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Educational Sorting in Mixed Marriages in Switzerland

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Abstract: According to status-caste exchange theory, intermarriages involve transactions in which higher educated immigrants trade status for the ethnic advantage of the less-educated native partners. Looking at 2 836 currently married Swiss immigrants, we find that the highly skilled "exchange" their status only when pairing with a medium-educated native. Results also show that younger cohorts of immigrants are more likely to choose hypogamy when marrying a same-origin immigrant than when partnering a native.

Keywords: intermarriage, status-caste exchange, educational hypogamy

Bildungssortierung in Mischehen in der Schweiz

Zusammenfassung: Laut Status-caste exchange Theorien, tauschen höher gebildete Einwanderer ihren Status zugunsten der Gruppenzugehörigkeit ihrer einheimischen PartnerInnen ein. Basierend auf einer Studie von 2 836 verheirateten MigrantInnen in der Schweiz, zeigen wir, dass hochqualifizierte Personen nur dann Bildungsgrenzen überschreiten, wenn sie mit einheimischen PartnerInnen mittleren Bildungstandes eine Paarbeziehung eingehen. Zudem wählen jüngere Kohorten weniger hypogame Beziehungen, wenn ihre LebensgefährtInnen der gleichen Herkunftsgruppe entstammen.

Schlüsselwörter: Mischehen, status-caste exchange, Bildungshypogamie

Les caractéristiques éducatives des conjoints dans les mariages mixtes en Suisse

Résumé : Selon la théorie du status-caste exchange, les mariages mixtes impliquent des transactions dans lesquelles les migrants plus diplômés échangent leur statut social contre l'avantage ethnique de leur partenaire natif moins diplômé. En étudiant 2 836 migrants mariés en Suisse, nous trouvons que ceux plus diplômés «échangent» leur statut seulement avec des natifs de niveau d'instruction moyen. De plus, les migrants des cohortes récentes choisissent l'union hypogamique plus souvent lorsque le partenaire a la même origine ethnique que lorsqu'il est natif.

Mots clés : mariages mixtes, status-caste exchange, hypogamie selon le niveau d'instruction

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1 Introduction

With upward immigration flows, and growing opportunities for inter-ethnic contacts, recent decades have made romantic encounters between people of different origins increasingly more likely to occur (Lanzieri 2012). One of the central theoretical standpoints devoted to the understanding of mixed marriage patterns is the status-caste exchange theory (Davis 1941; Merton 1941). Its proponents suggest that given balanced opportunities for interaction, immigrants' chances of marrying natives hinge on their level of qualifications, with highly educated immigrants being able to "trade" human capital in exchange for natives' ethnic advantage. It is also frequently assumed that entering marriage with a native member of the host country represents the utmost proof of integration for newcomers (Alba and Nee 2003; Gordon 1964). Identifying the factors that could increase immigrants' chances of integration via (inter)marriage with natives are therefore of particular interest. Education in general is recognized as one of the most important criteria in partner selection, invariably considered a marker of labour market returns (Kalmijn 1994). A high level of education represents one of the most valued qualities on the marriage market (Becker 1981; Oppenheimer 1988), signalling not only economic well-being, but also a given level of cultural capital and lifestyle (Halpin and Chan 2003; Hou and Miles 2008; Mare 1991).

Despite the importance of discerning how marital choices for an ethnically exogamous (i. e., different-origin) versus endogamous (i. e., same-origin) spouse intersect with education, empirical evidence is limited, and most often applied to the U.S. (e. g. Fu 2001; Oian 1997). The validity of status-caste exchange has not been evaluated in a national context with a remarkably large share of foreign-origin residents with high educational credentials, such as Switzerland (OECD 2015). With many new arrivals in the last 10–15 years and the inflow of highly skilled workers from the member countries of the European Union, Switzerland's immigrant population has been diversifying, particularly in terms of educational qualifications (Liebig et al. 2012). It remains unclear however how these transformations impacted marital patterns, especially immigrants' chances of (inter)marrying a native, across cohorts and generation type. It could be likely that the growing population of highly skilled newcomers would make immigrants' choice for a same-origin and similarly highly educated partner more viable, thus challenging the assumptions of status-caste exchange theory, particularly the proposition of an immutable preference for matching with natives.

Furthermore, Switzerland is one of the few Western European countries where, despite overall educational expansion (Schofer and Meyer 2005), the gender gap reversal in education is yet to be observed (De Hauw et al. 2015), and traditional gender roles are persistently visible (Kanji and Hupka-Brunner 2015; Levy et al. 2002). Despite a global trend towards a growing number of marriages in which

the wife is better educated than her husband (Esteve et al. 2013; Schwartz and Mare 2005), female hypogamous unions (i. e., women marrying men with a lower educational level than their own) are modestly increasing in rate and remain broadly uncommon in Switzerland (Branger 2014). Whether or not immigrant women with higher education could barter their superior level of schooling and act as innovators of educational marital sorting in such a particular context, is yet to be clarified. Finally, previous studies have also fallen short in assessing the role of the specific national origin of immigrants with respect to the status-caste exchange hypothesis (Choi et al. 2012). We predict strong inter-origin group differences in its validation given wide variation in the returns to education among different immigrant groups (Liebig et al. 2012).

In this study, we ask whether immigrants increase their chances of having a Swiss native spouse by means of a higher educational attainment. Using recent and comprehensive data from the 2013 Family and Generations Survey and a sample of 2 836 immigrant respondents, we engage in a series of multinomial logistic regression models meant to examine educational matching in exogamous versus endogamous marriages, across gender, origin group, generation type, and cohort group. In doing so, we propose theoretical hypotheses based on the status-caste exchange perspective, and we complement it with arguments related to cultural distance (Hofstede 2001), the role of preferences, opportunities and third parties in intermarriage (Kalmijn 1998), as well as changing gender norms in educational sorting (Esteve et al. 2013). Given that the most pivotal intermarriage types where exchanges between one partner's educational capital and the other's nativity advantage, are the ones between immigrants and natives, we focus on this particular marital configuration and leave aside mixed unions that do not involve a native spouse.

2 Background

2.1 Mixed partnerships in Switzerland

Despite Switzerland's sizeable share of immigrant population and the increasing prevalence of partnerships between individuals with immigrant background and Swiss natives (Ossipow and Waldis 2003), the patterns related to mixed unions in Switzerland have rarely been explored but for a few studies. Notwithstanding different data sources and different national origin classifications, previous research found evidence of an ethnically segregated and hierarchical (inter)marriage market, with consistent inequalities across different immigrant groups. A recent study (Potarca and Bernardi 2016) found that immigrants from bordering European countries (i. e., Germany, France, Austria) have the highest chances of getting and staying married with Swiss natives, whereas those from ex-Yugoslavia and Turkey have both lower probabilities of intermarrying and higher chances of divorcing their native spouse.

Southern Europeans occupy an intermediate ranking with equally low chances of intermarrying natives, but a greater likelihood of marriage survival compared to ex-Yugoslavs and Turks (ib.). Kohler (2012) also reveals low intermarriage (with natives) rates among Turkish immigrant women, as well as those from non-Western non-European regions (e. g., South and Central Asia, Middle East, and Maghreb), rates that get even more reduced for the second generation and for younger cohorts. Nevertheless, the same study shows that Southern European immigrant women are increasingly more likely to have a native partner if they belong to the second as opposed to the first generation (ib). All in all, research agrees on the following: first, the privileged status of EU immigrants on the (inter)marriage market, who are most often highly skilled, better employed, and share language and cultural affinities to the native Swiss (Lagana et al. 2014; Liebig et al. 2012); and second, the disadvantaged position of ex-Yugoslavs and Turks, who are repeatedly linked to high ethnic endogamy patterns, as well as comparatively poorer socio-economic integration outcomes (Fibbi et al. 2015; Kohler 2012; Potarca and Bernardi 2016; Wanner et al. 2005).

2.2 Status-caste exchange theory

Notwithstanding the ethnic hierarchies within the Swiss marriage market as well as in other Western contexts (e. g., Dribe and Lundh 2011; Kalmijn and van Tubergen 2010), previous research also found that higher education can offset the importance of ethnicity/ national origin as social boundary in mate selection (Choi et al. 2012). This means that better educated immigrants have higher propensities of marrying natives than their lower educated counterparts, and that their level of studies often surpasses the level of their native spouse (Trilla et al. 2008; Guetto and Azzolini 2015; Maffioli et al. 2014). These findings align to the predictions of status-caste exchange theory (Davis 1941; Merton 1941). As previously mentioned, this theoretical standpoint proposes that mixed unions involve an intrinsic exchange in which both partners trade status characteristics. Introduced with reference to the black – white racial divide in the U.S., the theory predicts that lower educated whites would be more open towards partnering a black person, provided the latter possesses higher educational endowments in exchange for the higher racial status of the former. Based on the same reasoning, better-educated blacks would have higher chances of having a white spouse than lower educated blacks, because they are able to barter their superior level of schooling with the high racial status of their white partner. Moreover, higher educated minority members would generally be more prone towards dating out-group members given that higher education is usually associated with better integration, an increase in interracial/ interethnic contact, and a decrease in in-group favouritism (Lieberson and Waters 1988). Symmetrically, the perception that native members hold with respect to higher educated immigrants would also be more positive compared to that held towards the lower educated.

