Can more education reduce opposition to intermarriage? Comparing India and the US

Payal Hathi

Intermarriage between races or castes is often used as a measure of average, population-level social tolerance. It is commonly assumed that increases in education will make a society more tolerant. General Social Survey (GSS) data between 1990 and 2016 show a dramatic rise in acceptance by whites of intermarriage with blacks in the US. In contrast, the Social Attitudes Research India (SARI) survey shows widespread opposition by non-low-caste individuals of intermarriage with low-caste individuals in Delhi and Uttar Pradesh in 2016. Multivariate regression results show that in both the US and India, greater education is associated with less opposition to intermarriage, even after controlling for relevant covariates, but effect sizes are small. Further analysis reveals that despite cross-sectional trends, improvements in education were not the major driver of liberalizing racial attitudes on intermarriage in the US, and are not likely to reduce future opposition to intercaste marriage substantially in India.

Keywords: intercaste marriage, social attitudes, caste prejudice, intergroup tolerance, education, India

Acknowledgements: I thank the SARI survey team for their diligent data collection efforts. I am grateful to Dean Spears and Diane Coffey for their guidance and comments. All errors are my own.

It is a common assumption that greater education can decrease prejudice. According to UNESCO's Declaration of Principles on Tolerance (1995), "Education is the most effective means of preventing intolerance…Education for tolerance should be considered an urgent imperative." Since education has been instrumental in impacting other important aspects of human development, such as employment, earnings, and health (Ross & Wu 1995), and less tangible outcomes such as civic participation (Egerton 2002) and women's empowerment (Mason & Smith 2003), this paper asks whether it can also be a driver for social tolerance, particularly in the context of interracial marriage in the US and intercaste marriage in India.

This study focuses on intergroup marriage as an important marker of social progress and tolerance. In modern society, marriage is perhaps the deepest and most enduring human relation among those we voluntarily enter into (Blau et al 1984). In societies in which individual worth is intrinsically tied to biology or birth, differences in race, ethnicity, religion, or caste are often used as the basis for differential access to privilege. In such societies, an individual born into a certain group is expected to marry within that group, and have children who will do the same, thereby preserving the group's status in society. Intergroup relationships are perceived as a threat to the status quo, provoking intense opposition (St. Jean 1998). Greater acceptability of intimate relations between groups signifies a weakening of social boundaries (Blau et al 1984). Intermarriage also carries great potential to drive cultural change (Kalmijn 1998), increasing tolerance and reducing discrimination, as it is not just the couple who come together, but entire families who come into contact with individuals they may not otherwise have had contact with (Goldstein 1999). High rates of intermarriage, therefore, are an indication that a society has reached a high level of social integration (Blau et al 1984, Erskine 1973, Golebiowska 2007). Measuring attitudes toward intermarriage can provide an understanding of society's tolerance for social integration as well as guidance on how attitudes of intolerance might be changed.

Why Would One Expect Education To Have An Impact On Prejudice and Social Attitudes?

Known as the "enlightenment perspective" (Wodtke 2012), less intelligence and less education are linked with prejudiced attitudes, based on the premise that the root of prejudice is an uninformed and inflexible worldview. There are several reasons for why more education and cognitive ability would reduce intergroup antagonism and increase a commitment to equality: some claim that education itself imparts knowledge about minorities and why systematic differences between groups exist, about how to recognize and reject prejudice, and about history's injustices towards socially excluded groups, and that this knowledge increases tolerance (Hodson & Busseri 2012). Another line of thought says that education gives people the ability to understand different points of view, and process information without relying on ideological absolutes (Deary et al 2008, Hodson & Busseri 2012, Schoon et al 2010). And still others explore the possibility that as one's education increases, identification with one's race decreases, making the more educated more likely to view other groups favorably (Kalmijn 1993). Finally, some say that more education and cognitive abilities create a concern for and a willingness to give private resources for the welfare of others (Kanazawa 2010).

"Contact theory," which contends that tolerance levels increase as meaningful contact with other races increases (Allport 1979, Sigelman & Welch 1993), provides another explanation for why greater education may lead to more tolerance towards intermarriage, as well as more actual

intermarriages. Kalmijn (1998) described that individuals tend to choose partners that are similar to themselves on dimensions of race and education, among other dimensions, because people tend to interact with potential partners from groups similar to themselves. Individual preferences make it easier to form a union when two individuals have similar backgrounds, values, and opinions, and similarities in education may provide this commonality.

In the Literature: Education, Integration, and Attitudes of Tolerance

In support of enlightenment theory, many scholars have described the relationship between education and more tolerant social attitudes, both generally and specifically in terms of intermarriage. For example, Bobo & Licari (1989) found that the superior cognition afforded by more education is associated with more tolerance in terms of types of civil liberties that people believe various non-conformist groups should be able to enjoy. Golebiowska (2007) used the 2000 General Social Survey to show that while greater education is positively associated with more tolerance towards interracial marriage, change in opposition to this particular form of integration has been slow, and signifies a "manifestation of lingering racial prejudice." Using data from a 1998 vote to symbolically remove a law criminalizing interracial marriage from the South Carolina state constitution, Yancey and Emerson (2001) found that at the county level, education is a strong predictor of attitudes towards intermarriage, with more support for the proposition in counties with greater levels of education.

In the US, although white opposition to intermarriage with blacks was as high as 62% as recently as 1990, several decades after the end of legal school segregation, affirmative action initiatives have greatly diversified college campuses (Romano 2009), making contact with individuals of different races more common. Fischer (2011) showed that white college students who had greater contact with black students expressed less social distance towards blacks. In India, even though affirmative action or "reservations" policies that reserve a certain number of seats for low-caste students in educational institutions as a redress mechanism for historical inequities have arguably increased caste antagonism (Desai & Kulkarni 2008), Rao (2014) found that a policy in Delhi that mandated seats for poor children in private schools increased personal interaction between wealthy and poor students which led to less discrimination against poor children by wealthy students. These examples demonstrate the possibility that contact theory suggests: as society becomes more integrated, and more similarities in educational experiences provide a common basis upon which romantic relationships can be formed, individual attitudes and preferences may change to become more tolerant.

Attitudes and Actual Intermarriage

Though interracial marriages are becoming more common in the US (Qian & Lichter 2011), only close to 1% of marriages are black-white marriages (Djamba & Kimuna 2014, US Census 2010). According to the 2012 India Human Development Survey (IHDS), a nationally representative sample of Indian households, only 5% of marriages in India are intercaste marriages. This may include both intercaste marriages between subcastes within higher castes as well as intermarriage with low-caste individuals. Also, individuals in India may not share the actual status of their marriages given the taboo against intercaste marriage (Kumar 2012).

Given that intermarriage is still rare and often difficult to capture, this paper focuses on attitudes because they can act as a gauge (Sassler & Schoen 1999), providing an indication of the direction in which trends in actual intermarriage are likely to progress. Sociologist TK Oommen (2002) described why attitudes do, in fact, matter: "facticity is inadequate to understand social phenomena. Perceptions are equally important. As the Thomas theorem in sociology upholds, if human beings define a situation as real it is real in its consequences." Between 1990 and 2010, when opposition to black-white intermarriage fell from 62% to 12%, actual black-white intermarriage almost doubled from 213,000 to 422,250 couples, or 0.41% to 0.75% of all marriages (US Bureau of the Census 1999, US Census 2010). Though small in percentage terms, as acceptability grows, actual intermarriage may begin to catch up to perceptions more quickly.

