Article

Chinese Journal of Sociology

Chinese Journal of Sociology
2020, Vol. 6(4) 521–546
© The Author(s) 2020
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/2057150X20957422
journals.sagepub.com/home/chs
SAGE

Mate selection among online daters in Shanghai: Why does education matter?

Siqi Xiao and Yue Qian

Abstract

Prior studies of assortative mating have shown that people tend to marry someone of the same educational level, but why individuals value a mate's education and the process of mate selection itself remain a black box in predominantly quantitative studies. With online dating's growing popularity, research needs to examine how online daters navigate dating markets given educational preferences they hold and "freedom of choice" offered by technologies. This study aims to investigate individuals' educational preferences and how educational preferences shape mate selection processes in online dating. In-depth interviews were conducted with 29 university-educated, heterosexual online daters (13 men, 16 women) in Shanghai. Data were analyzed through a combination of abductive and inductive coding strategies. Results showed that both educational levels and university prestige were primary mate selection criteria in online dating. Both genders considered educational sorting essential for achieving cultural matching, but only men emphasized the importance of spouse's education for their future children's education. Furthermore, guided by their educational preferences, online daters deliberately chose dating platforms and screened dating candidates. We argue that online daters' emphasis on university prestige is rooted in China's hierarchical higher education system, and gendered rationales for educational preferences stem from ingrained gender roles in Chinese families. Seemingly "personal" preferences are therefore shaped by cultural norms and institutional contexts. Moreover, results suggest that online dating may reinforce social closure among China's educational elites.

Department of Sociology, University of British Columbia, Canada

Corresponding author:
Yue Qian, Department of Sociology, University of British Columbia, 6303 NW Marine Drive, Vancouver, BC, Canada V6T 1Z1.
Email: yue.qian@ubc.ca

Keywords
China, qualitative methods, marriage and family, sex and gender

Research on educational assortative mating has shown that people tend to marry someone of the same educational level (Blossfeld, 2009; Kalmijn, 1998; Schwartz, 2013). Because education is a fundamental structure of social hierarchy, high levels of educational assortative mating indicate rigid group boundaries and strong social closure (Lichter and Qian, 2019). Using mostly quantitative data, prior studies conceptualized assortative mating outcomes to be influenced by both individual preferences and structural opportunities (Lichter and Qian, 2019; Schwartz, 2013). For example, educational institutions serve as marriage markets where similarly educated people can meet and develop romantic relationships (Blossfeld, 2009). Traditional meeting venues, such as workplaces and neighborhoods, where individuals are often sorted by education, can also lead to educationally homogamous partnerships (England, 2004; McClendon et al., 2014). While quantitative studies can shed light on the patterns and determinants of assortative mating, qualitative research is needed to better understand why individuals value education in a potential partner and how they search for partners given the educational preferences they hold.

In addition, most of the assortative mating literature has focused on marital sorting on educational levels and classified all college graduates as one educationally homogeneous group (e.g. Blossfeld, 2009; Han, 2010; Qian and Qian, 2014). Nevertheless, heterogeneity remains within college graduates as a group. The different types of tertiary education, such as university prestige, comprise horizontal dimensions of higher education (Gerber and Cheung, 2008: 300). With the expansion of higher education, the horizontal dimensions of tertiary education are found to become more important in shaping inequality in labor market outcomes (Gerber and Cheung, 2008; Hartog et al., 2010; Rivera, 2011). It remains an open question whether and how horizontal dimensions of higher education affect mate selection and martial outcomes.

Drawing on in-depth interviews with 29 university-educated, heterosexual online daters in Shanghai (a highly industrialized Chinese city), this study considers why people value education in a mate and how mate preferences shape the processes of partner searches. We found that online daters placed a high value on a potential mate's university prestige, which we argue was rooted in China's hierarchical higher education system. The rationales for educational preferences were gendered in that only men stressed the importance of spouse's education for their children's future, a gender difference that stemmed from ingrained gender roles in Chinese families. Guided by their educational preferences, online daters deliberately chose dating platforms and screened dating candidates. Thus, status homogamy was likely reinforced, even when meeting opportunities in cyberspace were less influenced by third parties or residential, school and occupational segregation (Rosenfeld and Thomas, 2012; Skopek et al., 2011). Situated in a society where traditionality and modernity coexist (Ji, 2015a; Yeung and Hu, 2016), this study provides an exemplary case for illustrating how seemingly "personal" dating preferences are deeply shaped by cultural norms and institutional contexts. It also highlights the implications of horizontal stratification in higher education for mate selection and suggests that online dating may reinforce social closure among educational elites in urban China.

Understanding mate selection in a modern–traditional mosaic

A large body of research on educational assortative mating draws on the modernization theory (see Blossfeld, 2009; Schwartz, 2013 for reviews). In the course of modernization, the influence of third parties (especially parents) over mate selection declines (Smits et al., 1998). At the same time, individuals move away from arranged marriage, familism and gender hierarchy, and increasingly favor individual autonomy, freedom of choice, romantic love and gender equality (Smits et al., 1998; Thornton and Young-DeMarco, 2001). As a result, to the extent that "love is blind", at higher levels of industrialization, individuals are more open to marrying someone from a different educational background (Blossfeld, 2009; Smits et al., 1998).

However, the modernization theory has given little attention to "the clashes, resistance, modifications, and forms of adaption that occur when the traditional meets the modern" (Ji, 2015a: 1061). In East Asia in particular, conflicting forces of rapid modernization and the continuing Confucian patriarchal tradition coexist, constituting a modern–traditional mosaic context (Ji, 2015a, 2015b). In this mosaic context, on the one hand, Chinese women have surpassed men in college enrollment (Yeung, 2013), and many young people emphasize romantic love and individual agency in their search for a partner (Ji, 2015a; To, 2013). On the other hand, although the acceptance of romantic attitudes towards love is on the rise, realistic attitudes and practical concerns remain prevalent among highly educated people (Hu and Wu, 2019). In addition, changes in mate selection do not correspond to structural changes in men's and women's educational attainment such that women still tend to marry someone who is more educated than themselves (Qian and Qian, 2014). Meanwhile, the expectation that the husband should be the primary earner in the family and the wife should be responsible for housework and childcare remains firmly in place (Qian and Li, 2020; Qian and Qian, 2015).

Drawing on Ji's (2015a) modern–traditional mosaic framework, this study illuminates how traditional and modern forces intertwine to shape individuals' mate selection preferences and processes in Shanghai. Shanghai is the largest city in China, with a population of over 24 million in 2017. As one of the first 5 cities that were open to foreign trade almost 180 years ago, Shanghai is the most westernized city on the Chinese mainland (Ji, 2015a). The latest census indicates that among all major cities, Shanghai has one of the highest shares of college-educated residents (Hu and Qian, 2016). In the process of higher education expansion (hence modernization), both genders attach greater importance to a spouse's educational attainment; educational homogamy has increased where university graduates, in particular, increasingly marry each other rather than marry the less-educated (Hu and Qian, 2016).

Prior research found that highly educated women in Shanghai demonstrated a "mix of traditional family values fused with a Western modern belief" (Ji, 2015a: 1071). They embraced a modern, individualistic view that stressed romantic love, companionship and personal growth in intimate relationships, but meanwhile endorsed the traditional family arrangement in which the wife should make sacrifices to prioritize the husband's career (Ji, 2015a; To, 2013). We extend this line of research in two ways. First, we examine both men's and women's narratives to provide a fuller understanding of gender dynamics in mate selection under the modern–traditional mosaic. Second, we investigate how online daters use new technologies to navigate the Shanghai marriage market where traditionality and modernity coexist.