Despite certain rebuttals (Hou and Myles 2013; Kalmijn and Van Tubergen 2006; Rosenfeld 2005), and polemics regarding the most appropriate method to capture empirical proof of these theoretical claims (Gullickson and Fu 2010; Kalmijn 2010; Rosenfeld 2010), multiple studies confirm status exchanges in marital unions in the U.S., specifically between Hispanics and whites (Fu 2001; Qian 1997), and between blacks and whites, particularly black men and white women (Fu 2001; Gullickson 2006; Kalmijn 1993; Qian 1997; Schoen and Cheng 2006; Schoen and Wooldredge 1989). There is also evidence for status exchange theory for black/ white intermarriage in Brazil (Gullickson and Torche 2014), immigrant men married to native women in the U.S. and partially in Australia (Choi et al. 2012), as well as immigrants married to natives in Italy (Guetto and Azzolini 2015; Maffioli et al. 2014) or Spain (Trilla et al. 2008).

Based on both theoretical arguments and empirical proofs, we would expect that in Switzerland, similar to other national contexts, *immigrants would be more likely to have a native rather than a same-origin spouse if they marry down on education* (i. e., have a higher level of qualifications than their partner). This should be *particularly the case for immigrant men* given the historically dominant and normative pattern of female educational hypergamy (i. e., women marrying men with a higher educational level than their own) in assortative mating (Blossfeld 2009). In recent years, against the background of the expansion of higher education and the reversal of the gender gap in schooling[1] in most middle- and high-income countries (Buchmann and DiPrete 2006; Hausmann et al. 2009), there has been a gradual decrease in hypergamous marriages and a rise in educational hypogamy (Bouchet-Valat 2015; Esteve et al. 2013; Grow and van Bavel 2015; Schwartz and Mare 2005). Despite these trends, couples in which the wife has the educational advantage should still be regarded as non-normative particularly in a context with a strong male breadwinner tradition such as Switzerland (Kanji and Hupka-Brunner 2015). Moreover, certain studies indicate that in Switzerland immigrant women have lower returns on education in the labour market than both Swiss women and immigrant men (Epple et al. 2015; Liebig et al. 2012; Riaño and Baghdadi 2007). This would suggest that highly trained immigrant women might not have as much "status" to be exchanged with "caste" in intermarriage compared to their male peers, and that lower educated native men might be reluctant to marry them to begin with.

2.3 Origin group differences

Furthermore, we expect substantial origin group differences in the occurrence of status-caste exchange in mixed marriages. Our expectations are based on the distinctive degrees of socio-economic integration of immigrants and on the level of their cultural distance from the native mainstream (Hofstede 2001), which shape both partnering preferences in the search process and the anticipated evaluation by

1 Women outperforming men in tertiary educational attainment.

third parties of one's choice to intermarry (Kalmijn 1998). As previously outlined, ex-Yugoslavs and Turks represent the group that fares the worst in the Swiss marriage market. We predict that for this particular sub-segment of the immigrant population, higher levels of qualifications would bring little to no advantage in the propensity to marry a native. This means that pairings of better educated ex-Yugoslavs and Turks married to lower educated natives would be less likely to occur. There are several reasons that can be put forward. First, previous research revealed a striking education-employment mismatch for highly educated immigrants originating from lower-income countries, with a large share of them being in jobs that do not correspond to their skills and experience, even when having been formally trained in Switzerland (Liebig et al. 2012). Second, the different religion and patriarchal practices and norms among Turks and ex-Yugoslavs (Alba 2005; Lievens 1998) may produce a too wide cultural distance for the native Swiss to cross when engaging in personal interaction with members from these immigrant groups. Riaño (2011) also observes that the ethnic discourse behind immigration policies in Switzerland portrays non-EU immigrants married to Swiss natives in a non-favourable light, invoking their insufficient language skills and overall greater incongruence with the native culture, irrespective of the level of training. The greater cultural distance, whether real (i. e., determined by differences in norms and religion) or perceived (i. e., derived from the state discourse on immigrants), that separates ex-Yugoslavs and Turks from Swiss natives is likely to shape natives' low preferences for marrying a partner from this immigrant group (Carol 2013). At the same time, cultural distance is also likely to guide the expected negative appraisal of such union by third parties (Carol 2016), regardless of immigrants' socio-economic integration. The higher education of ex-Yugoslavs and Turks would thus signal little social prestige to be traded with natives' ethnic advantage.

Conversely, immigrants from neighbouring Western European countries, particularly recent ones, are more often employed in higher-paying and highly-skilled occupations, enjoying better returns on education (Liebig et al. 2012). In this case, higher education is a more reliable measure of economic success and thus a commodity with higher chances to be traded in return for natives' greater ethnic prestige. To sum up, we anticipate that *compared to their Western European peers, higher educated immigrants from ex-Yugoslavia and Turkey would be less likely to exchange status for caste* (i. e., to partner down when marrying a native spouse) given that higher education does not have sufficient relevance for labour market success, and it does not cancel out large cultural gaps. We would also expect these differences to play out stronger for immigrant women from Former Yugoslavia and Turkey than for men. Traditional and patriarchal gender norms (Yüksel-Kaptanoğlu and Ergöçmen 2014) may add to Muslim women's practice to stay away from non-traditional unions in which the man does not hold the educational advantage. Previous research shows that Muslim marriages are indeed highly hypergamous (Muttarak and Testa 2015).

Finally, we expect Southern European immigrants to classify in-between the previous two groups given a better cultural match to the natives than ex-Yugoslavs and Turks, but lower socio-economic performance compared to the Western Europeans.

2.4 Generation type and cohort variation

We furthermore anticipate that compared to first generation immigrants, *proof for exchange theory should be particularly noticeable for new generations of immigrants (i. e., descendants of immigrants)*. Previous research indicates that naturalized immigrant youth have greater gains from high educational credentials than other individuals with migratory background, and even than the native Swiss (Fibbi et al. 2007).

Finally, we also expect birth cohort variation in educational patterns of different-origin versus same-origin marriages. Younger cohorts in general have also been associated with greater financial returns to schooling (e. g., Hamil-Luker 2005). Whether or not better skilled younger generations of immigrants would be more often linked to status-caste exchange in intermarriage compared to older cohorts is difficult to predict, as the greater signalling power of high educational credentials (and subsequent growing demand by natives for high-value mates with higher education) could be offset by the rise in immigrant population and relative group size in recent years. Under conditions of "replenished" minority populations (Jiménez 2008), higher educated immigrants would have better chances of matching with a similarly educated co-ethnic and a lesser need to trade their education for ethnic status. Therefore, given increased opportunities of getting in contact with in-group members, one could expect that *higher educated immigrants from recent cohorts are more likely to match with a similarly educated in-group partner*, instead of trading their superior level of schooling for the high ethnic status of a lower educated native partner. In this case, the role of mating opportunities (Kalmijn 1998), indirectly tested via cohort effects, would thus override the forces of status-caste exchange and become the prevailing theoretical explanation for observed intermarriage patterns.

3 Data and methods

3.1 Data

We make use of data from the 2013 Family and Generations Survey (originally *Enquête sur les familles et les générations (EFG 2013)*), carried out by the Federal Statistical Office (FSO) with a target population of 15 to 79 years old permanent residents in Switzerland. The *EFG* was designed to inform both scholarship and policy on the current state of families and inter-generational relations in Switzerland (for more details, see Potarca and Bernardi 2016).

The sample covers native Swiss, migrants with an annual or a permanent residence permit for at least twelve months (Permit B or C), and foreign citizens

with a short-term residence permit (Permit L) for a cumulative length of stay of at least twelve months. Excluded categories are international civil servants, diplomats and their family members, and foreign citizens seeking asylum (Permit F or N). The survey was conducted in either German (Standard German or Swiss German), French or Italian. Selected persons who do did not speak any of the proposed languages did not participate in the survey. Among the initial sample of respondents with foreign background (n = 5 463), we selected a sub-sample of participants who declared being in a marital union at the time of survey (n = 3 151). Through listwise deletion, we also excluded cases with inconsistencies in reporting dates of partnership transitions, or with missing information on either one of our variables of interest, as well as respondents born post-1990 (i. e., between 15 to 23 years old), given small numbers and a higher likelihood of not having started their marital career. This led to a final analytical sample of 2 836 currently married immigrant respondents.

