounds for optimism, future scenarios are challenging to predict. At present, it is essential to understand why religion appears to be a strong and rigid barrier to interethnic union formation impeding the social integration of these groups. In this regard, one promising line of work examines how the parents of 1.5- and second-generation immigrants, directly and indirectly, shape their children's dating behavior (Wachter and de Valk, 2020) and later, their union formation patterns (Carol, 2014; Çelikaksoy, 2012; Irastorza and Elwert, 2021). Another important direction of research that warrants more attention is the study of how religious communities and broader social networks shape the union formation patterns of immigrants and their children (Carol, 2013).

While our study is instrumental in showing the strong link between religion and union formation patterns among 1.5- and second-generation immigrants when religion is measured at the country level, it leaves the issue of time-varying country-level religion-related values unaddressed as our measures for values are time-invariant. Moreover, unfortunately, our study does not include information about personal religion because such information is not available in administrative registers. This lack of information means that some of the 1.5- and second-generation immigrants who we, for example, classified as being from Muslim countries might adhere to a different religion. We recognize that this is an important limitation of our work, not least because evidence suggests that immigrants are, to varying degrees, selected subsamples of the populations in their countries of origin (Ichou 2014). Nevertheless, along the lines of our work, it would be interesting to examine to what extent personal religion shapes the union formation patterns of 1.5- and second-generation immigrants when the dominant religion in their countries of origin is controlled. Such an approach would address misclassification problems and allow for the disentanglement of the relative importance of personal faith and group-level religion-related prejudice in shaping 1.5- and second-generation immigrants' union formation patterns.

Although a significant strength of our longitudinal approach is that we address right censoring, our approach relies on the assumption that right censoring is uninformative. However, some 1.5- and second-generation immigrants may have moved abroad to marry someone from their origin country. Within some immigrant groups in Western Europe, such marital behavior is not uncommon, especially among Muslims and other groups with high rates of intramarriage (Carol, Ersanilli, and Wagner, 2014). However, while addressing this issue is beyond the scope of our approach, we note that if this behavior is relatively widespread in groups with a high level of intraethnic union formation, it will imply that we underestimate the relationship between religion and intramarriage, meaning that our overall conclusions would remain unchanged.

Last, while our study and cultural proximity theory more generally recognize the relational nature of union formation, we acknowledge that our empirical approach mainly focuses on 'the immigrant side' of the question. In particular, we did not include measures that capture possible differences in the perceived social status of different immigrant groups among natives in the local partner markets. Such differences have received scant attention in existing research but appear important and warrant further scrutiny in future research (Elwert 2020).

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Table 1. Descriptive Statistics Measured in the Last Year Before an Event/Censoring.

	Men		Women	
	Mean	SD	Mean	SD
<i>Individual level variables:</i>				
<i>Generational status</i>				
Descendant	0.31	0.46	0.33	0.47
Immigrant: 0-5 years	0.13	0.34	0.13	0.34
Immigrant: 6-11 years	0.24	0.42	0.23	0.42
Immigrant: 12-16 years	0.31	0.46	0.29	0.46
Immigrant: Unknown	0.01	0.10	0.01	0.11
<i>Education</i>				
Primary/secondary	0.45	0.50	0.42	0.49
Gymnasium / high school	0.14	0.35	0.17	0.38
Vocational education	0.12	0.33	0.10	0.30
Short-cycle tertiary	0.02	0.14	0.02	0.13
Medium-cycle tertiary	0.02	0.15	0.04	0.19
Long-cycle tertiary	0.05	0.21	0.05	0.22
Education: Missing	0.20	0.40	0.20	0.40
<i>Cultural factors</i>				
<i>Religion</i>				
Protestant	0.10	0.29	0.11	0.31
Catholic	0.09	0.28	0.09	0.29
Other Christian	0.09	0.29	0.10	0.30
Muslim	0.61	0.49	0.58	0.49
Hindu, Buddhist, or other	0.11	0.32	0.11	0.32
<i>Values</i>				
Traditional values vs secular-rational values	1.46	0.63	1.43	0.65
Survival values vs self-expression values	3.22	1.03	3.17	1.07
<i>Language</i>				
Scandinavian	0.03	0.18	0.04	0.20
The core Anglosphere	0.02	0.14	0.03	0.16
Other English-speaking	0.60	0.49	0.61	0.49
Other languages	0.34	0.47	0.32	0.47
<i>Opportunity structures</i>				
Relative group size	9.31	12.14	9.01	11.83
Sex ratio	105.66	37.77	102.45	33.26
Educational similarity	59.05	23.83	57.70	24.07
<i>N</i>	37829		33293	

Table 2. Percentage Shares of 1.5 and Second-generation Immigrants in Denmark Who Formed Inter- or Intraethnic Unions or Were Censored by Country of Origin in the 1986-2016 period.

