Preference for Dating Out-Group Members:

Not the Same for all Out-Groups and Cultural Backgrounds

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Abstract

The goal of the present study was to examine dating preferences across three different out-group backgrounds (race/culture/ethnic, religious, socio-economic status) in three different cultural settings (the United Kingdom, the United States, India). A second goal was to explore the role of social psychological factors (social approval, social identity, previous dating experience) in out-group dating preferences. Findings from an online study (n_{UK} = 227, n_{US} = 245, n_{India} = 220) revealed that participants were less willing to date individuals from religious out-groups than individuals from other race/culture/ethnic or socio-economic status out-groups. Individuals' perceptions of approval from friends and family positively predicted out-group dating preference for all backgrounds and samples. How much individuals identified with their in-groups and whether they have previous experience dating someone from an out-group varied across outgroup backgrounds and samples in predicting out-group dating preferences. Together, the findings provide valuable insight into intergroup relations and reveal the importance of studying out-group dating preferences across different out-group backgrounds and samples.

Keywords: intergroup romantic relationships, culture, social identity, social approval

Continuous increase in immigration and globalization led many areas across the globe to become populated by individuals from different racial, religious and socio-economic backgrounds. One notable consequence of these diverse social environments is increasing number of intergroup interactions. The expansive line of research concerning intergroup relations demonstrates that intergroup interactions generally reduce prejudice and improve intergroup attitudes, when occurred under the right conditions (Allport, 1954; Davies, Troop, Aron, Pettigrew, & Wright, 2011). One unique way of understanding whether intergroup relations have improved is to focus on a more intimate type of interaction, namely intergroup romantic relationships. In the current study, we examine factors that shape intergroup dating attitudes in the context of dating across different race/culture/ethnic, religious, and socio-economic backgrounds in the UK, the US, and India.

According to the India Human Development survey (IHDS), in 1981, 3.5% of all marriages in India involved individuals who reported belonging to different castes within the country's stratified system which divides individuals into hierarchical groups and emphasizes endogamy (marrying individuals from one's ingroup). In 2005 this figure rose to 6.1%. Survey reports from 2011 show a similar percentage, 5.4% (IHDS, 2011; Desai & Vanneman, 2017). In 2001, 7% of couples living together in England and Wales were interethnic which rose to 9% in 2011 (Office for National Statistics, 2014). The 2010 U.S. Census report revealed that around 10% of all marriages in the U.S. were interracial showing an increase from 7% in 2000 (Lofquist, Lugalia, O'Connell, & Feliz, 2012; Simmons & O'Connell, 2003). Statistics from 2015 reveal that 17% of newlyweds in the U.S. are interracial (Livingston & Brown, 2017). This increase in intergroup marriages might be a result of general improvement in intergroup relations. However, for example, statistically, given the make-up of the U.S. population in 2000, researchers suggested that, under random matching, 44% of all marriages should have been interracial (Fisman, Iyengar, Kamenica, &

Simonson, 2008). Given that the demographic make-up of the U.S. is even more diverse since 2000, we should expect and even a greater percentage of intergroup marriages (United States Census Bureau, 2017). Thus, individuals still choose in-group members at a far greater rate than out-group members as marriage partners (Lofquist et al., 2012; Office for National Statistics, 2014). This has fuelled a plethora of studies on intergroup romantic relationships and how they compare to intragroup romantic relationships (e.g., Brown, McNatt, & Cooper, 2003; Herman & Campbell, 2012; Lui, Campbell & Condie, 1995; Schoepflin, 2009).

One explanation that was put forward as to why intergroup romantic relationships are still low in frequency concerns limited opportunities for intergroup dating and marriage to develop (Carol & Teney, 2015). This argument, however, is unlikely to be the main driver, especially in contexts such as the U.S., U.K., or India where the population make-up is heavily heterogeneous in terms of individuals social group memberships. In addition, with online dating becoming a popular outlet for meeting others (e.g., Alhabash, Hales, Baek, & Oh, 2014; Robnett & Feliciano, 2011), even individuals from more homogeneous or resegregated environments have the opportunity to form romantic relationships with out-group members (Ramiah, Schmid, Hewstone, & Floe, 2014).