3.2 Variable measurement

The dependent variable used in the analysis is type of current marriage, which was created based on both respondent's and their spouse's national origin.

First, *respondent's origin and generation type* were computed based on official FSO guidelines, and made use of extensive information on current nationality, nationality at birth, country of birth, both parents' country of birth, and whether childhood was mostly spent in Switzerland or abroad. If at least one parent was born abroad and the respondents migrated to Switzerland after the age of 16, they are coded as "first generation" and assigned the specific origin of the country of the foreign-born parent (or of the mother, in case both parents were foreign-born). If at least one parent was born abroad and respondents came to reside in Switzerland between the ages of six and 16, they are coded as "1.5 generation" and are given the foreign-born parent's/ mother's country of birth as origin category. If at least one parent was born abroad and they came to reside in Switzerland before the age of six (or were born in Switzerland), respondents are coded as "second generation" and receive foreign-born parent's/ mother's country of birth as origin. The three-category measurement of immigrant generation is in accordance to previous categorizations in intermarriage studies (e. g., González-Ferrer 2006). It is meant to distinguish between individuals who were subject to different migration experiences and acculturation processes: those who migrated as (young) adults (i. e., first generation), those who experienced migration during middle childhood and adolescence (i. e., 1.5 generation), and finally those that are native-born or that migrated during early childhood (i. e., second generation).

Second, *current spouse's origin* is only measured via the following variables: current nationality, nationality at birth (either Swiss or foreign), and country of birth.[2]

2 Supplementary analyses available from authors, in which both respondent's and spouse's origin categorization was constructed using the same coding scheme (i. e., based on information on

If the spouse is currently a Swiss national and had Swiss or double nationality at birth, irrespective of country of birth, he/ she is categorized as "native." If partners have a non-Swiss nationality at birth, then information on country of birth is used as measure of their specific immigrant origin.

We distinguish between five *origin* groups (for the current spouses, and five origin groups for respondents, for whom the categorization excludes the "Swiss native" option), as follows: 1) Swiss natives, 2) Western Europeans (from Germany, France or Austria), 3) ex-Yugoslavs and Turks, 4), Southern Europeans (originating from Italy, Spain, Portugal or Greece) and 5) others.

Building on the information outlined above, we code *type of union* as "endogamous" if respondent's and spouse's origin coincide, or "exogamous" if their origins are different. Among the latter, we further distinguish between two types of exogamous marital unions: with natives and with immigrants from another ethnic group than their own.

For *education*, we differentiated between three highest levels of education achieved: low education (i. e., no formal training, unfinished or completed compulsory education), which is taken as reference category; medium education (i. e., vocational or general post-compulsory secondary education); and high education (i. e., vocational or academic tertiary education). Based on both partners' education, we construct the main independent variable gauging spouses' educational sorting and differentiating between three types of unions, as follows: 1) the immigrant respondent has a lower level of education than their native spouse; 2) the two partners share the same educational level (i. e., homogamy); and 3) the immigrant respondent has a higher level of education than their native spouse.

Furthermore, *gender* is dichotomous variable with 0 signifying "male" (reference) and 1 "female." We also distinguish between five *cohort* groups, namely respondents born: 1) before 1950, 2) between 1951–1960, 3) 1961–1970, 4) 1971–1980, and 5) 1981–1990.

Control variables include: age at marriage (with categories: 1) below 20, 2) 21–30, 3) 31–40, and 4) over 40), spouses' age difference (which differentiates between: 1) age homogamy, meaning that the spouses share the same age or that the difference is less than 3 years, 2) partner is older, and 3) the respondent is older), a dummy variable measuring whether marriage occurred after migration, a binary variable indicating whether the respondent has been being previously married or

current nationality, nationality at birth (either Swiss or foreign), and country of birth only, thus discarding information on actual nationality at birth and parents' country of birth for respondents) reveal very similar results to the findings described later in the paper. Nevertheless, we prefer to keep different criteria for defining respondent's and spouse's origin in order to maximize the information contained in the sample. Using the same categorization scheme for the respondent as for the spouse also underestimates the number of Swiss-born immigrants and therefore reduces our sample size.

not, linguistic region (with categories: German[3], French, and Italian), and number of children in the household.

3.3 Analytical approach

We first report descriptive results, namely a cross-tabulation of educational sorting by marriage type, divided by gender. To test our hypotheses, we then follow with the estimation of a multinomial logistic regression analysis that examines the probability of having an exogamous Swiss spouse, or an exogamous non-Swiss spouse, versus an endogamous one (i. e., reference category) among immigrant respondents. As previously mentioned, we distinguish between exogamous unions involving a native spouse and exogamous marriages involving an immigrant belonging to another national origin group. We however only focus on the comparison between endogamous unions and exogamous unions with a native spouse. The key covariate is the educational sorting between immigrant respondents and their spouse. To inspect differences between men and women, between various origin groups, generation type, and cohort groups, we also fit a series of models with interaction terms. Based on these specifications, we estimate and plot predicted probabilities or contrasts of predicted probabilities of having a native versus same-origin spouse by relevant factors, at averaged values of all covariates. To account for non-response biases, the data included in all analyses are adjusted with the weight *wtelpers*. The weights take into account marital status (married or not), nationality (Swiss or not), sex, age groups, and (groups of) cantons of residence. Weights were further calibrated to correspond to the permanent resident population of Switzerland aged 15–79 in the year 2013.

Although log-linear models would have had the advantage of accounting for marginal distributions and have in fact been frequently used in empirical studies of intermarriage, particularly in the U.S. (e. g., Qian and Lichter 2007), the method is subject to on-going controversies (Gullickson and Fu 2010; Kalmijn 2010; Rosenfeld 2005; 2010). Scholars are still in disagreement regarding the correct way to design model specification (e. g., which parameter to choose to capture status-caste exchange effects, which other relevant parameters shall be included) or model selection (i. e., which is the best fitted model to be chosen). Furthermore, log-linear models require large samples and do not favour the inclusion of a high number of covariates. Given both the size of our dataset (i. e., $N = 2\,836$) and the theoretical focus on moderation by multiple factors (i. e., gender, origin group, generation type, birth cohort), our distinct analytical choice is optimal. Testing status-caste exchange theory by means of multinomial logit models has recently gained ground (e. g., Hou and Myles 2013), also because such method ensures a smoother computation

3 The very few cases of respondents in the Romansch linguistic region were recoded into the German category.

process and a clearer interpretation of results. Our model specification[4] resembles the one used by Guetto and Azzolini (2015) in their study of status-caste exchange in migrant women-native men marriages in Italy. As opposed to them, we examine both migrant women-native men and migrant men-native women marital unions. Nevertheless, we could not investigate status-caste exchange in intermarriage from the perspective of natives as well, given that the sample size of exogamous unions among native respondents is too small to warrant a detailed examination of educational sorting (e. g., $n = 6$ native men married to immigrant women originating from former Yugoslavia and Turkey).

4 Results

4.1 Descriptive results

Table 1 reports the descriptive statistics for the immigrants' sample both as a generic group and by origin. The exogamy with native rate in the total sample is 29.2%, reaching 42.1% among Western Europeans and only 8.5% among ex-Yugoslavs and Turks. The latter are also the least likely to be part of an educational homogamous marriage, the more likely to be men, younger, marry at an earlier age, and have on average a higher number of children. Western Europeans are positively selected with respect to formal training, with 49.7% of them having higher education, as opposed to Southern Europeans, who are more likely to be lower educated, or ex-Yugoslavs and Turks, who more often hold a medium-level educational degree. The sample is comprised of 74.1% first generation immigrants. Western Europeans are particularly numerous (80.7%) within this category, while Southern Europeans are more common than other groups in the second generation cluster (29.5% versus 18.3% for the larger sample).

Table 2 displays weighted percentages of educational sorting by marital union type and gender. The figures provide a crude assessment of how frequent mixed marriages in which immigrants marry down are. We notice that, on one side, immigrant men are often part of exogamous unions with native women in which they are more educated than their wife (33.9% versus 27.4% in endogamous unions). Immigrant women on the other side are more frequently trading down on education in endogamous unions (19.0%) than in exogamous unions with a native spouse (13.8%). In fact, immigrant women are much more likely to marry up in exogamous unions with natives (29.2%) than in both endogamous (19.6%) and exogamous unions with other immigrants (12.5%). In the case of both men

4 We could not replicate the study design of Hou and Myles (2013), who model the probability of intermarriage based on marital sorting while accounting for both spouses' educational level and migration background, given the lack of information on partners' migration history in early life (i. e., which generation type they belong to). In our models, we focus on the perspective of the respondent only, for whom we have all relevant information.