Online dating: A setting for studying mate selection

As in other countries (Rosenfeld and Thomas, 2012; Yu and Hertog, 2018), online dating has gained popularity in China. For instance, Jiayuan.com (a Chinese dating site, similar to Match.com) claims that the number of its users has increased from about 40,000 to 170,000,000 since its founding in 2003 (https://www.jiayuan.com/bottom/index.html). As a new technology, online dating typically symbolizes modernity, rationality and freedom of choice (Schmitz, 2017). Although there are no nationally representative data on the prevalence of Internet dating in the Chinese population, a recent study suggests that this new technology is more commonly adopted by younger and more educated people living in urban areas (Xia et al., 2014).[1] Online dating is seen as an ideal setting for studying mate preferences because online daters are less constrained by contact opportunities in everyday life and dating sites/apps minimize third-party control (Lichter and Qian, 2019; Rosenfeld and Thomas, 2012; Skopek et al., 2011).

Scholars conceptualize mate selection as a dynamic process shaped by both individual preferences and structural opportunities (Schwartz, 2013). As in searching for a job in the labor market, in their search for a mate in the marriage market, individuals usually set criteria for the minimally acceptable match (Oppenheimer, 1988). Structural factors that influence individuals' search for a mate include the pool of available partners in local marriage markets, third-party control, and changes in men's and women's economic roles in society (Lichter and Qian, 2019; Oppenheimer, 1988; Schwartz, 2013). For example, Oppenheimer (1988) posits that as women's employment and labor force attachment increase, men begin competing for highly educated women because men increasingly value a potential spouse's socioeconomic traits.

While extensive research has shown that traditional ways of meeting romantic partners (e.g. at school, in the workplace or through family and friends) often lead to similarities between partners (Kalmijn, 1998; Schwartz, 2013), research on how online dating affects mate selection is limited and inconclusive. Some past studies suggested that online dating facilitated partnering across social boundaries because it reduced third-party control and expanded users' dating pool to people outside their pre-existing social network (Potarca, 2017; Rosenfeld and Thomas, 2012). In contrast, other studies indicated that online dating might reproduce old wine in new bottles (Schmitz, 2017) in two ways: first, tailored marketing and algorithm-driven systems used by online dating companies created social segregation in cyberspace and fostered homogamous matches; second, personalized search engines and filter functions encouraged users to shop for someone who met their pre-existing mate-selection criteria (Finkel et al., 2012; Heino et al., 2010; Lee, 2016; Schwartz and Velotta, 2018; Skopek et al., 2011).

To date, research that assesses the role of online dating in mate selection has primarily used quantitative, meeting-online versus meeting-offline comparisons (e.g. Lee, 2016; Potarca, 2017; Rosenfeld and Thomas, 2012). Although this approach can show the impact of meeting venues on assortative mating outcomes, it does not reveal the underlying processes in online dating. How are individuals' decision-making processes in online dating guided by their mate preferences? How are these seemingly "personal" preferences shaped by cultural norms or institutional contexts? Examining the online dating process itself not only sheds light on mate selection in the Internet era, but also informs broader debates about the role of new technologies in reinforcing or ameliorating inequality in the intimate sphere.

Higher education in China

The role of education in shaping mate selection preferences and processes must be situated within China's cultural and institutional contexts associated with education (Wu, 2017). The significance of education is rooted in Chinese culture, as shown by the Confucian idea that "all pursuits are of low value; only studying the books is high" (Yu and Suen, 2005). Historically, the imperial examination system (*keju*) used education-based competition to promote meritocracy and social mobility regardless of social origins (Liu, 2016). Following this meritocratic tradition (Xie, 2016), contemporary higher education institutions rely primarily on *gaokao* (the National College Entrance Examination system) to select students (Liu, 2016). Since *gaokao* was resumed in 1977, most students must take *gaokao* to be admitted to universities. *Gaokao* scores have a decisive impact on students' access to elite universities (Hu and Vargas, 2015; Liu, 2016).

The Chinese government implemented a college expansion policy in 1999, with the annual college enrollment increasing from 1.0 million in 1998 to 6.3 million in 2009 (Yeung, 2013). Furthermore, the state has legitimized and institutionalized horizontal distinctions within higher education institutions through the "211"

Project and the "985" Project (Hu and Vargas, 2015; Shen, 2018). To build high-level universities, the Ministry of Education of China initiated the 211 Project in 1995 and invested in about 100 higher education institutions; in 1999, aiming to build world-class universities, the government launched the 985 Project and provided initial funding of 30 billion *Yuan* to about 30 universities (Shen, 2018; Zhang et al., 2013). In 2011, both the 985 Project and the 211 Project were closed to new universities, with a total of 39 985 universities and 112 211 universities (Shen, 2018; Zhang et al., 2013). Fudan University and Shanghai Jiao Tong University (Jiao Da), which were located in Shanghai and frequently mentioned by our respondents, are 2 examples of prestigious 985 universities and consistently rank among the top 10 Chinese universities. To be clear, a 985 university can also be a 211 university, but the reverse is not necessarily true. Generally, 211 universities are elite higher education institutions, and 985 universities are considered super-elite universities (Shen, 2018). The strategy of prioritizing a highly selective list of universities with generous funding has impacted and stratified the whole higher education system in China (Liu, 2016).

Combined with the state's classification of universities into "a hierarchy of selective tiers" (Loyalka et al., 2012: 287), a prestige-prioritized college admissions procedure embedded in the *gaokao* system has heightened horizontal distinctions within higher education institutions. Despite its regional and temporal variations, the Chinese college admissions procedure is largely a centralized matching process between colleges and students via *gaokao* and is executed sequentially across tiers in decreasing prestige (Chen and Kesten, 2019). To apply for universities, students are required to fill out an official university and field form, in which they list several choices of institutions (and fields of study in each institution) within each tier of universities (Liu, 2016). Elite universities, such as the 985 and 211 universities, fall into the first tier (*yiben*) and are given the first priority to choose and admit applicants who typically have the highest *gaokao* scores and have selected those universities as their first choice (Chen and Kesten, 2019). Second-tier (*erben*) universities are designated to recruit students nationwide and begin to select students after the first-tier matching process is finalized (Liu, 2016). Universities that are classified into the third tier (*sanben*) primarily recruit students provincially or regionally and start their admissions even later in the process (Liu, 2016). As a result of the highly institutionalized *gaokao* system and college admissions procedure, the relative ranking of universities and the hierarchical nature of the higher education system are deeply ingrained among Chinese people (at least those who have experienced *gaokao*).

Despite recent educational reforms aiming to eliminate disparities in matching priorities across different tiers of universities, horizontal stratification in higher education remains strong, and inequalities between 985/211 universities and non-211 universities are particularly stark (Wu, 2017). With the expansion of higher education, the prestige and ranking of higher educational institutions have become more important in determining labor market prospects (Hartog et al., 2010; Hu and Vargas, 2015). Extending prior research, which shows that institutional prestige is an effective signal to employers and produces economic inequality in the labor market (Gerber and Cheung, 2008; Rivera, 2011), this study examines the signaling effect and stratifying role of institutional prestige in the marriage market.

Data

We analyzed data from in-depth face-to-face interviews with 29 online daters in Shanghai. The interviews were conducted by the second author and a local researcher in June and July 2017. They posted recruitment advertisements on social media (mainly WeChat and Weibo, the two most popular social media platforms in China) and asked friends and colleagues to share the advertisements. Five respondents were recruited during the local researcher's participant observation in the events organized by a WeChat-based dating service. During the events, this researcher did not conceal her identity and immediately told each respondent about her purpose in attending. All interviews followed standard consent protocols, as approved by the research ethics board at the authors' institution.