While this paper is not an attempt to claim equivalence between the experiences of blacks in the US and low-caste individuals, or Dalits, in India generally, many sociologists have noted that these particular groups are at the bottom of each society's social hierarchy (Omvedt 2001, Oommen 2002, Sampath 2015). One manifestation of this is in the often-noted move in each society towards a black/non-black and Dalit/non-Dalit status divide (Kroeger & Williams 2011, Shah et al 2006), stemming from historical and current discrimination (Qian 2005). These status hierarchies perpetuate endogamy (Fu 2001, Oommen 2002, Pinto 2001), and actual intermarriage patterns are likely to change only if attitudes towards intermarriage change first. But social attitudes are difficult to change, and often stay constant over generations (Miller & Glass 1989). Remarkably, rates of opposition to interracial marriage in the US decreased sharply from 62%, approximately where they are in UP today, to 12% over the course of 26 years. How much of this dramatic shift in attitudes in the US can be explained by changes in education? What will be needed to accelerate tolerance, particularly towards intercaste marriage, in India?

Research Questions

The literature on the relationship between education and intergroup marriage has tended to focus on singular contexts and time periods. In this regard, this paper makes two important contributions. First, using General Social Survey data (http://gss.norc.org/Get-The-Data) from 1990 and 2016, it analyzes the relationship between improvements in education and attitudes of prejudice in black-white interracial marriage over time in the US, allowing a comparison of changes in attitudes within cohorts as they become older. Second, to the author's knowledge, it is the first paper in recent decades to explore education's potential to address intolerance in the Indian context, using a newly released social attitudes survey dataset in India known as Social Attitudes Research in India (SARI) (http://riceinstitute.org/data/sari-dataset-documentation/, Coffey et al 2017).

India is a unique and important country to explore this question: a large and populous developing country, a recent UN Human Rights Council report documented that the more than 201 million Dalits in India constitute the largest caste-affected group in South Asia, and that social norms importantly legitimize the mistreatment and discrimination against them (Iszak 2016). Within India, this study focuses on Delhi, a large metropolis and India's capital city, and Uttar Pradesh (UP), India's most populous state, with a largely rural population. While both states would be considered conservative in comparison to many other parts of the country, UP is particularly conservative on dimensions of marriage, family, and gender (Dyson & Moore 1983, Jeejeebhoy

& Sathar 2001), making it a particularly relevant geography for this study.
This paper will address three main research questions: (1) Is there an association between education and attitudes of opposition to intermarriage, both in the U.S. and in India? (2) Can changes in education explain changes in attitudes over time in the US? (3) How much of the difference in attitudes between UP and Delhi can be accounted for by education?

The rest of the paper proceeds in three sections. The Methods section describes the 1990 and 2016 GSS datasets and variables used for the analysis of attitudes towards interracial marriage in the US, and SARI data and variables from the states of Delhi and Uttar Pradesh used for the analysis of attitudes towards intercaste marriage in India. The Results section first presents descriptive results of respondent characteristics, rates of opposition to intermarriage, and education distributions of respondents. Multivariate regression results show trends in the association between education and opposition to intermarriage in both the US and India. Additional analyses explore changes in this association over time in the US and differences between places in India. The Discussion section considers the findings.

METHOD

Data

The findings in this paper draw on the General Social Survey (GSS) in the US and the Social Attitudes Research in India (SARI) survey in India.

General Sample Survey (GSS) in the US. This paper uses data from the 1990 and 2016 rounds of the General Sample Survey (GSS) in the United States. The GSS is a repeated, cross-sectional, nationally representative survey that has gathered demographic and attitudinal information from adult respondents by phone for over forty years, as a means of understanding trends in American society. The survey covers a wide range of topics, including intergroup tolerance and racial attitudes.

1990 was the first year in which the GSS asked the specific interracial marriage question that is used in this analysis, which asked:

> "Now I'm going to ask you about another type of contact with various groups of people. What about having a close relative marry a Black person. Would you be very in favor, somewhat in favor, neither in favor nor opposed, somewhat opposed, or very opposed?"

The same question was asked to respondents of all races, and about marrying individuals of other groups in addition to blacks. This analysis is restricted to only 915 white respondents in 1990 and 1,604 white respondents in 2016, and their attitudes towards their relatives marrying a black person, as black-white marriages continue to hold the greatest stigma in terms of interracial marriage in the US (Bobo 2011, Qian 2005, Kroeger & Williams 2011). Also, this facilitates comparability with the Indian data, which only asked about intercaste marriage to non-low-caste respondents. A respondent is considered to be opposed to their relative marrying a black person if the respondent reported being somewhat opposed or very opposed.

The question on intermarriage was asked for the first time in the GSS in 1990. While it would be most instructive to compare education distributions between India and the US at a time when opposition to intermarriage was even closer in percentage terms, the data limits the author's ability to go back to a time when attitudes in the US might have been as conservative as in present-day UP. Further, New York City is the only identifiable US city in the publicly available GSS dataset. Although restricting the US sample to only a large city may have created a better comparison for the SARI Delhi sample, sample sizes for NYC alone were too small.

Social Attitudes Research India (SARI). This paper also uses a novel new dataset from India. The Social Attitudes Research India (SARI) project is the first ongoing measurement of Indians' attitudes towards members of socially excluded groups, such as women, Muslims, and Scheduled Castes, as well as towards important social and policy issues. SARI's first round of data collection in 2016 includes data from 1,268 respondents from the northern state of Uttar Pradesh, and 1,105 respondents from the country's capital city, New Delhi. SARI is an exclusively mobile-phone based survey, conducted with respondents between the ages of 18 and 65. Participants were recruited through probability-weighted random digit dialing, and respondents were randomly selected from among all members in a household to ensure that non-phone owners as well as individuals of all castes, religions, ages, and education levels were included in the sample. To make results representative at the state level, data were weighted based on education, sex, age, and location (urban/rural) to match 2011 Census demographics.

Certain questions in the survey were asked only to self-reported dominant group/non-low-caste respondents, while others were asked only to self-reported minority/low caste groups. To explore attitudes towards intercaste marriage, non-low-caste respondents were asked the question below, intentionally worded to match the language of the GSS intermarriage question:

> "If a close family member or relative married a low-caste person, meaning a Harijan or Dalit, would you be opposed to it or not opposed to it?"

This question was asked only to those individuals *not* in the low caste categories of Scheduled Caste (SC) or Scheduled Tribe (ST), thus the sample is restricted to anyone who reported belonging to any caste group outside of SCs and STs (other caste categories include Other Backwards Caste (OBC), General Caste, and Brahmin).

All attitudes are self-reported, both in GSS and SARI data. Thus, individuals who report that they are not opposed to intermarriage likely include those who do oppose but are unwilling to admit it, in addition to those who truly are not opposed. While these two groups cannot be separated, an individual's unwillingness to admit opposition demonstrates an awareness of what is socially acceptable, and can thus be considered a signal of progress towards tolerance.

Measures

Education

The main dependent variable of interest is education. In both the GSS and SARI, respondents' level of education is measured as the number of years of school completed.

One limitation of this study is that this analysis measures educational attainment using years of education, however, the quality of education likely also matters for education's impact on attitudes towards intergroup marriage (Bobo & Licari 1989). The Program for International Student Assessment (PISA) survey monitors trends in knowledge and skills acquisition in 15 year olds across various countries, and the quality of Indian schools is considered to be far behind that of American schools (Walker 2011). One concern, then, may be whether a simple count of years of education is a comparable measure. Additional years of education in either system, however, are still a useful indicator of exposure to schooling and learning.