Table 1 Summary statistics of main variables

	Total sample (%)	Western Europe (%)	Ex-Yugoslavia and Turkey (%)	Southern Europe (%)	Others (%)
Type of marriage					
Endogamy	51.0	36.7	73.0	66.2	29.9
Exogamous (with native)	29.2	42.1	8.5	20.7	41.6
Exogamous (with other immigrant)	19.9	21.2	18.4	13.2	28.5
Educational sorting					
Marry up	23.1	20.9	31.5	21.9	21.3
Homogamy	60.2	62.6	49.2	61.6	63.0
Marry down	16.8	16.6	19.3	16.5	15.7
Gender					
Male	49.3	48.8	57.3	51.3	42.0
Female	50.7	51.2	42.7	48.7	58.0
Education					
Low	22.4	5.8	21.6	41.2	13.4
Medium	42.4	44.5	57.8	39.8	33.9
High	35.2	49.7	20.7	19.0	52.7
Generation type					
First generation	74.1	80.7	71.0	62.7	85.3
1.5 generation	7.6	3.9	17.4	7.9	4.4
Second generation	18.3	15.4	11.6	29.5	10.3
Birth cohort					
1940–1949	10.9	18.3	4.1	11.5	7.6
1950–1959	17.1	19.6	9.3	20.9	15.1
1960–1969	29.2	32.9	25.2	31.1	25.9
1970–1979	28.1	22.8	27.8	26.5	35.3
1980–1989	14.7	6.4	33.5	10.1	16.2
Age at marriage					
Below 20	8.9	3.9	16.4	13.0	3.1
21–30	59.0	51.4	66.4	63.3	55.9
31–40	23.9	31.2	13.1	17.7	32.1
Over 40	8.3	13.5	4.2	6.0	8.9
Spouses' age difference					
Age homogamy	53.8	54.7	57.5	57.3	45.6
Partner older	23.7	21.7	18.0	21.0	33.1
Respondent older	22.5	23.6	24.5	21.7	21.3
Married post-migration	78.0	71.8	77.7	82.8	77.7
Previously married	9.5	12.7	8.2	6.3	11.7
Linguistic region					
German	63.7	75.2	80.9	50.4	59.5
French	29.5	23.4	14.0	35.3	37.4
Italian	6.9	1.4	5.1	14.3	3.1
	Mean (standard deviation)				
Number of children in household	1.17 (0.02)	0.95 (0.05)	1.56 (0.07)	1.14 (0.04)	1.19 (0.05)
N (unweighted)	2836	649	392	1076	719
% row	100.0	22.9	13.8	37.9	25.4

Source: EFG Family and Generations Survey (2013). Weighted data by wtelpers.

Table 2 Distribution of educational sorting by marriage type and gender

	Endogamy	Exogamous (with native)	Exogamous (with other immigrant)	Total
Male immigrants (unweighted n = 1 363)				
Marry up	11.1	14.4	11.5	12.0
Homogamy	61.6	51.8	60.0	58.8
Marry down	27.4	33.9	28.5	29.2
	100.0	100.0	100.0	100.0
Female immigrants (unweighted n = 1 473)				
Marry up	19.6	29.2	12.5	21.4
Homogamy	61.4	57.0	69.6	61.5
Marry down	19.0	13.8	17.9	17.0
	100.0	100.0	100.0	100.0

Source: EFG Family and Generations Survey (2013). Weighted data by wtelpers.

Table 3 Distribution of marital status by educational level and gender

	Low	Medium	High	Total
Male immigrants (unweighted n = 1 770)				
No partner	17.4	29.7	28.3	26.8
Endogamy	64.4	37.0	31.5	40.0
Exogamous (with native)	9.6	19.4	20.8	18.1
Exogamous (with other immigrant)	8.6	13.9	19.5	15.1
	100.0	100.0	100.0	100.0
Female immigrants (unweighted n = 1 913)				
No partner	12.9	23.9	32.7	24.8
Endogamy	61.0	33.3	23.9	35.7
Exogamous (with native)	17.9	29.3	24.1	25.1
Exogamous (with other immigrant)	8.3	13.6	19.2	14.5
	100.0	100.0	100.0	100.0

Source: EFG Family and Generations Survey (2013). Weighted data by wtelpers.

and women, educational endogamy is the most likely to occur across all three types of unions, but the extent of this happening is the smallest among intermarriages with natives. To briefly check whether selection into marriage occurs differently for highly educated versus lower educated immigrants, Table 3 shows the distribution

of marital status by educational level and gender for a sample that also includes the non-married. The percentages illustrate that whereas highly educated immigrant men are almost as likely as their medium educated counterparts to be unmarried at the time of the survey, highly educated immigrant women are slightly more likely to have no marital partner compared to low and medium educated women. The lower educated in general seem to be over-represented in marriage. When it comes to selection into exogamy (with natives), it is the medium and highly educated immigrant men and women that are more often to report a native spouse, while in endogamous arrangements, it is the lower educated that are over-represented.

4.2 Multivariate results

Table 4 reports the relative risk ratios[5] of a multinomial logistic regression model that examines, having endogamous marriage as reference, the probability of having a native spouse (left panel), and the probability of having a partner from another immigrant group (right panel), while controlling for various factors. We mainly focus, as previously noted, on results corresponding to marriages with native partners. The reader recalls that we first hypothesized that the likelihood of an immigrant being married to a native rather than a co-national is highest among those couples in which the immigrant is more educated than their spouse. To assess this hypothesis, we look at the estimates of Model 1, which includes the main effect of educational sorting. Results show the complete opposite of our expectation, with immigrants that are more educated than their partner having a significantly lower likelihood of having a native spouse. To investigate whether this applies to both men and women, Model 2 adds an interaction between educational sorting and gender. Findings indicate no significant gender differences in the probability of status-caste exchange occurring.

For the sake of confirming that the theory of status-caste exchange does not receive any support in the context of Swiss intermarriages, we further estimate a model that includes a more detailed measure of the educational mixing of the couple, one that differentiates between nine educational constellations, based on all nine possible combinations between the respondent's and their partner's educational level. Figure 1 plots the predicted probabilities and 95% confidence intervals of having a native spouse as opposed to a same-origin one, based on the model just described. The graph shows that, for both genders, marriages involving a native spouse are most likely to happen when the immigrant respondent has a low level of education and their native partner has a medium level (i. e., the opposite of status-caste exchange), but also when the immigrant respondent is highly trained while the native partner has a medium educational level (i. e., evidence for status-caste exchange). We also notice that mixed unions are also more probable between similarly educated partners

5 A relative risk ratio higher than 1 suggests an increased risk, while a value lower than 1 reflects a reduced risk.

Table 4 Multinomial logit results for type of marriage among immigrants (endogamous = reference category), N = 2 836

	Exogamous (with native)				Exogamous (with other immigrant)			
	Model 1		Model 2 (Model 1 + gender interaction)		Model 1		Model 2 (Model 1 + gender interaction)	
	RRR	S.E.	RRR	S.E.	RRR	S.E.	RRR	S.E.
Educational sorting (Marry up = ref.)								
Homogamy	0.369***	(0.201)	0.355**	(0.349)	0.806	(0.227)	0.546	(0.312)
Marry down	0.334***	(0.246)	0.388*	(0.380)	0.601	(0.283)	0.450*	(0.364)
Gender (male = ref.)								
Female	1.463*	(0.149)	1.461	(0.374)	1.195	(0.167)	0.673	(0.402)
Educational sorting × gender interaction								
Homogamy × female			1.118	(0.403)			2.033	(0.427)
Marry down × female			0.724	(0.447)			1.648	(0.472)
Educational level (low = ref.)								
Medium	2.663***	(0.203)	2.657***	(0.203)	2.089***	(0.221)	2.055**	(0.223)
Low	3.162***	(0.249)	3.114***	(0.248)	3.001***	(0.265)	2.945***	(0.268)
Generation (first generation = ref.)								
1.5 generation	2.269***	(0.221)	2.261***	(0.222)	1.649	(0.281)	1.642	(0.282)
Second generation	4.467***	(0.183)	4.410***	(0.183)	2.598***	(0.207)	2.581***	(0.207)
Origin (Western Europe = ref.)								
Former Yugoslavia & Turkey	0.122***	(0.304)	0.122***	(0.305)	0.688	(0.276)	0.675	(0.278)
Southern Europe	0.193***	(0.181)	0.195***	(0.184)	0.388***	(0.235)	0.379***	(0.237)
Others	1.538*	(0.180)	1.541*	(0.180)	1.890**	(0.198)	1.864**	(0.198)
Birth cohort (Before 1950 = ref.)								
1951–1960	0.719	(0.211)	0.72	(0.212)	0.758	(0.245)	0.758	(0.245)
1961–1970	0.460***	(0.216)	0.468***	(0.216)	0.629	(0.251)	0.624	(0.251)
1971–1980	0.314***	(0.238)	0.321***	(0.239)	0.681	(0.261)	0.674	(0.262)
1981–1990	0.284***	(0.280)	0.295***	(0.281)	0.427**	(0.321)	0.418**	(0.322)

Continuation of table 4 on the next page.