Table 1 presents respondent characteristics at the time of interview. Our sample consists of 16 women and 13 men aged 25–39 years. Twenty-five respondents were never married, two were married and two were divorced. All respondents had at least a bachelor's degree. Although our respondents did not vary much by education level, they differed by the prestige of their alma mater. The diversity of university prestige in our sample was in fact generated without any intentional effort: We distributed our flyers as widely as possible for recruitment and did not set out to sample interviewees based on university prestige. The heterogeneity within the

Table 1. Sociodemographic characteristics of 29 respondents.

	Women ($N = 16$)	Men ($N = 13$)
Age		
25–29	10	6
30–34	4	6
35–39	2	1
Mean	30.24	29.62
Median	29	30
Marital status		
Never married	13	12
Married	2	0
Divorced	1	1
Educational level		
Bachelor's degree	9	8
Master's degree	6	5
Doctoral degree	1	0
Had higher education overseas	2	1

highly educated group turned out to be one of the most salient themes as the impact of horizontal differentiation in higher education on mate selection emerged from interview data.

Although online dating is often assumed to be "just for hookups" in public discourse, our respondents all reported that they were looking for a marriage partner, or at least a serious relationship, via online dating. To the best of our knowledge, there are no nationally representative data on motivations for using online dating in China. However, a 2019 study found that 70% of American singles were looking for a serious relationship and another study showed similar distributions of motivations for using online dating in Canada (Brym and Lenton, 2001; eHarmony, 2019). We suspect that an even higher share of Chinese people use online dating mainly to establish a serious relationship. In fact, even in the west, online dating is not "just for hookups" as is often assumed in public discourse. For example, more than a quarter of offline Tinder meetings led to committed relationships (Tinder is a popular dating app in the West that has a reputation for promoting hookups) (Timmermans and Courtois, 2018). Heterosexual US couples who met through online dating transition to marriage faster than other heterosexual couples (Rosenfeld, 2017). In short, given the type of relationship our respondents were looking for, our findings are more relevant for understanding the dynamics of Internet searching for marriage (rather than casual) partners, which we suspect is the main purpose of online dating in China.

During the semi-structured interviews, the respondents were asked about their sociodemographic characteristics, when and why they started using online dating, what they were looking for in potential partners, their online dating experiences (e.g. what platforms they used and why, with whom they met offline, interactions in offline meetings), their past relationships and their ideal future life. Interviews ranged from about 1 to 2.5 hours (mean = 1.5 hours). All the interviews were audio-recorded with the respondents' consent, and were later transcribed verbatim and checked for accuracy. Note that there was no question designed to elicit certain words from respondents. Particularly relevant to this study, the interviewers asked an open-ended question – "What were you looking for in potential partners?" – to gauge respondents' mate preferences. In fact, the salient theme regarding university prestige was not anticipated by the two researchers before they went into the field but rather emerged from the interviews.

Methods

After we read and familiarized ourselves with the data, we agreed upon the saliency of education in the narratives and decided to pursue education in mate selection as the main story for this study. Combining the abductive and inductive approaches, we used a three-stage systematic coding method to analyze the data. In the first stage, we conducted line-by-line open coding (Charmaz, 2014). We identified prominent themes across transcripts (e.g. "relatively good universities") and salient codes that signified key theoretical concepts, such as

985 and 211 as indicators of university prestige. In the second stage, we conducted focus coding and constant comparison (Charmaz, 2014), with a particular focus on respondents' educational preferences for potential partners. Meanwhile, we wrote down respondent-level and cross-case memos, and highlighted the text that triggered "'aha' moments in understanding the data" (Deterding and Waters, 2018: 20). The first two stages continued up to the point of inductive thematic saturation (Saunders et al., 2018). In the third stage, we created an Excel sheet to document relevant codes, detailed descriptions and original excerpts by themes and then connected them to respondents' stated mate preferences and demographic attributes. This approach ensured a more reliable cross-case analysis when we were identifying key theoretical linkages and increased the validity and transparency of the analysis (Deterding and Waters, 2018). It also allowed us to visually situate respondents' mate preferences within contexts (e.g. their backgrounds and past experiences), which helped to illuminate how individuals' preferences might be shaped by their social positions. Although the main story pertained to education, we kept the codes regarding all mate preferences (not only education but also age, income, appearance, etc.) to maintain a fuller understanding of each respondent.

At the writing stage, we took an iterative and abductive approach to cross-checking data and codes. We assessed intercoder reliability by revisiting excerpts and transcripts independently and then comparing codes to ensure agreement on data interpretation. When disagreement occurred, we reexamined the data, then triangulated and refined the coding until we reached an agreement. In this process, we also assured accurate translation, consistent conceptualization and that our write-ups reflected respondents' narratives without imposing our voices on respondents. By taking a qualitative approach, this study does not intend to generalize. Instead, through analyzing both women's and men's narratives, it aims to provide an in-depth understanding of individuals' mate selection preferences and processes.

Educational attainment and university prestige as mate selection criteria

When evaluating potential partners, 20 out of the 29 respondents (12 women and 8 men) unequivocally considered educational attainment a primary mate selection criterion. Among the 20 respondents, all of them considered a bachelor's degree to be the acceptable minimum level of education for potential partners, and 11 of them further used university prestige (proxied by the 985/211 universities) to explicitly evaluate potential partners.

In addition to setting a bachelor's degree as the acceptable minimum level of education for potential partners, our respondents frequently used terms such as "relatively good (*bijiao hao*) universities" and "(universities) cannot be too bad" to describe either their educational preferences for potential mates or their previous partners' educational backgrounds. For instance, Mei He (female, 27 years old) earned a bachelor's degree from a prestigious 985 university in Guangzhou and a master's degree abroad. She could accept someone with less education than herself as a potential partner. A bachelor's degree was, however, the acceptable minimum level of education, and moreover, his alma mater "cannot be too bad . . . At least, he should graduate from (a) 211 (university)." Thus, respondents often had a comparative sense of "relatively good universities". Given the hierarchical nature of China's higher education system, respondents assessed the relative status of tertiary degrees through institutional prestige.

Respondents contextualized their educational preferences for potential partners in relation not only to the hierarchy embedded within China's university-ranking system, but also to their own education. Respondents who graduated from super-elite institutions tended to set even higher or more rigid criteria for their potential partners' university prestige. For instance, Pan Shuai (male, 30) graduated with a double major from a top 985 university in Beijing. He limited his pool of acceptable partners to women who graduated from either top-10 universities on the Chinese mainland or a few "relatively good universities" in Hong Kong and abroad. When asked whether 211 university graduates were deemed unacceptable, he explained: "Graduating from 211 universities could be acceptable if I met an exceptional woman, because dating isn't always black and white. But normally I have requirements related to educational background, so that the chances of finding the one would be higher". Pan Shuai's remark revealed that university prestige served as an immediate signal of a potential partner's desirability and dateability in the partner-search and decision-making process.

Notably, the emphasis on university prestige (especially the prestige of undergraduate institutions) was consistently strong, regardless of gender and whether respondents graduated from a 985, 211 or non-211 university. Yu Jing (female, 28) received a bachelor's degree from a non-211 university. She had a list of "good universities" on her mind when it came to her potential partners' education. When probed about which universities were counted as "good schools", she explained that except for the top four 985 universities in Shanghai, other lower-ranked 985 universities were not on her list. The excerpts above demonstrate that the prestige of the university where a potential partner received his/her bachelor's degree was an important mate selection criterion.

Why educational status matters

We have shown the great importance that our respondents attached to both educational attainment and university prestige in a potential partner. We thus argue that *educational status* – a conjunction of educational level and institutional prestige (and sometimes overseas or domestic educational background) – was a quality that respondents highly valued in a potential partner. In this section, we discuss in detail why online daters viewed educational status as an important mate selection criterion and the differences between men and women's perspectives.

