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# Working paper

## The rise of online dating and heterogamous marriages

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### The Rise of Online Dating and Heterogamous Marriages

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### **Abstract**

We study how the diffusion of online dating platforms has shaped intermarriage patterns by race and education in the United States. Online dating can, in principle, foster heterogamous unions by broadening users' exposure to diverse racial and educational groups, or alternatively reduce such unions by enabling more effective preference-based screening. Using data from the American Community Survey and a continuous-treatment difference-in-differences design, we find that online dating platforms significantly affect interracial marriage rates, though their impacts differ across platforms. In contrast, we find weaker evidence that online dating has altered educational homogamy. To explore the underlying mechanisms, we draw on an original survey where we collected respondents' retrospective dating histories, partner preferences, and online dating behavior. Leveraging individual panel data regressions that account for time-invariant heterogeneity in selecting into online dating, we show that meeting a partner online is associated with a higher likelihood of interracial marriage-except among individuals with strong same-race preferences, who are more likely to use filters and marry within their group. Taken together, our findings reveal that the effects of online dating platforms on marriage formation hinge critically on both platform features and individual preferences.

JEL Classification: J11, J12, J15

### Keywords: Online Dating, Assortative Mating, Racial Homogamy, Interracial Marriage

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### 1 Introduction

Online dating has become a popular way for young people to meet and date. According to Rosenfeld et al. (2019), meeting online has become the most popular way of meeting a partner in the United States since 2013, replacing traditional methods such as introductions through family or friends, or encounters at churches and schools. Online dating platforms have substantially changed the way people search for potential partners. On one hand, they broaden individuals' dating networks and enable connections beyond their traditional social circles. On the other hand, some dating platforms facilitate screening potential matches based on preferred characteristics, such as race or education, which may increase the likelihood of homogamous marriages among people with strong preferences for similarity.

In this paper, we study how online dating contributes to heterogamous (i.e., mixed) marriages in the United States. Compared to the previous literature, we emphasize the differentiated nature of online dating platforms and the possibility that users sort into different platforms based on their preferences. Online dating platforms are highly differentiated in their design and features. For example, Tinder does not allow detailed filters for characteristics like race, or education to screen out matches. It only allows basic ones, such as distance, and gender/sexual orientation. As a result, Tinder users must swipe a large number of profiles before finding a preferred match, a process that can be time-consuming. In contrast, Hinge, which markets itself as an "anti-Tinder" platform and is known for prioritizing serious relationships over casual encounters<sup>1</sup>, allows detailed filter functions over many characteristics, including race, education, age, height, and religion. Therefore, Hinge users can save search time by targeting profiles that match their preferences. The effect of online dating platforms on mating patterns may also vary across platforms for reasons unrelated to platform features. For example, some dating platforms have much bigger user pools than others; Tinder, for instance, has been the most popular online dating platform in the United States (McClain and Gelles-Watnick, 2023). Even without filter functions, users may expect a higher chance of meeting a preferred partner on Tinder simply due to its scale, provided they invest suffi-

<sup>&</sup>lt;sup>1</sup>https://www.businessofapps.com/data/hinge-statistics/[Accessed 2025/09/05]

cient search effort. Moreover, Tinder's popularity may attract a particularly diverse user base, thereby increasing exposure to profiles from various backgrounds.

To understand the distinctive role of these online dating features in sorting and marriage patterns, we utilize two complementary datasets. First, we use the American Community Survey (ACS), combined with local online dating popularity indices we construct using search-volume data from Google Trends and the Mangools database. The ACS data provides a large, nationally representative sample of demographics, thereby allowing us to understand the trends in marriage patterns. The Google Trends and Mangools databases jointly offer information on the search volumes of keywords, which we use to construct the local popularity of each online dating platform, using their names as keywords. For each platform, we observe substantial, non-monotonic, and sudden shifts in local popularity that cannot be attributed to long-term demographic trends likely to influence partner preferences. Instead, the fluctuations appear to be driven by platform-specific launch marketing, with later dynamics shaped by network effects and competition. We leverage these sharp shifts as the key source of variation to identify the causal impact of online dating platforms on mating outcomes.

We employ a continuous-treatment difference-in-differences design, relying on a parallel trends assumption, to examine how rising local popularity of different online dating platforms affects marriage patterns. Online dating is undeniably more prevalent among certain demographic groups, each with distinct spouse preferences. To satisfy the parallel trends assumption, we include rich sets of controls for gender, race, education, and birth year, in addition to state and year fixed effects. For robustness, we further incorporate state-, education-, and race-specific trends, and confirm that our results remain stable across these specifications. Finally, an event-study analysis shows no evidence of differential pre-trends once these demographic controls are included, indicating that both same-race and educational homograpy rates evolve similarly across states prior to treatment. This finding lends credibility to our identification strategy and validates the use of the continuous-treatment (i.e., platform popularity) difference-in-differences design.

Our ACS analysis shows that the spread of popular online dating platforms significantly

shapes mating outcomes, though the direction of effects varies across platforms—indicating that there is no uniform impact of online dating technology. Tinder appears to be the most influential platform in fostering interracial marriage: a one–standard deviation increase in local Tinder popularity, measured by keyword search volume, reduces the same-race marriage rate by 1 percentage point, or roughly 1.1% of the sample mean of same-race marriage rates. This effect accounts for nearly 30% of the overall decline in same-race marriage rates (3 percentage points) observed in our ACS sample between 2008 and 2018. For other platforms, estimated effects are either statistically insignificant or considerably smaller in magnitude. Among those with significant impacts, a one–standard deviation increase in eHarmony search volume lowers same-race marriage by 0.4 percentage points, while equivalent increases in Match.com and Zoosk popularity raise same-race marriage by 0.5 and 0.4 percentage points, respectively. By contrast, we find little evidence that online dating has systematically influenced educational homogamy. The only exception is Coffee Meets Bagel, where a one–standard deviation increase in local popularity reduces same-education marriage rates by 0.4 percentage points.

We next turn to evidence from our original survey, which collects respondents' complete retrospective dating histories, self-reported preferences for partner characteristics, and detailed information on online dating usage. This complements our ACS analysis by shedding light on the mechanisms at play. While the ACS offers credibility through its large, nationally representative sample, it lacks crucial information on who used online dating and on unobserved individual preferences for partner traits. Our survey addresses these gaps by asking respondents which platforms they used and what filter settings they applied, thereby allowing us to study how platform features shape mating outcomes. This enables a more comprehensive understanding of sorting patterns across platforms, search behaviors within platforms, and outcomes conditional on stated preferences—areas that have received limited attention in the literature (Hitsch et al., 2010; Lee, 2016; Rosenfeld et al., 2019; Thomas, 2020; Buyukeren et al., 2025). In addition, the availability of multiple relationship spells per respondent enables the use of individual fixed-effects regressions, accounting for unobserved, time-invariant heterogeneity that may influence both selection into online dating and mating outcomes.

The individual fixed effect regression results using multiple dating spells indicate that meeting a partner online is significantly associated with a higher likelihood of interracial marriage in high-population density areas, where online dating is more prevalent. By contrast, we find no statistically significant effects in low-density areas, likely reflecting lower platform usage in those regions. We then examine heterogeneity by same-race preferences. Among individuals with a strong stated preference for a same-race partner, the negative association between online dating and same-race matching disappears, suggesting as expected that the effects of online dating technology depend on user preferences. Indeed, we find that users with strong same-race preferences are more likely to use the racial filter functions, confirming that these users are likely to apply filters to narrow their searches to the same race, thus increasing the likelihood of meeting a same-race partner. In terms of educational sorting, meeting online is associated with a moderately higher likelihood of partnering with someone who has at least a college degree; however, we find no significant heterogeneity in this effect by respondents' education preferences for a partner.

Next, we investigate whether meeting a partner online is associated with differential relationship quality, proxied by the relationship duration. We adopt a Cox proportional hazard model, where the baseline hazard rate is separately estimated for each individual to account for individual unobserved heterogeneity that affects both relationship quality and selection in online dating. We find that meeting a partner online is not significantly associated with a higher break-up rate, once individual unobserved heterogeneity is accounted for.

Taken together, these findings indicate that online dating technologies have reshaped mating patterns in the United States, particularly with respect to interracial marriage. Importantly, the effects are not uniform: they vary across platforms and depend critically on individual preferences. Users with strong same-race preferences are especially likely to rely on racial filters, which increase the likelihood of same race matches.

Our findings are broadly consistent with prior work (Thomas, 2020), which also shows that online dating has contributed to the rise of heterogamous couples in the United States, albeit using a different survey. We extend this literature by providing evidence from the nation-

ally representative American Community Survey as well as our own original survey, which sheds light on the mechanisms of sorting across platforms and the role of filter usage conditional on online dating participation. Lee (2016), using data from a private anonymous online dating platform in South Korea, reported mixed effects: the platform reduced assortative mating by occupation and geographic distance but increased it by education and other demographic characteristics. Our evidence helps explain such divergent results, highlighting that user preferences (and thus cultural differences) may drive selection into distinct online dating platforms, which in turn can facilitate meeting either similar or dissimilar partners. Given the differentiated nature of online dating platforms, understanding how platform features shape mating outcomes is essential. Buyukeren et al. (2025) examined the impact of Tinder's introduction on college students, documenting its substantial influences on sexual activity and mental health. Exploiting variation in exposure, comparing students in Greek organizations, where Tinder was heavily advertised at launch, to other students, they show that Tinder increased sexual activity and, notably, improved mental health among women. Our study complements theirs by broadening the scope from a single platform to a wider set of online dating technologies, including Tinder, and by focusing on long-term mating outcomes such as interracial marriage.

The remainder of the paper is structured as follows. Section 2 outlines the institutional background and the rise of different online dating platforms. Section 3 presents the continuous-treatment difference-in-differences results using the ACS. Section 4 describes our survey design and reports findings from the individual fixed-effects analysis and the Cox proportional hazards model. Section 5 concludes.

### 2 Background: The Rise of Online Dating

Most online dating platforms launched their services after 2000, with the exceptions of Match.com and eHarmony, which started in 1995 and 2000, respectively. The most popular online dating

Table 1: Summary of Popular Online Dating Platforms

Platform	Launch Year	Race/Ethnicity Filter	Education Filter
Tinder	2013§	No	No
Bumble	2014	Premium Only Yes	Premium Only Yes
Plenty of Fish (POF)	2003	Yes	Yes
Hinge	2013‡	Yes	Yes
OkCupid	2004	Yes	Yes
Match.com	1995	Premium Only Yes	Premium Only Yes
Zoosk	2007	Yes	Yes
eHarmony	2000	Premium Only Yes	Premium Only Yes
Coffee Meets Bagel	2012	Yes	Yes
Black People Meet	2002	Yes	Yes
MeetMe	2005†	No	Yes

*Note:* We used various sources (https://www.datingsitesreviews.com/, Wikipedia, each platform website, ChatGPT 40) to gather this information, and verified the presence of filters by manually checking their platforms in 2022.

Premium-only indicates filters available with a subscription.

platform, Tinder, began its full service in 2013, around which time many other competing platforms, such as Bumble (2014) and Hinge (2013), emerged. Most online dating platforms have a free version and sometimes offer a separate paid premium version with different functionalities. Free versions typically allow users to set preferences for distance and gender/sexual orientation, limiting visible profiles to those meeting these criteria. Policies on race/ethnicity and education filters, however, vary across platforms, creating important differences in their services.

Table 1 summarizes the history of popular online dating platforms and whether each platform allows race/ethnicity and education filters. The majority of these online dating platforms allow users to filter matches by race/ethnicity, education, or both. Tinder is the only

<sup>§:</sup> Tinder launched a limited iOS version in 2012 and a full version (including Android) in 2013. Following Buyukeren et al. (2025), we consider 2013 as Tinder's full launch year.

<sup>†:</sup> MeetMe was formerly known as "myYearbook", rebranded in 2012.

<sup>‡:</sup> Hinge started as a dating website in 2012 but re-launched as a mobile app in 2013. Therefore, we consider 2013 as their first full-service launch year.

online dating platform on this list that offers neither of these filters. Bumble, Match.com and eHarmony do not offer such filters in their free versions but make them available in paid premium versions. MeetMe does not allow race/ethnicity filters but provides education filters instead.

Given these differentiated search tools, platforms tend to attract users with distinct preferences for partner characteristics. As we later show, there is substantial sorting across platforms and in filter usage, underscoring the importance of accounting for heterogeneous platform effects on mating outcomes by users' preferences.

### 3 Evidence from American Community Survey

In this section, We use microdata from the American Community Survey (ACS) obtained through IPUMS USA (Ruggles et al., 2025) to examine how the local popularity of online dating platforms affects intermarriage patterns by race and education, employing a continuous-treatment difference-in-differences design.

### 3.1 Construction of the Dataset

We construct our analysis sample from the ACS data by following several steps. First, we use 11 waves of data from 2008 to 2018, a period that coincides with the emergence and rapid growth of online dating. We then restrict the sample to individuals who were household heads, married at the time of the survey, aged 20 to 50 at the time of marriage, and whose marriage occurred between 2008 and 2018. To ensure accurate classification of racial matching, we exclude individuals who report two or more major races.

Table 2 presents summary statistics for the resulting dataset. The final sample consists of 766,074 household heads. The average age at marriage in the sample is 31.39 years. The sample includes 1.5% same-sex couples and the females are 44.3% of the sample. The racial

Table 2: Summary Statistics for ACS Data (2008-2018)

	Mean	SD
Age At Marriage	31.391	7.741
Female	0.443	0.497
Same-Sex Marriage	0.015	0.122
White	0.730	0.444
Black	0.064	0.245
Asian/Pacific Islander	0.065	0.246
Hispanic/Latino	0.134	0.341
American Indian/Alaska Native	0.007	0.083
Spouse Same Race	0.877	0.329
White	0.909	0.288
Black	0.850	0.357
Asian/Pacific Islander	0.823	0.382
Hispanic/Latino	0.760	0.427
American Indian/Alaska Native	0.481	0.500
Less Than High School	0.059	0.235
High School	0.177	0.382
Some College	0.312	0.463
College	0.279	0.449
Graduate School	0.173	0.378
Spouse Same Education	0.442	0.497
Less Than High School	0.469	0.499
High School	0.448	0.497
Some College	0.458	0.498
College	0.439	0.496
Graduate School	0.401	0.490

*Note:* This table reports summary statistics from the ACS dataset, comprising 11 waves spanning 2008 to 2018. The sample has been restricted according to the selection criteria outlined in the main text, resulting in a total of 766,074 observations.

composition, based on ACS classifications, includes five major groups. The majority of respondents are White (73%), followed by Hispanic/Latino (13.4%), Asian/Pacific Islander (6.5%), and Black (6.4%) individuals. A small fraction of the sample (0.7%) identifies as American Indian or Alaska Native.