Research has alluded to other explanations for why individuals may choose to be romantically involved with an ingroup member rather than an out-group member, including the principle of homophily, which states that there are a higher rate of intragroup interactions than intergroup interactions (McPherson, Smith-Lovin, & Cook, 2001). Another reason is the motivation to maintain kinships and alliances through endogamy (e.g., Dwyer, 2000). A further potential reason may be intergroup anxiety which is experienced when individuals anticipate interacting or actually interact with an out-group member; this anxiety can prevent or hinder intergroup interactions (Stephan, 2014). Other factors include social norms (e.g., Allport, 1954; Pettigrew & Troop, 2006) and physical attractiveness (e.g. Murstein, Merighi,

& Malloy, 2001). For example, Fisman and colleagues (2008) examined racial preferences in dating through a speed dating experiment and found that these preferences were influenced by the physical attractiveness of the potential partner. When the potential partner was rated as less attractive, that partner was preferred less as a future partner (Fisman et al., 2008). Excluding arranged marriages, dating is the starting point before marriage for many; therefore, investigating out-group dating preferences is a reasonable starting point to investigate further why intergroup marriages are less frequent. As in marriages, research conducted on intergroup dating preferences point to in-group bias concerning dating preferences. For example, Yancey (2009) found that 98% of White Americans reported willingness to date other White Americans, but only 49% of White Americans reported willingness to date Black Americans, 59% Asian Americans, and 61% Hispanic Americans.

The goal of the current study was to focus on out-group dating preferences to enhance our understanding of the factors that shape views concerning intergroup romantic relationships in different intergroup contexts. Specifically, we focused on the role of social psychological factors (social approval, social identity, past dating experience) that have been previously associated with dating preferences. We examined the role of these factors in relation to romantic relationships occurring across different types of outgroups, namely for dating across racial/cultural/ethnic boundaries, religious groups, and socio-economic status. We examined this question with samples recruited in the United Kingdom, the United States, and India, representing three cultural contexts with heterogenous group compositions.

Out-Group Categories and Countries

Within social psychology, past research on out-group dating preferences and relevant predictors has paid attention primarily to one type of out-group background, namely preferences for dating individuals from racial, cultural, or ethnic outgroups. It is from this specific context that many researchers have drawn conclusions regarding our understanding

about the social psychological factors that influence out-group dating preferences in general. In the current research, we asked whether these social psychological factors (social approval, social identity, previous dating experience) play an equally important role across different out-group categories. This is an important question to consider as these are different categories that represent different aspects of an individual's character. For example, the approval one receives from society may be an important factor when considering dating an individual from a different racial background because race is a visible physical characteristic, whereas, it may not be as important if an individual were to date an out-group religious or socio-economic status member as these characteristics are not always easily visible. Thus, this study goes beyond existing research to examine the role of commonly studied social psychological factors in the context of intergroup dating preferences across three different types of out-groups: race/culture/ethnicity, religion, socio-economic status.

Furthermore, most research on intergroup dating preferences originates from North America. Accumulated cross-cultural evidence has shown that psychological findings do not always replicate in other countries or cultural contexts (for a review see Henrich, Heine & Norenzayan, 2010). To increase the diversity in this area of research and test the generalizability of findings observed in one cultural context to other cultural contexts, we investigated out-group dating preferences in samples drawn from three different countries (UK, US, India). We chose these countries because this three-way comparison makes it possible to examine dating preferences in countries that vary in values (e.g., individualism/collectivism; power distance) which may impact attitudes and behaviors in relation to selecting a potential romantic partner (e.g., Hiew, Halford, Van De Vijver, & Liu, 2015; Pepping, Taylor, Koh, & Halford, 2017). Additionally, these countries provide ample opportunities for intergroup contact as they host many different racial and ethnic, religious (e.g., Hindu, Buddhist, Christian, Muslim), and socio-economic status (e.g., different castes

and social classes) groups that live side by side (notably so in metropolitan areas such as London, New York, Mumbai).