Educational status, non-financial partner traits and the importance of "liao de lai"

Although prior research often assumes that education influences marriage formation because it signals individuals' long-run socioeconomic prospects (Oppenheimer, 1988), our respondents most frequently used educational status as a proxy for non-financial partner traits, including values, ability, intelligence, manners, etc. When further asked why educational status and the associated non-financial partner traits were important to them, many respondents emphasized the importance of *liao de lai* – feeling connected and able to communicate well with their partner.

To ensure *liao de lai*, most respondents set a bachelor's degree as the acceptable minimum level of education for potential partners. For example, "someone with a bachelor's degree would be absolutely fine" for Wei Ya (female, 28) who had a master's degree, but she would not consider men "with only an associate's degree" (*da zhuan*). As she put it, "(t)his criterion (a bachelor's degree) is easy to meet because higher education has expanded for so many years. Maybe those with only an associate's degree don't like studying, which would pose communication barriers. Different values would also lead to arguments".

Clearly, earning a bachelor's degree was seen as an indicator that individuals valued education. Valuing education was further seen as reflecting values, opinions and worldviews. Especially in the context of China's higher education expansion (Yeung, 2013), having at least a bachelor's degree was thus believed to provide a common basis for conversation and mutual understanding.

Nevertheless, meeting the minimum requirement was not enough. Respondents also stressed the importance of university prestige. University prestige was perceived to indicate not only intelligence, but also views on education. For example, Xing Yun (female, 29) got her bachelor's, master's and doctoral degrees all from 985 institutions. She was willing to consider men who were less educated than herself as long as their undergraduate institution was "relatively good" (which, by her definition, meant 985 and elite 211 universities). When asked why university prestige was important to her, she explained: "I like smart men. Subconsciously, I feel that if your school is bad, it means you are dumb, or you don't take school, (which is) such an important business, seriously. If you don't care about education, our values won't match".

This quote from Xing Yun highlights a common belief held by respondents that prestigious universities separated the cognitive elite from the rest of the population. Additionally, because university prestige was considered a more reliable indicator of worldviews and critical thinking skills, it sometimes trumped education level as a mate selection criterion. As Mei He (female, 27) put it,

> (i)n fact, although I have a master's degree, I never feel that having earned a master's degree makes me smarter or more knowledgeable than someone with just a bachelor's degree. I care more about whether that person (a potential partner) is willing to think

> critically, so I think the institution where he got his bachelor's degree cannot be too bad. The undergraduate institution should be at least a 211 university.

Educational status as cultural resources and gender differences

Notably, rather than being an intangible, idiosyncratic criterion in mate selection, *liao de lai* requires similarity between partners with respect to cultural resources. Cultural resources include "a variety of values and behaviors, such as child-rearing values, political attitudes, cultural literacy, taste in art and music, and styles of speech" (Kalmijn, 1994: 426). Our respondents' narratives illustrate the importance of cultural matching in mate selection among online daters in Shanghai. Sorting on educational status was crucial for achieving cultural matching, because good communication needed similarity of knowledge and a common basis for conversation. When asked whether she had any selection criteria with respect to education, Qing Niao (female, 28), who received a bachelor's degree from a non-211 university, said:

> I certainly hope that his education could be the same as mine. His educational degree doesn't have to be exceptional. It's just that he must be able to communicate well with me (*liao de lai*). It would be unacceptable if no matter what I say, he is not in the same league. If I talk about Donald Trump with him but he doesn't even know who this person is, there is no way we can communicate.

Although Qing Niao did not put special emphasis on university prestige, some other respondents emphasized it and perceived it to be positively correlated with a variety of cultural resources that created a common basis for conversation. Yan Zhen (male, 27) had a master's degree from a 985 university. He recalled his online dating experiences on Momo (a dating app). Through Momo he met women with bachelor's degrees from "not-so-good" universities, and he commented: "I don't want to be mean, but we were indeed different once we communicated". He made it clear that he first used university prestige as a filter to screen potential partners in online dating. Next, through "communication, styles of speech, or feelings following the communication", he would "evaluate whether that person was similar (to him) or communicated well (with him)" (*liao de lai*). He evaluated similarity and *liao de lai* in many dimensions, "such as having received the same education, similar past experiences, people that (they) interacted with or were surrounded by".

In addition to signaling worldviews and overall qualities, university prestige was considered important for good communication because it conveyed one's ability to engage in high culture and ensured similar tastes and common interests. As Mei He (female, 27) put it,

> (t)hings like 985 or 211, like I said, could reveal how much value one person puts on education and that person's basic quality. Otherwise, I think it feels quite boring when

> two people chat. He likes watching Korean drama or playing video games every day. You propose to go to a museum, but after he is there, he can't understand anything. You will feel that this relationship won't long.

Styles of speech, as cultural resources, also govern the way people interact with each other. Men in particular linked women's educational status with styles of speech, which further influenced how they evaluated these women's aesthetic appearances and manners. Yan Zhen (male, 27), as mentioned above, was a case in point. Another example was Da Shi (male, 38) who had a bachelor's degree from a non-211 university. He spoke about his preference for "*xue ba*" (straight A students) because just this one characteristic (being a *xue ba*) could reveal many other traits, such as good manners, the way she talked and even appearance. He said: "it's like if I think she is good at studying and thus has a '*xue ba*' look, I would feel she is very good-looking and looks so refined with glasses".

Men tend to associate women's educational status with not only their styles of speech and aesthetic appearances, but also their child-rearing skills. In fact, only male respondents linked potential partners' education with their ability to educate children. For example, Bairen (male, 34), who received a bachelor's degree from a non-211 university, put it plainly: "If a woman does not even have a bachelor's degree, it would be harmful to children's upbringing".

Relatedly, a connection between women's educational status and their ability to cultivate children's highbrow cultural tastes was made by Li An (male, 26), who described himself as a graduate from a second-class 985 university. Intelligence and personality were his mate selection criteria. Li An was only willing to consider someone with at least a bachelor's degree from a first-tier (*yiben*) university, because he believed that university prestige was correlated with intelligence (although he felt that it was "politically incorrect" to make such connection). When the interviewer probed him on how he defined "intelligence", Li An explained:

> She has to read widely, which is indispensable. As a practical consideration, my parents strongly encouraged me to read since I was a child, but no one taught me what I should read. Thus, I took a tortuous path: I read many second-class or third-class works and some not-so-good stuff. After I went to university, I attempted to read classics of all time. Therefore, I hope that my future wife and I can provide my children with some helpful guidance . . . to help my children read first-class works from the very beginning.

The quotes from Bairen and Li An vividly illustrate that men viewed women's education as crucial to their children's future. When explaining why potential partners' education mattered to them, a few men attached importance to a mate's values, critical thinking skills and intelligence that were signaled by education, but very few men associated women's education with their economic independence. Instead, a woman's good education was considered by men mainly as an indicator of the quality of her child rearing. By contrast, our female respondents did not connect their potential partner's education with his child-rearing skills at all. The fact that men, but not women, viewed cultural resources (manifested through educational status) as a domestic resource highlights the persistence of traditional gender roles and unequal divisions of household labor in Chinese families.

Educational status as a proxy for financial partner traits and family background

While respondents frequently associated a mate's education with non-financial partner traits and cultural resources, educational status was only occasionally used, mainly by women, as a proxy for financial partner traits. Because it could be sensitive to ask about income in online dating, some respondents used educational status to estimate potential partners' earnings. Ma Lili (female, 34) had a bachelor's degree from a non-211 university. She refused to consider men without a bachelor's degree, because she believed that education and work ability were correlated. She further added that "if a person has a relatively low level of education, it would suggest that he doesn't have a high income". Our interviews suggested that given the extremely high housing prices in Shanghai, material resources were mainly evaluated through homeownership rather than educational status. This in part explained why economic considerations were not the driving force behind our respondents' educational preferences for potential partners.