	Men				Women			
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Censored	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Censored
<i>Non-Western countries:</i>								
Thailand	32	6	26	36	53	11	16	20
Russia	32	13	11	44	50	14	6	30
Phillipines	39	7	26	27	42	14	20	24
Uganda	39	10	9	42	39	18	10	34
Iran	38	11	13	38	31	19	24	27
Egypt	31	20	6	43	23	18	19	40
India	21	13	31	36	23	14	25	38
Bosnia	22	10	37	31	19	10	48	22
Vietnam	18	6	49	27	23	9	49	19
Syria	28	26	9	36	8	42	17	34
Serbia	21	24	27	29	16	27	33	24
Marocco	23	9	32	36	12	12	54	22
Lebanon	24	15	33	28	6	18	46	30
China	10	11	36	44	23	15	23	39
Jordan	19	26	19	36	11	28	28	33
Sri Lanka	18	5	40	36	11	4	48	37
Iraq	20	13	26	41	8	14	41	36
Macedonia	14	25	32	29	8	30	42	20
Afghanistan	12	13	33	41	6	7	47	40
Pakistan	10	8	48	34	5	6	57	32
Somalia	9	5	33	53	6	4	43	47
Turkey	11	5	64	21	4	4	72	19
<i>Western countries:</i>								
Sweden	53	6	2	39	66	7	1	26
Poland	52	6	11	31	60	10	10	20
The Netherlands	55	6	5	34	51	6	7	36
Germany	50	4	4	42	52	5	4	38
Iceland	41	3	8	47	50	9	11	30

United Kingdom	43	12	1	44	45	15	3	37
Romania	40	8	13	40	51	16	4	28

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Note: Countries with less than 100 individuals are not included in the table. Countries where a cell would derive from less than 5 individuals are not shown in the table. Percentages may not add up to 100 percent because of rounding.

Table 3. Percentage Shares of All Union Formations that Resulted from Marriage, Cohabitation with Common Children, and Cohabitation Without Common Children

	Men			Women		
	Interethnic union (native)	Interethnic Union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic Union (immigrant)	Intraethnic union
Marriage	5	36	65	9	37	63
Cohabitation with common children	7	8	7	5	9	8
Cohabitation	88	55	28	85	54	29
Number of Union Formations	8875	3707	12667	6894	3724	13271

Percentages may not add up to 100 percent because of rounding.



Table 4. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants in Denmark in the 1986-2016 Period.

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Cultural factors</i>						
Religion (ref. = Protestant)						
Catholic	1.147 (0.153)	0.768 (0.146)	0.896 (0.352)	1.078 (0.173)	1.260 (0.252)	0.809 (0.315)
Other Christian	0.715 (0.126)	0.819 (0.194)	2.001 (0.927)	0.651* (0.136)	1.123 (0.283)	1.292 (0.601)
Muslim	0.578** (0.098)	0.632* (0.145)	3.034* (1.362)	0.333*** (0.068)	0.865 (0.214)	2.903* (1.290)
Hindu, Buddhist, or other	0.504*** (0.090)	0.575* (0.138)	3.215* (1.477)	0.691 (0.149)	0.656 (0.170)	1.845 (0.870)
Traditional values vs secular-rational values	1.031 (0.046)	0.946 (0.057)	1.001 (0.111)	0.980 (0.050)	0.910 (0.056)	1.077 (0.119)
Survival values vs self-expression values	0.964 (0.063)	1.205* (0.107)	1.205 (0.209)	0.934 (0.072)	1.150 (0.109)	1.284 (0.225)
Language (ref. = Scandinavian)						
The core Anglosphere	0.730 (0.194)	1.890 (0.730)	0.440 (0.351)	0.654 (0.221)	0.980 (0.388)	0.298 (0.246)
Other English-speaking	0.677 (0.170)	1.651 (0.594)	0.890 (0.632)	0.709 (0.227)	0.836 (0.311)	0.708 (0.519)
Other	0.618 (0.176)	2.344* (0.935)	1.051 (0.817)	0.510 (0.184)	1.159 (0.482)	0.866 (0.696)
<i>Opportunity structures</i>						
Relative group size	0.872*** (0.022)	0.915** (0.030)	1.054*** (0.014)	0.747*** (0.032)	0.886** (0.034)	1.108*** (0.015)
Sex ratio	1.026* (0.012)	1.019 (0.020)	0.863*** (0.017)	0.973 (0.017)	1.001 (0.025)	0.998 (0.018)
Educational similarity	0.973 (0.021)	0.956 (0.035)	1.276** (0.030)	0.910** (0.022)	0.958 (0.035)	1.136*** (0.029)
Group-level variance	1.111*** (0.026)	1.183*** (0.047)	2.066*** (0.342)	1.198*** (0.042)	1.227*** (0.050)	2.211*** (0.391)
Observations	316792	316792	316792	219086	219086	219086

The table reports odds ratios with standard errors in parentheses. Models control for time, time<sup>2</sup>, generational status, educational level, start year, and province.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)

Figure 1. The Relative Size of the Ten Largest Immigrant Groups from Western Countries in Denmark