Moreover, these countries have unique histories that influence intergroup relations. For example, the US has a history of slavery (which was not abolished until 1865), anti-miscegenation laws (that lasted until 1967, making it illegal to marry outside of your own race) (Browning, 1951), and Jim Crow segregation laws (that were enforced until 1965). This particular racial hierarchical system in the US might shape individuals' willingness to date out-group racial members, but may not impact their willingness to date religious out-group members. The UK also has a history of slavery, and a long history of religious divide, particularly between Protestants and Catholics and social class divide that is still relevant today (e.g., Cunningham & Savage, 2015). The US and the UK also have different patterns of immigration (e.g., Mexican immigrants in the US) (Waters, 2014). These different circumstances make it plausible, for example, that individuals may be more willing to date out-group members from different racial/ethnic groups, but not from a different social class depending on the country they live in. India has a well-known distinct divide between social classes (caste system) (e.g., Olcott, 1944; WoodBurne, 1922) and hosts numerous groups of different religious/linguistic/cultural backgrounds. Finally, India has a tradition of arranged marriages. However, this tradition is slowly changing and Indian young adults are now increasingly having romantic relationships before marriage (Alexander, Garda, Kanade, Jejeebhoy & Ganatra, 2006; Gala & Kapadia, 2014; Ganth & Kadhiravan, 2017) and with individuals from different backgrounds (e.g., Heitmeyer, 2016). It is therefore plausible that historical factors that have shaped intergroup relations differently in these three countries might also play differential roles in shaping intergroup dating attitudes. To examine out-group dating preferences in different cultural backgrounds, we collected data from these three

different settings on preference for dating individuals from different racial/cultural/ethnic, religious, and socio-economic status backgrounds.

Social Psychological Factors and Out-group Dating Preferences

Different social psychological factors have been examined in relation to out-group dating preferences including social approval, self-esteem, social identity, status, physical attractiveness, dating experience, religion, intergroup attitudes, and intergroup anxiety (e.g., Brown, McNatt, & Cooper, 2003; Harper & Yeung, 2015; Levin et al., 2007; Liu, Campbell, & Condie, 1995; Perry, 2013; Shibazaki & Brennan, 1998). In this study, we investigate self- (social identity) and other-related (social approval) social psychological factors, as well as those that concern past personal and other-related experience with intergroup dating experience (previous intergroup direct dating experience and the indirect experience of having known others in an intergroup romantic relationship). These factors have been shown to play an important role in shaping outgroup dating attitudes, however this literature is almost exclusively limited to dating across cultural, racial or ethnic boundaries. Thus, it is yet to be investigated if these factors play a similar or different role in the context of dating across other group boundaries. We turn to each of these factors below.

Social approval. Social approval of intergroup romantic relationships can be defined as the positive attitudes held by that of family members, friends, community, and the overarching society towards intergroup romantic relationships (Bell & Hastings, 2015). Past studies have demonstrated a strong link between social approval and out-group dating preferences (e.g., Liu et al., 1995; Tucker & Mitchell-Kernan, 1995; Yahya & Boag, 2014). Level of social approval has been shown to be associated with the initiation, maintenance, and termination of intergroup romantic relationships (e.g., Clark-Ibanez & Felmlee, 2004; Harris & Kalbfleisch, 2000; Lehmiller, Graziano, & VanderDrift, 2014; Miller, Olson, & Fazio, 2004; Sinclair, Felmlee, Sprecher, & Wright, 2015; Tillman & Miller, 2017; Tucker &

Mitchell-Kernan, 1995; West, Lowe, & Marsden, 2017). Individuals commonly express that social network aversion to intergroup romantic relationships is one of the leading hindrances to engaging in such a relationship (Clark-Ibanez & Felmlee, 2004; Harris & Kalbfleisch, 2000; Liu et al., 1995; Remennick, 2005; Tucker & Mitchell-Kernan, 1995). Additionally, previous research has shown that views on intergroup dating are predicted by family allocentrism (connectedness to family) (Uskul, Lalonde, & Cheng, 2007). Thus, social approval, whether from close personal relationships such as family members or approval from society in general, plays an important role in intergroup dating preferences.