Lastly, in the Chinese context, considerations of family background remain important in mate selection (Ji, 2015a). Indeed, educational status was also used by some respondents as a proxy for economic and cultural resources possessed by the parental family. As Mei He (female, 27) put it,

> I think through one's educational level and the school he attended, you can roughly know how much value his family places on education and also indirectly know this person's family background. For people who have studied abroad, their family won't be poor.

Similarly, Fu Ke (male, 26) who had a master's degree explained: "If you consider people who attended the same school, everyone would be similar to each other, and everyone's family background would be similar. Education is supposed to serve as a screening device".

In sum, educational status – a conjunction of educational level and institutional prestige (and sometimes overseas or domestic educational background) – was an important mate selection criterion, primarily because it signified various non-financial partner traits (e.g. ability, values, intelligence, manners, etc.). Certain educational status was often viewed as a prerequisite for *liao de lai* (feeling connected and able to communicate well), and this emphasis on *liao de lai* enhanced similarity in cultural status between partners. Notably, men tended to associate women's educational status with their child-rearing skills, whereas women were more likely to use educational status to infer men's earnings. This gender difference highlighted the entrenched norms about men's breadwinner role and women's homemaker role in Chinese families.

How educational preferences shape online dating processes

In this section, we show that educational preferences for potential partners may influence mate selection outcomes by shaping individuals' choices of dating platforms and strategies for screening dating candidates. Online daters' ability to translate their mate preferences into mating behaviors is enhanced by three key features of dating technologies. Specifically, online dating platforms (a) provide users with access to a large pool of potential partners in defined dating markets; (b) make key socio-demographic traits readily available for users to evaluate even before online chatting or offline meetings; and (c) allow for easy search and filter functions (Finkel et al., 2012; Schwartz and Velotta, 2018). Moreover, many, if not all, online dating platforms use target marketing, client pre-screening and algorithms to match users based on similarities, which may further promote contact and relationships between people of similar status.

Educational preferences for potential partners shape choices of online dating platforms

The proliferation and individualization of dating sites/apps/services have provided increasingly diverse options for online daters. Our respondents mentioned a variety of online dating platforms that they had used, including Chinese dating apps (e.g. Tantan and Momo, similar to Tinder), matchmaking websites (e.g. Jiayuan.com), university bulletin board systems (BBS), local WeChat groups that specialized in matchmaking, and exclusive dating platforms catering to elite clients that restricted access to users who met certain standards (similar to those advertised as "Ivy League Dating Sites" in the west). In order to maximize their chances of finding a mate who met their criteria, our respondents strategically chose dating platforms.

Yan Zhen (male, 27) had a master's degree from a 985 university. He started using online dating, hoping to find a serious relationship. He experimented with various dating platforms in order to find out which platform best met his needs – finding a partner of similar age and with at least a bachelor's degree. He also had certain criteria for potential partners' educational status and screened dating candidates based on their university prestige. Among all the platforms he had tried, his favorite was Moshang Huakai, known as an elite dating platform that targeted students and alumni of top-ranking universities in China and overseas. Yan Zhen explained:

> After I have tried so many online dating platforms, for me, a recent graduate, if I have requirements for potential partners' education, I think Moshang Huakai is pretty good because it has quite demanding selection criteria concentrating on education.

> When I was using it, only (students and alumni of) Tsinghua University, Peking University, Jiao Da, etc. could be accepted as users ... As I had relatively high standards, this platform presented a bit more matches to me ... Currently, this platform has a pretty high success rate, about 30%.

By contrast, Yan Zhen found that users on Momo (a dating app) tended to have lower educational status, like "high school, or those with bachelor's degrees from ordinary universities ... who likely graduated from 'not-so-good' universities". Yan Zhen found it difficult to communicate with them online, so he did not meet anyone offline through Momo.

Similarly, Pan Shuai (male 30), who limited his pool of acceptable partners to graduates of either top-10 universities on the Chinese mainland or a few "relatively good universities" in Hong Kong and abroad, had experimented with 4 other matchmaking platforms, but he finally decided to try meeting potential partners through "KnowYourself", a public account about psychology on WeChat. As a long-term subscriber to this public account, he attended its offline activities available to paid members, hoping to meet someone to date:

> At least (those offline workshops organized by KnowYourself) served to screen candidates and limited attendees to a certain group of people, those with a strong financial base, a good education, and shared interests ... I met two women through the workshop.

Sometimes, stated dating preferences did not accurately reflect online daters' actual mate selection strategies. Unlike Yan Zhen and Pan Shuai, some respondents did not explicitly use university prestige as a mate selection criterion. Yet they intentionally chose dating platforms, such as prestigious universities' BBS, that would allow them to find someone similar to themselves. Wei Ya (female, 28) had a master's degree from a 211 university and was married to a man with a master's degree from a 985 university. She chose to use university-based BBS because users on this type of platform tended to be homogeneous in terms of educational status and age, which, along with height, were her top three mate selection criteria. Through the matchmaking section on Jiao Da BBS, she had dated two men (including her husband), both of whom graduated from top-ranking 985 universities. She commented that, compared to meeting people through family or friends, online dating allowed her to choose a partner based on her own preferences, whereas relatives and friends might not know her specific needs. She further described instances where several people who were introduced to her through relatives or friends had relatively low levels of education – "not even a bachelor's degree".

In addition to domestic dating platforms, some respondents used western dating sites/apps, with location set to Shanghai, to access educational elites as potential partners. Mei He (female, 27) had a master's degree abroad. She had used Baihe.com (a dating site, similar to Match.com), Mylove (a dating app) and Tinder, but she only met people offline through Tinder. Mei He felt that unlike in the west, Tinder did not have a reputation of being a “hookup” app in China. She specifically explained that Mylove did not match her with people who had a similar educational background to her own, and as for Baihe.com users, “their educational levels were generally not that good”. Because she wanted to find someone with a similar educational experience to her own (i.e. overseas tertiary education), she started using Tinder in Shanghai, which “required users to register and login with their Facebook accounts” and “could only be accessed by using a VPN” (virtual private network). According to her observation, “all, or I should say 80% of the Tinder users I knew, were people who had received overseas education”. This choice indeed helped her meet online daters who either studied abroad or who “were aware of the outside world” despite never studying abroad. She commented that “people on Tinder were more interesting” as they “differed drastically from people with traditional domestic education in visions and ways of thinking”.

Evaluating educational status serves as a shortcut strategy for screening potential partners

As people deliberately choose certain dating platforms to access potential partners in defined dating markets, dating technologies also allow users to evaluate potential partners through browsing their dating profiles. Our respondents often used educational status as a key screening criterion to determine whether they would pass on or pick certain dating profiles. For example, when Mei He (female, 27) was discussing what she viewed as important factors determining men’s success in the eyes of women looking for a partner in Shanghai, she shared her way of screening potential partners on Baihe.com:

> You would skim through (*sao yi xia*) their dating profiles, and this (homeownership status) would leave an impression on you, but this is not an important consideration that would make me pass on someone. For me, maybe education and appearance are crucial reasons why I would pass on someone.

If someone did not meet her “basic criteria” – attraction at first sight, height, age and education – Mei He would not consider him at all. “These tangible qualities just help you filter profiles. Just like HR, when they screen job candidates, they have some keywords in mind”, she added.

In addition to filtering out the dating candidates who do not meet their mate selection criteria, online daters can also pick candidates who meet their criteria while “shopping for the right person” (Heino et al., 2010: 443). Some respondents used online dating platforms on which personal dating ads were posted (either by users themselves or by platform organizers). As these dating platforms typically did not offer easy search or filter functions, our respondents would browse through posted profiles and then pick suitable candidates to initiate contacts with. For example, Wei Ya (female, 28), as mentioned before, used the matchmaking section on Jiao Da BBS, through which she met her husband. In her search for a partner, after she browsed personal dating ads posted on Jiao Da BBS for a while, she would pick (*zhai*) some people whose information stated on their ads met her mate selection criteria regarding age, height and education. As she firmly put it, "the ones I picked definitely met my criteria".