Other Demographic and Cultural Covariates.

If more education can lead to greater tolerance, either through knowledge accumulation, or through opportunities for more connections with people of diverse backgrounds, what factors might affect educational attainment, and how are they associated with attitudes of tolerance?

Age. Older individuals may have had more opportunities for education and to engage with people outside of their own communities over the course of their lives, making them more tolerant. However, older generations are often more conservative in their social attitudes because their beliefs were formed and cemented in older, more conservative times (Herman & Campbell 2012). It is not possible to predict whether age will counteract the association between education and tolerance, or enhance the association.

In both GSS and SARI, age is measured in years, with each year included in this analysis as a binary variable using factor notation. The GSS collected data for respondents even older than 65 years of age, however, for consistency purposes with the Indian data, the sample is restricted to respondents only between 18 and 65 years of age.

Sex. In addition to the limited educational opportunities that girls in India often face (White, Ruther & Kahn 2016), social and cultural restrictions on their ability to participate in public spaces (Jeejebhoy & Sathar 2001) may lead to greater conservatism. In the US, women have become more educated (Lopez & Gonzalez-Barrera 2014) and restrictions on their mobility and autonomy are far less pronounced (Rosen 2013). More generally, women tend to have more socially liberal attitudes (Sidanius, Pratto, & Bobo 1994, Stanford News Service 1996), but also express greater conservatism within family and personal spheres since they are more likely to face disapproval for challenging convention (Herman & Campbell 2012). It is not possible to predict whether sex will counteract or enhance the association between education and tolerance.

For both GSS and SARI data, sex is included in this analysis as a binary variable.

Place. Opportunities for education are greater in urban areas in both contexts, suggesting that individuals in urban areas are likely to be less prejudiced. Urban areas also tend to be more diverse, and thus less socially conservative (Livingston & Brown 2017). Additionally, wealth is often concentrated in urban areas, and wealth in itself allows for greater educational opportunity. Urban place is likely to be associated with greater tolerance in both countries, and thus should enhance the association between education and tolerance.

For GSS analysis, information about the respondent's location is based on where the respondent lived when they were 16 years of age, with categories of "country/nonfarm, farm, town less than 50000, 50000 to 250000, big-city suburb, or city greater than 250000." Location is included as a binary variable, to distinguish urban and rural places. Rural places include country/nonfarm and farm. In the SARI data, respondents reported urban versus rural location. Delhi is a large metropolis, and so all respondents in Delhi are urban.

Wealth. In the US, the wealthiest are much better educated (Saad 2011), suggesting that they may express more tolerance. They also tend to be more socially liberal (Gilens 2009, Kurtzleben 2016). Similarly in India, the wealthiest are much better educated (Desai et al 2010), suggesting that they may be more tolerant, though less is known directly about general social attitudes. Wealth is likely to be associated with greater tolerance in both countries, and thus should enhance the association between education and tolerance.

Wealth is not included in either analysis as no wealth/income data was collected in SARI.

Religion. Greater religiosity has a direct association with lower levels of tolerance (Katnik 2002), and being a member of the dominant religion, which provides a privileged status, is also associated with more discriminatory attitudes (Sidanius, Pratto, & Bobo 1994). Such privilege might also include greater wealth accumulation and educational opportunities. However, in the US, where Protestants make up 53% of the population, mainline Protestant groups have higher incomes, more education (Masci 2016), and tend to be more moderate socially, while conservative Protestants tend to have both less wealth and education, and tend to be more conservative (Fitzgerald & Glass 2014, Keister 2008). In India, Hindus make up approximately 80% of the population. Hindus have greater educational attainment than non-Hindus, suggesting greater tolerance. However, Hindus are less wealthy on average than non-Hindus (particularly Jains and Christians) (IHDS 2012), suggesting less tolerance. There are no studies exploring the direct association of religion on tolerance that the author is aware of. It is not possible to predict whether religion will counteract or enhance the association between education and tolerance.

In GSS analyses, religion is included as a binary variable for whether the respondent is Protestant, the dominant religion in the US. In SARI analyses, religion is included as a binary variable for whether the respondent is Hindu, the dominant religion in India.

Caste. Those of non-low-caste in India, and particularly those of the highest Brahmin caste, are more likely to be wealthy and more educated (Desai & Dubey 2012), suggesting greater tolerance, however, they also tend to be more traditional (Thorat & Joshi 2017), suggesting less tolerance. It is not possible to predict whether caste will counteract or enhance the association between education and tolerance.

In SARI analyses, caste is included as a binary variable for whether the respondent is Brahmin, the richest and most educated caste in India.

Analytical Strategy

After presenting descriptive statistics of the two datasets, this analysis uses ordinary least squares (OLS) models to show bivariate and multivariate regression results exploring the association between education and attitudes of opposition to intermarriage. OLS is used instead of logistic regression despite having a binary dependent variable. Although results are not shown, logistic regression yields almost identical results to OLS regressions, given sufficient sample sizes. Linear regression is used for ease of interpretation.

All data used in this analysis are cross-sectional. Thus, although the causal mechanisms through which education impacts attitudes of tolerance cannot be isolated, the analyses presented below account for relevant factors to assess the extent to which education is associated with opposition to intermarriage, and whether it can predict changes in social tolerance in the future.

RESULTS

Sample Description

Each country's data is broken up into two samples, for a total of four samples: Uttar Pradesh in 2016, Delhi in 2016, the US in 1990, and the US in 2016. Data includes only non-low-caste individuals for the two India samples, and only white individuals for the two US samples. All individuals are between ages 18 and 65. Summary statistics describing the population and opposition to intermarriage are in Table 1 below.

The data reveal a few key differences. In comparing India to the US, the Indian sample is, on average, younger, less educated, less likely to be female, less likely to be urban (in UP only since all of Delhi is urban), and more likely to belong to the dominant religion. In terms of opposition to intermarriage, attitudes of opposition fell dramatically in the US between 1990 and 2016, while they are relatively high in Delhi and UP in 2016.

There is a clear age trend in the US in both years, with more opposition among older cohorts. Although there are many more non-white individuals among younger generations than older ones in the US (Cohn 2014), there is less opposition to intermarriage even within the youngest cohorts of white adults in our sample. It is striking that among Indian respondents, however, younger cohorts express similar or higher levels of opposition than older cohorts.

Table 1. *Sample description*

	US (1990)	US (2016)	UP (2016)	Delhi (2016)
independent variables				
total respondents	915	1604	1268	1105
average age of respondent (in years)	39	42.8	35.2	35.9
average years of education (overall)	13.2	14.0	5.7	9.4
fraction of respondents with no education	0%	0%	40%	18%
fraction female	54%	54%	46%	46%
fraction urban	75%	82%	25%	100%
fraction Protestant	62%	48%		
fraction Hindu			78%	80%
fraction OBC			49%	28%
fraction general caste			44%	55%
fraction Brahmin			8%	17%
dependent variable				
total respondents	905	1051	1157	975
oppose intermarriage	62%	12%	69%	47%
opposition to intermarriage, by age				
18-29 year olds	54%	5%	67%	44%
30-39 year olds	59%	8%	72%	46%
40-49 year olds	63%	14%	65%	52%
50-59 year olds	71%	16%	76%	53%
60-65 year olds	82%	20%	78%	33%