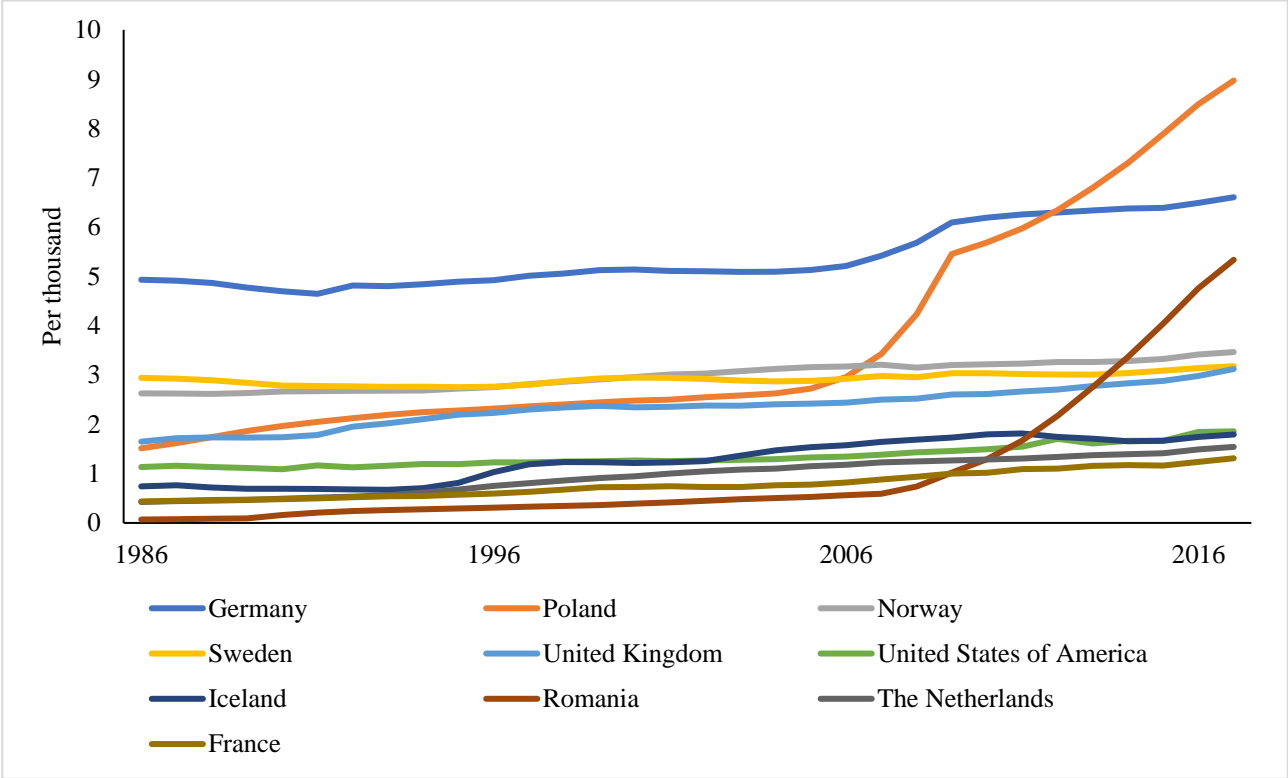
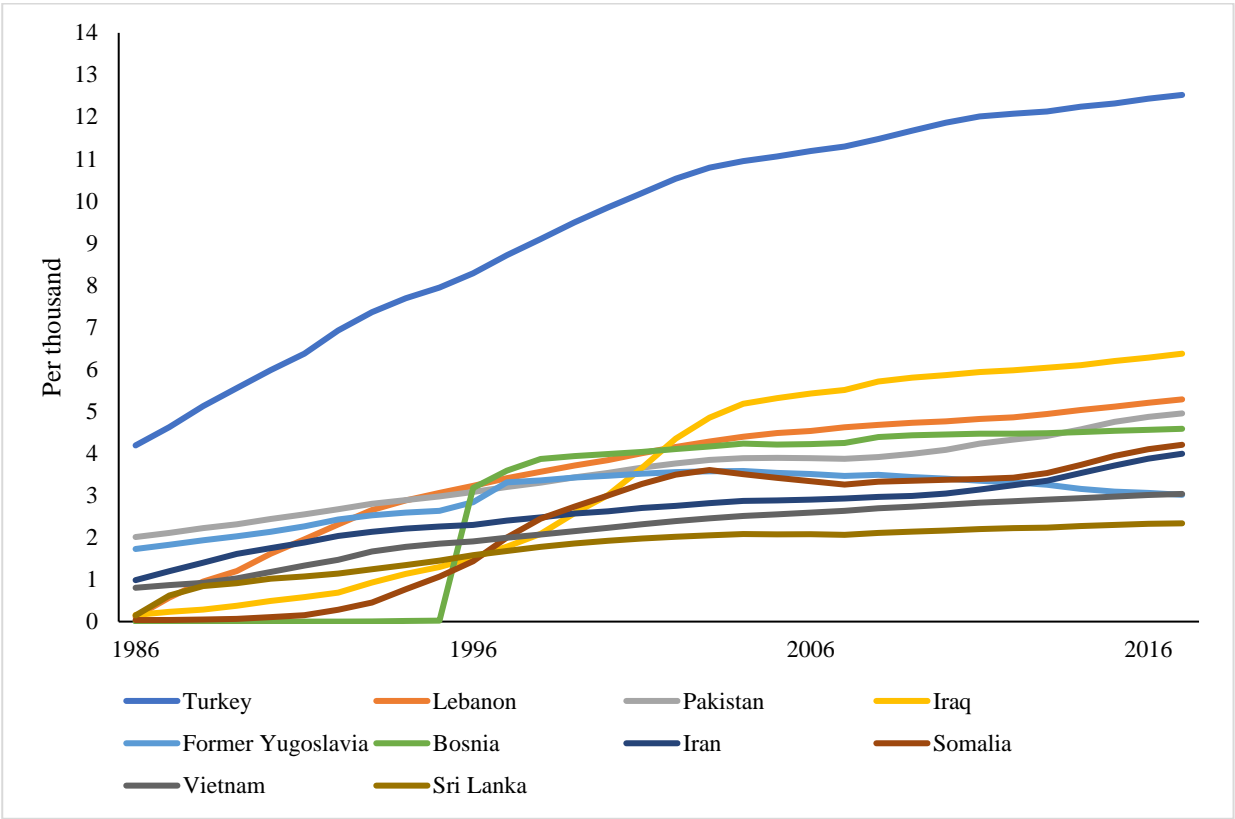