We next examine racial homogamy—the extent to which individuals marry within their racial groups—both overall and by racial subgroup. Overall, 87.7% of individuals share the same race as their spouse, indicating a very high racial homogamy rate. This tendency varies substantially across groups: White individuals exhibit the highest racial homogamy rate at

90.9%, followed by Black (85.0%) and Asian/Pacific Islander (82.3%) individuals. Hispanic/Latino individuals have a lower rate at 76.0%, while American Indian/Alaska Native individuals have the lowest rate at 48.1%. However, the standard deviation for this latter group is relatively large due to the small sample size.

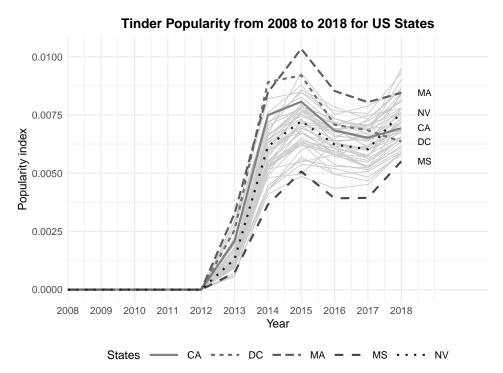
The final section of the summary table reports the distribution of educational attainments as well as the likelihood of marrying a spouse with the same level of education. Compared to the racial homogamy rate, the educational homogamy rate is substantially lower, almost half as large as the racial homogamy rate. The educational homogamy rate is not very different across educational groups, ranging from 40% to 47%.

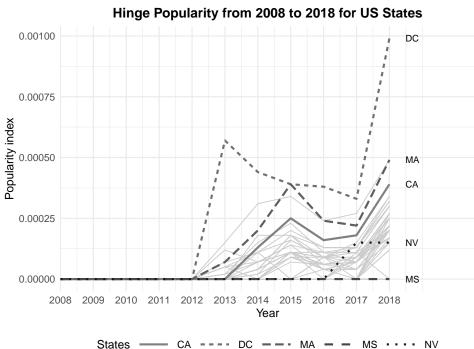
We match each marriage year and state of residence in the ACS data to the corresponding year's online dating platform popularity in that state. Popularity is measured by per-capita search volumes for each platform name, constructed using Google Trends (Google, 2024) and the KWFinder tool by Mangools (Mangools, 2024). Since Google Trends reports only relative search volumes—normalizing the peak value within a given period to 100—we combine these relative indices with absolute search volume data from KWFinder for a subperiod to recover per-capita search volumes for each platform—state—year cell. Details on the construction of these popularity indices are provided in Appendix Section A. For our baseline analysis, we use the popularity index value for the marriage year. However, recognizing that couples may date for some time before marrying, we also test the robustness of our findings in Section 3.4 using the average popularity over the two years preceding the marriage year, and the results remain consistent.

Figure 1 presents the time series of two resulting panel popularity indices—Tinder and Hinge—across US states<sup>2</sup>; for nine other online dating platform popularity indices, see Online Appendix Section B. We observe that search volumes for both platforms surged rapidly after their 2013 launches. Initially, Tinder aggressively targeted college students, particularly those in Greek organizations (see Buyukeren et al. (2025) for details on Tinder's history). Consis-

<sup>&</sup>lt;sup>2</sup>While minimal search activity for Tinder is observed in 2012, we set the popularity index to zero for all years prior to 2013, given that the platform's first full launch occurred in 2013 (Buyukeren et al. (2025)). For Hinge, the popularity index is zero through 2012, so no recoding is needed.

Figure 1: Popularity Index for Tinder and Hinge





*Note:* This figure shows Tinder and Hinge popularity indices for 51 US states, highlighting five states (Massachusetts, Nevada, California, Washington DC, Mississippi) in darker lines. Although small search volumes for Tinder were detected in 2012, we set the popularity index to zero prior to 2013, as 2013 marks Tinder's first full launch year.(Buyukeren et al. (2025)). For Hinge, the popularity index is zero through 2012, so no recoding is needed.

tent with this strategy, Massachusetts—known for its numerous universities—has consistently ranked highest in Tinder popularity. Tinder has also been popular in California, home to its co-founder's alma mater, the University of Southern California, and a key marketing target (Buyukeren et al. (2025)). Similarly, Hinge positioned itself as an "anti-Tinder" for serious relationships and initially focused its marketing on Washington DC, where their headquarters are located (The Washington Post (2013)). Consequently, Hinge has remained most popular in Washington DC throughout our sample period.

The figures reveal substantial variation in online dating popularity across states and over time that cannot be fully explained by long-term demographic trends or shifts in preferences, thereby strengthening our identification strategy. Initial marketing campaigns generated idiosyncratic and plausibly exogenous variation in local platform popularity, while growing competition among platforms produced non-monotonic usage patterns. For example, in Washington, DC, Tinder's popularity has fallen steadily since 2015, while Hinge saw a sharp rise in 2018 following targeted marketing. Popularity indices for additional platforms, presented in Online Appendix Section B, similarly show complex, non-monotonic patterns of growth and decline.

### 3.2 Main Regression Results

Next, we proceed with a regression analysis to examine the impact of online dating platform popularity on marriage patterns. We employ a continuous treatment difference-in-differences framework. Our identification relies on a parallel trends assumption: in the absence of online dating platforms, changes in intermarriage patterns by race and education would have evolved similarly across states. To address potential concerns, we add extensive information —birth year, gender, race, and education— to control for demographic-specific differences in marriage partner preferences. To validate our parallel trend assumption, we provide evidence from an event study that is consistent with parallel trends in Section 3.3. We also exploit narrower

time windows around the platform launch year for robustness, as preferences are less likely to shift in short horizons, while early marketing efforts generate sharper, more idiosyncratic variation in local popularity. The regression we focus on is:

SameRacePartner<sub>it</sub> or SameEducPartner<sub>it</sub> = 
$$\alpha_0 + \sum_{k=1}^K \alpha_{1k}$$
Online Dating index (std.)<sub>kst</sub> 
$$+ X_i^{\top} \beta + \delta_s + \gamma_t + \lambda_s \times t + \mu_r \times t + \phi_e \times t + \epsilon_{it}. \quad (1)$$

Here, i denotes an individual, t is a year index, and s refers to state. The controls  $X_i$  include dummies for birth year, gender, race and education level. The terms  $\lambda_s \times t$ ,  $\mu_r \times t$ ,  $\phi_e \times t$  represent state-specific, race-specific, and education-specific linear time trends, respectively. SameRacePartner $_{it}$  (SameEducPartner $_{it}$ ) equals 1 if individual i's spouse has the same race (education) with i and 0 otherwise. The Online Dating index (std.) $_{kst}$  measures the standardized search volume for platform k in state s and year t, calculated by subtracting the mean and dividing by the standard deviation of that platform's index across all states and years, as described in Appendix Section A.

The coefficients  $\{\alpha_{1k}\}$  are therefore our coefficients of interest and represent the effect of online dating platform k's popularity on racial or educational homogamy. The state-, race-, and education-specific linear time trends can capture slowly evolving long-term trends in preferences for spouse characteristics, so  $\{\alpha_{1k}\}$  exploits remaining variations in short-term fluctuations in online dating popularity.

Tables 3 and 4 present the results of the regression analysis specified in Equation 1. From specifications (1) to (4), we progressively add state-specific, race-specific, and education-specific linear time trends to check the sensitivity of our results across these specifications. All specifications control for individual birth year, gender, race, and education, as well as year and state dummies. We examine eleven popular online dating platforms: Tinder, Plenty of Fish, Bumble, OkCupid, eHarmony, Zoosk, MeetMe, Match.com, Black People Meet, Hinge, and Coffee Meets Bagel. In specifications (5)–(8), we include only Tinder's standardized search volume, as Tinder has been the most popular and influential online dating platform through-

Table 3: Effect of Online Dating Popularity on Racial Homogamy

	Dependent Variable: Spouse Same Race								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Tinder (std.)	-0.011***	-0.010*	-0.010*	-0.010*	-0.008***	-0.011***	-0.011**	-0.011***	
	(0.004)	(0.006)	(0.006)	(0.006)	(0.003)	(0.004)	(0.004)	(0.004)	
Plenty of Fish (std.)	-0.001	-0.001	-0.001	-0.001					
•	(0.001)	(0.001)	(0.001)	(0.001)					
Bumble (std.)	0.001	0.001	0.001	0.001					
	(0.002)	(0.001)	(0.001)	(0.001)					
OkCupid (std.)	0.002	0.001	0.001	0.001					
	(0.001)	(0.001)	(0.001)	(0.001)					
eHarmony (std.)	-0.003	-0.004**	-0.004**	-0.004**					
	(0.002)	(0.002)	(0.002)	(0.002)					
Zoosk (std.)	0.003	0.004*	0.004*	0.004*					
	(0.002)	(0.002)	(0.002)	(0.002)					
MeetMe (std.)	0.002**	-0.000	-0.000	-0.000					
	(0.001)	(0.001)	(0.001)	(0.001)					
Match.com (std.)	0.003*	0.005*	0.005*	0.005*					
	(0.002)	(0.002)	(0.002)	(0.002)					
Black People Meet (std.)	-0.002**	-0.002	-0.002	-0.002					
	(0.001)	(0.001)	(0.001)	(0.001)					
Hinge (std.)	-0.002	-0.001	-0.001	-0.001					
	(0.001)	(0.002)	(0.002)	(0.002)					
Coffee Meets Bagel (std.)	0.002***	-0.000	-0.000	-0.000					
	(0.001)	(0.001)	(0.001)	(0.001)					
Avg. Dependent Var.	0.877	0.877	0.877	0.877	0.877	0.877	0.877	0.877	
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y	
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y	
Race FE	Y	Y	Y	Y	Y	Y	Y	Y	
Education FE	Y	Y	Y	Y	Y	Y	Y	Y	
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	
State FE	Y	Y	Y	Y	Y	Y	Y	Y	
State Time Trend	N	Y	Y	Y	N	Y	Y	Y	
Race Time Trend	N	N	Y	Y	N	N	Y	Y	
<b>Education Time Trend</b>	N	N	N	Y	N	N	N	Y	
Adj. R-squared	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	
Observations	766,074	766,074	766,074	766,074	766,074	766,074	766,074	766,074	

*Note:* Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\*\* p < 0.05, \*\*\* p < 0.01

out our sample period; results using Tinder alone are therefore of particular interest.

The estimated effects of a one standard deviation increase in Tinder popularity on racial homogamy are remarkably consistent across specifications, ranging from 0.8 to 1.1 percentage points, representing 0.9% to 1.25% of the dependent variable mean. In our preferred specification, which includes all linear time trends (columns 4 and 8), a one standard deviation increase in local Tinder popularity reduces same-race marriages by 1.0 to 1.1 percentage points.

Tinder stands out as the platform with by far the largest impact on racial homogamy

Table 4: Effect of Online Dating Popularity on Educational Homogamy

			Dependent	Variable: Sp	ouse Sam	e Education		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tinder (std.)	0.005 (0.007)	-0.002 (0.006)	-0.002 (0.006)	-0.003 (0.006)				
Plenty of Fish (std.)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)				
Bumble (std.)	0.001 (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)				
Okcupid (std.)	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)				
eHarmony (std.)	0.004 (0.003)	0.003 (0.004)	0.003 (0.004)	0.003 (0.004)				
Zoosk (std.)	-0.001 (0.004)	-0.003 (0.004)	-0.003 (0.004)	-0.003 (0.004)				
Meetme (std.)	-0.003 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)				
Match.com (std.)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)				
Black People Meet (std.)	-0.001 (0.002)	-0.000 (0.002)	-0.000 (0.002)	-0.000 (0.002)				
Hinge (std.)	0.003* (0.002)	0.002 (0.002)	0.002 (0.002)	0.002 (0.002)				
Coffee Meets Bagel (std.)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.001 (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)
Avg. Dependent Var.	0.442	0.442	0.442	0.442	0.442	0.442	0.442	0.442
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y
Race FE	Y	Y	Y	Y	Y	Y	Y	Y
Education FE	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y	Y	Y	Y
State Time Trend	N	Y	Y	Y	N	Y	Y	Y
Race Time Trend	N	N	Y	Y	N	N	Y	Y
Education Time Trend	N	N	N	Y	N	N	N	Y
Adj. R-squared Observations	0.010 766,074	0.010 766,074	0.010 766,074	0.010 766,074	0.010 766,074	0.010 766,074	0.010 766,074	0.010 766,074

Note: Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

among those examined. Other platforms display either statistically insignificant or much smaller effects. Under our preferred specification (4), greater eHarmony popularity reduces same-race marriages, whereas higher popularity of Zoosk and Match.com leads to modest increases in same-race marriages. These contrasting patterns highlight the heterogeneity of platform effects, yet the magnitudes remain considerably smaller than the pronounced influence observed for Tinder.

In contrast to its effect on racial homogamy, we find no evidence that Tinder affects educational homogamy. Table 4 shows that when all eleven platforms are included, only the popularity of Coffee Meets Bagel reduces educational homogamy: a one-standard-deviation increase in its popularity declines same education marriages by 0.4 percentage points (0.9% of the mean). This result also holds when Coffee Meets Bagel is analyzed on its own. The corresponding specification that includes only Tinder is reported in Table B.1 in the Online Appendix. Although some specifications suggest a significant effect of Tinder, these appear to be driven by correlations with other omitted platforms, as Tinder ceases to be significant once all platforms are controlled for (see Columns 1 to 4 in Table 4).

### 3.3 Supportive Evidence of Parallel Trend Identifying Assumption

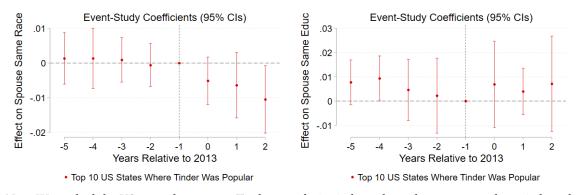
We assess potential pre-trends in intermarriage by race and education to evaluate the credibility of the parallel trends assumption. Because Tinder is the most influential platform in shaping interracial marriage patterns, we focus on whether states where Tinder later became most popular exhibited differential trends in intermarriage prior to its launch. We define the ten states with the highest Tinder popularity during our sample period as the treated group, with years after 2013 designated as the post-treatment period.