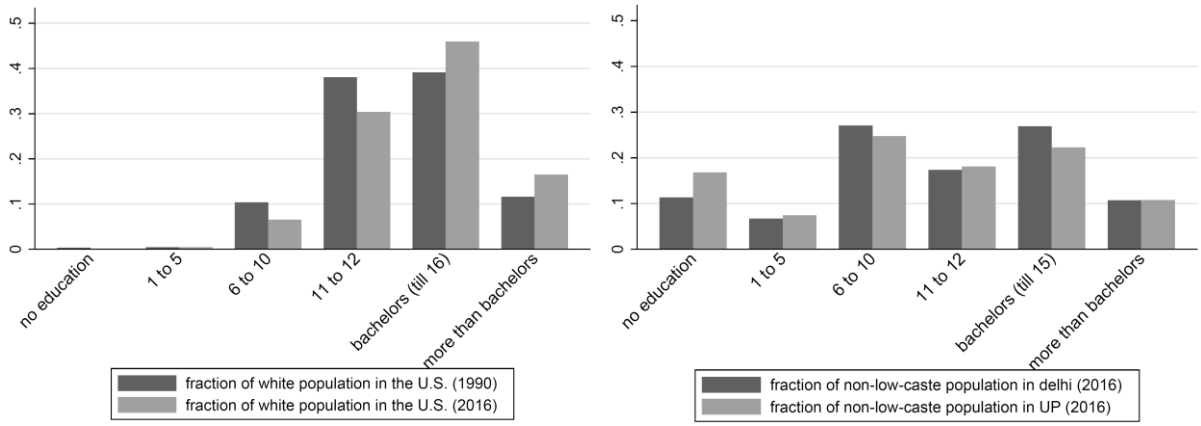
Note: The GSS gave respondents five different options to describe their level of agreement with or opposition to a family member marrying a black person. In contrast, high caste respondents in the India samples had only two options: opposed to a family member marrying a low caste person, or not opposed. The "strongly favor," "favor," and "neither favor nor oppose" in the US samples are combined and compared throughout this paper to "do not oppose" in the India samples. The "oppose" and "strongly oppose" options in the US samples are combined and compared to "oppose" in the India samples. Percentage breakdowns for the US samples are as follows: 2% of respondents in the US in 1990 and 17% in 2016 reported "strongly favor", 4% and 14% respectively reported "favor", 32% and 57% respectively reported "neither favor nor oppose", 27% and 6% respectively reported "oppose", and 35% and 6% respectively reported "strongly oppose."

Even though attitudes on intermarriage are similar between the US in 1990 (62% opposed) and UP in 2016 (69% opposed), there are stark disparities in education between the US and India, seen both in Table 1 above and Figure 1 below, which shows the education distribution of the respondent population in the US on the left and in Delhi and UP on the right. American respondents, on average, have more years of education, as the average American in 1990 had 7.5 years more of education than the average person from UP today. Additionally, the American distribution falls almost entirely above 10 years of education, with the average individual having

finished high school (i.e. 12th standard), plus 1-2 more years of education. The Indian distribution is distributed across both lower levels and higher levels of completed education, with the average Indian respondent having less than a 10th standard education.

More strikingly, almost no American respondents report having no education, in either year. In India's capital city, however, almost 20% of respondents have no education, and in UP, a full 40% have no education. The fraction of individuals with no education is approximately 100 times greater in UP today than was true in the US in 1990. Despite these differences in education, it is notable that levels of intolerance are comparable, suggesting that intolerance can coexist even with high levels of education.

FIGURE 1. EDUCATION DISTRIBUTION IN THE US IN 1990 AND 2016 (LEFT) ALMOST ENTIRELY ABOVE 10TH STANDARD, WHILE DELHI AND UP'S (RIGHT) INCLUDES ALL LEVELS OF EDUCATION

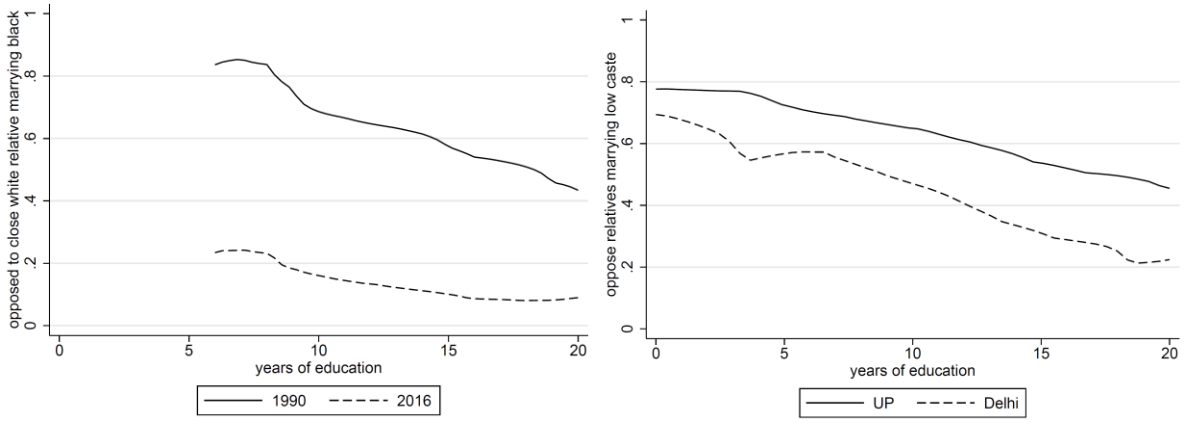


Note: Each bar represents the fraction of the sample with each level of education. Bachelors degrees in the US are usually 4 years long, thus the 'bachelors' category in the US data shows those who have completed 16 years of education. Bachelors degrees in India are usually 3 years long, thus the 'bachelors' category in the Indian data shows those who have completed 15 years of education.

Education Is Associated With Less Opposition To Intermarriage Across Four Different Contexts

In addressing Research Question 1, Figure 2 breaks down attitudes of opposition to intermarriage by level of education. The graph on the left shows the US trends, and the graph on the right shows the India trends. It is clear in all four samples that greater education is associated with greater tolerance. A total of 14 outlier respondents with a 5th standard education or less were dropped from the pooled 1990 and 2016 US dataset, however this did not affect the trend for the remaining sample. Both country's trends are graphed on similarly scaled axes, showing clearly that opposition dropped sharply in the US between 1990 and 2016, and that while opposition remains high in both Delhi and UP in 2016, it is lower in Delhi than in UP.

FIGURE 2. OPPOSITION TO INTERMARRIAGE IN THE U.S. DROPPED DRAMATICALLY BETWEEN 1990 AND 2016 AT ALL LEVELS OF EDUCATION, WHILE IT REMAINS HIGH IN DELHI AND UP



Note: There were too few data points in the US data below 6 years of education to see a trend, thus outliers were excluded. The US graph started at 6 years of completed education.

The Education – Opposition To Intermarriage Gradient Is Robust To The Inclusion Of Controls

The linear regressions below show that the downward sloping relationship between education and opposition to intermarriage remains across all four samples, regardless of which control variables are included. For each sample, bivariate results are shown alongside multiple regression results: although covariates were added one at a time, only results of the final regression with all covariates included are shown.

Starting with the American data (columns 1-4 in Table 2), adjusting for the age, sex, location, and religion of the respondent, one extra year of education decreased the likelihood of opposition to a close relative marrying a black person by 2.4 percentage points in 1990, and by 1.1 percentage points in 2014. Results are shown both without (columns 1 and 3) and with covariates (columns 2 and 4). Regardless of which covariates are included, the magnitude of the coefficient on education does not change much, suggesting that other factors are not responsible for this association. All results are statistically significant at the 1% level.