Figure 2. The Relative Size of the Ten Largest Immigrant Groups from non-Western Countries in Denmark



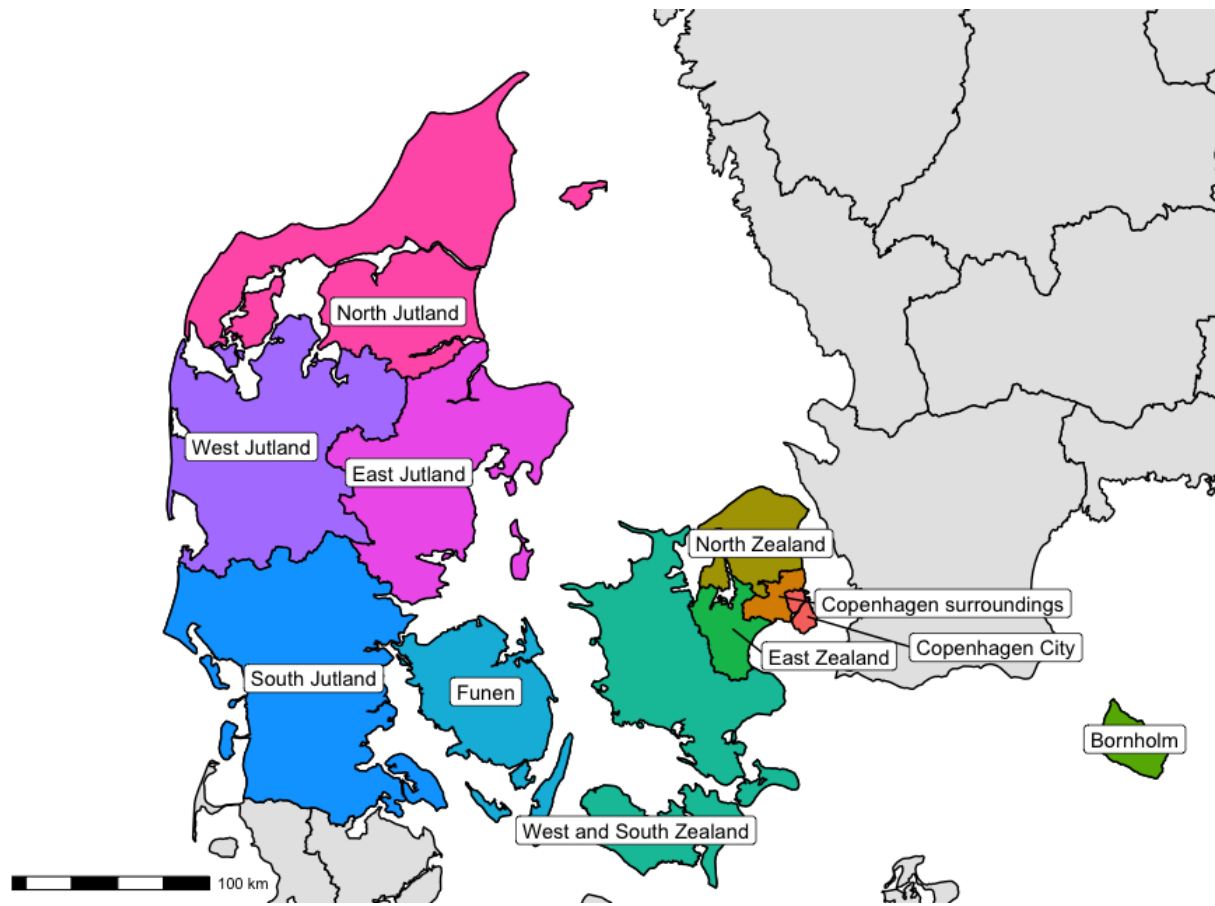


Figure 3. Map of the 11 Provinces in Denmark

Supplementary materials for  
Interethnic Union Formation among 1.5- and Second-generation  
Immigrants: The Role of Cultural Proximity

Table A1. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants in Denmark in the 1986-2016 Period. Full Models.