One reason for the important role played by social approval in intergroup dating preferences is that social approval is profoundly tied to social norms. For example, endogamy is a practice that expects individuals to only date and marry individuals from their own in-groups. This is particularly prevalent in countries such as India, which follows a caste system and has traditionally endorsed arranged marriages (e.g., Gala & Kapadia, 2014). This social norm remains prevalent still today for several reasons. One reason is that dating or marrying an individual outside of one's in-group is believed to threaten family and cultural traditions and even cultural identity (Carol & Teney, 2015; Clark-Ibanez & Felmlee, 2004; Uskul, Lalonde, & Konanur, 2011; Yahya & Boag, 2014). Thus, families may approve or not approve of a partner depending on whether they believe that the chosen partner would contribute to or disrupt the continuation of family traditions. Therefore, the endogamy norm works as a mechanism to protect valued characteristics of a group and its members, making social approval an important factor when investigating intergroup romantic relationships.

Social identity. Previous literature in intergroup relations in general has recognised the role of social identity and its connection to social interactions (Allport, 1954; Brewer & Pierce, 2005; Hogg, Abrams, & Brewer, 2017). Social identity refers to an individual's sense of belonging in the world through their social groups (Honsey, 2008; Tajel & Turner, 1979).

A component of having important connections to one's social group is that it compels individuals to create an in-group/out-group categorization of the world. This can lead individuals to view their own social groups as superior to other groups and use their group as a comparison marker for other groups (e.g., Hornsey, 2008; Reid & Hogg, 2005).

Researchers have shown that social identity is relevant for out-group dating preferences (Brown et al., 2003; Shibazaki & Brennan, 1998). For example, Brown and colleagues (2003) found that the more Jewish students identified as being Jewish, the stronger their preference was for dating Jewish individuals partners over non-Jewish individuals and awarded the potential Jewish (vs. non-Jewish) partners more positive evaluations. Liu and colleagues (1995) also found that individuals who identified more with their ethnic group had a higher dating preference for other in-group ethnic members than other ethnic out-group members. Similarly, research has shown that individuals who do not hold strong ethnic group identifications are more likely to date interracially in college (Levin et al., 2007). Additional research has found that among second-generation immigrants, stronger identification with the mainstream culture was associated with more positive views on intergroup romantic relationships (Uskul, Lalonde, & Konanur, 2011; Uskul, Lalonde, & Cheng, 2007). Furthermore, in terms of religious identities, Perry (2013) found that when compared with non-Christians, Protestants were the less likely to be involved in an intergroup romantic relationship.

Direct and indirect intergroup dating experience. The contact hypothesis suggests that having contact with out-group members can serve to reduce prejudice and improve intergroup attitudes (Allport, 1954; Pettigrew, 1998; Pettigrew & Tropp, 2006). For example, individuals' previous personal intergroup dating experience is associated with a decrease of intergroup anxiety and in-group bias (Levin et al., 2007). In addition, Uskul and colleagues (2007) found that when compared to European Canadians, Chinese Canadians who have

previously been in an intergroup romantic relationship showed more openness and positive attitudes towards intergroup dating than those who have not (Uskul, Lalonde, & Cheng, 2007). Moreover, research has shown that experiencing intergroup dating in college can lead to intergroup dating and marriage after college (Levin et al., 2007).

The extended contact hypothesis asserts that intergroup attitudes can be altered in a positive manner when an individual has knowledge of other in-group members having relationships with out-group members (e.g.,Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). For example, Paterson, Turner, and Conner (2015) found that having extended contact by knowing an individual in an intergroup romantic relationship resulted in greater perceived social acceptance and improved attitudes towards mixed group romantic relationships. Thus, both direct and indirect contact are important factors to account for in examining intergroup romantic relationships.

Thus, the goal of the current study was to expand the current understanding of out-group dating preferences by examining whether a) out-group dating preferences vary across different out-group backgrounds and countries and b) the predictive power of factors (social approval, social identity, past dating experiences) that have previously been linked with out-group dating preferences varies across different out-group backgrounds and in different countries/cultural contexts. Based on past research on the role of different social psychological factors in attitudes towards intergroup romantic relationships, in the current study we tested the following predictions:

H1: Social approval will be positively associated with out-group dating preferences.