Figure 2 shows no evidence of pre-trends in intermarriage by race or education once demographics (gender, race, education, and birth year) are controlled for. After 2013, the top ten Tinder states experienced a decline in same-race marriage rates, consistent with Table 3<sup>3</sup>. Repeating the exercise for the top 25 states (Figure B.7 in the Online Appendix) yields similar results, with no evidence of pre-trends. Overall, these findings provide strong support for the validity of the parallel trends assumption underlying our identification strategy.

We further assess the robustness of our findings by narrowing the sample period to a fiveyear window centered around 2013, the year Tinder launched its full service. During this

<sup>&</sup>lt;sup>3</sup>Table 3 relies on a continuous measure of Tinder popularity, whereas Figure 2 classifies states into two groups: those where Tinder was consistently popular and those where it was not.

Figure 2: Event Study Evidence on the Absence of Pre-Trend



*Note:* We ranked the US states by average Tinder popularity indices throughout our sample periods and defined the top 10 US states where Tinder was most popular as a treated group and years after 2013 (Tinder's launch year) as post-treatment year. The 10 US states are Massachusetts, Vermont, New York, Washington, Rhode Island, Washington DC, North Dakota, Utah, Colorado, and Maine. For results using the top 25 US states, see Figure B.7 in the Online Appendix. We controlled for gender, race, education, and birth year fixed effects, as well as year and state fixed effects.

period, Tinder's initial popularity was more likely driven by exogenous factors, such as its marketing strategy, making the results less susceptible to confounding from long-term demographic trends. Table 5 shows that the effect of Tinder popularity on racial homogamy remains statistically significant across all specifications, with magnitudes even larger than those reported in the baseline results in Table 3. In line with Table 4, however, we continue to find no significant effect of Tinder popularity on educational homogamy.

### 3.4 Robustness to Using Two-Year Average Indices

Next, we check the robustness of our results when using the two-year average of online dating popularity indices instead of the popularity indices for the marriage year. People may date for a while before getting married, so the effect of online dating might appear with a time lag. The results, reported in Tables B.2 and B.3 in Online Appendix Section B, show that a one–standard deviation increase in the two-year average of Tinder popularity reduces racial homogamy by 0.8 to 1.5 percentage points. Our preferred specifications (4) and (8) yield slightly larger magnitudes than the baseline estimates. For educational homogamy, the results remain broadly consistent with the baseline: Coffee Meets Bagel is the only platform show-

Table 5: Robustness Check: Effect of Online Dating Popularity on Racial and Education Homogamy (5-year window, 2010–2015)

Dependent Variable		Spouse S	ame Race		Sp	Spouse Same Education				
-	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Tinder (std.)	-0.010** (0.003)	* -0.014** (0.004)	* -0.014** (0.004)	* -0.014** (0.004)	* 0.000 (0.004)	0.001 (0.007)	0.001 (0.007)	0.001 (0.007)		
Avg. of Dependent Variable	0.877	0.877	0.877	0.877	0.442	0.442	0.442	0.442		
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y		
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y		
Race FE	Y	Y	Y	Y	Y	Y	Y	Y		
Educ FE	Y	Y	Y	Y	Y	Y	Y	Y		
Year FE	Y	Y	Y	Y	Y	Y	Y	Y		
State FE	Y	Y	Y	Y	Y	Y	Y	Y		
State-Specific Time Trend	N	Y	Y	Y	N	Y	Y	Y		
Race-Specific Time Trend	N	N	Y	Y	N	N	Y	Y		
Educ-Specific Time Trend	N	N	N	Y	N	N	N	Y		
Adjusted R squared	0.055	0.055	0.055	0.055	0.011	0.011	0.011	0.011		
Observations	462197	462197	462197	462197	462197	462197	462197	462197		

*Note:* Standard errors are clustered at the state level and are presented in parentheses. \*p < 0.1, \*p < 0.05, \*\*\* p < 0.01

ing a significant effect, with a one-standard deviation increase in popularity leading to a 0.4 percentage point decline.

### 3.5 Heterogeneous Effects of Tinder Popularity

Next, we further investigate the heterogeneous effects of Tinder popularity across subpopulations. Because online dating might be popular among young generations who are familiar with using the internet, the effect of Tinder's popularity may vary by technology access and age. Table 6 shows regression results with interaction terms between the Tinder popularity index and demographic and technology access indicators. The results indicate a stronger negative effect of local Tinder popularity on same-race marriage rates among individuals with home internet access, and those born after 1980. Moreover, we find no evidence of heterogeneous effects on educational homogamy: none of the interaction coefficients with Tinder popularity are statistically significant in this dimension.

Table 6: Heterogeneous Effect of Online Dating Popularity on Racial and Education Homogamy

	Spouse Sa (1)	ame Race	Spouse Sar (3)	me Education (4))
Tinder (std.)	0.002	-0.007*	-0.045	-0.008*
	(0.014)	(0.004)	(0.031)	(0.004)
Internet at Home	-0.042***		-0.054***	
	(0.011)		(0.012)	
Tinder (std.) × Internet at Home	-0.020**		0.020	
	(0.009)		(0.016)	
Tinder (std.) × Born after 1980		-0.005***		-0.002
, ,		(0.001)		(0.001)
Avg. of Dep. Var.	0.877	0.877	0.442	0.442
Birth Year FE	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y
Race FE	Y	Y	Y	Y
Educ FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
State Time Trend	Y	Y	Y	Y
Race Time Trend	Y	Y	Y	Y
Educ Time Trend	Y	Y	Y	Y
Adjusted R squared	0.062	0.056	0.014	0.010
Observations	64939	766074	64939	766074

*Note:* Standard errors clustered at the state level are in parentheses. \*p < 0.1, \* $\rlap/p < 0.05$ , \* $\rlap/p^* < 0.01$ .

### 4 Evidence from Survey

Next, we turn to our survey evidence, which complements the ACS analysis by addressing its key limitation—namely, the absence of information on who uses online dating and their spouse preferences, and thus its limited ability to shed light on underlying mechanisms.

Table 7: Questions For Preferences on Spouse Characteristics

Race	How much do you agree to the following statements?
	• I prefer meeting a spouse having the same race as me.
	<ul> <li>A couple of the same race is more likely to stay together.</li> </ul>
	• A person of the same race can be a better partner to me.
	• There is nothing wrong with two people of <u>different</u> races being a
	couple.
	How much do you agree to the following statements? Note:
Education	University/College degree excludes a degree from a community
	college/vocational schools.
	• I prefer meeting a spouse with at least a university/college degree.
	<ul> <li>Having a university/college degree is <u>not</u> an important</li> </ul>
	consideration when choosing a spouse.
Note: This table l	ists the statements used in our analysis that passed the list randomization test (see On

*Note:* This table lists the statements used in our analysis that passed the list randomization test (see Online Appendix Section C for details) and show no evidence of substantial social desirability bias. The responses are in 5-scales (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree).

### 4.1 Survey Design

We conducted a 10-minute online survey<sup>4</sup> through the survey platforms, Amazon MTurk and Lucid Marketplace<sup>5</sup>, which have registered panel members between January 2022 and March 2022. To understand the racial and geographic differences in online dating usage, we stratified our sample by race and local Black population density. We restricted the eligibility to White or Black race only, who do not report multiple races or ethnicities, and those who were born between 1971 and 1991, corresponding to ages 31 to 51 at the time of the survey. The full survey questionnaire is shown in Online Appendix Section D.

Our survey consists of three main blocks. In the first major block, we asked detailed questions about online dating usage, including the platforms respondents used, the types of filters they applied (e.g., race, education, income), and the number of dating partners they had met through these apps. In the second major block, we asked about preferences for a

<sup>&</sup>lt;sup>4</sup>The median time spent on the survey was 10 minutes. Compensation varied across respondents, with an average payment of \$1.70 per participant.

<sup>&</sup>lt;sup>5</sup>24% of our sample was collected on Amazon MTurk and 76% was collected on Lucid Marketplace. We initially fielded the survey on Amazon Mechanical Turk (MTurk) but subsequently switched to Lucid Marketplace, which offers better targeting and tighter control over sampling speed. To improve precision, we pool responses from both platforms to maximize sample size. Lucid Marketplace has been widely used in economics research (see, e.g., Binetti et al. (2024); Colarieti et al. (2024)).

spouse's characteristics, including race and education. For example, respondents were asked to indicate their level of agreement or disagreement with statements like: "A person of the same race can be a better partner for me;" and: "There is nothing wrong with two people of different races being a couple." To address potential social desirability bias in responses, we implemented list randomization for race- and education-related statements and retained only a subset of statements for our analysis that do not show a substantial contamination with social desirability bias. See Online Appendix Section C for details of the list randomization analysis. Table 7 shows a full list of statements used in our analysis that passed the list randomization test <sup>6</sup>. The third major block asked about the full retrospective history of serious relationships, defined as marriage, engagement, or cohabitation. For each relationship, respondents reported when they met the partner and when they ended the relationship, how they met (online or offline), the dating platforms used if they met online, and the partner's characteristics. Information on multiple relationship spells is crucial for our research design, as it enables individual fixed-effects regressions that account for unobserved heterogeneity influencing both selection into online dating and mating outcomes.

Table 8 presents summary statistics for key variables. We collected 1,986 responses in total. The average age of people in our sample is 40.33. Over half of them are female (62%), roughly 11% reported as LGBTQ, and slightly less than half of them are Black (46%). The educational attainment of the collected sample is relatively high, with over 70% of them having an associate's degree, bachelor's degree, or higher. In terms of marital status at the time of the survey, around 42% of people were never married, while 42% of them were married.

Many respondents were experienced with online dating: 57% reported having used online dating at least once, and indeed, they used multiple (3.3) online dating platforms on average. "Marriage" (65%) and "Casual Date" (59%) were the most common reasons people mentioned as the purpose of using online dating, confirming that online dating platforms can be influential in marriage outcomes. In terms of realized serious relationships, defined as marriage, engagement, cohabitation, or other similar verbal commitments, offline meetings were still

<sup>&</sup>lt;sup>6</sup>For a full set of statements included in the survey, see Table C.7 in the Online Appendix.

Table 8: Summary Statistics for Key Variables

	N	Mean	SD
Age	1986	40.329	5.670
Female	1986	0.621	0.485
LGBTQ	1959	0.105	0.306
Black	1986	0.462	0.499
Less than High School	1986	0.033	0.178
High School	1986	0.212	0.409
Associate Degree	1986	0.377	0.485
Bachelor's Degree or Higher	1986	0.378	0.485
Never Married	1986	0.416	0.493
Married	1986	0.415	0.493
Divorced	1986	0.152	0.359
Widowed	1986	0.016	0.126
Ever Used Online Dating	1986	0.573	0.495
Number of Online Dating Platforms Used	1137	3.339	2.180
Online Dating For Marriage	1137	0.645	0.479
Online Dating for Casual Date	1137	0.588	0.492
Online Dating For Sex	1137	0.383	0.486
Online Dating For Friend	1137	0.451	0.498
Online Dating For Other Reasons	1137	0.011	0.106
Had Any Serious Relationships	1006	0.767	0.422
(Marriage/Engagement/Cohabitation)	1986	0.767	0.423
Number of Serious Relationships	1523	2.066	1.297
Met Offline	1126	0.701	0.412
Met on Online Dating	1126	0.251	0.393
Met on Other Online Sites	1126	0.048	0.189

Note: This table presents the summary statistics for the key variables in our survey sample. The total sample size is 1986. The top panel of the table shows basic demographic characteristics, while the bottom panel shows dating patterns and online dating usage. We allowed multiple responses for the question about the purpose of using online dating. Serious relationships are defined as ones that have developed into either marriage/engagement/cohabitation (living together)/ other similar commitments (including any ongoing ones). We asked details, including whether they met offline/on online dating/on other online sites, up to five serious relationships.

more common than online dating. On average, 70% of past serious relationships began offline, 25% through online dating platforms, and 5% via other online sites, such as Facebook (prior to the launch of Facebook Dating). Overall, 76% of our sample members reported having at least one serious relationship in the past, and the average number of serious relationships was 2.1.

Figure 3 shows the popularity of various online dating platforms among survey samples.

The figure displays the share of online dating users who reported using each online dating

Tinder 70.20 Plenty of Fish 10.13 0.37 Match.com 0.10 0.32 Facebook Dating Bumble 0.05 0.22 MeetMe 0.05 Platform Okcupid 0.07 Eharmony Black People Meets 7 0.07 Zoosk 0.02 Hinge 0.02 Grindr 0.05 Coffee Meets Bagel

Figure 3: Online Dating Popularity Among People by Match Type

Share

Type ☐ Serious Matches ☐ All Usage

0.3

0.4

0.5

0.6

*Note:* This figure shows the popularity of online dating platforms. "All Usage" shows the share among online dating users who reported using each platform. Multiple choices are allowed. "Serious Matches" shows the distribution of online dating platforms where serious relationships were formed; serious relationships are defined as ones that have developed into either marriage/engagement/cohabitation (living together)/ other similar commitments (including any ongoing ones).

0.2

platform and the distribution of online dating platforms where serious relationships, defined as those that have developed into either marriage, engagement, cohabitation, or similar verbal promise, were formed. The figure confirms that Tinder is the most popular online dating platform. 55% of respondents who reported using any online dating platform indicated that they had used Tinder. The next popular platforms were Plenty of Fish (40%), Match.com (37%), and Facebook Dating (32%)<sup>7</sup>, which launched for the first time in 2019. Interestingly, Tinder was also the platform that resulted in most serious relationships – defined as those that have developed into either marriage/engagement/cohabitation/other similar verbal commitments – challenging the common perception that it is primarily used for casual, one-time hook-ups. In fact, 20% of all serious relationships that originated online began on Tinder. Other major platforms, including Plenty of Fish, Match.com, and Facebook Dating, also contributed sub-

0.00

0.1

0.0

Inner Circle

<sup>&</sup>lt;sup>7</sup>Facebook Dating offers no race filter but includes an education filter.