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Individual factors</i>						
Time	1.367*** (0.014)	1.448*** (0.022)	1.416*** (0.012)	1.172*** (0.013)	1.305*** (0.021)	1.244*** (0.011)
Time <sup>2</sup>	0.984*** 1.367***	0.985*** 1.448***	0.983*** 1.416***	0.991*** 1.172***	0.986*** 1.305***	0.985*** 1.244***
Generational status (ref. = descendant)						
Immigrant: 0-5 years	1.088* (0.039)	1.162** (0.067)	1.138*** (0.039)	1.073 (0.045)	1.009 (0.058)	1.100** (0.036)
Immigrant: 6-11 years	0.971 (0.031)	1.169** (0.060)	1.290*** (0.038)	1.022 (0.037)	1.202*** (0.060)	1.287*** (0.037)
Immigrant: 12-16 years	0.645*** (0.023)	1.244*** (0.065)	1.635*** (0.048)	0.722*** (0.028)	1.152** (0.060)	1.489*** (0.044)
Immigrant: Age missing	0.511** (0.075)	1.225 (0.308)	0.782 (0.111)	0.379** (0.060)	0.648 (0.173)	0.432*** (0.065)
Educational level (ref = no education)						
High-school	1.208** (0.036)	1.063 (0.051)	0.859** (0.026)	1.466*** (0.048)	0.898* (0.041)	0.772*** (0.022)
Vocational training	1.312*** (0.074)	1.077 (0.102)	2.627*** (0.165)	1.172* (0.083)	1.035 (0.103)	1.905*** (0.128)
Short-cycle tertiary	1.176 (0.109)	1.384* (0.184)	2.230*** (0.202)	1.238 (0.143)	0.955 (0.152)	1.751*** (0.172)
Medium-cycle tertiary	1.365** (0.133)	1.687*** (0.231)	3.645*** (0.342)	1.449*** (0.150)	0.943 (0.140)	2.273*** (0.217)
Long-cycle tertiary	1.502*** (0.108)	1.405** (0.162)	2.645*** (0.220)	1.570*** (0.133)	0.906 (0.117)	1.441*** (0.134)
Education missing	0.943 (0.048)	1.350*** (0.087)	1.559*** (0.052)	0.722*** (0.046)	1.138 (0.077)	1.245*** (0.044)
<i>Cultural factors</i>						
Religion (ref. = Protestant)						
Catholic	1.147 (0.153)	0.768 (0.146)	0.896 (0.352)	1.078 (0.173)	1.260 (0.252)	0.809 (0.315)
Other Christian	0.715 (0.126)	0.819 (0.194)	2.001 (0.927)	0.651* (0.136)	1.123 (0.283)	1.292 (0.601)
Muslim	0.578** (0.098)	0.632* (0.145)	3.034* (1.362)	0.333*** (0.068)	0.865 (0.214)	2.903* (1.290)
Hindu, Buddhist, or other	0.504*** (0.090)	0.575* (0.138)	3.215* (1.477)	0.691 (0.149)	0.656 (0.170)	1.845 (0.870)
Traditional values vs secular-rational values	1.031 (0.046)	0.946 (0.057)	1.001 (0.111)	0.980 (0.050)	0.910 (0.056)	1.077 (0.119)
Survival values vs self- expression values	0.964 (0.063)	1.205* (0.107)	1.205 (0.209)	0.934 (0.072)	1.150 (0.109)	1.284 (0.225)
Language (ref. = Scandinavian)						
The core Anglosphere	0.730 (0.194)	1.890 (0.730)	0.440 (0.351)	0.654 (0.221)	0.980 (0.388)	0.298 (0.246)

Other English-speaking	0.677 (0.170)	1.651 (0.594)	0.890 (0.632)	0.709 (0.227)	0.836 (0.311)	0.708 (0.519)
Other languages	0.618 (0.176)	2.344* (0.935)	1.051 (0.817)	0.510 (0.184)	1.159 (0.482)	0.866 (0.696)
<i>Opportunity structures</i>						
Relative group size	0.872*** (0.022)	0.915** (0.030)	1.054*** (0.014)	0.747*** (0.032)	0.886** (0.034)	1.108*** (0.015)
Sex ratio	1.026* (0.012)	1.019 (0.020)	0.863*** (0.017)	0.973 (0.017)	1.001 (0.025)	0.998 (0.018)
Educational similarity	0.973 (0.021)	0.956 (0.035)	1.276** (0.030)	0.910** (0.022)	0.958 (0.035)	1.136*** (0.029)
Group-level variance	1.111*** (0.026)	1.183*** (0.047)	2.066*** (0.342)	1.198*** (0.042)	1.227*** (0.050)	2.211*** (0.391)
Start year indicator	YES	YES	YES	YES	YES	YES
Province indicator	YES	YES	YES	YES	YES	YES
Observations	316792	316792	316792	219086	219086	219086

The table reports odds ratios with standard errors in parentheses.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)

Table A2. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among Second-generation Immigrants in Denmark in the 1986-2016 Period.