Continuation of table 4.

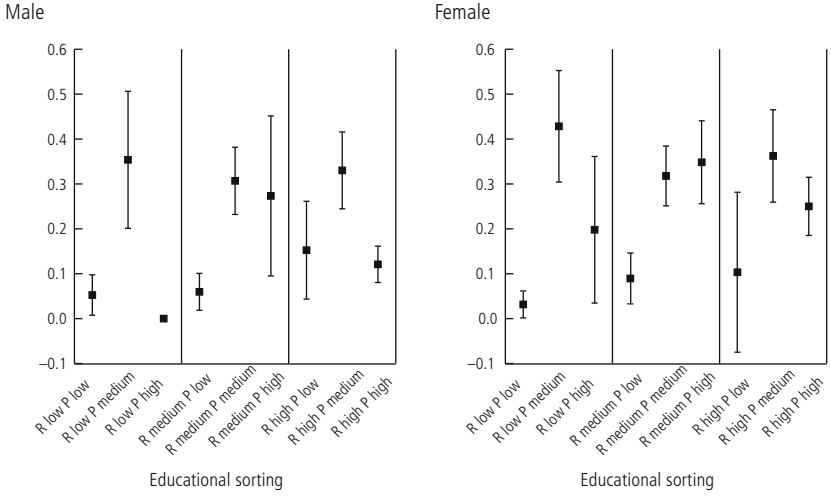
	Exogamous (with native)				Exogamous (with other immigrant)			
	Model 1		Model 2 (Model 1 + gender interaction)		Model 1		Model 2 (Model 1 + gender interaction)	
	RRR	S.E.	RRR	S.E.	RRR	S.E.	RRR	S.E.
Age at marriage (below 20 = ref.)								
21–30	3.195***	(0.319)	3.154***	(0.317)	2.692**	(0.335)	2.665**	(0.335)
31–40	4.826***	(0.342)	4.834***	(0.340)	4.476***	(0.358)	4.416***	(0.357)
Over 40	4.405***	(0.417)	4.420***	(0.415)	7.633***	(0.433)	7.627***	(0.432)
Spouses' age difference (age homogamy = ref.)								
Partner older	1.233	(0.160)	1.24	(0.161)	1.087	(0.187)	1.091	(0.187)
Respondent older	0.882	(0.201)	0.872	(0.201)	0.946	(0.180)	0.928	(0.181)
Married post-migration	9.275***	(0.253)	9.283***	(0.253)	1.779**	(0.191)	1.782**	(0.191)
Previously married	0.965	(0.249)	0.961	(0.248)	1	(0.260)	1.008	(0.260)
Linguistic region (German = ref.)								
French	1.014	(0.148)	1.027	(0.148)	1.203	(0.142)	1.206	(0.142)
Italian	1.901***	(0.173)	1.897***	(0.174)	1.16	(0.208)	1.15	(0.207)
Number of children in household	0.913	(0.075)	0.912	(0.075)	1.021	(0.075)	1.022	(0.075)
Constant	0.064***	(0.469)	0.063***	(0.524)	0.065***	(0.429)	0.095***	(0.498)
McFadden's R^2	0.198		0.200		0.198		0.200	
Log-likelihood	–891 140.568		–889 674.482		–891 140.568		–889 674.482	

Source: EFG Family and Generations Survey (2013). Weighted data by wtelpers.
Notes: RRR = relative risk ratios; S.E. = standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

if their level of education is medium (for both men and women), and only in the case of immigrant women married to native men, when both partners are highly educated. Finally, a high chance of mixed marriage is also observed for couples in which the immigrant wife has medium education, while the native husband has higher education (i. e., the opposite of status-caste exchange, but in alignment with traditional gender role expectations). All in all, these additional results uphold the limited evidence of exchanges between partners' educational and ethnic prestige occurring in mixed marriages in Switzerland.

Furthermore, we anticipated substantial inter-origin group differences, with higher

Figure 1 Predicted probabilities of having a native (versus same-origin) spouse among immigrant men and women, by educational constellations (95% confidence interval)



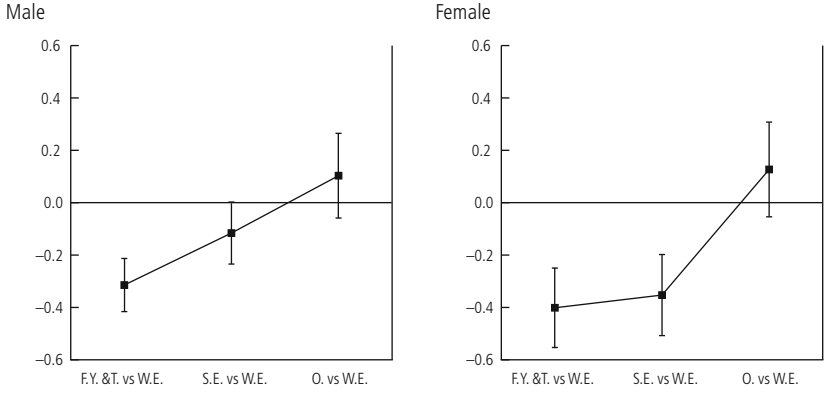
Notes: R = respondent (immigrant), P = partner (native).
The predicted probability for mixed unions involving a low-educated immigrant man and a high-educated native woman is 0 given the lack of such unions among observed cases.
Based on a multinomial logistic regression model of type of marriage (endogamous as baseline category) with an interaction between gender and educational constellations, controlling for origin group, generation type, birth cohort, age at marriage, spouses' age difference, whether married post-migration, whether previously married, linguistic region, and number of children in household.

educated immigrants from Former Yugoslavia and Turkey expected to be less likely to marry down when partnering a native, compared to Western Europeans, particularly among women. To better assess and visualize the hypothesized differences, Figure 2 contrasts the predicted probabilities of having a native spouse (versus a same-origin one) among immigrant men and women marrying down by group of origin. If the 95% confidence interval does not cross the 0 reference line, then the difference between origin groups is significant. We notice that compared to Western European

immigrants, those from former Yugoslavia and Turkey are significantly less likely to marry down, irrespective of their gender,[6] when having a native spouse. This confirms our initial expectation according to which relatively higher education among this particular immigrant group is a poor signal of success in the marriage market and is of little use in increasing intermarriage chances. Also as expected, Southern Europeans hold an intermediate position, being less likely to engage in status-caste exchange than the Western Europeans (the contrast being significant for women only), but more likely so than ex-Yugoslavs and Turks.[7]

We also put forward the hypothesis that status-caste exchange would be more apparent

Figure 2 Origin group contrasts of predicted probabilities of having a native (versus same-origin) spouse among immigrant men and women marrying down (95% confidence interval)



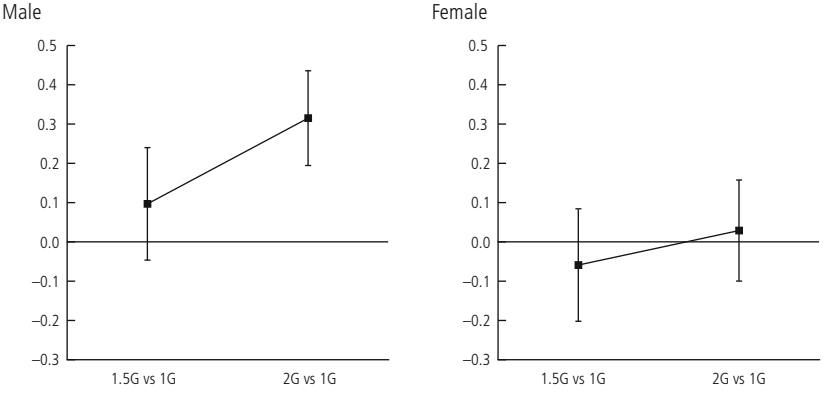
Notes: F. Y. & T. = former Yugoslavs and Turks, W. E. = Western Europeans, S. E. = Southern Europeans, O. = others.
Based on a multinomial logistic regression model of type of marriage (endogamous as baseline category) with an interaction between educational sorting, gender, and immigrant group, controlling for respondent's education, generation type, birth cohort, age at marriage, spouses' age difference, whether married post-migration, whether previously married, linguistic region, and number of children in household.

among subsequent generations of immigrants than those from the first generation. Figure 3 indicates that this is the case particularly for male immigrants belonging to the second generation. Immigrant women from the second generation are only slightly more likely to marry down compared to first generation women, but the difference is not significant. We also do not observe a significant contrast between 1.5 generation and first generation immigrants.

6 As anticipated, the contrast is slightly larger for women than for men, but the difference between genders is non-significant.

7 The contrast is significant for men only, as additional analyses with Southern Europeans as reference category indicate.