Notably, the value placed on educational status in a potential mate may be elevated in the online dating context. Our respondents raised concerns about potential frauds and uncertainties associated with not knowing the real person when they met "perfect strangers" online (with whom they had no previous social tie; Rosenfeld and Thomas, 2012). Jiang Di (female, 29) had a master's degree from a 211 university. When asked if she stated mate selection criteria on Jiayuan.com, she replied, "yes, typically I stated basic criteria like education". She wanted to find someone who had at least a bachelor's degree and graduated from a university that was ranked similarly to her alma mater. "Maybe even better than my alma mater", she added. Like a few other respondents, Jiang Di was aware that screening her dating candidates based on educational status made online dating similar to hiring and, by doing so, she might have judged the book by its cover. However, she justified her online dating strategy as follows: "Because you don't know him – you don't know whether he has good character, you have to use such tangible qualities (as educational level and institutional prestige) to evaluate him".

Thus, in the face of uncertainties associated with Internet searches for romantic partners, some of our respondents felt that they had to use educational status, an easy-to-evaluate and searchable characteristic, as a shortcut for screening through a large pool of perfect strangers. This shortcut strategy for screening potential partners appeared to be buttressed by the commonly held belief that educational status was indicative of a person's overall qualities.

Online dating platforms serve as an invisible hand to foster homogamous matches

Not only may online daters actively use educational status to filter and screen potential partners, but also online dating platforms may serve as an invisible hand to foster homogamous matches. In some cases, dating platforms, such as Moshang Huakai, specifically target highly educated people (especially educational elites) and even conduct educational background checks to verify their users' academic credentials. Dating platforms further advertise their user compositions and pre-screening requirements to attract their target audience and create a pool of users with certain educational backgrounds. Meanwhile, as shown above, online daters often strategically chose dating platforms with a member base that was highly composed of users who met their mate selection criteria. Thus, individuals' deliberate choices of dating platforms and dating platforms' business practices (e.g. targeting specific users and pre-screening potential users) operate in a mutually reinforcing cycle, which increases contact between people of similar educational status.

In other cases, online dating platforms use algorithms to identify matches for their users. Matching algorithms are typically developed based on the principle of similarity (Finkel et al., 2012). In fact, many online dating platforms are marketed for their ability to match people based on similarities. For instance, Mylove, one dating app mentioned by our respondents, had as its slogan: "Help you find the one from 10 million people, the one who likes the same book and the same movie and has the same hobbies and attitudes towards life as you do". Most online dating platforms closely guard their matching algorithms, but our respondents shared their observations with us. Li An (male, 26) had a bachelor's degree from a 985 university. He used a dating service that allowed each user to have online interactions with one match through guided activities for one week. Li An explained how to join the platform:

> You have to register beforehand and provide detailed personal information including hobbies, upbringing, what (you) are doing now, plans for the future, and stuff like that . . . You can choose whether you want someone of the same gender or a different gender, someone living in the same city or a different city, and someone younger, older, or either . . . Then it (the dating service) will identify a match for you based on some kind of algorithm.'

He further shared his observation on the matching algorithm:

> In terms of matching, basically, the tier of the universities where two people were from matches up. For example, I am just a second-class 985 (graduate), so I would be matched with another second-class 985 (graduate). It wouldn't match me with (someone from) Tsinghua University, Peking University, or Fudan University (super-elite 985 institutions).

Some respondents applied a marketplace metaphor to conceptualize the online dating process (Heino et al., 2010). For example, Ma Lili (female, 34) had a bachelor's degree from a non-211 university. She met her husband through a WeChat group that specialized in matchmaking. When asked about her view on online dating, she said that online dating was a very effective way to meet a large number of people within a short period of time. She specifically drew an analogy between online dating and online shopping, both of which should rely on algorithms to recommend matches and thus increase the search efficiency. As she put it,

> I think for online dating platforms, it is important that . . . As the old saying goes, "birds of a feather flock together" . . . Even if it sounds brutal, differentiate people by income, or by education, or other overall qualities. Put more or less the same people – not the same people but people who are similar to each other – together. This would increase the success rates.

When the interviewer asked whether the dating platform she used put similar people together, she said that "based on my observation, generally the educational level and the income level of the users were within the same range – no one was too bad or too good".

Overall, our results show that acting as an invisible hand, dating platforms worked together with individual educational preferences to shape online dating choices and processes, which in turn might promote contact and intimate relationships between people of similar educational status.

Discussion

A large number of quantitative studies examined educational assortative mating patterns, and they mostly treated college graduates as one educationally homogeneous group (Blossfeld, 2009; Kalmijn, 1998; Schwartz, 2013). Yet why individuals value education in a mate and the process of mate selection itself remain a black box. Despite the rapid expansion of higher education and the growing heterogeneity within college graduates as a group (Gerber and Cheung, 2008; Yeung, 2013), the impact of horizontal differentiation in higher education on mate selection remains understudied. In view of the research gaps, this study uses data from interviews with 29 university-educated, heterosexual online daters in Shanghai to understand mate selection preferences and processes in much greater detail. In doing so, it also contributes to the growing body of research on how online dating shapes relationship behavior and mate selection (Sassler and Lichter, 2020).

Our findings illustrate that *educational status* – a conjunction of educational level and institutional prestige (and sometimes overseas or domestic educational background) – is an important mate selection criterion. As access to higher education has expanded substantially (Yeung, 2013), most respondents in our sample, regardless of gender, considered a bachelor's degree to be the acceptable minimum level of education for potential partners. In other words, the social boundaries that separated university graduates and those with less education were very rigid. This finding is consistent with other research showing that increasing educational homogamy (especially homogamy among university graduates) has happened in tandem with higher education expansion in China (Han, 2010; Hu and Qian, 2016). However, not all tertiary degrees were equally valued. Considered a criterion for evaluating a potential mate's education, the widely used prestige ranking of universities (985/211) among our respondents signified the horizontal hierarchy embedded in China's higher education system. Based on the institutionally endorsed hierarchy of institutional prestige, our respondents commonly composed a list of "relatively good universities". This list was composed also in relation to respondents' own educational status. Although the emphasis on university prestige was consistently strong, respondents who graduated from super-elite institutions tended to set even higher or more rigid criteria for their potential partners' university prestige. By revealing that university prestige signals people's dateability or marriageability and hence influences their marriage market prospects, this study extends the research on signaling effects of university prestige from the economic to the family realm (Gerber and Cheung, 2008; Rivera, 2011). Although we focus on online daters only, with the increased use of online dating and decreased selectivity of online dating populations, insights gained from this study may shed light on mate selection in the overall population (Kreager et al., 2014; Skopek et al., 2011; Yu and Hertog, 2018). Going forward, we advise researchers to consider assortative mating on the horizontal dimensions of higher education in China.

This study challenges modernization theoretical frameworks which treat modernity and traditionality as two opposite poles and stress the role of individualistic choices in mate selection at high levels of industrialization (Schwartz, 2013; Smits et al., 1998). Such frameworks may overemphasize human agency and individual preferences (Schmitz, 2017); meanwhile, they overlook how "sometimes the social becomes personal" (England, 2016: 5); that is, how entrenched social, cultural and institutional processes may cultivate and influence people's preferences in habitual and durable ways. When examining why people valued education in a mate, we challenged modernization theoretical frameworks by demonstrating that seemingly "personal" mate preferences were in fact shaped by cultural norms, institutional contexts and a mix of modern and traditional forces. On the one hand, respondents used an individualistic rhetoric of "freedom of choice" to justify why they valued a mate's educational status. Regardless of gender, many respondents used educational status as a proxy for non-financial partner traits, such as values, worldviews, interest in high culture activities, and knowledge basis for conversation. Through evaluating potential partners' educational status, online daters hoped to find someone with whom they felt connected and were able to communicate well (*liao de lai*). Free from third-party control, respondents mentioned feelings of empowerment and autonomy in their search for a partner online. Their pursuit of a *liao de lai* partner also echoed the emphasis on romantic love, companionship and personal growth in modern mating practices.