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Cultural factors</i>						
Religion (ref. = Protestant)						
Catholic	1.163 (0.166)	0.809 (0.204)	3.529 (2.858)	0.943 (0.187)	0.932 (0.272)	0.960 (0.622)
Other Christian	0.509** (0.114)	1.430 (0.488)	17.038** (16.024)	0.411** (0.126)	1.017 (0.412)	3.674 (2.903)
Muslim	0.497*** (0.105)	1.131 (0.391)	20.775** (19.772)	0.378*** (0.110)	0.846 (0.338)	7.233* (5.674)
Hindu, Buddhist, or other	0.523*** (0.098)	0.807 (0.241)	22.075*** (18.612)	0.550* (0.146)	0.586 (0.212)	4.178* (2.907)
Traditional values vs secular-rational values	0.868** (0.046)	0.914 (0.072)	1.293 (0.212)	0.800** (0.063)	0.851 (0.085)	1.146 (0.194)
Survival values vs self- expression values	1.077 (0.077)	1.070 (0.120)	0.931 (0.257)	1.039 (0.108)	1.211 (0.173)	1.086 (0.297)
Language (ref. = Scandinavian)						
The core Anglosphere	0.669 (0.142)	1.645 (0.597)	0.399 (0.466)	0.712 (0.233)	1.311 (0.588)	1.419 (1.555)
Other English-speaking	0.734 (0.137)	1.204 (0.408)	0.580 (0.612)	0.766 (0.232)	0.810 (0.338)	2.230 (2.258)
Other languages	0.813 (0.184)	1.532 (0.585)	0.461 (0.517)	0.651 (0.235)	0.902 (0.434)	2.184 (2.373)
<i>Opportunity structures</i>						
Relative group size	0.874*** (0.029)	0.868** (0.040)	1.132*** (0.027)	0.803*** (0.042)	0.928 (0.046)	1.111*** (0.026)
Sex ratio	1.016 (0.024)	1.070 (0.042)	0.911 (0.056)	1.026 (0.032)	0.950 (0.050)	1.071 (0.056)
Educational similarity	1.000 (0.040)	1.024 (0.077)	1.420*** (0.088)	0.969 (0.047)	0.977 (0.075)	1.298*** (0.080)
Group-level variance	1.037* (0.017)	1.069* (0.034)	1.876** (0.445)	1.141*** (0.044)	1.192** (0.072)	1.931** (0.462)
Start year indicator	YES	YES	YES	YES	YES	YES
Province indicator	YES	YES	YES	YES	YES	YES
Observations	103021	102926	102926	79070	79039	79039

The table reports odds ratios with standard errors in parentheses. The models include controls for time, time<sup>2</sup>, educational level, start year, and province.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)



Table A3. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants from Muslim Countries in Denmark in the 1986-2016 Period.