Given that there is no wealth/income data in the SARI data, wealth/income is not included as a covariate here, although as explained above, its effects on both education and attitudes may be important. In GSS results not shown, however, controlling for total family income in addition to other covariates makes the coefficient on education only about 0.002 more negative in both years. It does not seem to be the case that there is actually a large effect of income, or that not including income/wealth would cause an omitted variable bias problem.

In the Indian data (columns 5-8 in Table 2), adjusting for the age, sex, location, religion, and caste of the respondent, one extra year of education decreases the likelihood of opposition to a close relative marrying some of low caste by 1.4 percentage points in UP, and by 2.9 percentage points in Delhi. Results are shown both without (columns 5 and 7) and with covariates (columns 6 and 8). These results are also robust to the inclusion of various covariates, and are statistically significant at the 1% level.

Table 2. *Education-tolerance associations are statistically significant but small*

	(1) US (1990)	(2) US (1990)	(3) US (2016)	(4) US (2016)	(5) UP (2016)	(6) UP (2016)	(7) Delhi (2016)	(8) Delhi (2016)
education	-0.0297***	-0.0238***	-0.0115**	-0.0109**	-0.0162***	-0.0136***	-0.0259***	-0.0294***
	(0.00566)	(0.00598)	(0.00365)	(0.00370)	(0.00228)	(0.00259)	(0.00266)	(0.00286)
age		✓		✓		✓		✓
female		✓		✓		✓		✓
urban		✓		✓		✓		
Protestant (US) / Hindu (India)		✓		✓		✓		✓
Brahmin						✓		✓
constant	1.014***	0.168	0.278***	0.186	0.789***	0.744***	0.709***	0.729***
	(0.0763)	(0.665)	(0.0520)	(0.146)	(0.0188)	(0.0714)	(0.0294)	(0.0977)
n	904	904	1049	1049	1157	1157	986	985

Note: Standard errors in parentheses. + p<0.1 * p<0.05 ** p<0.01 *** p<0.001.
The dependent variable in all regressions is an indicator variable for whether the respondent reported being opposed to interracial or intercaste marriage. 'education' is the respondent's years of completed education, between 0 and 20. 'age' is the resdondent's age at the time of the survey, between the ages of 18 and 65. 'female' is an indicator variable for the respondent's sex. 'urban' is an indicator variable for the respondent's location. 'Protestant' and 'Hindu' are indicator variables for the respondent's religion, for the US and India respectively. 'Brahmin' is an indicator variable for the respondent's caste.

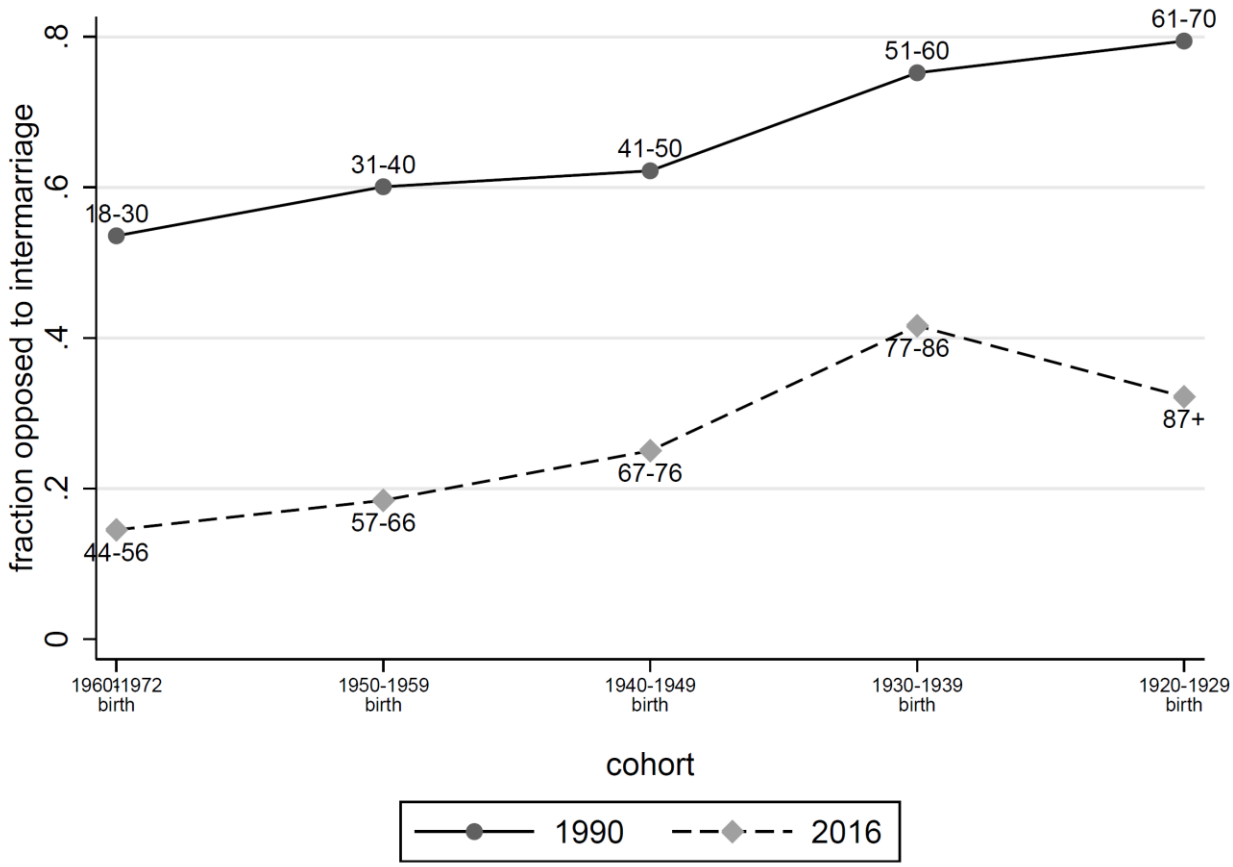
Improvements In Education Will Not Necessarily Lead To More Tolerance

The trends above are not sufficient evidence in and of themselves that more education will lead to more tolerance. To address Research Question 2, Figure 3 below shows why improvements in education were likely not the main instrument of changes in attitudes in the US.

Figure 3 focuses on the US data, and shows opposition to intermarriage for the "same" group of individuals over the 24 year period ("Same" here refers to the same sample of the population in terms of age, as if the same group were followed over time. These are not the exact same individuals). Each point on the graph shows the fraction of individuals in a particular cohort that are opposed to interracial marriage. The solid line is the trend in 1990 and the bottom dashed line is the trend in 2016. For example, the first point on the solid line shows that approximately 54% of 18 to 30 year olds reported opposition to intermarriage in 1990. This cohort of individuals would be 26 years older in 2016, so the corresponding first point on the dashed line shows that only 15% of the same group of individuals reported opposition 26 years later in 2016, when they were 44 to 56 years old. It could be argued that 18 year olds in 1990 may have gone to college and become more educated, resulting in increased tolerance by the time those individuals are 44 in 2016. However, if we move to the second point – 31 year olds in 1990 who would become 57 year olds in 2016 – we see a similarly large (approximately 40 percentage point) decline in opposition to intermarriage, even though this cohort is not likely to have received more education in the intervening years.

Each corresponding set of points is representative of the same group at two different points in time, allowing us to see how attitudes changed for the same group of people. The two lines remain approximately 30 to 40 percentage points apart for every cohort that we can observe in the data. The drop in opposition to intermarriage happened in the US at a time when education was already at relatively high levels. Given that most of these cohorts would not have received any additional education after the first survey in 1990, it is clear that something separate from progress in education is driving changes in attitudes towards intermarriage.