Age 0.59 Distance 0.47 0.30 Relationship Status 0.27 **Smoking Physical Traits** 0.25 0.23 Race Preference For Children 0.22 0.21 Hobby 0.20 Drug I did not use any filter 0.19 Religion 0.18 0.17 Alcohol 0.17 Language Education 0.15 Political Orientation 0.10 0.08 Income Others 0.01 0.0 0.2 0.4 0.6 Share

Figure 4: Filter Usage Among Online Dating users

*Note:* This figure displays the share of online dating users who reported using each filter. "Relationship Status" includes any presence of a child. "Physical Traits" includes height and weight.

stantially to the formation of serious relationships.

Figure 4 presents the share of online dating users who reported using various filters to screen potential matches based on specific characteristics. Only 19% of users indicated that they did not use any filters, highlighting the widespread use of filtering functions on dating platforms. Among the available options, "Age" and "Distance" were the most commonly used, with 59% and 47% of users reporting their use, respectively. Other frequently used filters included "Relationship Status" (30%), "Smoking" (27%), "Physical Traits" (25%), and "Race" (23%). The focus of our analysis, the racial filter, was the sixth most popular filter among online dating users. In contrast, the "Education" filter was among the least utilized, with only 15% of users indicating that they applied it.

### 4.2 Results From the Survey Data

### 4.2.1 Evidence of Sorting into Online Dating and Filter Usage

This section examines patterns of sorting into online dating and the use of filtering features. Table 9 presents linear probability model estimates for four outcomes: whether respondents have used any online dating platform, whether they have used Tinder, and—conditional on online dating use—whether they applied a racial filter or an education filter.

First, we find evidence of selection into online dating use. Women are 12 percentage points less likely to use online dating, while individuals identifying as LGBTQ are 10 percentage points more likely. Older individuals are less likely to use online platforms, whereas those with a strong preference for a highly educated spouse and those earning over \$75,000 are more likely to do so. Among all religious groups, Jewish respondents are the most likely to engage in online dating. Notably, people living in densely populated areas are more likely to use online dating. Although theory suggests that those in sparsely populated areas might rely more on online platforms due to offline search frictions, our results imply that the higher user density in urban areas may enhance the perceived value of using these platforms.

Second, the pattern of Tinder usage largely mirrors that of general online dating but with several notable differences. Black respondents and Hindus are significantly less likely to use Tinder compared to White respondents and the omitted religious group – people without a religion or people with other religions.<sup>8</sup> In contrast to general online dating, LGBTQ status, preference for highly educated spouses, Jewish affiliation, and population density no longer show significant associations with Tinder use.

Third, among online dating users, we examine who uses racial filters. Black individuals, those with a strong preference for same-race partners, Protestants, Jews, and Muslims are more likely to use racial filters. Conversely, Hindus are significantly less likely to do so. Interestingly, users in high-density areas are more likely to apply racial filters—possibly because

<sup>&</sup>lt;sup>8</sup>Although Black respondents in our survey report lower Tinder use than Whites, our ACS analysis indicates that Tinder still contributed to interracial marriage among Black individuals. Table B.4 in the Online Appendix shows that Tinder's diffusion increased interracial marriages for Black respondents born between 1971 and 1991.

Table 9: Linear Probability Model on Sorting into Online Dating and Filter Usage

	(1) Used Online Dating	(2) Used Tinder	(3) Used Race Filter	(4) Used Educ Filter
Female	-0.121***	-0.135***	-0.042	0.002
	(0.033)	(0.029)	(0.033)	(0.026)
Black	-0.001	-0.071**	0.074*	0.034
	(0.035)	(0.029)	(0.039)	(0.030)
College	-0.014	0.009	-0.018	-0.013
	(0.031)	(0.034)	(0.033)	(0.023)
LGBTQ	0.103**	0.003	-0.020	-0.043
-	(0.041)	(0.053)	(0.042)	(0.033)
Age	-0.018***	-0.022***	0.003	-0.001
	(0.003)	(0.002)	(0.003)	(0.003)
Same-Race Pref. Z-score	-0.027	-0.023	0.041**	0.017
	(0.019)	(0.018)	(0.018)	(0.015)
Higher-Educ Pref. Z-score	0.028*	0.015	0.007	0.033**
	(0.015)	(0.013)	(0.014)	(0.015)
Income 75k-99k	0.133**	0.133***	-0.024	0.008
	(0.050)	(0.038)	(0.063)	(0.047)
Income 100k-149k	0.160***	0.122**	0.018	0.099**
	(0.054)	(0.059)	(0.059)	(0.041)
Income 150k+	0.105*	0.129**	-0.065	0.129*
	(0.057)	(0.064)	(0.070)	(0.075)
Catholic	0.052	0.025	0.047	0.001
	(0.039)	(0.037)	(0.039)	(0.039)
Protestant	0.033	-0.033	0.099**	0.049
	(0.034)	(0.034)	(0.040)	(0.037)
Jew	0.211***	0.093	0.213*	0.045
	(0.075)	(0.105)	(0.112)	(0.101)
Hinduism	0.084	-0.241***	-0.237***	-0.138***
	(0.307)	(0.024)	(0.045)	(0.037)
Islam	-0.014	-0.008	0.158*	0.233**
	(0.081)	(0.113)	(0.093)	(0.108)
Conservatism Z-score	-0.012	-0.003	0.013	0.010
	(0.013)	(0.013)	(0.014)	(0.013)
Log(Pop. Density)	0.024**	0.001	0.128***	0.023
	(0.010)	(0.011)	(0.015)	(0.016)
Avg. Dep. Var.	0.573	0.314	0.233	0.146
State FE	Yes	Yes	Yes	Yes
Adj. $R^2$	0.101	0.148	0.046	0.036
Observations	1188	1188	749	749

Note: Standard errors are clustered by US states and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. Baseline income group excluded from the regression is people who earn below 75k annual pre-tax income. Baseline religious groups excluded from the regression are people without any religion and people who believe in other religions, including Buddhism. 'Same-Race Pref. Z-score' and 'Higher-Educ Pref. Z-score' indicate standardized indices for the preference for same-race and highly educated spouses. 'Conservatism Z-score' is a standardized index for self-reported conservative political ideology.

such areas provide a sufficiently large pool of potential matches even within narrower racial criteria.

Fourth, we analyze the use of education filters among online dating users. Individuals who strongly prefer highly educated spouses and those earning over \$100,000 annually are more likely to use education filters. As with racial filters, Hindus are significantly less likely to use them, while Muslims are significantly more likely to do so.

In sum, the results reveal substantial sorting in both online dating participation and filter usage. Specifically, individuals with stronger preferences regarding partner characteristics are more likely to use filters to refine their search. Interestingly, racial filtering is more prevalent in high-density areas, even though offline search frictions are arguably lower in these environments.

### 4.2.2 Evidence on Mating Patterns

Next, we examine how meeting a partner online is associated with mating outcomes. While the ACS data do not include information on how respondents met their partners, our survey collected this information for up to five of each respondent's most serious relationships—defined as those that resulted in marriage, engagement, cohabitation, or comparable verbal commitments. The availability of multiple relationships per individual enables the use of individual fixed-effects regressions to assess how partner characteristics vary with the meeting method, while controlling for unobserved time-invariant individual factors that may influence both selection into online dating and mating outcomes. All regressions include standard errors clustered at the individual level and control for relationship-type fixed effects (i.e., marriage, engagement, or cohabitation)<sup>9</sup>. We also estimate regressions separately by whether the U.S. state where the respondent met their partner had high or low population density, with "high population density" defined as states whose 2013 population density exceeded the median.

 $<sup>^9</sup>$ Fewer than 4% of respondents in our sample reported multiple marriages, making it difficult to implement individual fixed-effects regressions using marriage spells alone.

Table 10: Individual Fixed Effect Regression on Same-Race Partner

		Whet	ther the par	tner is sam	e race	
	(1)	(2)	(3)	(4)	(5)	(6)
Met Online	-0.034	-0.026	-0.090*	-0.085*	0.005	0.027
	(0.034)	(0.032)	(0.047)	(0.045)	(0.050)	(0.048)
Met Online X						
Same-Race Pref.		0.046		0.084*		0.083
Z-score						
		(0.035)		(0.046)		(0.055)
Avg. of Dependent	0.789	0.789	0.789	0.789	0.789	0.789
Variable	0.769	0.709	0.707	0.709	0.709	0.709
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Relationship Type FE	Yes	Yes	Yes	Yes	Yes	Yes
			High	High	Low Pop	Low Pop
Sample	All	All	Pop	Pop	Density	Density
			Density	Density	Delisity	Delisity
Adjusted R squared	-0.001	0.001	0.017	0.025	0.002	0.010
Number of	976	976	551	551	425	425
Observations	7/0	7/0	331	331	443	443
Number of Individuals	402	402	256	256	195	195

Note: Standard errors, clustered at the individual level, are reported in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. To include individual fixed effects, we limit the sample to respondents who report at least two serious relationship spells. "Relationship type" is a categorical variable indicating whether the serious relationship involved marriage, engagement, or cohabitation. "High population density area" refers to a U.S. state with a 2013 population density above the median. We assign this based on the state in which the respondent met their partner.

Table 10 presents the results for the likelihood of having a same-race partner. Statistically significant associations appear only in high-density states: in those areas, meeting online is associated with a lower likelihood of having a same-race partner when controlling for individual fixed effects (Column 3). Moreover, the interaction results in Column 4 indicate that this effect varies with racial preferences. For individuals one standard deviation above the mean in same-race preference, meeting online is no longer significantly associated with a lower likelihood of having a same-race partner.

Table 11 reports similar regressions for the likelihood that the partner has a college degree. We find that meeting online is associated with a modestly higher likelihood of having a college-educated partner. While subsample results by population density are not statistically significant—likely due to smaller sample sizes—the full-sample results are largely driven by

Table 11: Individual Fixed Effect Regression on College-Grad Partner

	Whether the partner has a College Degree					
	(1)	(2)	(3)	(4)	(5)	(6)
Met Online	0.054* (0.031)	0.054* (0.031)	0.046 (0.044)	0.048 (0.044)	0.003 (0.053)	0.001 (0.061)
Met Online X Higher-Educ Pref. Z-score		-0.008		-0.048		-0.007
		(0.027)		(0.036)		(0.052)
Avg. of Dependent Variable	0.223	0.223	0.223	0.223	0.223	0.223
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Relationship Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Sample	All	All	High Pop Density	High Pop Density	Low Pop Density	Low Pop Density
Adjusted R squared	0.028	0.027	0.032	0.033	0.033	0.031
Number of Observations	976	976	551	551	425	425
Number of Individuals	402	402	256	256	195	195

Note: Standard errors, clustered at the individual level, are reported in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. To include individual fixed effects, we limit the sample to respondents who report at least two serious relationship spells. "Relationship type" is a categorical variable indicating whether the serious relationship involved marriage, engagement, or cohabitation. "High population density area" refers to a U.S. state with a 2013 population density above the median. We assign this based on the state in which the respondent met their partner.

respondents in high-density states.

Given the prominence of the Tinder effect in the ACS analysis, we also examine it using our survey data (see Tables B.5 and B.6 in the Online Appendix). Most coefficients are statistically insignificant, likely due to the limited survey sample size compared to the ACS, but their signs are broadly consistent with the ACS baseline estimates. For instance, the effect of meeting on Tinder on the likelihood of same-race marriage remains negative (Table B.5). We caution that the magnitudes are nonetheless not directly comparable across datasets because the survey and the ACS analyses differ in research design and sample composition <sup>10</sup>. To gauge the expected precision with our survey sample size, we drew 100 bootstrap (i.e., sample with replacement) subsamples from the ACS, each with 635 White and 341 Black respondents born

<sup>&</sup>lt;sup>10</sup>In Tables B.5 and B.6, for example, the Tinder covariate is a dummy indicating whether the respondent met their partner on Tinder, whereas in Tables 3 and 4 it is a continuous measure of platform popularity. Moreover, the ACS covers all racial groups (excluding mixed races) and includes individuals who married between 2008 and 2018 at ages 20–50, while our survey is restricted to White and Black respondents—roughly half of the sample each—born between 1971 and 1991.

between 1971 and 1991, emulating the sample sizes in our survey. Figure B.8 reports the distribution of the bootstrapped Tinder coefficients and their associated *p*-values, showing that statistically significant effects are rare at this scale. This suggests that the lack of significance in our survey results reflects limited statistical power rather than a contradiction with the ACS findings.

In summary, the individual fixed effects regressions—which account for unobserved individual heterogeneity in selection into online dating—suggest that mating outcomes, specifically the likelihood of having a same-race or college-educated partner, are significantly associated with having met a partner online. For racial homogamy, we find heterogeneity based on respondents' same-race preference intensity, emphasizing that the influence of dating technologies depends heavily on user preferences.

### 4.2.3 Evidence on Relationship Quality

Lastly, we examine whether relationship quality—proxied by relationship duration—differs according to the method through which partners met. To do so, we estimate a Cox proportional hazards model (equation 2), stratified by individual, to assess whether the hazard of relationship dissolution,  $h_i(t \mid X_i)$ , varies systematically with meeting method. Stratification allows each individual to have their own baseline hazard function,  $h_{0i}(t)$ , thereby accounting for unobserved heterogeneity that may jointly influence both the meeting method and relationship duration (e.g., individuals who tend to exit relationships more quickly might be more likely to engage in online dating). In all specifications, we also control for age at the time of meeting their partner and for relationship-type fixed effects.

$$h_i(t \mid X_i) = h_{0i}(t) \exp(X_i \beta) \tag{2}$$

Table 12: Cox Proportional Hazard Model Stratified by Individual

	(1)	(2)	(3)	(4)	(5)	(6)
Met Online	0.954	0.979	0.857	0.822	0.846	1.037
	(0.153)	(0.155)	(0.205)	(0.217)	(0.229)	(0.304)
Met Online X						
Same-Race Pref.		1.161		1.136		1.369
Z-score		()		(0.0.17)		( )
		(0.178)		(0.265)		(0.363)
Met Online X						
Higher-Educ		1.240		1.277		1.260
Pref. Z-score		(0.189)		(0.327)		(0.342)
Avg. of Duration	6.789	6.789	6.789	6.789	6.789	6.789
Control Age	Yes	Yes	Yes	Yes	Yes	Yes
When Met Individual FE	Yes	Yes			Voc	Voc
Relationship	ies	ies	Yes	Yes	Yes	Yes
Type FE	Yes	Yes	Yes	Yes	Yes	Yes
1) pc 12			High	High	I arry Dam	I avv Dan
Sample	All	All	Pop	Pop	Low Pop Density	Low Pop Density
			Density	Density	Delisity	Delisity
Adjusted R						
squared Observations	843	843	479	479	364	364
Observations	043	043	4/2	4/2	J0 <del>4</del>	JU <del>1</del>

*Note:* The table shows the exponentiated coefficients; Standard errors, clustered at the individual level, are reported in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. We limit the sample to respondents who report at least two serious relationship spells to estimate the baseline hazard functions separately for each individual.