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Individual factors</i>						
Time	1.393*** (0.022)	1.465*** (0.031)	1.427*** (0.014)	1.256*** (0.029)	1.241*** (0.028)	1.248*** (0.013)
Time <sup>2</sup>	0.983*** (0.001)	0.984*** (0.001)	0.982*** (0.001)	0.989*** (0.001)	0.989*** (0.001)	0.984*** (0.001)
Generational status (ref. = descendant)						
Immigrant: 0-5 years	1.018 (0.057)	0.991 (0.078)	1.144*** (0.044)	0.850 (0.075)	0.842* (0.069)	1.093* (0.040)
Immigrant: 6-11 years	0.868** (0.047)	1.044 (0.076)	1.193*** (0.040)	0.742*** (0.062)	0.963 (0.076)	1.244*** (0.041)
Immigrant: 12-16 years	0.531*** (0.033)	1.042 (0.082)	1.464*** (0.052)	0.379*** (0.038)	0.859 (0.075)	1.350*** (0.046)
Immigrant: Age missing	0.429** (0.131)	0.762 (0.392)	0.696* (0.119)	0.258* (0.153)	0.672 (0.346)	0.427*** (0.080)
Educational level (ref = no education)						
High-school	1.153** (0.052)	1.051 (0.066)	0.882*** (0.030)	1.595*** (0.104)	1.006 (0.065)	0.761*** (0.024)
Vocational training	1.147 (0.125)	0.730* (0.114)	2.968*** (0.242)	0.955 (0.153)	0.915 (0.159)	1.946*** (0.164)
Short-cycle tertiary	1.001 (0.170)	1.049 (0.211)	2.830*** (0.317)	1.089 (0.256)	0.840 (0.213)	1.792*** (0.212)
Medium-cycle tertiary	1.171 (0.196)	1.331 (0.264)	4.188*** (0.491)	1.164 (0.243)	0.790 (0.180)	2.293*** (0.263)
Long-cycle tertiary	1.157 (0.161)	1.017 (0.186)	3.275*** (0.347)	1.567* (0.286)	0.751 (0.159)	1.418** (0.161)
Education missing	1.014 (0.074)	1.093 (0.101)	1.514*** (0.058)	0.719* (0.106)	1.145 (0.116)	1.314*** (0.051)
<i>Cultural factors</i>						
Traditional values vs secular-rational values	0.984 (0.120)	1.123 (0.115)	0.800 (0.139)	0.979 (0.168)	0.970 (0.141)	0.758 (0.108)
Survival values vs self- expression values	1.176 (0.332)	1.779** (0.387)	0.424* (0.169)	1.060 (0.432)	2.126* (0.713)	0.710 (0.234)
Language (ref. = Other English-speaking)						
Other languages	0.743 (0.173)	1.401 (0.250)	1.857 (0.624)	0.444* (0.151)	1.293 (0.352)	1.658 (0.461)
<i>Opportunity structures</i>						
Relative group size	0.903*** (0.026)	0.924* (0.033)	1.072*** (0.016)	0.778*** (0.040)	0.916* (0.039)	1.126*** (0.017)
Sex ratio	1.024 (0.021)	1.003 (0.035)	0.904*** (0.022)	1.010 (0.040)	0.942 (0.039)	1.006 (0.021)
Educational similarity	0.983 (0.039)	0.845** (0.047)	1.316*** (0.038)	0.890* (0.050)	0.891 (0.053)	1.140*** (0.035)
Group-level variance	1.234** (0.097)	1.091* (0.041)	1.490* (0.241)	1.556** (0.246)	1.313** (0.122)	1.322* (0.152)

Start year indicator	YES	YES	YES	YES	YES	YES
Province indicator	YES	YES	YES	YES	YES	YES
Observations	192249	192249	192249	129751	129751	129751

The table reports odds ratios with standard errors in parentheses.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)

Table A4. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants in Denmark in the 1986-2016 Period Without Controls for Opportunity Structures in Local Partner Markets

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Cultural factors</i>						
Religion (ref.= Protestant)						
Catholic	1.099 (0.157)	0.779 (0.156)	0.921 (0.374)	1.047 (0.179)	1.270 (0.262)	0.806 (0.324)
Other Christian	0.684* (0.128)	0.819 (0.204)	2.026 (0.976)	0.622* (0.138)	1.128 (0.294)	1.268 (0.609)
Muslim	0.541*** (0.098)	0.609* (0.147)	3.152* (1.467)	0.295*** (0.064)	0.835 (0.213)	2.976* (1.364)
Hindu, Buddhist, or other	0.492*** (0.094)	0.569* (0.144)	3.454** (1.652)	0.692 (0.158)	0.637 (0.172)	1.869 (0.909)
Traditional values vs secular-rational values	1.039 (0.049)	0.962 (0.061)	0.971 (0.112)	0.972 (0.053)	0.924 (0.059)	1.062 (0.121)
Survival values vs self- expression values	0.959 (0.067)	1.211* (0.113)	1.240 (0.224)	0.942 (0.078)	1.148 (0.112)	1.287 (0.233)
Language (ref.= Scandinavian)						
The core Anglosphere	0.788 (0.228)	1.992 (0.813)	0.328 (0.272)	0.666 (0.242)	0.992 (0.407)	0.285 (0.242)
Other English-speaking	0.703 (0.193)	1.720 (0.657)	0.745 (0.553)	0.719 (0.249)	0.849 (0.330)	0.687 (0.520)
Other	0.639 (0.197)	2.435* (1.031)	0.886 (0.721)	0.515 (0.200)	1.173 (0.509)	0.860 (0.715)
Group-level variance	1.137*** (0.030)	1.220*** (0.054)	2.244*** (0.403)	1.240*** (0.049)	1.257*** (0.055)	2.365*** (0.445)
Start year indicator variables	YES	YES	YES	YES	YES	YES
Observations	316792	316792	316792	219086	219086	219086

The table reports odds ratios with standard errors in parentheses. The models include controls for time, time<sup>2</sup>, generational status, educational level, and start year.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)

Table A5. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants in Denmark in the 2002-2016 Period.