H2: Social identity (defined as in-group identity) will be negatively associated with out-group dating preferences concerning.

H3: Previous dating contact experience will be positively associated with out-group dating preferences.

H4: Previous indirect contact will be positively associated with out-group dating preferences.

Method

Participants

We recruited 271 participants (227 women) (M_{age} = 19.78, *SD* = 3.44) from an undergraduate participant pool at a UK university, 245 participants in the US (125 women, M_{age} = 35.50, *SD* = 11.1) and 220 participants in India (64 women, M_{age} = 30.28, *SD* = 7.34) using Amazon Mechanical Turk (Mturk). Participants recruited in the UK received course credit and participants from the US and India received $.50 for their participation (see supplementary material for demographic characteristics per sample). Participants were excluded (*n* = 96) due to completing less than 70% the questionnaire or failing attention checks.

Procedure and measures

After giving consent, participants filled out an online questionnaire presented to them as a study on the self, others, and dating. The questionnaire included several measures assessing dating partner preferences, social identity, and social approval. Participants also responded to questions regarding their own out-group dating experience (direct and indirect) as well as several demographic questions. Descriptive statistics and reliability coefficients for all measures per sample are presented in Table 1.

Dating preferences. Dating preferences were measured using a modified version of a scale by Liu and colleagues (1995). The first two questions in the scale included normative items asking participants to rate the appropriateness of dating someone and then marrying someone from a different racial/ethnic/cultural, religious, or socio-economic status group ("Everything else being equal, how appropriate a dating partner would you consider someone who is of a different racial/cultural/ethnic background than of your own"; "Everything else being equal, how appropriate a marriage partner would you consider someone who is of a

different socio-economic status background than of your own"). The third question asked participants to indicate their likelihood of dating someone from the three different backgrounds. Items were assessed using a 7-point Likert scale ranging from 1 "not at all appropriate" to 7 "extremely appropriate" (for the first two items) and 1 "not at all likely" to 7 "extremely likely" (for the last item) and were averaged to create an index for each type of dating preference, with higher mean scores indicating higher appropriateness and likelihood.

Social approval. Participants then completed the social approval scale separately for each out-group target, using a 7-point Likert scale ranging from 1 "extremely negative" to 7 "extremely positive". Each scale included three items, with the first two items asking participants to rate the approval they would receive from friends and family if they were dating a partner from a different background (e.g., "How do you think your parents would feel about your dating someone who is from a different socio-economic status than of your own?"). The third item asked participants to rate the approval they would receive from the friends and family of the partner ("How do think the parents and friends of a partner who has different religious beliefs would feel about your dating?"). Items were averaged to create an index for each type of dating preference, with higher mean scores indicating higher perceived social approval.

Dating experience. Next, participants were asked to respond to six questions pertaining to their past dating experience. They responded with yes/no to whether they have ever dated someone who was of a different out-group background than their own. This question was asked for each out-group category (racial/cultural/ethnic, religious, socio-economic status). For each background, participants were also asked to indicate whether they know anyone personally who has dated someone who was of a different out-group (yes/no) (see Table 2 for frequencies).

Social identity. The 12-item social identity scale (Cameron, 2004) was used to assess three facets of social identity: centrality, in-group affect, and in group ties. The scale was adapted to measure the strength of participant's social identity for each group membership: racial/cultural/ethnic; religious; and socio-economic status (e.g. "In general, I'm glad to be a part of my racial/cultural/ethnic group") (1: "strongly disagree" to 7: "strongly agree"). Several items were reverse scored and higher values indicate stronger identification (see Table 1 for reliability coefficients).[1]

Results

Information on descriptive statistics and reliability coefficients are presented in Table 1. Table 2 lists the frequencies concerning participants previous dating experiences (see supplementary material for an overview of demographic characteristics). Comparing the three samples as a function of age and gender revealed a significant difference in gender, $\chi 2$ (2) = 157.29, $p < .001$, and age, $F(2, 733) = 267.79$, $p < .001$.