Table 12 reports the exponentiated coefficients,  $\exp(\widehat{\beta})$ , which are interpreted as hazard ratios:

$$\exp(\beta_k) = \frac{h_i(t \mid x_{ik} + 1, x_{i,-k})}{h_i(t \mid x_{ik}, x_{i,-k})}.$$
(3)

Values greater than 1 indicate a higher hazard (shorter expected duration), while values less than 1 indicate a lower hazard (longer expected duration). Across all specifications, we find no statistically significant evidence that relationship duration differs by meeting method once individual-specific baseline hazards are taken into account.

### 5 Conclusion

This paper investigates how online dating technology shapes mating patterns in the United States, focusing on the role of platform-specific filtering functions that allow users to screen for preferred characteristics. Given that each platform offers different filtering capabilities, users may self-select into platforms that align with their partner preferences, resulting in different mating outcomes.

Using data from the American Community Survey and a continuous-treatment difference-in-differences design—validated through an event study—we find that rising local popularity of platforms such as Tinder and eHarmony increased interracial marriages, while Match.com and Zoosk increased same-race marriages. These effects remain robust after controlling for flexible state-, race-, and education-group—specific linear time trends. By contrast, we find weaker statistical evidence that online dating popularity affected educational homogamy.

We then turn to original survey data that captures partner preferences, dating histories, and online dating experiences. We find that users exhibit differential search behavior depending on their preferences: individuals with strong preferences for a partner's race or education are more likely to use filtering functions when available. Using individual fixed-effects models that account for unobserved heterogeneity in selection into online dating and spouse preferences, we find modest evidence that meeting a partner online is associated with a greater likelihood of interracial dating in high-population-density areas where online dating is more prevalent. However, this effect disappears among individuals with strong same-race preferences, highlighting that the impact of online dating platforms critically depends on user preferences. We also examine whether relationships that began online differ in duration, which proxies for relationship quality. After accounting for individual-level unobserved heterogeneity, we find no significant overall difference in relationship duration by meeting method.

Taken together, our findings suggest that online dating technologies have the potential to reshape broader patterns of assortative mating in the United States, particularly with respect to interracial marriages. Yet their influence on partner search is mediated by both individual

preferences and platform design. The effects are not uniform but platform-specific, underscoring the importance of examining multiple platforms and the interaction between their features and users' preferences when evaluating their impact on mating outcomes.

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Online Appendix for "The Rise of Online Dating and Heterogamous Marriages" (Hwang, de Paula, Yang)

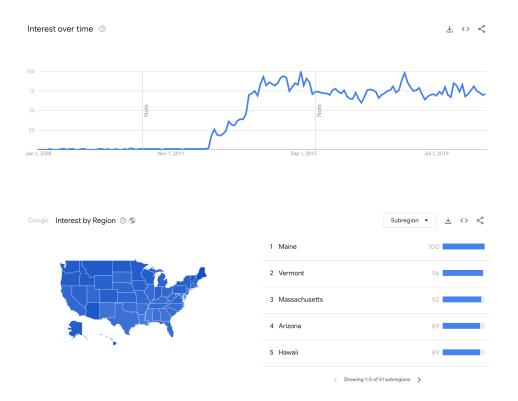
## A Construction of Online Dating Platform Popularity Indices

This section describes the construction of the online dating platform popularity indices using Google Trends and KWFinder (Mangools) data. First, we obtain the relative search volume of each online dating platform name in different states and across time. For example, Figure A.1 shows the relative search volume we obtained for "Tinder". As an illustration, the upper subfigure displays the relative search volume for Tinder in New York state from 2008 to 2020, while the lower subfigure presents the relative search volume across different states in 2018. It is important to note that all search volumes are relative, meaning they are normalized to the highest value within the selected range, which is set to 100. Additionally, each individual search volume represents Tinder's search volume divided by the total search volume for all queries in that area or time period. Consequently, these figures reflect Tinder's relative popularity compared to all other search activities, rather than its absolute search volumes.

To deal with the problem that the absolute value is not available for the keyword, we combine the Google Trends data with the KWFinder tool on Mangools, where the absolute search volumes are available for a certain period of time for each US state. Specifically, we follow the steps below to construct the panel search volume index for Tinder. First, we obtain the absolute search volume for Tinder in 2020 for New York state using KWFinder denoted by  $X_{20}^{NY-11}$ . Then we divide this number by the population of New York State to get a normalized version of the search volume for Tinder:  $\tilde{X}_{20}^{NY}$ . Having this in hand, we then use the relative search volume for Tinder across time to back out the normalized search volume for Tinder

<sup>&</sup>lt;sup>11</sup>We begin with search volume data from 2020, the earliest year for which KWFinder provides absolute search volume figures. New York is chosen as the baseline state due to its high and widespread usage of Tinder. To assess the robustness of our results, we also re-estimated the analysis using alternative baseline states and found that the results remained consistent.

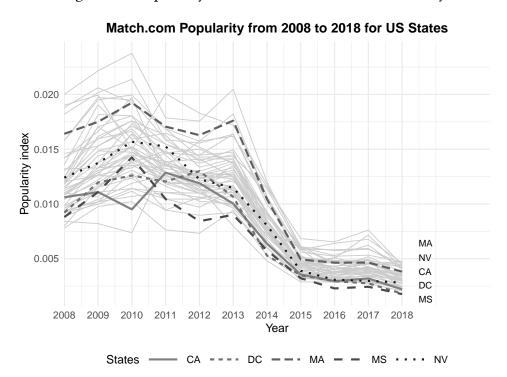
Figure A.1: Screenshots of Google Trends for "Tinder" keyword: Across Time for New York and Across States



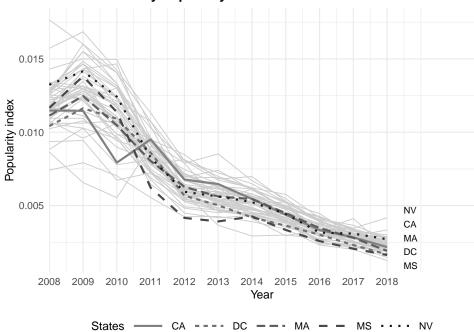
across all time:  $\{\widetilde{X}_{08}^{NY},\widetilde{X}_{09}^{NY},...,\widetilde{X}_{18}^{NY}\}$ . Finally, the last step is to use the relative search volume across different states in each year to back out the normalized search volumes for other states  $\{\widetilde{X}_{08}^{S_1},\widetilde{X}_{09}^{S_1},...,\widetilde{X}_{18}^{S_1},....,\widetilde{X}_{08}^{S_2},\widetilde{X}_{09}^{S_2},...,\widetilde{X}_{18}^{S_2},....,\widetilde{X}_{08}^{S_N},\widetilde{X}_{09}^{S_N},...,\widetilde{X}_{18}^{S_N}\}$ . Using this method, we can construct the panel of online dating platform popularity indices for each US state and across years.

## **B** Additional Tables and Figures

Figure B.2: Popularity Index for Match.com and eHarmony

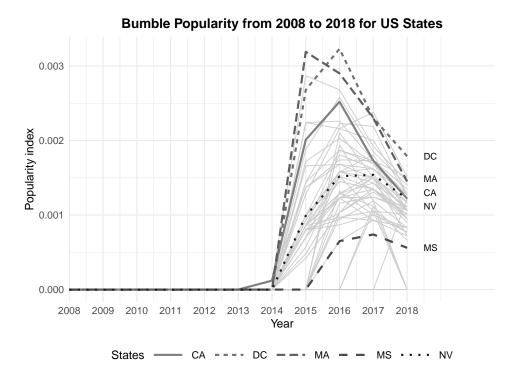


### eHarmony Popularity from 2008 to 2018 for US States

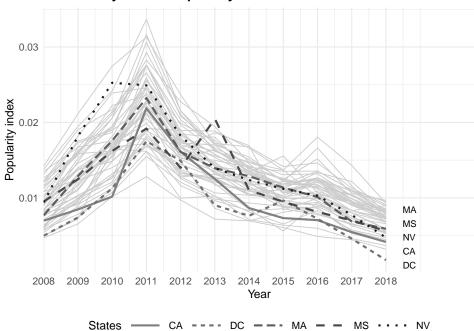


*Note:* This figure shows Match.com and eHarmony popularity indices for 51 US states, where five states (Massachusetts, Nevada, California, Washington DC, Mississippi) are highlighted in darker lines.

Figure B.3: Popularity Index for Bumble and Plenty of Fish

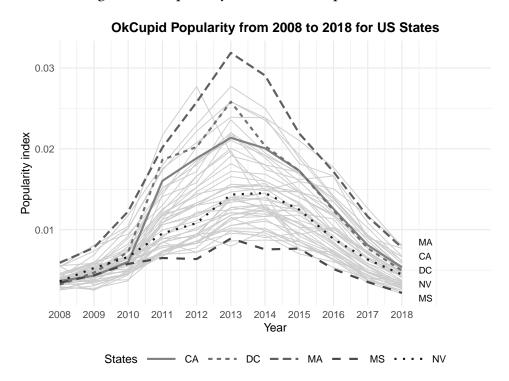


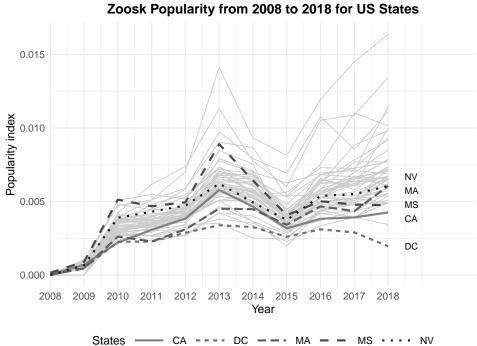




*Note:* This figure shows Bumble and Plenty of Fish popularity indices for 51 US states, where five states (Massachusetts, Nevada, California, Washington DC, Mississippi) are highlighted in darker lines.

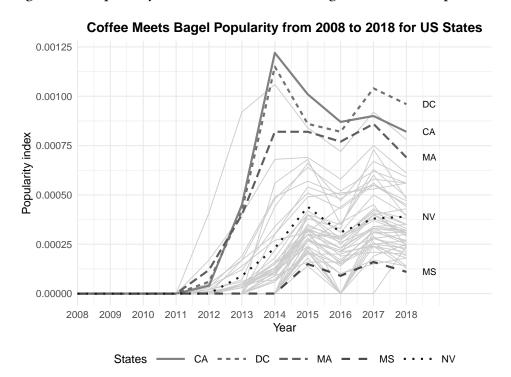
Figure B.4: Popularity Index for OkCupid and Zoosk

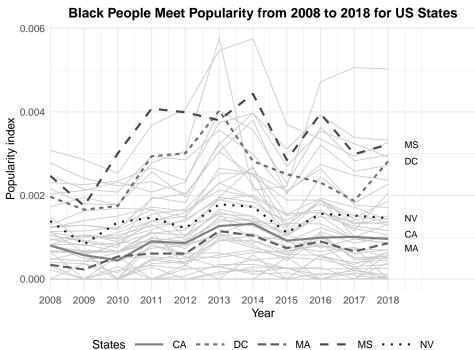




*Note:* This figure shows OkCupid and Zoosk popularity indices for 51 US states, where five states (Massachusetts, Nevada, California, Washington DC, Mississippi) are highlighted in darker lines.

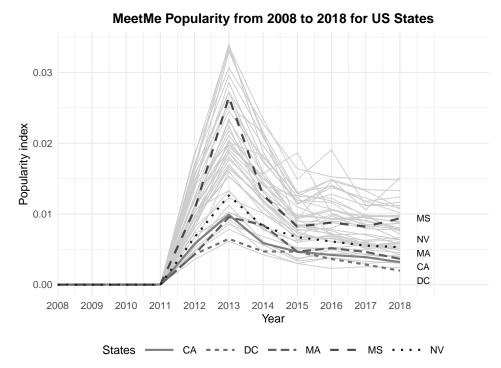
Figure B.5: Popularity Index for Coffee Meets Bagel and Black People Meet





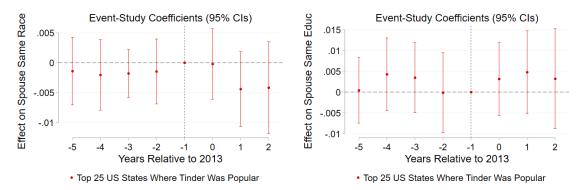
*Note:* This figure shows Coffee Meets Bagel and Black People Meet popularity indices for 51 US states, where five states (Massachusetts, Nevada, California, Washington DC, Mississippi) are highlighted in darker lines.

Figure B.6: Popularity Index for MeetMe



*Note:* This figure shows MeetMe popularity indices for 51 US states, where five states (Massachusetts, Nevada, California, Washington DC, Mississippi) are highlighted in darker lines.

Figure B.7: Event Study Evidence on the Absence of Pre-Trend (Using Top 25 US States)



*Note:* We ranked the US states by average Tinder popularity indices throughout our sample periods and defined the top 25 US states where Tinder was most popular as a treated group. The 25 US states are Massachusetts, Vermont, New York, Washington, Rhode Island, Washington DC, North Dakota, Utah, Colorado, Maine, Connecticut, New Hampshire, California, Philadelphia, Hawaii, Montana, Illinois, Wisconsin, Michigan, Minnesota, Iowa, Arizona, Arkansas, New Jersey, and Nebraska.