FIGURE 3. SIMILAR DROPS IN OPPOSITION TO INTERMARRIAGE OVER 26 YEARS, ACROSS ALL GSS COHORTS, LIKELY WITH MINIMAL CHANGES IN EDUCATION



Note: Each point shows the fraction of respondents in the given age cohort that reported opposition to interracial marriage in the US in each year. Individuals between 18 and 30 years of age in 1990 would have been 44-56 years of age by 2016, thus each corresponding set of points is representative of the same cohort of individuals over time.

Within India, 46% of high caste respondents in Delhi oppose their relative marrying a low caste person, and 69% of high caste respondents in UP do the same. Can this gap in attitudes in the Indian context be explained by differences in education? Table 3 below addresses Research Question 3 by showing that after accounting for differences in education in a linear regression analysis, being from Delhi has an independent and statistically significant effect on attitudes. Education can explain only a small fraction of the gap in attitudes opposing intercaste marriage between Delhi and UP, thus it is likely not a primary driver for change in attitudes opposing intercaste marriage after all. As in the US, something outside of education is importantly shaping attitudes differently in each of these places.

Table 3. *Within India, education explains only a small fraction of the attitude gap between UP and Delhi*

	(1)	(2)	(3)	(4)	(5)	(6)
	dependent variable: oppose close relative marrying low caste					
delhi	-0.230***	-0.168***	-0.167***	-0.171***	-0.170***	-0.176***
	(0.0347)	(0.0345)	(0.0344)	(0.0344)	(0.0344)	(0.0344)
education		-0.0171***	-0.0160***	-0.0152***	-0.0154***	-0.0156***
		(0.00169)	(0.00180)	(0.00182)	(0.00184)	(0.00184)
age			✓	✓	✓	✓
female				✓	✓	✓
Hindu					✓	✓
Brahmin						✓
constant	0.695***	0.794***	0.792***	0.757***	0.742***	0.748***
	(0.0105)	(0.0142)	(0.0482)	(0.0498)	(0.0530)	(0.0530)
n	2143	2143	2143	2143	2142	2142

Note: Standard errors in parentheses. + p<0.1 * p<0.05 ** p<0.01 *** p<0.001.
The dependent variable in all regressions is an indicator variable for whether the respondent reported being opposed to interracial or intercaste marriage. Delhi and UP data are pooled for these regressions. 'delhi' is an indicator variable for whether the respondent is from Delhi, and not UP. 'education' is the respondent's years of completed education, between 0 and 20. 'age' is the resdondent's age at the time of the survey, between the ages of 18 and 65. 'female' is an indicator variable for the respondent's sex. 'Hindu' is an indicator variable for the respondent's religion. 'Brahmin' is an indicator variable for the respondent's caste.

Actual Increases In Education Fail To Predict Observed Attitudes Over Time In The US

Analyzing observed changes in the US data may give insight into what changes can be expected in India in the future, therefore a simple future projection is presented here. Nationally representative panel data from the 2005 and 2012 IHDS surveys include individual educational status, making it possible to calculate average yearly increases in education in UP and Delhi. This data is also available in the GSS for the US samples. Regression analyses in Table 2 provide estimates of the expected change in attitudes per extra year of education in each sample.

To calculate the average increase in years of education, per person, per year, the average number of years of education for individuals between 18 and 65 in 2005 is subtracted from the average in

2012, and then divided by the difference in the number of years (call this x). X is multiplied by 10 in order to calculate the average number of years that a person's education would have increased over the next 10 years (call this y). Y is then multiplied by the regression coefficient from Table 2 which shows the change in attitude against intermarriage per extra year of education to calculate the total change in attitudes due to education in the next 10 years (call this z). Subtracting z from the fraction of respondents opposing intermarriage in each sample gives the fraction of opposition expected in 10 years.

Starting from today's levels of opposition to intercaste marriage, SARI data predicts that in UP, based on increases in education alone, instead of 69% of people opposing their relatives marrying a low caste person, 67% will be opposed in 10 years. In Delhi, instead of 47% opposition, 44% will be opposed in 10 years, based on increases in education alone. These incremental changes in education clearly lead to only very small changes in attitudes.

Performing the same calculation to project attitude changes in the US starting from 1990, the data would have predicted that instead of 62% of people opposing their relative marrying a black person, 60% would be opposed in 2016, based on increases in education alone. However, in reality, only 12% of people oppose intermarriage by 2016. Clearly, opposition to interracial marriage declined much more quickly than predicted by changes in education alone. Even though the US population in 1990 was much more educated than respondents in Delhi and UP today, it was still highly intolerant. It is not a given, therefore, that India will become more tolerant because of increases in education alone. In both societies, although the more educated tend to express more liberal attitudes, greater education has a very small influence on attitudes.

DISCUSSION

The goal of this study is to understand the role that education has played in reducing attitudes of prejudice in the US over time, and assessing whether it can play an important role in doing the same in a different context, in India. Intermarriage was chosen as the measure of tolerance since marriage is understood to be one of the most intimate types of interpersonal contact that one can choose, showing a belief in status equality. Given the deeply personal nature of marriage choice, survey questions about intermarriage should give a truer sense of people's beliefs than those about less intimate engagements or more general policy opinions.

This study has shown that although there is a clear cross-sectional association between education and less opposition to interracial or intercaste marriage, even after controlling for relevant covariates, improvements in education are not in themselves likely to lead to more tolerance. Changes in opposition in the US occurred among cohorts that were already highly educated and during a time when they were not likely to have received additional education, and differences in education between UP and Delhi only explain a small fraction of the difference in attitudes. Additionally, increases in education far underestimate the actual change in attitudes seen in the US between 1990 and 2016, suggesting that changes in education were not a major driver of liberalizing racial attitudes on intermarriage in the US. Using a simple future projection, this study shows that greater education is also unlikely to reduce opposition to intermarriage substantially in India in the near future. It is important to understand the limits of education in

changing attitudes, as greater education may not be a force for social change on attitudes so deeply entrenched as opposition to intermarriage.

Many scholars have pointed out that the dramatic shift in attitudes in the US may be a reflection of a growing awareness of the political incorrectness of explicit racism (Bonilla-Silva & Forman 2000). Decreased reporting of opposition to intermarriage does not necessarily mean that racial prejudice no longer exists, but even if it is the case that reported attitudes demonstrate an awareness of what is politically correct more than actual acceptance of intermarriage (Herman & Campbell 2012), this reveals a positive, if slow, evolution of racism in American society. In India, on the other hand, the large fractions of non-low-caste Indians in Delhi and UP reporting opposition to intercaste marriage demonstrates greater acceptability of caste prejudice. While the social norm in the US has evolved from a majority opposed to interracial marriage to a majority not opposed, the social norm in India continues to be opposition to intercaste marriage. If education is not likely to be a central driver of social change in India, what are possible avenues for change, and what can be learned from the American experience?

What Might Change Attitudes?

In the US context, historian Renee Romano (2009) describes that by continuously highlighting how racial discrimination was immoral and unfair, the Civil Rights Movement of the 1950s and 60s built upon legal and policy shifts to slowly increase blacks' own social power in their protest for basic rights, and push whites to confront their own prejudices. She argues that these efforts brought a significant shift in public opinion, making open expressions of racism increasingly unacceptable. Still, underlying attitudes of prejudice remained more difficult to change, as a major shift in acceptability of black-white marriages only began several decades later.