First, to examine whether out-group dating preferences varied as a function of type of out-group (race/culture/ethnicity; religious, SES) and country (UK, US, India), we conducted a repeated measures ANOVA with out-group dating preference scores as the with-in subject variable and country as the between-subjects variable. This analysis revealed a significant main effect of type of out-group background, F (1.92, 732) = 86.56, $p < .001$, $\eta^2 = .11$, and a significant out-group dating preferences X country interaction, F (3.84, 1406.41) = 16.43, $p <$

[1] For exploratory purposes, we also included a 21-item measure for general disgust sensitivity that captured moral, sexual, and pathogen disgust (Tybur, Lieberman, & Griskevicius, 2009). For the purposes of this paper we did not include results associated with this measure and discuss it any further. Please contact the authors for further information about the findings associated with this measure.

.001, $\eta^2 = .04$. The main effect of country was not significant, F (2,733) = 2.56, $p = .08$, $\eta^2 = .01$,

Pairwise comparisons used to unfold the main effect of type of out-group background revealed that dating preference for religious out-group targets ($M = 4.49$, $SD = 1.38$) was significantly lower than dating preference for racial/cultural/ethnic out-group members ($M = 4.98$, $SD = 1.36$), $p < .001$, Cohen's $d = .36$, 95% CI [.36, .58] and dating preference for SES out-group members ($M = 5.03$, $SD = 1.19$), $p < .001$, Cohen's $d = .42$, 95% CI [-.63, -.41]. Dating preferences for racial/cultural/ethnic out-group members did not differ significantly from dating preferences for SES out-group members ($p = .12$).

Unfolding the out-group dating preferences X country interaction effect using simple effects analysis revealed differences between countries in race/culture/ethnic out-group dating preference scores: participants from India had a significantly lower preference ($M = 4.72$, $SD = 1.23$) than did participants from the UK ($M = 5.11$, $SD = 1.25$) ($p = .002$, Cohen's $d = .31$, 95% CI [-.62, -.14]) and the USA ($M = 5.06$, $SD = 1.56$) ($p = .01$, Cohen's $d = .24$, 95% CI [-.59, -.09]); scores did not significantly differ between participants from the UK and the US ($p = .72$). Religious out-group dating preference was significantly lower in the UK sample ($M = 4.34$, $SD = 1.34$) than in the Indian sample ($M = 4.66$, $SD = 1.26$) ($p = .01$, Cohen's $d = .25$, 95% CI [-.57, -.08]); there was not a significant difference between participants from the UK and the US ($p = .72$) or between participants from the US and India ($p = .24$). Finally, participants from India scored lower on SES out-group dating preferences ($M = 4.77$, $SD = 1.13$) than did participants from the USA ($M = 5.29$, $SD = 1.20$) ($p < .001$, Cohen's $d = .45$, 95% CI [-.73, -.29]), and participants from the UK ($M = 5.01$, $SD = 1.20$) ($p = .03$, Cohen's $d = .21$, 95% CI [-.45, -.03]). Participants from the USA had a significantly higher dating preference for out-group SES members than did participants from the UK ($p = .01$, Cohen's $d = .23$, 95% CI [.07, .48]).

Concerning out-group dating preferences within each country, results revealed that UK participants had a significantly lower preference for dating religious out-group members than dating SES out-group members ($p < .001$, 95% CI [-.81, -.52]) and race/culture/ethnic out-group members ($p < .001$, 95 CI [-.91, - .62]). They did not differ in their preference for dating race/culture/ethnic or SES out-group members ($p = .13$). In the US sample, preference for dating SES out-group members was significantly higher than preference for dating race/culture/ethnic out-group members ($p = .001$, 95% CI [-.35, -.09]) and for religious out-group members ($p < .001$, 95% CI [.62, .92]). Preference for dating individuals from another race/culture/ethnic out-group was also significantly higher than preference for dating religious out-group members ($p < .001$, 95% CI [.39, .70]). India participants did not differ significantly between their dating preferences across the three types of out-groups.

Controlling for age and gender in the above analysis did not change the pattern of results, with the exception that the main effect of out-group background became marginally significant, F (1.92, 730) = 2.53, $p = .08$, $\eta^2 = .003$.