Table B.1: Effect of Online Dating Popularity on Educational Homogamy (Tinder Only)

	Depende	ent Variabl	e: Spouse Sa	ıme Education
	(1)	(2)	(3)	(4)
Tinder (std.)	0.000	-0.009**	-0.009**	-0.009**
	(0.004)	(0.004)	(0.004)	(0.004)
Avg. of Dependent Variable	0.442	0.442	0.442	0.442
Birth Year FE	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y
Race FE	Y	Y	Y	Y
Education FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
State Time Trend	N	Y	Y	Y
Race Time Trend	N	N	Y	Y
<b>Education Time Trend</b>	N	N	N	Y
Adjusted R squared	0.010	0.010	0.010	0.010
Observations	766074	766074	766074	766074

Note: Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table B.2: Effect of Online Dating Popularity (2-year average) on Racial Homogamy

			Depende	nt Variable	: Spouse Sa	ıme Race		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tinder (std.; 2yr avg.)	-0.011**	-0.015**	-0.015**	-0.015**	-0.008**	-0.013**	-0.013**	-0.013**
, ,	(0.005)	(0.007)	(0.007)	(0.007)	(0.004)	(0.005)	(0.005)	(0.005)
Plenty of Fish (2yr avg.)	-0.000	-0.002	-0.002	-0.002				
, , ,	(0.001)	(0.001)	(0.001)	(0.001)				
Bumble (2yr avg.)	0.001	0.002	0.002	0.002				
, ,	(0.003)	(0.003)	(0.003)	(0.003)				
OkCupid (2yr avg.)	0.002*	0.002	0.002	0.002				
1 (1	(0.001)	(0.002)	(0.002)	(0.002)				
eHarmony (2yr avg.)	-0.002	-0.004	-0.004	-0.004				
, (, )	(0.002)	(0.003)	(0.003)	(0.003)				
Zoosk (2yr avg.)	0.000	0.001	0.001	0.001				
, , ,	(0.002)	(0.003)	(0.003)	(0.003)				
MeetMe (2yr avg.)	0.003***	0.001	0.000	0.000				
, ,	(0.001)	(0.002)	(0.002)	(0.002)				
Match.com (2yr avg.)	0.003	0.005	0.005	0.005				
, ,	(0.002)	(0.003)	(0.003)	(0.003)				
Black People Meet (2yr avg.)	-0.001	0.001	0.001	0.001				
-	(0.002)	(0.002)	(0.002)	(0.002)				
Hinge (2yr avg.)	-0.000	0.002	0.002	0.002				
	(0.002)	(0.003)	(0.003)	(0.003)				
Coffee Meets Bagel (2yr avg.)	0.001*	-0.001	-0.001	-0.001				
	(0.001)	(0.001)	(0.001)	(0.001)				
Avg. Dependent Var.	0.877	0.877	0.877	0.877	0.877	0.877	0.877	0.877
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y
Race FE	Y	Y	Y	Y	Y	Y	Y	Y
Education FE	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y	Y	Y	Y
State Time Trend	N	Y	Y	Y	N	Y	Y	Y
Race Time Trend	N	N	Y	Y	N	N	Y	Y
Education Time Trend	N	N	N	Y	N	N	N	Y
Adj. R-squared	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055
Observations	635,616	635,616	635,616	635,616	635,616	635,616	635,616	635,616

Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table B.3: Effect of Online Dating Popularity (2-year average) on Educational Homogamy

					Spouse S	ame Educati		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tinder (std.;2yr avg.)	0.005	-0.004	-0.004	-0.004				
	(0.009)	(0.011)	(0.011)	(0.011)				
Plenty of Fish (std.;2yr avg.)	-0.000	-0.001	-0.001	-0.001				
	(0.002)	(0.003)	(0.003)	(0.003)				
Bumble (std.;2yr avg.)	0.002	0.004	0.004	0.004				
, , , , ,	(0.003)	(0.004)	(0.004)	(0.004)				
Okcupid (std.;2yr avg.)	-0.003	-0.003	-0.003	-0.003				
	(0.002)	(0.003)	(0.003)	(0.003)				
eHarmony (std.;2yr avg.)	0.006	0.004	0.004	0.004				
, ( , , , , , , , , , , , , , , , , , ,	(0.004)	(0.005)	(0.005)	(0.005)				
Zoosk (std.;2yr avg.)	0.001	-0.000	-0.000	-0.000				
, , ,	(0.005)	(0.006)	(0.006)	(0.006)				
Meetme (std.;2yr avg.)	-0.002	-0.002	-0.002	-0.002				
, , , , , , , , , , , , , , , , , , ,	(0.002)	(0.003)	(0.003)	(0.003)				
Match.com (std.;2yr avg.)	0.001	0.001	0.001	0.001				
, , , , , , , , , , , , , , , , , , , ,	(0.005)	(0.006)	(0.006)	(0.006)				
Black People Meet (std.;2yr avg.)	-0.002	-0.002	-0.002	-0.002				
	(0.003)	(0.003)	(0.003)	(0.003)				
Hinge (std.;2yr avg.)	0.005*	0.003	0.003	0.003				
	(0.003)	(0.003)	(0.003)	(0.003)				
Coffee Meets Bagel (std.;2yr avg.)	-0.004***	-0.004*	-0.004*	-0.004*	-0.001	-0.003***	-0.003***	-0.003***
	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Avg. Dependent Var.	0.442	0.442	0.442	0.442	0.442	0.442	0.442	0.442
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y
Race FE	Y	Y	Y	Y	Y	Y	Y	Y
Education FE	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y	Y	Y	Y
State Time Trend	N	Y	Y	Y	N	Y	Y	Y
Race Time Trend	N	N	Y	Y	N	N	Y	Y
Education Time Trend	N	N	N	Y	N	N	N	Y
Adj. R-squared	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Observations	635,616	635,616	635,616	635,616	635,616	635,616	635,616	635,616

Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table B.4: Effect of Online Dating Popularity on Racial Homogamy (Black Respondents Born Between 1971-1991)

			-	t Variable:	Spouse Sam	e Race		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tinder (std.)	-0.049**	-0.059*	-0.059*	-0.059*	-0.034***	-0.032*	-0.032*	-0.032*
	(0.023)	(0.030)	(0.030)	(0.030)	(0.009)	(0.018)	(0.018)	(0.018)
Plenty of Fish (std.)	-0.003	-0.000	-0.000	-0.000				
	(0.006)	(0.006)	(0.006)	(0.006)				
Bumble (std.)	-0.002	-0.003	-0.003	-0.003				
	(0.010)	(0.012)	(0.012)	(0.012)				
Okcupid (std.)	-0.002	0.000	0.000	0.000				
-	(0.006)	(0.007)	(0.007)	(0.007)				
eHarmony (std.)	-0.025***	-0.025**	-0.025**	-0.025**				
	(0.009)	(0.011)	(0.011)	(0.011)				
Zoosk (std.)	-0.022*	-0.021*	-0.021*	-0.021*				
	(0.011)	(0.012)	(0.012)	(0.012)				
Meetme (std.)	-0.001	0.001	0.001	0.001				
	(800.0)	(0.010)	(0.010)	(0.010)				
Match.com (std.)	0.011	0.015	0.015	0.015				
	(0.010)	(0.011)	(0.011)	(0.011)				
Black People Meet (std.)	0.006	0.005	0.005	0.005				
-	(0.007)	(0.007)	(0.007)	(0.007)				
Hinge (std.)	0.005	0.008	0.008	0.008				
	(800.0)	(0.011)	(0.011)	(0.011)				
Coffee Meets Bagel (std.)	0.005	0.009	0.009	0.009				
-	(0.005)	(0.007)	(0.007)	(0.007)				
Avg. of Dependent Variable	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844
Birth Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Sex FE	Y	Y	Y	Y	Y	Y	Y	Y
Race FE	Y	Y	Y	Y	Y	Y	Y	Y
Education FE	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y	Y	Y	Y
State Time Trend	N	Y	Y	Y	N	Y	Y	Y
Race Time Trend	N	N	Y	Y	N	N	Y	Y
Education Time Trend	N	N	N	Y	N	N	N	Y
Adjusted R squared	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
Observations	36256	36256	36256	36256	36256	36256	36256	36256

Note: Standard errors are clustered at the state level and are presented in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table B.5: Individual Fixed Effect Regression on Same-Race Partner (Tinder)

	(1)	(2)	(3)	(4)	(5)	(6)
Met on Tinder	-0.018 (0.088)	-0.018 (0.089)	-0.020 (0.105)	-0.050 (0.105)	-0.175 (0.164)	-0.314 (0.206)
Met on Tinder X Same-Race Pref. Z-score		-0.018		0.114		-0.361
		(0.098)		(0.091)		(0.224)
Avg. of Dependent Variable	0.789	0.789	0.789	0.789	0.789	0.789
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Relationship Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Sample	All	All	High Pop Density	High Pop Density	Low Pop Density	Low Pop Density
Adjusted R squared	-0.003	-0.004	0.006	0.007	0.005	0.011
Number of Observations	976	976	551	551	425	425
Number of Individuals	402	402	256	256	195	195

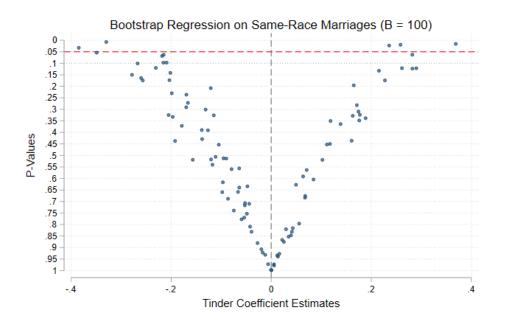
Note: Standard errors, clustered at the individual level, are reported in parentheses. \* p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01. To include individual fixed effects, we limit the sample to respondents who report at least two serious relationship spells. "Relationship type" is a categorical variable indicating whether the serious relationship involved marriage, engagement, or cohabitation. "High population density area" refers to a U.S. state with a 2013 population density above the median. We assign this based on the state in which the respondent met their partner.

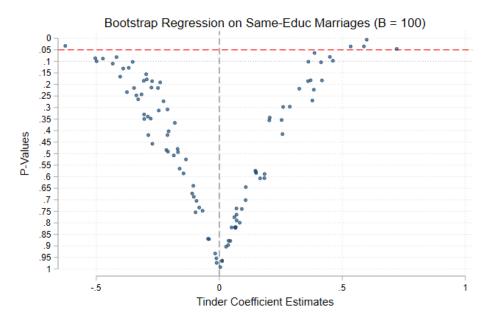
Table B.6: Individual Fixed Effect Regression on College-Grad Partner

	(1)	(2)	(3)	(4)	(5)	(6)
Met on Tinder	0.157	0.200*	0.081	0.157	0.245	0.176
	(0.101)	(0.109)	(0.106)	(0.105)	(0.280)	(0.178)
Met on Tinder X						
Higher-Educ		-0.127		-0.176**		0.901***
Pref. Z-score		, ,		, ,		,
		(0.087)		(0.085)		(0.262)
Avg. of						
Dependent	0.223	0.223	0.223	0.223	0.223	0.223
Variable		••	••	••	••	••
Individual FE	Yes	Yes	Yes	Yes	Yes	Yes
Relationship Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Sample	All	All	High Pop Density	High Pop Density	Low Pop Density	Low Pop Density
Adjusted R squared	0.029	0.032	0.031	0.037	0.040	0.067
Number of Observations	976	976	551	551	425	425
Number of Individuals	402	402	256	256	195	195

Note: Standard errors, clustered at the individual level, are reported in parentheses. \* p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01. To include individual fixed effects, we limit the sample to respondents who report at least two serious relationship spells. "Relationship type" is a categorical variable indicating whether the serious relationship involved marriage, engagement, or cohabitation. "High population density area" refers to a U.S. state with a 2013 population density above the median. We assign this based on the state in which the respondent met their partner.

Figure B.8: Bootstrapping ACS Regression with Small Random Sample





*Note:* To assess whether significant results persist at a sample size comparable to our survey, we bootstrapped the ACS 100 times to form subsamples of 635 White and 341 Black respondents born between 1971 and 1991. The figure plots the Tinder coefficient from each replication against its p-value. At this scale, the estimated effect of the Tinder popularity index seldom reaches conventional significance.

# C Social Desirability Bias Check From List Randomization

We assess the presence of social desirability bias in respondents' stated preferences regarding spousal characteristics using the List Randomization method (Hubbard et al. (1989), Karlan and Zinman (2012), Valente et al. (2024), Deng and Hwang (2025)). This method allows us to detect bias by comparing agreement levels obtained through direct and indirect reporting.

In the direct report, respondents are asked whether they agree with a specific statement, and we record the proportion who report agreement. Responses were recorded on a five-point scale (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree). We classify "Somewhat agree" and "Strongly agree" as agreement with the statement. In contrast, the indirect report is obtained by comparing two randomly assigned groups. One group is presented with a set of neutral statements and asked how many they agree with. The other group receives the same set, plus an additional sensitive statement of interest. The difference in average agreement between the two groups provides an estimate of the proportion agreeing with the sensitive statement, free from the pressure to respond in a socially desirable manner.

To construct the indirect report, we selected four neutral statements believed to be free of social desirability bias: "I exercise more than three times a week," "I am living with at least one child in my household," "I have three or more bedrooms at home," and "I have health insurance coverage (of any kind, either public or private)."

Table C.7 presents the results. The "Direct" column shows the proportion of respondents who directly expressed agreement with each statement, while the "Indirect" column provides the proportion inferred via list randomization. The "Difference" column reports the difference between these two measures, and the "P-value" column tests whether the difference is statistically significant.

Among the statements related to racial preferences, only "I have considered marrying someone of a different race" shows significant evidence of social desirability bias, suggesting

Table C.7: List Randomization Test for Social Desirability Bias

Statements	Direct	Indirect	Difference	P-Value
I prefer meeting a spouse having the same race as me.	0.399	0.537	0.138	0.246
	(0.012)	(0.119)		
I have considered marrying someone of a different race.	0.221	0.620	0.399	0.001
	(0.010)	(0.119)		
A couple of the same race is more likely to stay together.	0.272	0.419	0.146	0.235
	(0.010)	(0.123)		
A person of the same race can be a better partner to me.	0.554	0.469	-0.085	0.518
	(0.012)	(0.130)		
There is nothing wrong with two people of different races being a couple.	0.843	0.880	0.037	0.759
	(0.009)	(0.121)		
I prefer meeting a spouse with at least a university/college degree.	0.373	0.508	0.135	0.275
, , ,	(0.011)	(0.124)		
Having a spouse with at least a university/college degree is necessary for a happy marriage.	0.191	0.480	0.289	0.037
	(0.009)	(0.138)		
I can marry someone without a university/college degree as long as I love this person.	0.248	0.673	0.425	0.000
r.	(0.010)	(0.118)		
It is less risky to have a spouse with at least a university/college degree.	0.781	0.322	-0.458	0.000
	(0.010)	(0.128)		
Having a university/college degree is not an important consideration when choosing a spouse.	0.593	0.752	0.159	0.193
Note: This table shows the presenting of possile who are	(0.012)	(0.122)	oto tour outo thuo	

*Note:* This table shows the proportion of people who expressed agreement with statements through direct and indirect reports, the estimates of the difference in proportions, and the p-value for testing whether the difference is different from zero. The standard error estimates of the proportion estimates are presented within parentheses.

that respondents may underreport agreement with this statement in direct questioning. The other four race-related statements do not exhibit significant differences, and we retain these for further analysis.