On the other hand, the ostensibly individualistic preferences required compatibility between partners' cultural resources and were shaped by larger social forces in traditional ways. Compatibility in the non-financial traits that respondents associated with educational status (e.g. knowledge basis, values, worldviews, taste) ensured a shared cultural outlook (Kalmijn, 1994). Thus, sorting on education was crucial for achieving cultural matching. Individual preferences for a mate with similar cultural resources and the resultant process of cultural matching may well enhance status homogamy in Shanghai (Kalmijn, 1994). In addition, the importance that our respondents attached to a mate's educational status (especially university prestige) was rooted in the Confucian tradition as well as the contemporary institutional contexts in which state policies and educational practices legitimized and buttressed a hierarchical higher education system. Although our respondents were neither constrained by universities as meeting venues nor controlled by third parties, they still displayed a habituated mate preference that placed a high value on educational status. This preference was cultivated through years of cultural learning in educational institutions that privileged high *gaokao* scores and elite university status (Liu, 2016). Although the goal of this qualitative study was not to generalize, we argue that our findings can be theoretically applicable beyond Shanghai because the hierarchical higher education system is institutionalized in China and other East Asian societies (Hannum et al., 2019).

Additionally, deeply ingrained traditional gender roles in Chinese families contributed to gendered rationales for educational preferences. Our findings challenge Oppenheimer's (1988) theory, which posits that as women's employment and labor force attachment increase, men will increasingly value a mate's socioeconomic traits and thus compete for highly educated women in the marriage market. Our interviews indicate that women's good education, although valued by men, was not evaluated as a socioeconomic indicator. Instead, men often emphasized the importance of women's education for their future children's educational success and social mobility. Child-rearing values and practices are key cultural resources (Kalmijn, 1994), and parental cultural capital can predict children's educational success (Lareau, 2011). Our results thus suggest that in Shanghai, men valued highly educated, elite women's cultural resources mainly because they were believed to be conducive to good parenting and children's future success. By contrast, women tended to use educational status to infer men's earnings but not quality of child rearing. Such gendered rationales for educational preferences reflect the entrenched male-breadwinning/female-homemaking family model in China (Ji, 2015a; Qian and Li, 2020; Qian and Qian, 2015). Men's preferences for highly educated women – this seemingly "modern" mate preference – stem from ingrained expectations for husbands and wives to perform traditional gender roles in Chinese families.

This study further shows how mate preferences translate into actual mating behaviors. Guided by their educational preferences, online daters limited their pool of potential partners to defined dating markets by deliberately choosing certain dating platforms. The dating platform of their choice usually had a member base that was composed mostly of users who met their mate selection criteria. In addition, because education is an easy-to-evaluate and searchable characteristic, online daters adopted a common shortcut strategy for screening through a large pool of dating candidates: evaluating a potential mate's educational status. Meanwhile, online dating platforms served as an invisible hand for matching people based largely on similarities through target marketing, client prescreening and algorithms. Through these various mechanisms, online dating may serve to reinforce social closure among highly educated people (especially educational elites), even though it allows people to search for partners without third-party control and beyond the restricted contact opportunities in everyday life. Recall that our respondents were mostly looking for a serious relationship. Thus, compared with online daters who were merely looking for casual relationships, our respondents might have imposed stricter mating selection criteria and conducted a more deliberate search for the right person (Jankowiak, 2013; Sumter et al., 2017). To better understand the implications of online dating for relationship behavior and social inequality, a fruitful avenue for future research is to investigate how mate selection preferences and processes vary by people's motivations for using online dating.

This research is not without limitations. First, although our sample allowed us to assess horizontal differentiation in higher education, it consisted of university-educated online daters only. It is possible that highly educated people care more about cultural matching, whereas less-educated people have a more practical disposition towards affection (Press, 2004). To better understand the role of educational status in mate selection among people with lower levels of education, future studies are advised to examine (a) whether less-educated people use educational status as a proxy for cultural resources, financial prospects, or both; (b) whether they maintain distance from, or aim high to actively seek, highly educated partners (Kalmijn, 1994; Kreager et al., 2014); and (c) how these class-based mate selection preferences and processes further differ by gender. Second, we believe that our findings are theoretically applicable beyond Shanghai, but we await more qualitative studies examining mate selection in other social contexts with rapid expansion and institutionalized hierarchy of higher education. Lastly, caring about potential partners' financial prospects and seeking partners who share similar cultural resources (manifested in interests, ability and lifestyle) can sometimes overlap (Kalmijn, 1994). Future research is needed to better measure and quantify the relative importance of cultural matching and economic competition in shaping mate selection across various educational-status groups.

In sum, this study expands the implications of horizontal stratification in higher education from the economic realm to the family realm and advances the understanding of mate selection preferences and processes in a modern–traditional mosaic context (Ji, 2015a; Yeung and Hu, 2016). It suggests that in Shanghai (urban China more broadly), cultural and institutional contexts, personal preferences and technological advancements intertwine to perpetuate inequality in the marriage market.

Acknowledgement

The authors are grateful for data collection efforts contributed by Yang Shen (Shanghai Jiao Tong University). This research was approved by the UBC's Behavioural Research Ethics Board.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The second author acknowledges funding support from the University of British Columbia through the Hampton Fund Research Grant – New

Faculty Award and from the Social Sciences and Humanities Research Council of Canada through the Insight Development Grant.

ORCID iD

Yue Qian https://orcid.org/0000-0003-2120-5403

Note

1. For example, the median ages are 25 and 26 years, respectively, for male and female users of a major online dating site in China (Xia et al., 2014), whereas the median age in the general adult population is 41 years for both men and women over the age of 18 (authors' calculation based on Table 3-1 from the 2010 Census: www.stats.gov.cn/tjsj/pcsj/rkpc/6rp/indexch.htm). Similarly, 67% of female online daters and 53% of male online daters have at least a vocational college degree (Xia et al., 2014), but the respective figures in the general adult population are 12% for men and 10% for women (authors' calculation based on Table 4-1 from the 2010 Census).

References

Blossfeld HP (2009) Educational assortative marriage in comparative perspective. *Annual Review of Sociology* 35: 513–530.

Brym RJ and Lenton RL (2001) Love online: A report on digital dating in Canada. Available at: http://www.webco22.com/social/loveonline.pdf (accessed 19 August 2020).

Charmaz K (2014) *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. 2nd edn. Thousand Oaks: SAGE Publications.

Chen Y and Kesten O (2019) Chinese college admissions and school choice reforms: An experimental study. *Games and Economic Behavior* 115: 83–100.

Deterding NM and Waters MC (2018) Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological Methods & Research*. Epub ahead of print 1 October. DOI: 10.1177/0049124118799377.

eHarmony (2019) 70% of American singles are looking for a serious relationship. 22 May. Available at: https://www.prnewswire.com/news-releases/70-of-american-singles-are-looking-for-a-serious-relationship-300854725.html (accessed 19 August 2020).

England P (2004) More mercenary mate selection? Comment on Sweeney and Cancian (2004) and Press (2004). *Journal of Marriage and Family* 66(4): 1034–1037.

England P (2016) Sometimes the social becomes personal: Gender, class, and sexualities. *American Sociological Review* 81(1): 4–28.