As many scholars note, the number of black-white marriages in the US is slowly increasing, signaling greater social integration. Additionally, many studies of racial attitudes in the US cite the fact that youth tend to be more liberal as a sign of hope that prejudice against blacks can be eliminated, and that social progress will continue (Golebiowska 2007, Newport 2013, Passel, Wang & Taylor 2010). Table 1 above also showed that in the US, the young were generally the least opposed to intermarriage. At the same time, Qian (2005) posits that even in instances of educational similarity, real differences in economic status and cultural experiences between blacks and whites may work to solidify blacks' racial identity, thereby making it more difficult to overcome marriage boundaries. These opposing forces mean that attitude change and social integration in intermarriage will likely be faster as other daily inequities are addressed.

In India, on the other hand, attitudes against intermarriage do not appear to have changed much over the past several decades. While this paper includes data only from 2016, a 1975 study of caste attitudes, also conducted in Delhi and parts of Uttar Pradesh with 370 high and low caste men, found that opposition towards intercaste marriage between 1968 and 1972 hardly changed, staying stagnant around 77% overall (Anant 1975). Though Delhi today seems to be at least somewhat more tolerant today, these fractions from close to 50 years ago are not so far off from the numbers in UP today. The strength of these norms can be seen even today in the fact that many believe in these attitudes not only for themselves but for others too: SARI data reveals that 41% of adults in Delhi and 62% of adults in UP would be in favor of laws banning intermarriage

between high and low castes. Additionally, Table 1 above shows that we do not yet see the same trend of the youth being the most liberal in India, as is the case in the US.

While there have been efforts over time to counter caste-based discrimination through legislation, including the direct promotion of intercaste marriage (Mohan 2015), enforcement has been inadequate. Disturbingly, Indian officials often dismiss calls for social justice on the issue of caste, rather than acknowledging widespread discrimination (Mitra 2016, Pinto 2001). In response, growing social and political Dalit movements are on the rise in various parts of India (Wankhede 2008), oftentimes facing violence for asserting themselves against caste prejudice. According to Dalit intellectual Chandra Bhan Prasad, this violent backlash is a response to Dalits' growing economic and educational status (Jha 2016). If, as Qian (2005) suggests, these clashes strengthen the Dalit identity against non-Dalits, it may become even more difficult over time to cross the caste divide through intermarriage, despite improvements in education.

Avenues for Future Research

Marriage continues to be an important way to maintain caste boundaries and hierarchy in India (Banerjee et al 2013, Shah et al 2006, Srinivas 1976). However, evidence in both the US and India shows that if marriage can be viewed as a tool for social status exchange (Ahuja & Ostermann 2015, Kalmin 1993), high status in terms of race or caste may be exchangeable for other valuable characteristics like education or wealth. At least in urban India, the growth of the Indian economy seems to be allowing for the separation of caste and socioeconomic status in marriage (Ahuja & Ostermann 2015). Future research should explore the extent to which the trappings of modernization (Desai & Andrist 2010), including higher incomes and education, will be able to change societal perceptions and break down caste barriers in India more generally.

More work is also needed on the influence of recent Dalit social and political movements on changing perceptions of caste identity, and the effects of these changes on openness to intermarriage. Additionally, a deeper understanding of the backgrounds and experiences of couples living in intercaste marriages is critical. Insight into their decision making process and the consequences they face for breaking social norms may shed light on how to push the general public to realize the roots of caste prejudice and why it is so detrimental to social progress.

REFERENCES

Ahuja, A., & Ostermann, S. L. (2016). Crossing caste boundaries in the modern Indian marriage market. *Studies in Comparative International Development*, *51*(3), 365-387.

Allport, G.W., 1979. *The nature of prejudice*. Basic books.

Anant, S. S. (1975). The changing intercaste attitudes in North India: A follow-up after four years. *European Journal of Social Psychology*, *5*(1), 49-59.

Banerjee, A., Duflo, E., Ghatak, M., & Lafortune, J. (2013). Marry for what? Caste and mate selection in modern India. *American Economic Journal: Microeconomics*, *5*(2), 33-72.

Blau, P. M., Beeker, C., & Fitzpatrick, K. M. (1984). Intersecting social affiliations and intermarriage. *Social Forces*, *62*(3), 585-606.

Bobo, L. D. (2011). Somewhere between Jim Crow & post-racialism: Reflections on the racial divide in America today. *Daedalus*, *140*(2), 11-36.

Bobo, L. & Licari, F.C. (1989). Education and political tolerance: Testing the effects of cognitive sophistication and target group affect. *Public Opinion Quarterly*, *53*(3), 285-308.

Bonilla-Silva, E. & Forman, T. A. (2000). "I Am Not a Racist But...": Mapping White College Students' Racial Ideology in the USA. *Discourse & society*, *11*(1), 50-85.

Cohn, D. (2014, June 26). Falloff in births slow shift to a majority-minority youth population. Pew Research Center. Retrieved from http://www.pewresearch.org

Deary, I. J., Batty, G. D., & Gale, C. R. (2008). Bright children become enlightened adults. *Psychological science*, *19*(1), 1-6.

Desai, S., & Andrist, L. (2010). Gender scripts and age at marriage in India. *Demography*, *47*(3), 667-687.

Desai, S., & Dubey, A. (2012). Caste in 21st century India: Competing narratives. *Economic and political weekly*, *46*(11), 40.

Desai, S. B., Dubey, A., Joshi, B. L., Sen, M., Shariff, A., & Vanneman, R. (2010). Human development in India. *New York: Oxford University*.

Desai, S., & Kulkarni, V. (2008). Changing educational inequalities in India in the context of affirmative action. *Demography*, *45*(2), 245-270.

Desai, S., Vanneman, R., and National Council of Applied Economic Research, New Delhi. India Human Development Survey (IHDS), 2005. ICPSR22626-v11. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2016-02-16.

Desai, S. & Vanneman, R.. India Human Development Survey-II (IHDS-II), 2011-12. ICPSR36151-v5. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2016-08-01.

Djamba, Y. K., & Kimuna, S. R. (2014). Are Americans really in favor of interracial marriage? A closer look at when they are asked about black-white marriage for their relatives. *Journal of Black Studies*, *45*(6), 528-544.

Dyson, T., & Moore, M. (1983). On kinship structure, female autonomy, and demographic behavior in India. *Population and development review*, 35-60.

Egerton, M. (2002). Higher education and civic engagement. *The British journal of*

sociology, *53*(4), 603-620.

Erskine, H. (1973). The polls: interracial socializing. *The Public Opinion Quarterly*, *37*(2), 283-294.

Fischer, M. J. (2011). Interracial contact and changes in the racial attitudes of white college students. *Social Psychology of Education*, *14*(4), 547-574.

Fitzgerald, S. T., & Glass, J. (2014). Conservative Protestants, normative pathways, and adult attainment. *Religion and inequality in America: Research and theory on religion's role in stratification*, 97-118.

Fu, V. K. (2001). Racial intermarriage pairings. *Demography*, *38*(2), 147-159.

Gilens, M. (2009). Preference gaps and inequality in representation. *PS: Political Science & Politics*, *42*(2), 335-341.

Golebiowska, E. A. (2007). The Contours and Etiology of Whites' Attitudes Toward Black-White Interracial Marriage1. *Journal of Black Studies*, *38*(2), 268-287.

Goldstein, J. R. (1999). Kinship networks that cross racial lines: the exception or the rule?. *Demography*, *36*(3), 399-407.

Herman, M. R., & Campbell, M. E. (2012). I wouldn't, but you can: Attitudes toward interracial relationships. *Social Science Research*, *41*(2), 343-358.