In contrast, among the education-related statements, several show substantial social desirability bias. Specifically, under the 5% significance level, we find that "Having a spouse with at least a university/college degree is necessary for a happy marriage," "I can marry someone without a university/college degree as long as I love this person," and "It is less risky to have a spouse with at least a university/college degree" all fail the test. Therefore, for subsequent analysis, we focus on the remaining two education-related statements that pass the list randomization test: "I prefer meeting a spouse with at least a university/college degree" and "Having a university/college degree is not an important consideration when choosing a spouse."

## **D** Survey Questionnaires

## **Online Dating**

**Start of Block: HIIT Demographics** 



#### demo consent

We are a non-partisan group of researchers from Johns Hopkins University and University College London. You are being asked to join an academic research survey about dating preference. Participation in this study is voluntary. Even if you decide to join now, you can change your mind later.

This is a **short survey**, **which takes less than 1 minute**, **to check your eligibility to apply to participate in our 5-minutes survey about dating preference**. There is no reward for doing this short survey. However, if you pass the eligibility checks, you will be given a chance to participate in our **5-minutes** survey. The reward for successfully completing our main survey is **1.8 dollar**.

Your participation in this study is entirely voluntary. You may stop your participation at any time, without any penalty.

The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board.

You can ask questions about this research study now or at any time during the study, by emailing the **PI**, **Dr**. **Yujung Hwang**, **yhwang18@jhu.edu** If you have questions about your rights as a research participant or feel that you have not been treated fairly, or feel that you have been harmed in any way by participating in this study, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580. Clicking "Yes, I consent" below means that you have read and understood the information in this consent form. Also, it means that you agree to participate in the study. By consenting to this form, you have not waived any legal rights you otherwise would have as a participant in a research study.

○ Yes,	I consent.	(4)	
O No, I	do not cor	sent.	(5)

**End of Block: HIIT Demographics** 

**Start of Block: Repeated Participation** 

answered_before Have you ever participated in <b>our survey</b> regarding dating preferences before?
○ Yes (2)
O No (1)
End of Block: Repeated Participation
Start of Block: Eligibility
gender What is your biological gender at the time of your birth?
○ Male (1)
O Female (2)
*
birthyear What is your <b>year of birth</b> ?
Page Break
ago broak

educ What is your highest level of education?
C Less than high school (1)
O High school graduate (2)
O Some college, no degree (3)
Associate degree (4)
O Bachelor's degree (5)
Master's degree (6)
O Professional or Doctorate degree (7)
marital What is your current marital status?
○ Married (1)
○ Widowed (2)
O Divorced (3)
○ Separated (4)
O Never married (5)
Page Break ————————————————————————————————————

race Choose	race Choose one or more ethnicities/races that you consider yourself to be:				
	White (1)				
	Black or African American (2)				
	Hispanic/Latino (7)				
	American Indian or Alaska Native (3)				
	Asian (4)				
	Native Hawaiian or Pacific Islander (5)				
	Other (6)				
appuse Have you ever used any online dating app (e.g., Tinder, Bumble)?					
○ Yes (1)					
O No (2)					
Page Break					

Display This Qu	uestion:
If Have you	u ever used any online dating app (e.g., Tinder, Bumble)? = Yes
purpose What	t is/was the purpose of using <b>dating apps</b> ? Click all that apply.
	To word a material angue (4)
	To meet a potential spouse (1)
	To meet a sex partner (3)
	To meet a casual dating partner (4)
	To moot a cacaar daming paraner (1)
	To meet a friend (5)
	Other, please specify (6)

Start of Block: Consent for recruitment

**End of Block: Eligibility** 

consent We are a non-partisan group of researchers from Johns Hopkins University and University College London. You are being asked to join an academic research survey about dating preference. Participation in this study is voluntary. Even if you decide to join now, you can change your mind later. RESEARCH SUMMARY (KEY INFORMATION): The information in this section is intended to be an introduction to the study only. Complete details of the study are listed in the sections below. The purpose of this research is to understand dating preference. PROCEDURES: We will ask you several questions about your preference for a spouse/dating partner. The survey will take about **5 minutes.** RISKS/DISCOMFORTS: We do not anticipate any risks or discomforts greater than those encountered in daily life.

BENEFITS: This study may benefit society by contributing to scientific knowledge of social preference in the US. PAYMENTS: You will get paid **1.8 dollar** if you successfully complete this survey.

VOLUNTARY PARTICIPATION AND RIGHT TO WITHDRAW: You can agree to be in the study now and change your mind later, without any penalty or loss of benefits.

#### **CONFIDENTIALITY:**

Any study records that identify you will be kept confidential to the extent possible by law. The records from your participation may be reviewed by people responsible for making sure that research is done properly, including members of the Johns Hopkins University Homewood Institutional Review Board. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. IF YOU

HAVE QUESTIONS OR CONCERNS: You can ask questions about this research study now or at any time during the study, by emailing to socialprefresearch@gmail.com. If you have questions about your rights as a research participant or feel that you have not been treated fairly, please call the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580. IF YOU ARE HARMED BY PARTICIPATING IN THE STUDY: If you feel that you have been harmed in any way by participating in this study, please email to socialprefresearch@gmail.com. Please also notify the Homewood Institutional Review Board at Johns Hopkins University at (410) 516-6580. Clicking "Yes, I consent" below means that you have read and understand the information in this consent form. Also, it means that you agree to participate in the study. By consenting to this form, you have not waived any legal rights you otherwise would have as a participant in a research study.

Yes, I consent. (1)	
O No, I do not consent. (2)	
End of Block: Consent for recruitment	
Start of Block: Commitment	
	of a marking of the LIC manufation. The manufation

commitment You have been selected to represent a portion of the US population. The results from the survey can influence public policy and thus affect the lives of many people. In order for the information from this research to be the most helpful, it is important that you try to be as accurate, complete, and **honest as possible with your answers.** To do this, it is important to think carefully about each question, search your memory, and take time in answering. Are you willing to do this?

Yes, I agree (1)

No, I do not agree (2)

**End of Block: Commitment** 

**Start of Block: Dating App Choice** 

datingapp Wh	ich dating apps did you use the most? Click all that apply.
	Tinder (464)
	Bumble (465)
	Okcupid (466)
	Hinge (467)
	Coffee Meets Bagel (468)
	Grindr (469)
	Eharmony (470)
	Zoosk (471)
	Black People Meets (472)
	Plenty of Fish (473)
	MeetMe (474)
	Inner Circle (475)
	Match.com (477)
	Facebook Dating (479)
	Others, please specify (478)

Page Break —

freq How many date partners did you ever meet offline from using online dating apps?
One or two (1)
O More than two but less than five (2)
O More than five but less than ten (3)
O More than ten (4)
O Prefer not to say (5)
Page Break ————————————————————————————————————

filter Did you	set <b>any filters</b> in any of the online dating apps you used? Choose all that apply.
	Distance (17)
	Race (1)
	Education (4)
	Age (5)
	Income (8)
	Political orientation (7)
	Alcohol (9)
	Smoking (10)
	Drug (11)
	Relationship status (including any presence of children) (15)
	Religion (19)
	Preference for children (13)
	Physical traits (ex. heights/weights) (14)
	Hobby (2)
	Language they speak (16)

	Other, please specify (3)
Page Break	

appfyear When was your <b>first year</b> using any dating app?
O Before 2005 (4)
O 2005 to 2010 (6)
O 2010 to 2015 (7)
O 2015 to 2020 (8)
O After 2020 (9)
O Prefer not to say (11)
O I do not remember (13)
applyear When was your last year using any dating app?
O Before 2005 (4)
O 2005 to 2010 (5)
O 2010 to 2015 (6)
O 2015 to 2020 (7)
O After 2020 (8)
O Prefer not to say (10)
O I do not remember (11)
End of Block: Dating App Choice

Start of Block: Spouse preference 1

sprace\_1 How much do you agree to the following statements?

· -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (4)	0	0	0	0	0
A person of the same race can be a better partner to me. (2)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (5)	0	0		0	0
Page Break —					

speduc\_1 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (1)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (2)	0	0	0		0
I can marry someone without a university/college degree as long as I love this person. (3)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is not an important consideration when choosing a spouse. (5)	0	0		0	0
Page Break ——					

spincome\_1 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

Page Break

spother\_1 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)				0	0
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0	0	0	0	0

**End of Block: Spouse preference 1** 

**Start of Block: List Randomization 1** 



LR1 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my

End of Block: List Randomization 1							
Start of Block: Spouse preference 2							
sprace_2 How i	much do you agı	ree to the followi	ng statements?				
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)		
I prefer meeting a spouse having the same race as me. (1)	0	0	0	0	0		
A couple of the same race is more likely to stay together. (4)	$\circ$	0	$\circ$	0	0		
A person of the same race can be a better partner to me. (2)	0	0	0	$\circ$	0		
There is nothing wrong with two people of different races being a couple. (5)	0	0	0		0		

speduc\_2 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (1)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (2)	0	0	0		0
I can marry someone without a university/college degree as long as I love this person. (3)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is not an important consideration when choosing a spouse. (5)	0	0		0	0
Page Break ——					

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spincome\_2 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

				 	 	 	 _	-	 _	-	 	_	-	 -	_	 	-	 	-	 	_	 	 -	-	 -	-	-		
Page	Bre	ak	_																									_	_

spother\_2 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)	0				
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0	0	0	0	0

**End of Block: Spouse preference 2** 

**Start of Block: List Randomization 2** 



LR2 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my

	have three or m public or private		t home. I have sidered marrying	health insuranc someone of a <u>di</u>	
End of Block:	List Randomiza	tion 2			
Start of Block:	Spouse prefere	ence 3			
sprace_3 How	much do you agr	ee to the followi	•		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A person of the same race can be a better partner to me. (2)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (5)	0			0	0
Page Break -					

speduc\_3 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (1)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (2)	0	0	0	0	0
I can marry someone without a university/college degree as long as I love this person. (3)	0		0		0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	$\circ$	$\circ$
Having a university/college degree is <u>not</u> an important consideration when choosing a spouse. (5)	0			0	0
Page Break ——					

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spincome\_3 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

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Pa	ge E	3re	ak	_			 																			_

spother\_3 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)	0				
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0	0	0	0	0

**End of Block: Spouse preference 3** 

**Start of Block: List Randomization 3** 



LR3 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my

End of Block:	List Randomiza	tion 3			
Start of Block	: Spouse prefer	ence 4			
sprace_4 How	much do you agı	ee to the follow	ng statements?		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (5)	0	0	0		0

speduc\_4 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college (1)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage.  (2)	0	0	0		0
I can marry someone without a university/college degree as long as I love this person. (3)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is not an important consideration when choosing a spouse. (5)	0	0		0	0
Page Break ——					

spincome\_4 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0		0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0	0		0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0	0	0	0	0

Page Bre	eak ——		

spother\_4 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)	0				
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0	0	0	0	0

**End of Block: Spouse preference 4** 

Start of Block: List Randomization 4



LR4 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my

	l have three or m public or private		t home. I have of the same race o	e health insuranc can be a better p	= :
End of Block:	List Randomiza	tion 4			
Start of Block:	Spouse prefere	ence 5			
sprace_5 How	much do you agr	ee to the followi	_		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
Page Break —					

speduc\_5 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (1)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (2)	0	0	0	0	0
I can marry someone without a university/college degree as long as I love this person. (3)	0		0		0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	$\circ$	$\circ$
Having a university/college degree is <u>not</u> an important consideration when choosing a spouse. (5)	0			0	0
Page Break ——					

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spincome\_5 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

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spother\_5 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)			0	0	
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 5** 

**Start of Block: List Randomization 5** 



LR5 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

any kind, either being a couple.	public or private	). There is no	othing wrong with	two people of <u>d</u>	ifferent races
End of Block:	List Randomiza	tion 5			
Start of Block:	Spouse prefere	ence 6			
sprace_6 How	much do you agr	ee to the followi	ng statements?		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (11)	0	0	0	0	0

Page Break —

speduc\_6 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Having a spouse with at least a university/college degree is necessary for a happy marriage.	0	0	0	0	0
I can marry someone without a university/college degree as long as I love this person. (3)	0	0			0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is <b>not</b> an important consideration when choosing a spouse. (5)	0	0	0	0	0

spincome\_6 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

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spother\_6 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)			0	0	
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 6** 

**Start of Block: List Randomization 6** 



LR6 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

any kind, either degree.	public or private	). I prefer me	eeting a spouse w	ith at least a uni	versity/college
End of Block:	List Randomiza	tion 6			
Start of Block:	Spouse prefere	ence 7			
sprace_7 How	much do you agr	ee to the followi	ng statements?		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (11)	0	0	0	0	0

Page Break —

speduc\_7 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (7)	0	0	0	0	0
I can marry someone without a university/college degree as long as I love this person. (3)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is not an important consideration when choosing a spouse. (5)	0	0		0	0
Page Break ——					

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spincome\_7 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)		0	0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0	0	0	0	0

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spother\_7 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)				0	0
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 7** 

**Start of Block: List Randomization 7** 



LR7 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

=	public or private happy marriage	-	pouse with at lea	st a university/co	ollege degree is
End of Block:	List Randomiza	ition 7			
Start of Block:	Spouse prefer	ence 8			
sprace_8 How	much do you agı	ree to the follow	_		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a <u>different</u> race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (11)	0	0	0	0	0

Page Break —

speduc\_8 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (7)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (8)	0		0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (4)	0	0	0	0	0
Having a university/college degree is <u>not</u> an important consideration when choosing a spouse. (5)	0	0	0	0	0
Page Break ——					

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spincome\_8 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)		0	0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0	0	0	0	0

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spother\_8 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)			0	0	
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 8** 

**Start of Block: List Randomization 8** 



LR8 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

any kind, either as long as I lov	public or private e this person.	e). I can marr	y someone <u>witho</u>	<u>ut</u> a university/c	ollege degree
End of Block:	List Randomiza	ition 8			
Start of Block:	Spouse prefer	ence 9			
sprace_9 How	much do you agr	ee to the follow	_		
	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (11)	0	0	0	0	0

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speduc\_9 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (7)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (8)	0	0	0	0	0
I can marry someone without a university/college degree as long as I love this person. (9)	0	0	0	0	0
Having a university/college degree is <u>not</u> an important consideration when choosing a spouse. (5)	0	0	0	0	0

spincome\_9 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0	0		0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0	0		0	0

Page Break		

spother\_9 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)				0	0
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0	0	0	0	0

**End of Block: Spouse preference 9** 

**Start of Block: List Randomization 9** 



LR9 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

any kind, either university/colle	public or private ge degree.	). It is <u>less</u> ri	sky to have a spo	use with at least	а
End of Block:	List Randomiza	tion 9			
Start of Block:	Spouse prefer	ence 10			
sprace_10 How	much do you aç Strongly disagree (1)	gree to the follow Somewhat disagree (2)	ving statements?  Neither agree  nor disagree  (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having the same race as me. (6)	0	0	0	0	0
I have considered marrying someone of a different race. (3)	0	0	0	0	0
A couple of the same race is more likely to stay together. (8)	0	0	0	0	0
A person of the same race can be a better partner to me. (10)	0	0	0	0	0
There is nothing wrong with two people of different races being a couple. (11)	0	0	0	0	0

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speduc\_10 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (7)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (8)	0	0	0		0
I can marry someone without a university/college degree as long as I love this person. (9)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (10)	0	0	$\circ$	0	0
Page Break ——					

spincome\_10 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0		0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0		0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0		0	0	0

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spother\_10 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)			0	0	0
I prefer meeting a spouse having the same political orientation as me. (3)	0	0	0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 10** 

**Start of Block: List Randomization 10** 



LR10 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 5.