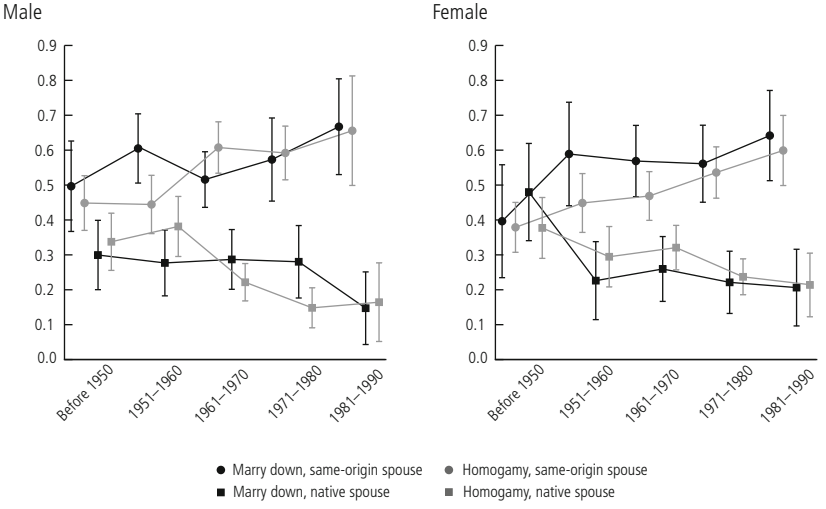
Figure 3 Generation type contrasts of predicted probabilities of having a native (versus same-origin) spouse among immigrant men and women marrying down (95% confidence interval)



Notes: 1G = first generation, 1.5G = 1.5 generation, 2G = second generation.
Based on a multinomial logistic regression model of type of marriage (endogamous as baseline category) with an interaction between educational sorting, gender, and generation type, controlling for, respondent's education, immigrant group, birth cohort, age at marriage, spouses' age difference, whether married post-migration, whether previously married, linguistic region, and number of children in household.

Finally, we contended that, with increasing returns on education and rising immigrant populations over the years, better trained younger cohorts of immigrants would prefer to marry a similarly educated same-origin partner than trade down on education for the ethnic advantage of a native spouse. To investigate these specific inter-cohort difference, we plotted predicted probabilities of having a native or a same-origin spouse by birth cohort among immigrant men and women that either marry down or homogamously (Figure 4). The graph shows that couples with both ethnic and educational positive sorting (i. e., having a same-origin spouse with a similar level of education) are indeed more likely to be seen among younger generations, to the detriment of mixed couples in which the immigrant spouse is more educated than the native one. The results hold for both men and women. A supplementary graph (not shown here) plots cohort-specific contrasts of predicted probabilities of having a native spouse among immigrants marrying down. It shows that the youngest cohort of immigrant men (i. e., born in the 80s) is significantly less likely to marry down when pairing with a native in comparison to most older cohorts, whereas the youngest cohort of immigrant women is only significantly less likely to exchange higher education for ethnic status, compared to the oldest cohort (i. e., those born before 1950). Therefore, the lower probability of marrying down in intermarriage among younger immigrants is part of a recent trend for men, and a longer on-going trend for women.

Figure 4 Predicted probabilities of having a native or a same-origin spouse among immigrant men and women marrying down or homogamously, by birth cohort (95% confidence interval)



Notes: Based on a multinomial logistic regression model of type of marriage (endogamous as baseline category) with an interaction between educational sorting, gender, and birth cohort, controlling for respondent's education, immigrant group, generation type, age at marriage, spouses' age difference, whether married post-migration, whether previously married, linguistic region, and number of children in household.

5 Conclusion and discussion

In this study we inquired whether higher educational credentials could operate as instrument of immigrant integration in the marriage market of a country known for its traditional gender values, and its large share of highly skilled immigrant workers. Based on the assumptions of the status-caste exchange theory (Davis 1941; Merton 1941) and looking at prevailing marriages reported in the 2013 Family and Generations Survey data set, we proposed that better educated immigrants are more likely to match with partners belonging to the native majority group because they can compensate for their lower ethnic/ nativity status with their educational status advantage. We also explored this hypothesis across gender, immigrant group, generation type, or cohort group.

The evidence against status-caste exchange in marriages between an immigrant and a Swiss native partner aligns with studies contesting the legitimacy of such theoretical view (e. g., Rosenfeld 2005), particularly outside of the U.S. (e. g., Hou and Miles 2008). The few encounters in which trading between a partner's education and the other's ethnic advantage do seem to occur are those between a highly

educated immigrant and a medium educated native. Marital unions in which the immigrant spouse is medium educated and the native spouse has lower education are not equally probable. This shows that the crossing of educational boundaries in ethnic mixing in Switzerland is likely to result only when the distance between partners' educational levels is not too large, and only when the immigrant partner has high educational credentials. For neither immigrant men, nor immigrant women, high-level education does not increase the chances of being married to a native with low education with whom to barter "status" for "caste." The advantages that could result from marrying a native partner do not seem to justify the crossing of such large educational gap. This undermines an inherent assumption within the status-caste exchange theory, which asserts that "whiteness" (in the U.S.) and native origin (in the European context) prevail as utmost preference on the marriage market, and that given the opportunity, being matched to a majority member would be an incontestable first choice. Our results illustrate that highly skilled immigrants would rather follow pathways towards integration that occur outside the confines of (inter)marriage with Swiss natives if the educational distance between partners is too great. The findings thus refute the status-caste exchange theory in its classical form (i. e., the highly educated minority member trading status for the "caste" advantage of the lower educated majority member) and propose a downplayed version of status-caste exchange, in which trading is more likely to happen with a medium educated native partner.

The reason behind status-caste exchange occurring in marriages between highly educated immigrants and medium educated natives might lie in the marginal distribution of education in the population. In Switzerland graduating from programmes at the upper secondary level is highly common, while relatively fewer people are just with a low level of education or hold a tertiary education. In addition, Switzerland has one of the highest employment rates among OECD countries for 25–34 year-olds with vocational training (OECD 2016). As a consequence, Swiss natives with medium education are not only more frequent potential candidates on the marriage market, but also possess a relatively high socioeconomic status. Furthermore, the difference in employment rate between the highly educated and the medium educated is much smaller compared to the differential between the medium educated and the lower educated (ib.). This could also justify why status-caste exchange is observed between the highly educated migrants and the medium educated natives, and not between the medium educated migrants and the low educated natives.

There are also important origin group differences in the educational sorting of intermarriage, which echo the ethnic hierarchization broadly observed in the Swiss marriage market (Potarca and Bernardi 2016). Western Europeans, who are more culturally similar and whose qualifications fit the Swiss labour market better (Lagana et al. 2014), are more prone to marry down, particularly women, in comparison to both Southern Europeans and immigrants from ex-Yugoslavia and Turkey. This pos-

sibly occurs given that in their context of origin, hypogamous couples are no longer exceptional or stigmatized (e. g., Bouchet-Valat 2015; Grow and van Bavel 2015). The higher-educated immigrants from former Yugoslavia and Turkey are the least likely to marry down when marrying a native. There are two possible explanations that could shed light on the partnering practices of these immigrant minorities. On the one hand, as we hypothesised, education in this group may simply not constitute an advantage on the marriage market because it does not translate into sufficient labour market returns to allow for a status-caste exchange. A lower educated native would not gain from marrying a higher educated immigrant that is more culturally distant and at the same time cannot compensate such distance with economic or social status advantages. On the other hand, a higher educated ex-Yugoslav or Turk may represent only a small and select number within a group that is usually reported to show a lower average level of education compared to all other immigrant groups in Switzerland (Liebig et al. 2012). Compared to immigrants belonging to a mostly highly educated group (e. g., Western Europeans), the meaning of having high educational credentials could thus be different for well-trained ex-Yugoslavs or Turks, who might hold an elite status within their group. This position may deter them from compromising on cultural distance by marrying down to a native, and instead choose a co-ethnic spouse with a comparable level of education. Future research could try to directly test these assumptions by accounting for the marginal distribution of education across groups.

The investigation of differences across generation type confirmed that second generation immigrants are more likely to marry down when intermarrying compared to the first generation, suggesting that their better integration translates into higher education acting as a better signal of success. Nonetheless, this finding only holds for men. A supplementary analysis looking at the full spectrum of educational sorting among second generation women shows that the pairings that are more likely to lead to mixed marriages are those between second generation immigrant women matched to better educated native men. These marriage configurations reproduce more closely the educational sorting characterizing Swiss partnerships (Branger 2014): women marring upward, and men marrying downward. A better integration therefore means conformity towards a rather conservative hypergamic pairing among spouses. It is an open question whether educational hypogamy would spread in Switzerland as it has in other Western countries (Esteve et al. 2013; Schwartz and Mare 2005), or whether such tendency will be driven by first generation immigrant groups, who are more likely to engage in such coupling (in either endogamous or exogamous arrangements). In the context of conservative family practices and policies, Swiss immigrants may play the role of innovators introducing non-normative partnership practices. To answer this inquiry, future studies should also compare immigrants' educational matching in endogamous unions to those of natives' endogamous unions.