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Cultural factors</i>						
Religion (ref. = Protestant)						
Catholic	1.128 (0.193)	0.870 (0.202)	0.941 (0.420)	1.296 (0.257)	1.209 (0.307)	0.871 (0.357)
Other Christian	0.710 (0.161)	0.783 (0.212)	1.655 (0.859)	0.787 (0.207)	1.239 (0.386)	1.548 (0.733)
Muslim	0.610* (0.132)	0.707 (0.188)	3.188* (1.585)	0.446** (0.115)	0.838 (0.255)	2.339 (1.044)
Hindu, Buddhist, or other	0.533** (0.124)	0.419** (0.121)	3.665** (1.796)	0.797 (0.217)	0.525* (0.172)	3.048* (1.408)
Traditional values vs secular-rational values	1.027 (0.058)	0.957 (0.066)	0.970 (0.114)	0.839** (0.054)	0.878 (0.068)	1.054 (0.122)
Survival values vs self- expression values	0.905 (0.075)	1.271* (0.138)	0.968 (0.180)	0.936 (0.090)	1.178 (0.141)	1.123 (0.201)
Language (ref. = Scandinavian)						
The core Anglosphere	0.710 (0.225)	1.326 (0.616)	0.211 (0.204)	0.551 (0.215)	0.851 (0.431)	0.311 (0.252)
Other English-speaking	0.787 (0.229)	1.215 (0.516)	0.881 (0.590)	0.775 (0.278)	1.048 (0.477)	0.724 (0.518)
Other languages	0.780 (0.262)	1.369 (0.641)	0.849 (0.627)	0.511 (0.211)	1.137 (0.578)	0.692 (0.542)
<i>Opportunity structures</i>						
Relative group size	0.830*** (0.033)	0.879** (0.041)	1.152*** (0.027)	0.709*** (0.049)	0.956 (0.049)	1.124*** (0.024)
Sex ratio	0.967 (0.028)	0.952 (0.044)	0.934 (0.050)	0.897** (0.035)	1.038 (0.050)	1.209*** (0.055)
Educational similarity	1.009 (0.041)	0.949 (0.060)	1.139* (0.059)	0.907* (0.041)	1.057 (0.069)	1.111* (0.053)
Group-level variance	1.118*** (0.036)	1.125* (0.056)	1.583** (0.242)	1.212*** (0.055)	1.252*** (0.072)	1.716*** (0.261)
Observations	115977	115977	115977	88043	88043	88043

The table reports odds ratios with standard errors in parentheses. The models include controls for time, time<sup>2</sup>, generational status, educational level, start year, and province.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)

Table A6. Multilevel Discrete-time Competing Risks Event History Analyses Predicting Inter- and Intraethnic Union Formation among 1.5- and Second-generation Immigrants in Denmark in the 1986-2016 Period Using a Multinomial Approach

	Men			Women		
	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union	Interethnic union (native)	Interethnic union (immigrant)	Intraethnic union
<i>Cultural factors</i>						
Religion (ref. = Protestant)						
Catholic	1.037 (0.098)	0.720* (0.096)	1.705** (0.280)	1.087 (0.116)	1.192 (0.163)	0.960 (0.150)
Other Christian	0.396*** (0.051)	1.101 (0.173)	4.869*** (0.891)	0.433*** (0.062)	1.172 (0.195)	2.561*** (0.447)
Muslim	0.396*** (0.048)	0.537*** (0.084)	8.111*** (1.483)	0.293*** (0.041)	0.555*** (0.092)	4.384*** (0.754)
Hindu, Buddhist, or other	0.357*** (0.044)	0.507*** (0.078)	7.658*** (1.310)	0.457*** (0.064)	0.549*** (0.091)	3.724*** (0.629)
Traditional values vs secular-rational values	0.889*** (0.028)	0.918* (0.034)	1.225*** (0.041)	0.856*** (0.030)	0.838*** (0.033)	1.192*** (0.043)
Survival values vs self-expression values	1.065 (0.049)	1.311*** (0.076)	0.893* (0.049)	0.952 (0.049)	1.354*** (0.083)	1.128* (0.066)
Language (ref. = Scandinavian)						
The core Anglosphere	0.704* (0.123)	1.678* (0.410)	0.316** (0.129)	0.766 (0.157)	0.770 (0.191)	0.282*** (0.101)
Other English-speaking	0.698* (0.113)	1.028 (0.236)	1.148 (0.289)	0.751 (0.143)	0.526** (0.123)	0.823 (0.215)
Other languages	0.893 (0.164)	1.511 (0.377)	0.840 (0.224)	0.840 (0.182)	0.808 (0.209)	0.615 (0.173)
<i>Opportunity structures</i>						
Relative group size	0.706*** (0.017)	0.774*** (0.022)	1.155*** (0.014)	0.520*** (0.022)	0.687*** (0.024)	1.192*** (0.015)
Sex ratio	1.029** (0.011)	1.060*** (0.017)	0.834*** (0.014)	0.902*** (0.016)	1.083*** (0.022)	1.003 (0.014)
Educational similarity	0.900*** (0.019)	0.985 (0.034)	1.392*** (0.031)	0.869*** (0.021)	0.908** (0.032)	1.244*** (0.028)
Group-level variance		1.039*** (0.010)			1.059*** (0.013)	
Observations		316792			219086	

The table reports odds ratios with standard errors in parentheses. The models include controls for time, time<sup>2</sup>, generational status, educational level, start year, and province. The group-level variances are constrained to be equal across types of union formation.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  (two-tailed tests)