Finkel EJ, Eastwick PW, Karney BR, et al. (2012) Online dating: A critical analysis from the perspective of psychological science. *Psychological Science in the Public Interest* 13(1): 3–66.

Gerber TP and Cheung SY (2008) Horizontal stratification in postsecondary education: Forms, explanations, and implications. *Annual Review of Sociology* 34: 299–318.

Han H (2010) Trends in educational assortative marriage in China from 1970 to 2000. *Demographic Research* 22: 733–770.

Hannum E, Ishida H, Park H, et al. (2019) Education in East Asian societies: Postwar expansion and the evolution of inequality. *Annual Review of Sociology* 45: 625–647.

Hartog J, Sun Y and Ding X (2010) University rank and bachelor's labour market positions in China. *Economics of Education Review* 29(6): 971–979.

Heino RD, Ellison NB and Gibbs JL (2010) Relationshopping: Investigating the market metaphor in online dating. *Journal of Social and Personal Relationships* 27(4): 427–447.

Hu A and Qian Z (2016) Does higher education expansion promote educational homogamy? Evidence from married couples of the post-80s generation in Shanghai, China. *Social Science Research* 60: 148–162.

Hu A and Vargas N (2015) Economic consequences of horizontal stratification in postsecondary education: Evidence from urban China. *Higher Education* 70(3): 337–358.

Hu A and Wu X (2019) Parental education and college students' attitudes toward love: Survey evidence from China. *Journal of Marriage and Family* 81(3): 584–600.

Jankowiak W (2013) Chinese youth: Hot romance and cold calculation. In: Link P, Madsen RP and Pickowicz PG (eds) *Restless China*. Lanham: Rowman & Littlefield, pp.191–212.

Ji Y (2015a) Between tradition and modernity: "Leftover" women in Shanghai. *Journal of Marriage and Family* 77(5): 1057–1073.

Ji Y (2015b) Asian families at the crossroads: A meeting of east, west, tradition, modernity, and gender. *Journal of Marriage and Family* 77(5): 1031–1038.

Kalmijn M (1994) Assortative mating by cultural and economic occupational status. *American Journal of Sociology* 100(2): 422–452.

Kalmijn M (1998) Intermarriage and homogamy: Causes, patterns, trends. *Annual Review of Sociology* 24: 395–421.

Kreager DA, Cavanagh SE, Yen J, et al. (2014) "Where have all the good men gone?" Gendered interactions in online dating. *Journal of Marriage and Family* 76(2): 387–410.

Lareau A (2011) *Unequal Childhoods: Class, Race, and Family Life*. Berkeley: University of California Press.

Lee S (2016) Effect of online dating on assortative mating: Evidence from South Korea. *Journal of Applied Econometrics* 31(6): 1120–1139.

Lichter DT and Qian Z (2019) The study of assortative mating: Theory, data, and analysis. In: Schoen R (ed.) *Analytical Family Demography*. Cham: Springer, pp.303–337.

Liu Y (2016) *Higher Education, Meritocracy and Inequality in China*. Singapore: Springer.

Loyalka P, Song Y and Wei J (2012) The effects of attending selective college tiers in China. *Social Science Research* 41(2): 287–305.

McClendon D, Kuo JCL, and Raley RK (2014) Opportunities to meet: Occupational education and marriage formation in young adulthood. *Demography* 51(4): 1319–1344.

Oppenheimer VK (1988) A theory of marriage timing. *American Journal of Sociology* 94(3): 563–591.

Potarca G (2017) Does the internet affect assortative mating? Evidence from the US and Germany. *Social Science Research* 61: 278–297.

Press JE (2004) Cute butts and housework: A gynocentric theory of assortative mating. *Journal of Marriage and Family* 66(4): 1029–1033.

Qian Y and Li J (2020) Separating spheres: Cohort differences in gender attitudes about work and family in China. *China Review* 20(2): 19–52.

Qian Y and Qian Z (2014) The gender divide in urban China: Singlehood and assortative mating by age and education. *Demographic Research* 31: 1337–1364.

Qian Y and Qian Z (2015) Work, family, and gendered happiness among married people in urban China. *Social Indicators Research* 121(1): 61–74.

Rivera LA (2011) Ivies, extracurriculars, and exclusion: Elite employers' use of educational credentials. *Research in Social Stratification and Mobility* 29(1): 71–90.

Rosenfeld MJ (2017) Marriage, choice, and couplehood in the age of the Internet. *Sociological Science* 4: 490–510.

Rosenfeld MJ and Thomas RJ (2012) Searching for a mate: The rise of the Internet as a social intermediary. *American Sociological Review* 77(4): 523–547.

Sassler S and Lichter DT (2020) Cohabitation and marriage: Complexity and diversity in union-formation patterns. *Journal of Marriage and Family* 82(1): 35–61.

Saunders B, Sim J, Kingstone T, et al. (2018) Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity* 52(4): 1893–1907.

Schmitz A (2017) *The Structure of Digital Partner Choice: A Bourdieusian Perspective*. Cham: Springer International Publishing.

Schwartz CR (2013) Trends and variation in assortative mating: Causes and consequences. *Annual Review of Sociology* 39: 451–470.

Schwartz P and Velotta N (2018) Online dating: Changing intimacy one swipe at a time? In: Van Hook J, McHale SM and King V (eds) *Families and Technology*. Cham: Springer, pp.57–88.

Shen G (2018) Building world-class universities in China: From the view of national strategies. Available at: http://www.guninetwork.org/articles/building-world-class-universities-china-view-national-strategies (accessed 19 August 2020).

Skopek J, Schulz F and Blossfeld HP (2011) Who contacts whom? Educational homophily in online mate selection. *European Sociological Review* 27(2): 180–195.

Smits J, Ultee W and Lammers J (1998) Educational homogamy in 65 countries: An explanation of differences in openness using country-level explanatory variables. *American Sociological Review* 63(2): 264–285.

Sumter SR, Vandenbosch L and Ligtenberg L (2017) Love me Tinder: Untangling emerging adults' motivations for using the dating application Tinder. *Telematics and Informatics* 34(1): 67–78.

Thornton A and Young-DeMarco L (2001) Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and Family* 63(4): 1009–1037.

Timmermans E and Courtois C (2018) From swiping to casual sex and/or committed relationships: Exploring the experiences of Tinder users. *Information Society* 34: 59–70.

To S (2013) Understanding *sheng nu* ("leftover women"): The phenomenon of late marriage among Chinese professional women. *Symbolic Interaction* 36(1): 1–20.

Wu X (2017) Higher education, elite formation, and social stratification in contemporary China: Preliminary findings from the Beijing College Students Panel Survey. *Chinese Journal of Sociology* 3(1): 3–31.

Xia P, Tu K, Ribeiro B, et al. (2014) Characterization of user online dating behavior and preference on a large online dating site. In: Missaoui R and Sarr I (eds) *Social Network Analysis-Community Detection and Evolution*. Cham: Springer, pp.193–217.

Xie Y (2016) Understanding inequality in China. *Chinese Journal of Sociology* 2(3): 327–347.

Yeung WJJ (2013) Higher education expansion and social stratification in China. *Chinese Sociological Review* 45(4): 54–80.

Yeung WJJ and Hu S (2016) Paradox in marriage values and behavior in contemporary China. *Chinese Journal of Sociology* 2(3): 447–476.

Yu L and Suen HK (2005) Historical and contemporary exam-driven education fever in China. *KEDI Journal of Educational Policy* 2(1): 17–33.

Yu WH and Hertog E (2018) Family characteristics and mate selection: Evidence from computer-assisted dating in Japan. *Journal of Marriage and Family* 80(3): 589–606.

Zhang H, Patton D and Kenney M (2013) Building global-class universities: Assessing the impact of the 985 Project. *Research Policy* 42(3): 765–775.