Our results also show that younger cohorts of better-educated migrants progressively withdraw from the culturally costly mixed marriage choice, and prefer to marry an in-group mate that shares their level of education. We also notice that whereas marrying down to a lesser-educated same-origin partner is more likely among the youngest cohort of both immigrant men and women, having a lower educated native spouse is less likely. Being willing to trade down on education in endogamous arrangements as opposed to exogamous marriages illustrates that as opposed to older cohorts, for younger ones, it is more challenging to cross both types of boundaries (i. e., ethnic origin and education) in partner selection. In line with the previous discussion, we strongly contend that it is migrant-migrant marriages among younger cohorts that are driving demographic change towards normalizing hypogamy, while intermarriages seem to persistently discourage non-traditional educational sorting.

There are certain limitations to our study that require comment. First, we acknowledge the complexity of factors influencing marital decisions and the possibility that the patterns observed in this study do not necessarily reflect the genuine preferences of higher educated immigrants, as they could also conceal the influence of opportunities in the marriage market or the preferences of the native Swiss for traditional and endogamous partnerships. Nevertheless, we consider the investigation of cohort differences as a partial indirect signal of how increased opportunities for in-group contact in recent years steered higher educated immigrants away from intermarriages in which they would marry down. Furthermore, both attitudinal and behavioural research indicates that younger cohorts of Swiss natives are increasingly open towards intermarrying (Carol 2013; Potarca and Bernardi 2016), meaning that our findings are more likely a manifestation of the endogamous preferences of well-educated immigrants than those of natives.

Second, the sample size did not allow us to explore detailed educational constellations for each origin group and by gender, or inter-cohort differences by origin group. Against the background of increasing marital unions formed across ethnic/nativity lines, we hope data collected in the future to include a larger size of mixed marriages in general. The size of our sample constrained us to use broad rather than detailed educational and origin group categories. With respect to educational qualifications, we also did not possess information on whether first generation immigrant respondents (i. e., the ones more often having foreign education) were declaring an educational level that reflects credentials achieved in their country of origin, or the highest degree recognized in Switzerland. Nevertheless, given that the item measuring the highest educational level does not specifically ask respondents with foreign background to translate their degree to the Swiss educational system, we assume that the answer reflects the highest educational credential in general, regardless of where this was obtained. With reference to the categorization of origin group, we acknowledge that grouping respondents from Ex-Yugoslavia and Turkey into a single category does not account for their heterogeneous background; yet, these immigrant

groups are often treated as one group both in research and in the public discourse (e. g., Liebig et al. 2012). For the sake of comparability with previous studies, and to avoid issues related to small cell size (e. g., only $n = 7$ Turkish respondents are in an exogamous marriage with a native), we also align to this practice.

Third, as previously hinted to, given the use of cross-sectional data, we were unable to test whether pre-marriage education or actual economic success measured in earnings' level or occupational prestige causally led to the observed (inter)marital choices. Fourth, we did not have data on pre-marriage language skills to be included as a means to control with more precise indicators the cultural distance between origin groups and Swiss natives. The inclusion of a variable measuring language difficulty during the interview (as assessed by the interviewer) in supplementary analyses does not however alter our current findings.

Despite caveats, our study and its findings raise the issue of better understanding the role of cultural (mis)match in mixed unions where the combination of educational levels vary between spouses. Finally, as an additional recommendation for future research, we encourage the examination of educational sorting in intermarriage for other outcomes, such as marital satisfaction or risk of marital dissolution. Future scholarship could therefore seek to understand if the rarely observed hypogamous intermarriages are also linked to greater relationship dysfunction, or a greater probability of divorce.

6 References

Alba, Richard. 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.

Alba, Richard and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge, MA: Harvard University Press.

Becker, Gary S. 1981. *A Treatise on the Family*. Cambridge: Harvard University Press.

Blossfeld, Hans-Peter. 2009. Educational Assortative Marriage in Comparative Perspective. *Annual Review of Sociology* 35: 513–530.

Bouchet-Valat, Milan. 2015. Plus diplômées, moins célibataires. L'inversion de l'hypergamie féminine au fil des cohortes en France. *Population* 70(4): 705–730.

Branger, Katja. 2014. Nombre croissant de couples où la femme a un niveau de formation égal ou supérieur à celui de l'homme. Newsletter Démos. Bulletin d'information démographique 4/2014: 8–10.

Buchmann, Claudia and Thomas A. DiPrete. 2006. The Growing Female Advantage in College Completion: The Role of Family Background and Academic Achievement. *American Sociological Review* 71(4): 515–541.

Carol, Sarah. 2016. Like Will to Like? Partner Choice Among Muslim Migrants and Natives in Western Europe. *Journal of Ethnic and Migration Studies* 42(2): 261–276.

Carol, Sarah. 2013. Intermarriage Attitudes Among Minority and Majority Groups in Western Europe: The Role of Attachment to the Religious In-Group. *International Migration* 51(3): 67–83.

Choi, Kate H., Marta Tienda, Deborah Cobb-Clark, and Mathias Sinning. 2012. Immigration and Status Exchange in Australia and the United States. *Research in Social Stratification and Mobility* 30(1): 49–62.

Davis, Kingsley. 1941. Intermarriage in Caste Societies. *American Anthropologist* 43(3): 376–395.

Dribe, Martin and Christer Lundh. 2011. Cultural Dissimilarity and Intermarriage. A Longitudinal Study of Immigrants in Sweden 1990–2005. *International Migration Review* 45(2): 297–324.

Epple, Ruedi, Martin Gasser, Sarah Kersten, Michael Nollert, and Sebastian Schief. 2015. Parenthood and Employment: The Impact of Policies and Culture on Gender Inequality in Switzerland. *Equality, Diversity and Inclusion: An International Journal* 34(2): 141–154.

Esteve, Albert, Joan García-Román, and Iñaki Permanyer. 2012. The Gender-Gap Reversal in Education and Its Effect on Union Formation: The End of Hypergamy? *Population and Development Review* 38(3): 535–546.

Fibbi, Rosita, Mathias Lerch, and Philippe Wanner. 2007. Naturalisation and Socio-Economic Characteristics of Youth of Immigrant Descent in Switzerland. *Journal of Ethnic and Migration Studies* 33(7): 1121–1144.

Fibbi, Rosita, Philippe Wanner, Dusan Ugrina, and Ceren Topgul. 2015. *The New Second Generation in Switzerland: Youth of Turkish and Former Yugoslav Descent in Zurich and Basel*. Amsterdam: Imiscoe Research.

Fu, Vincent Kang. 2001. Racial Intermarriage Pairings. *Demography* 38(2): 147–159.

González-Ferrer, Amparo. 2006. Who Do Immigrants Marry? Partner Choice Among Single Immigrants in Germany. *European Sociological Review* 22(2): 171–185.

Gordon, Milton M. 1964. *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.

Grow, André and Jan Van Bavel. 2015. Assortative Mating and the Reversal of Gender Inequality in Education in Europe: An Agent-Based Model. *PLOS ONE* 10(6): e0127806.

Guetto, Raffaele and Davide Azzolini. 2015. An Empirical Study of Status Exchange Through Migrant/Native Marriages in Italy. *Journal of Ethnic and Migration Studies* 41(13): 2149–2172.

Gullickson, Aaron. 2006. Education and Black-White Interracial Marriage. *Demography* 43(4): 673–689.

Gullickson, Aaron and Vincent Kang Fu. 2010. Comment: An Endorsement of Exchange Theory in Mate Selection. *American Journal of Sociology* 115(4): 1243–1251.

Gullickson, Aaron and Florencia Torche. 2014. Patterns of Racial and Educational Assortative Mating in Brazil. *Demography* 51(3): 835–856.

Halpin, Brendan and Tak Wing Chan. 2003. Educational Homogamy in Ireland and Britain: Trends and Patterns. *The British Journal of Sociology* 54(4): 473–495.

Hamil-Luker, Jenifer. 2005. Women's Wages: Cohort Differences in Returns to Education and Training Over Time. *Social Science Quarterly* 86(s1): 1261–1278.

Hausmann, Ricardo, Laura D. Tyson, and Saadia Zahidi. 2009. *The Global Gender Gap Report*. Cologny/Geneva: World Economic Forum.

de Hauw Yolien, Andé Grow, and Jan van Bavel. 2015. The Reversal of the Gender Inequality in Education and Assortative Mating in Europe. Paper presented at the *Population Association of America Annual Meeting*. San Diego, U.S., April 30-May 2, 2015.

Hofstede, Geert. 2001. *Culture's Consequences, Comparing Values, Behaviors, Institutions, and Organizations Across Nations.* Thousand Oaks CA: Sage Publications.