Hodson, G., & Busseri, M. A. (2012). Bright minds and dark attitudes: Lower cognitive ability predicts greater prejudice through right-wing ideology and low intergroup contact. *Psychological science*, *23*(2), 187-195.

Izsak, R. (2016). Report of the Special Rappourteur on Minority Issues. *Human Rights Council*, *5*.

Jejeebhoy, S. J., & Sathar, Z. A. (2001). Women's autonomy in India and Pakistan: the influence of religion and region. *Population and development review*, *27*(4), 687-712

Jha, A.K. (2016, February 3). The Dalits – Still Untouchable. *India Today.* Retrieved from http://indiatoday.intoday.in

Kalmijn, M. (1993). Trends in black/white intermarriage. *Social forces*, *72*(1), 119-146.

Kalmijn, M. (1998). Intermarriage and homogamy: Causes, patterns, trends. *Annual review of sociology*, *24*(1), 395-421.

Kanazawa, S. (2010). Why liberals and atheists are more intelligent. *Social Psychology Quarterly*, *73*(1), 33-57.

Katnik, A. (2002). Religion, social class, and political tolerance: A cross-national analysis. *International Journal of Sociology*, *32*(1), 14-38.

Keister, L. A. (2008). Conservative Protestants and wealth: How religion perpetuates asset poverty. *American journal of Sociology*, *113*(5), 1237-1271.

Kroeger, R. A., & Williams, K. (2011). Consequences of black exceptionalism? Interracial unions with blacks, depressive symptoms, and relationship satisfaction. *The Sociological Quarterly*, *52*(3), 400-420.

Kurtzleben, D. (2016, April 30). Why are Highly Educated Americans Getting More Liberal? *NPR Politics.* Retrieved from: http://www.npr.org

Kumar, A. (2012). Khap panchayats: A socio-historical overview. *Economic and Political Weekly*, *47*(4), 59-64.

Livingston, G., & Brown, A. (2017). Intermarriage in the US 50 years after Loving v. Virginia. *Report, Pew Research Center, May*, *18*.

Lopez, M. H., & Gonzalez-Barrera, A. (2014, March 6). Women's college enrollment gains leave men behind. *Pew Research Center*. Retreived from: http://www.pewresearch.org

Masci, D. (2016, October 11). How income varies among U.S. religious groups. *Pew Research Center*. Retrieved from: http://www.pewresearch.org

Mason, K. O., & Smith, H. L. (2003). Women's empowerment and social context: Results from five Asian countries. *Gender and Development Group, World Bank, Washington, DC*.

Miller, R. B., & Glass, J. (1989). Parent-child attitude similarity across the life course. *Journal of Marriage and the Family*, 991-997.

Mitra, D. (2015, March 25). Stung by UN Report on Caste Discrimination, India Cries Foul. *The Wire*. Retrieved from https://thewire.in

Mohan, R. (2015, December 19). Among 500, only 19 couples across India got monetary assistance under inter-caste marriages scheme. *The Economic Times.* Retreived from http://economictimes.indiatimes.com

Newport, F. (2013, July 25). In US, 87% approve of black-white marriage, vs. 4% in 1958. Retrieved from http://www.gallup.com

Omvedt, G. (2001, October 18). Caste, race, and sociologists - I. *The Hindu.* Retrieved from http://www.thehindu.com

Oommen, T. K. (2002). Race, religion, and caste: Anthropological and sociological perspectives. *Comparative Sociology*, *1*(2), 115-126.

Passel, J.S., Wang, W. and Taylor, P. (2010, June 4). One-in-seven new US marriages is interracial or interethnic. *Pew Social & Demographic Trends*. Retreived from: http://www.pewsocialtrends.org

Pinto, A. (2001). UN Conference against Racism: Is Caste Race?. *Economic and Political Weekly*, 2817-2820.

Qian, Z. (2005). Breaking the last taboo: Interracial marriage in America. *Contexts*, *4*(4), 33-37.

Qian, Z., & Lichter, D. T. (2011). Changing patterns of interracial marriage in a multiracial society. *Journal of Marriage and Family*, *73*(5), 1065-1084.

Rao, G. (2014). *Familiarity Does Not Breed Contempt: Generosity, Discrimination and Diversity in Delhi Schools*. UC Berkeley Mimeo.

Romano, R. C. (2009). *Race mixing: Black-white marriage in postwar America*. Harvard University Press.

Rosen, R. (2013). *The world split open: How the modern women's movement changed America*. Tantor eBooks.

Ross, C. E., & Wu, C. L. (1995). The links between education and health. *American sociological review*, 719-745.

Saad, L. (2011, December 5). U.S. "1%" Is More Republican, but Not More Conservative. *Gallup Politics.* Retrieved from: htp://www.gallup.com

Sampath, R. (2015, June 19). Racial and caste oppression have many similarities. *The Conversation*. Retrieved from: https://theconversation.com

Sassler, S., & Schoen, R. (1999). The effect of attitudes and economic activity on marriage. *Journal of Marriage and the Family*, 147-159.

Schoon, I., Cheng, H., Gale, C. R., Batty, G. D., & Deary, I. J. (2010). Social status, cognitive ability, and educational attainment as predictors of liberal social attitudes and political trust. *Intelligence*, *38*(1), 144-150.

Shah, G., Mander, H., Thorat, S., Deshpande, S., & Baviskar, A. (2006): *Untouchability in rural India*. SAGE.

Sidanius, J., Pratto, F., & Bobo, L. (1994). Social dominance orientation and the political psychology of gender: A case of invariance?. *Journal of Personality and Social Psychology*, *67*(6), 998.

Sigelman, L., & Welch, S. (1993). The contact hypothesis revisited: Black-white interaction and positive racial attitudes. *Social forces*, *71*(3), 781-795.

Srinivas, M. N. (1980). *The remembered village* (No. 26). Univ of California Press.

Stanford University News Service (1996, October 30). The gender gap in politics goes deeper than a liberal-conservative split. Retrieved from http://news.stanford.edu

St. Jean, Y. (1998). Let people speak for themselves: Interracial unions and the General Social Survey. *Journal of Black Studies, 28*(3), 398-414.

Thorat, A. and O. Joshi (2015, August 26) So Who is Practicing Untouchability in India? *NCAER IHDS blog*. Retrieved from http://ihds.info/blog

UNESCO (1995). Declaration of Principles on Tolerance. Retrieved from http://www.unesco.org

US Bureau of the Census (1999). Interracial Married Couples: 1960 to Present. Retrieved from https://www.census.gov

US Census (2010). Table 1. Hispanic Origin and Race of Wife and Husband in Married-Couple Households for the United States: 2010. Retrieved from http://www.census.gov

Walker, M. (2011). PISA 2009 Plus Results: Performance of 15-year-olds in reading, mathematics and science for 10 additional participants.

Wankhede, H. S. (2008). The political and the social in the Dalit movement today. *Economic and Political Weekly*, 50-57.

White, G., Ruther, M., & Kahn, J. (2016). Educational Inequality in India: An Analysis of Gender Differences in Reading and Mathematics. IHDS Working Paper 2016-2.

Wodtke, G. T. (2012). The impact of education on intergroup attitudes: A multiracial analysis. *Social Psychology Quarterly*, *75*(1), 80-106.

Yancey, G. A., & Emerson, M. O. (2001). An analysis of resistance to racial exogamy: The 1998 South Carolina referendum. *Journal of Black Studies*, *31*(5), 635-650.