I exercise more than three times a week. I am living with at least one child in my household. I have three or more bedrooms at home. I have health insurance coverage (of

any kind, either public or private). Having a university/college degree is **not** an important consideration when choosing a spouse. **End of Block: List Randomization 10** Start of Block: Spouse preference 11 sprace\_11 How much do you agree to the following statements? Neither agree Strongly Somewhat Somewhat Strongly nor disagree disagree (1) disagree (2) agree (4) agree (5) (3)I prefer meeting a spouse having the same race as me. (6) I have considered marrying someone of a different race. (3) A couple of the same race is more likely to stay together. (8) A person of the same race can be a better partner to me. (10) There is nothing wrong with two people of different races being a

couple. (11)

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speduc\_11 How much do you agree to the following statements?

Note: University/College degree excludes a degree from a community college/vocational schools.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse with at least a university/college degree. (7)	0	0	0	0	0
Having a spouse with at least a university/college degree is necessary for a happy marriage. (8)	0	0			0
I can marry someone without a university/college degree as long as I love this person. (9)	0	0	0	0	0
It is <u>less</u> risky to have a spouse with at least a university/college degree. (10)	0	0	0	0	0
Having a university/college degree is not an important consideration when choosing a spouse. (5)	0	0		0	0
Page Break ——					

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spincome\_11 How much do you agree to the following statements?

• -	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I prefer meeting a spouse having an income level similar to mine / higher than mine. (1)	0	0	0	0	0
I have <u>not</u> considered marrying someone who earns <u>less</u> money than me. (2)	0	0	0	0	0
I can have a happy marriage even if my spouse earns less money than me. (3)	0	0	0	0	0
Whether my partner earns similar or more money than me is an important consideration when choosing a partner. (4)	0	0	0	0	0
I think it is unlikely for me to love someone who earns less money than me. (7)	0	0	0	0	0

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Pa	ge l	Bre	ea	k	_			_	_																																_	_

spother\_11 How much do you agree to the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
(if you have a religion) I prefer a spouse having the same religion with me. (if you do not have a religion) I prefer a spouse having no religion as me. (1)	0		0	0	0
I prefer meeting a spouse having the same political orientation as me. (3)	0		0	0	0
I prefer meeting a spouse with a small age difference from myself. (5)	0		0	0	0

**End of Block: Spouse preference 11** 

**Start of Block: List Randomization 11** 



LR11 Without specifying which ones you agree to, please report the total number of "yes" answers to the statements below. Your answer must be a number between 0 and 4.

I exercise more than three times a week. 
I am living with at least one child in my

household. I have three or more bedrooms at home. any kind, either public or private).	I have health insurance coverage (or
any kina, either public or private).	
End of Block: List Randomization 11	
Start of Block: Any Serious Relationship	
*	
serious Did you have any serious relationships which deve engagement / cohabitation (living together) / other simi ongoing ones)?	•
○ Yes (1)	
O No (2)	
O Prefer not to say (6)	
End of Block: Any Serious Relationship	
Start of Block: Dating History Details	
*	
numserious How <b>many serious relationships</b> (marriage / together) / similar verbal promise) did you have in the past?	
Page Break ————————————————————————————————————	

instruction\_dating From now on, we will ask about your past serious relationship partners (e.g., when and where you met this person). Please start from the most recent relationship.

If you have had more than three serious relationship partners, choose the most serious three partners.

(We would like to have the name of your partner so that we can make sure we are asking about the same person in the questions that follow. You may also enter a nickname or initials in place of a name.)

End of Block: Dating History Details
Start of Block: Serious Partners
name_p What is your partner \${Im://CurrentLoopNumber}'s first name? (The name helps us make sure we are asking about the same person in the questions that follow. You may enter a nickname or initials instead.)
Page Break

current_p Are you <b>still in the relationship</b> with \${name_p/ChoiceTextEntryValue}?
○ Yes, I'm still in the relationship with \${name_p/ChoiceTextEntryValue}. (1)
O No, our relationship ended. (2)
type_p What is/was the <b>type of this serious relationship</b> between you and ${\text{name_p/ChoiceTextEntryValue}}$ ?
O Marriage (1)
O Engagement (3)
Ochabitation (living together) (2)
Other, please specify (4)
*
starty_p <b>When did you meet</b> \${name_p/ChoiceTextEntryValue}? Please enter the year (4 digits). If you don't remember it exactly, please give us your best estimate.
Page Break ————————————————————————————————————

Display This Question:
If Loop current: Are you still in the relationship with \${q://QID56/ChoiceTextEntryValue}? = No, our relationship ended.
*
endy_p <b>When did this relationship</b> between you and \${name_p/ChoiceTextEntryValue} <b>end</b> ? Please enter the year (4 digits). If you don't remember it exactly, please give us your best estimate.
meet_p Did you meet \${name_p/ChoiceTextEntryValue} for the <b>first time online or offline</b> ? For example, if you found him/her from online dating apps and had offline datings afterward, please choose an online dating app.
Offline (1)
Online dating app (2)
Other online sites, please specify (3)
currentaddress_p When you met \${name_p/ChoiceTextEntryValue}, were you living in the current address?
○ Yes (1)
O No (2)

O I do not remember (3)

## Display This Question:

If Loop current: When you met \${q://QID56/ChoiceTextEntryValue}, were you living in the current address? = No

te_p in which <b>US state</b> were you living when you met \${name_p/ChoiceTextEntryValue}? If u were abroad, choose abroad.
O Alabama (1)
O Alaska (2)
O Arizona (3)
O Arkansas (4)
O California (5)
O Colorado (6)
Oconnecticut (7)
O Delaware (8)
O District of Columbia (9)
O Florida (10)
○ Georgia (11)
O Hawaii (12)
O Idaho (13)
O Illinois (14)
O Indiana (15)
O lowa (16)
○ Kansas (17)
○ Kentucky (18)
O Louisiana (19)
O Maine (20)

○ Maryland (21)
O Massachusetts (22)
○ Michigan (23)
O Minnesota (24)
○ Mississippi (25)
O Missouri (26)
O Montana (27)
O Nebraska (28)
O Nevada (29)
O New Hampshire (30)
○ New Jersey (31)
○ New Mexico (32)
O New York (33)
O North Carolina (34)
O North Dakota (35)
Ohio (36)
Oklahoma (37)
Oregon (38)
O Pennsylvania (39)
O Puerto Rico (40)
○ Rhode Island (41)

O South Carolina (42)
O South Dakota (43)
○ Tennessee (44)
O Texas (45)
O Utah (46)
O Vermont (47)
○ Virginia (48)
○ Washington (49)
○ West Virginia (50)
○ Wisconsin (51)
○ Wyoming (52)
O Abroad (53)
Display This Question:  If Loop current: When you met \${q://QID56/ChoiceTextEntryValue}, were you living in the current address? = No
zipcode_p What was the <b>US zipcode</b> of where you lived when you met \${name_p/ChoiceTextEntryValue}? If you lived abroad, type "abroad". If you do not remember, please type NA.
Page Break ————————————————————————————————————

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If Did you meet \${q://QID56/ChoiceTextEntryValue} for the first time online or offline? For example,... = Online dating app

app_p On which <b>dating app</b> did you use to meet \${name_p/ChoiceTextEntryValue}?
O Tinder (1)
O Bumble (4)
Okcupid (5)
O Hinge (6)
○ Coffee Meets Bagel (7)
○ Grindr (8)
O Eharmony (9)
O Zoosk (10)
O Black People Meets (11)
O Plenty of Fish (12)
O Meetme (13)
O Inner Circle (14)
O Match.com (16)
C Facebook Dating (18)
Others, please specify (17)
<del></del>

## Display This Question:

If Loop current: Did you meet \${q://QID56/ChoiceTextEntryValue} for the first time online or offline? For example,... = Offline

ory_p Please use one or two sentences to briefly describe how you d \${name_p/ChoiceTextEntryValue} first met and got to know each other and be sure to scribe "how" and "where" you first met.
nge Break

age_p What i	s \${name_p/ChoiceTextEntryValue}'s <b>year of birth</b> ?
race_p What applies.	is the <b>race/ethnicity</b> of \${name_p/ChoiceTextEntryValue}? Choose <u>all</u> that
	White (1)
	Black or African American (2)
	Hispanic/Latino (7)
	American Indian or Alaska Native (3)
	Asian (4)
	Native Hawaiian or Pacific Islander (5)
	Other (6)

educ_p What was the <b>highest education</b> of \${name_p/ChoiceTextEntryValue}?
(If \${name_p/ChoiceTextEntryValue} was still in school when you met, please choose the degree in progress)
O Less than high school (1)
O High school graduate (2)
O Some college, no degree (3)
O Associate degree (4)
O Bachelor's degree (5)
O Master's degree (6)
O Professional or Doctorate degree (7)
Page Prock
Page Break ————————————————————————————————————

religion_p What was the <b>religion</b> of \${name_p/C	hoic	eTe	xtEn	tryV	alue)	}?					
O No religion (1)											
Catholic (11)											
O Protestants (2)											
O Buddhism (3)											
○ Jew (4)											
○ Islam (5)											
O Hinduism (6)											
Other, please specify (7)											
O Prefer not to say (9)											
political_p Here is an 11-point scale on which the arranged from extremely liberal (left) to extremel place \${name_p/ChoiceTextEntryValue} on this	y co scale	nser	vativ nely		ight).	Wh	ere v ely	voul		J	
Political Ideology ()					_	-	_	_	_		
						_					
Page Break ————————————————————————————————————											

income_p What was the <b>pre-tax annual income</b> of \${name_p/ChoiceTextEntryValue} <b>when you met</b> \${name_p/ChoiceTextEntryValue}? If he/she did not work, then choose \$0.
O \$0 (7)
\$1 to \$9,999 (8)
\$10,000 to \$24,999 (9)
\$25,000 to \$49,999 (10)
○ \$50,000 to \$74,999 (11)
○ \$75,000 to \$99,999 (12)
\$100,000 to \$149,999 (13)
○ \$150,000 and greater (14)
O Prefer not to say (15)
O I do not know (17)

income_ps What was <u>your</u> pre-tax annual income when you met \${name_p/ChoiceTextEntryValue}? If you did not work, then choose \$0.
O \$0 (1)
○ \$1 to \$9,999 (2)
○ \$10,000 to \$24,999 (3)
○ \$25,000 to \$49,999 (4)
○ \$50,000 to \$74,999 (5)
○ \$75,000 to \$99,999 (6)
○ \$100,000 to \$149,999 (7)
○ \$150,000 and greater (8)
O Prefer not to say (9)
O I do not know (10)
Page Break

gender_ps What is the <b>biological gender</b> of \${name_p/ChoiceTextEntryValue} at the time of birth?
○ Male (1)
O Female (2)
End of Block: Serious Partners
Start of Block: Demo
religion What is your <b>religion</b> ?
O No religion (1)
O Catholic (16)
O Protestants (2)
O Buddhism (3)
O Jew (9)
O Islam (10)
O Hinduism (11)
Other, please specify (12)
O Prefer not to say (15)
Page Break ————

political Here is an 11-point scale on which the parranged from extremely liberal (left) to extremely yourself on this scale?					-	-	_				се
<u>,</u>	Extremely liberal				Ex	ely ative	Not Applicabl				
	0	1	2	3	4	5	6	7	8	9	10
Political Ideology ()						Ī					
income What was <b>your pre-tax annual income</b> not work, then choose \$0.	in th	ne y	ear 2	2019	<b>9</b> (be	fore	COV	ID)?	If yo	ou di	d
<b>\$0</b> (7)											
\$1 to \$9,999 (8)											
\$10,000 to \$24,999 (9)											
\$25,000 to \$49,999 (10)											
\$50,000 to \$74,999 (11)											
\$75,000 to \$99,999 (12)											
\$100,000 to \$149,999 (13)											
\$150,000 and greater (14)											
O Prefer not to answer (15)											

Start of Block: Sexual preference

End of Block: Demo

socialgender What is your current <b>gender identity</b> ?
O Male (1)
O Female (2)
Other, please specify (5)
O Prefer not to say (4)
sexpref What is your sexual orientation?
O Heterosexual (1)
O Homosexual (2)
O Bisexual (3)
Other, please specify (4)
O Prefer not to say (5)
End of Block: Sexual preference
Start of Block: Location
Zipcode What is your current <b>zip code</b> ? Please enter the <b>5 digits</b> of your zip code.
End of Block: Location
Start of Block: End of Survey Message Lucid
end_message_lucid Thank you for taking part in this study. Please click the button below to be redirected back to LUCID Marketplace and register your submission.
End of Block: End of Survey Message Lucid