Hou, Feng and John Myles. 2008. The Changing Role of Education in the Marriage Market: Assortative Marriage in Canada and the United States Since the 1970s. *Canadian Journal of Sociology* 33(2): 337–366.

Hou, Feng. 2013. Interracial Marriage and Status-Caste Exchange in Canada and the United States. *Ethnic and Racial Studies* 36(1): 75–96.

Jiménez, Tomás R. 2008. Mexican Immigrant Replenishment and the Continuing Significance of Ethnicity and Race. *American Journal of Sociology* 113(6): 1527–1567.

Kalmijn, Matthijs. 2010. Comment: Educational Inequality, Homogamy, and Status Exchange in Black-White Intermarriage. *American Journal of Sociology* 115(4): 1252–1263.

Kalmijn, Matthijs. 1998. Intermarriage and Homogamy: Causes, Patterns, Trends. *Annual Review of Sociology* 24: 395–421.

Kalmijn, Matthijs. 1994. Assortative Mating by Cultural and Economic Occupational Status. *American Journal of Sociology* 100(2): 422–452.

Kalmijn, Matthijs. 1993. Trends in Black/White Intermarriage. *Social Forces* 72(1): 119–146.

Kalmijn, Matthijs and Frank van Tubergen. 2007. Ethnic Intermarriage in the Netherlands: Confirmations and Refutations of Accepted Insights. *European Journal of Population / Revue Européenne de Démographie* 22(4): 371–397.

Kanji, Shireen and Sandra Hupka-Brunner. 2015. Young Women's Strong Preference for Children and Subsequent Occupational Gender Segregation: What Is the Link? *Equality, Diversity and Inclusion: An International Journal* 34(2): 124–140.

Kohler, Pierre. 2012. Three Essays on the Economic and Cultural Integration of Migrants in Switzerland. MPRA Paper 38129. https://mpra.ub.uni-muenchen.de/38129/ (14.02.2017).

Laganà, Francesco, Julien Chevillard, and Jacques-Antoine Gauthier. 2014. Socio-Economic Background and Early Post-Compulsory Education Pathways: A Comparison Between Natives and Second-Generation Immigrants in Switzerland. *European Sociological Review* 30(1): 18–34.

Lanzieri, Giampaolo. 2012. Mixed Marriages in Europe, 1990–2010. Pp. 81–121 in *Cross-Border Marriage: Global Trends and Diversity,* edited by Doo-Sub Kim. Seoul: Korea Institute for Health and Social Affairs.

Levy, René, Eric Widmer, and Jean Kellerhals. 2002. Modern Family or Modernized Family Traditionalism? Master Status and the Gender Order in Switzerland. *Electronic Journal of Sociology* 6(4): 6.

Lieberson Stanley and Mary C. Waters. 1988. *From Many Strands: Ethnic and Racial Groups in Contemporary America*. New York: Russell Sage Foundation.

Liebig, Thomas, Sebastian Kohls, and Karolin Krause. 2012. The Labour Market Integration of Immigrants and Their Children in Switzerland. *OECD Social, Employment and Migration Working Papers* 128. http://www.oecd-ilibrary.org/social-issues-migration-health/the-labour-market-integration-of-immigrants-and-their-children-in-switzerland_5k9fjjs1m2d2-en (14.02.2017).

Lievens, John. 1998. Interethnic Marriage: Bringing in the Context Through Multilevel Modelling. *European Journal of Population / Revue Européenne de Démographie* 14(2): 117–155.

Maffioli, Dionisia, Anna Paterno, and Giuseppe Gabrielli. 2014. International Married and Unmarried Unions in Italy: Criteria of Mate Selection. *International Migration* 52(3): 160–176.

Mare, Robert D. 1991. Five Decades of Educational Assortative Mating. *American Sociological Review* 56(1): 15–32.

Merton, Robert K. 1941. Intermarriage and the Social Structure: Fact and Theory. *Psychiatry* 4(3): 361–374.

Muttarak, Raya and Maria Rita Testa. (2015). Trends, Patterns, and Determinants of Interreligious Partnerships in Austria (1971–2001). Pp. 117–135 in *Yearbook of International Religious Demography* 2015, edited by Brian J. Grim, Todd M. Johnson, Vegard Skirbekk, and Gina A. Zurlo. Leiden/Boston: Brill.

OECD. 2016. *Switzerland, in Education at a Glance 2016: OECD Indicators*. Paris: OECD Publishing.

OECD. 2015. *Indicators of Immigrant Integration 2015: Settling In.* Paris: OECD Publishing.

Oppenheimer, Valerie K. 1988. A Theory of Marriage Timing. *American Journal of Sociology* 94(3): 563–591.

Ossipow, Laurence and Barbara Waldis. 2003. Couples Binationaux et Sociétés Multiculturelles. Pp. 375–403 in *Les migrations et la Suisse: Résultats du Programme National de Recherche Migrations et Relations Interculturelles,* edited by Hans-Rudolf Wicker and Rosita Fibbi. Zurich: Seismo.

Potarca, Gina and Laura Bernardi. (2016). Is There a Retreat From Intermarriage? Evidence From a Traditional Immigrant Country. Paper presented at the *European Population Conference (EPC).* Mainz, Germany, August 31, September 3, 2016.

Qian, Zhenchao. 1997. Breaking the Racial Barriers: Variations in Interracial Marriage Between 1980 and 1990. *Demography* 34(2): 263–276.

Qian, Zhenchao and Daniel T. Lichter. 2007. Social Boundaries and Marital Assimilation: Interpreting Trends in Racial and Ethnic Intermarriage. *American Sociological Review* 72(1): 68–94.

Riaño, Yvonne. 2011. "He's the Swiss Citizen, I'm the Foreign Spouse": Binational Marriages and the Impact of Family-Related Migration Policies on Gender Relations. Pp. 265–283 in *Gender, Generations and the Family in International Migration*, edited by Albert Kraler, Eleonore Kofman, Martin Kohli, and Camille Schmoll. Amsterdam: Amsterdam University Press.

Riaño, Yvonne and Nadia Baghdadi. 2007. Understanding the Labour Market Participation of Skilled Immigrant Women in Switzerland: The Interplay of Class, Ethnicity and Gender. *Journal of International Migration and Integration* 8(2): 163–183.

Rosenfeld, Michael J. 2010. Still Weak Support for Status-Caste Exchange: A Reply to Critics. *American Journal of Sociology* 115(4): 1264–1276.

Rosenfeld, Michael J. 2005. A Critique of Exchange Theory in Mate Selection. *American Journal of Sociology* 110(5): 1284–1325.

Schoen, Robert and Yen-hsin A. Cheng. 2006. Partner Choice and the Differential Retreat From Marriage. *Journal of Marriage and Family* 68(1): 1–10.

Schoen, Robert and John Wooldredge. 1989. Marriage Choices in North Carolina and Virginia, 1969–71 and 1979–81. *Journal of Marriage and the Family* 51(2): 465–481.

Schofer, Evan and John W. Meyer. 2005. The Worldwide Expansion of Higher Education in the Twentieth Century. *American Sociological Review* 70(6): 898–920.

Schwartz, Christine R. and Robert D. Mare. 2005. Trends in Educational Assortative Marriage From 1940 to 2003. *Demography* 42(4): 621–646.

Schwartz, Christine R. and Hongyun Han. 2014. The Reversal of the Gender Gap in Education and Trends in Marital Dissolution. *American Sociological Review* 79(4): 605–629.

Trilla, Clara Cortina, Albert Esteve, and Andreu Domingo. 2008. Marriage Patterns of the Foreign-Born Population in a New Country of Immigration: The Case of Spain. *International Migration Review* 42(4): 877–902.

Wanner, Philippe, Mathias Lerch, and Rosita Fibbi. 2005. *Familles et Migrations. Le Rôle de la Famille sur les Flux Migratoires.* Neuchâtel: Office Fédéral de la Statistique.

Yüksel-Kaptanoğlu, İlknur and Banu Akadli Ergöçmen. 2014. Early Marriage Trends in Turkey, 1978–2008. *Journal of Family Issues* 35(12): 1707–1724.

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Véronique Jaquier, Joëlle Vuille

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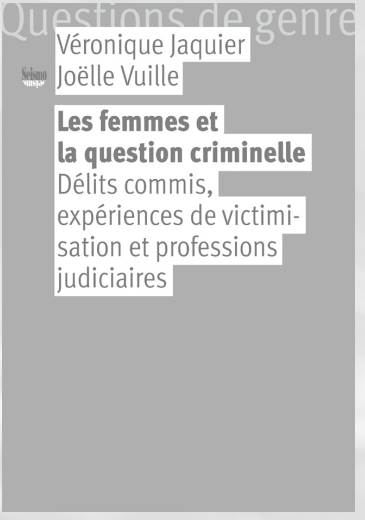

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