Multiple group SEM path analysis

Before comparing the relationships between variables across the three cultural groups, we used structural equation models (SEMs) to test for multi-group invariance (Guenole & Brown, 2014). In addition, we conducted tests of equivalence between groups to use composite scores in the final models for social identity as this measure had three subscales. All model analyses were conducted using IMB SPSS AMOS 23 (Byrne, 2004). In the supplementary material we describe the measurement invariance procedure conducted to use the combined social identity score in the later path models. After further testing for measurement invariance, three exploratory multiple group structural equation path models were created and tested for each out-group background (race/culture/ethnicity, religious, socio-economic status) to examine if the predictor variables predicted the three outcome

variables. Each model included social identity (all three subscales combined), social approval, gender, age, direct dating experience, and indirect dating experience as independent variables and dating preference as the dependent variable (see Figure 1 for an illustration of the general model structure).

Race/culture/ethnic out-group dating preference. A baseline model was created to test out-group race/culture/ethnic dating preference. Fit indices showed that the fully unconstrained model provided adequate fit the data [(χ^2 (*df* = 144, *N* = 736) = 371.697); RMSEA = .46 (90% CI = [.04, .05]); CFI = .93]. Comparing the chi-square for the unconstrained model to the constrained measurement model (392.271, 160 *df*) yielded a chi-square difference ($\Delta\chi^2$) value of 20.574 with 16 *df,* which is not statistically significant (p = .19). Thus, we can conclude that there is partial invariance across the three countries for the out-group race/culture/ethnic model.

Furthermore, constraining the structural parameters in the path model to be equal across the three countries resulted in a statistically significant worsening of overall model fit ($\Delta\chi^2$ = 64.460, df = 28; $p < .001$). Rejecting the null hypothesis that the paths (as a whole) are equally strong across the three countries. Table 4 shows the significant and non-significant results of direct effects by country for each model. Results showed that country membership moderated the relationship between: a) having previously dated an out-group member and dating preference, b) social identity and dating preference, c) having previously known someone who has dated an out-group member, d) age and dating preference, e) gender and dating preference. Members of the three countries did not differentiate on the path between social approval and dating preferences, where there was a significant direct effect for all groups. The direct effect from having previously dated to dating preferences was significant only in the UK model (β = .26, p = .04). The path from social identity to dating preference was only significant in the India model (β = -.19, p = .04). The direct effect of previous

extended dating contact experience on dating preference was significant in the US model (β = .79, $p < .001$).

Religious out-group dating preference. A baseline model was created to test religious out-group dating preference. Fit indices showed that the fully unconstrained model provided adequate fit the data [(χ^2 (*df* = 144, *N* = 736) = 360.347); RMSEA = .04 (90% CI = [.04, .05]); CFI = .93]. Comparing the chi-square for the unconstrained model to the constrained measurement model (385.865, 162 *df*) yielded a chi-square difference ($\Delta\chi^{2)}$ value of 25.528 with 18 *df,* which is not statistically significant (p = .11). Thus, we can conclude that there is partial invariance across the three countries for the religious out-group model.

Additionally, constraining the structural parameters in the path model to be equal across the three countries resulted in a marginally significant worsening of overall model fit ($\Delta\chi^2$ = 213.107, df = 42; $p < .001$). This demonstrates that the paths may not all be the same across the three countries. Results showed that country group membership moderated the relationship between a) social identity and dating preference for religious out-group members, b) previous dating experience and dating preference, c) gender and dating preference. However, cultural group membership did not moderate the relationships between social approval and dating preference (significant in all models), age, dating preference (not significant), and having previously known someone whose dated an out-group member and dating preference (not significant). The relations between social identity and dating preference was significant in the India model (β = -.15, p = .04) and the US model (β = -.22, p = .01), but not significant in the UK model (β = -.08, p = .35). The relationship between gender and dating preference was only significant in the India model (β = -.37, p = .02). Additionally, the relationship between having previously dated a religious out-group member was only a significant predictor in the US model (β = .45, p = .03).

Socio-economic status out-group dating preference. A baseline model was created to test out-group socio-economic status dating preference. Fit indices showed that the fully unconstrained model provided adequate fit the data [(χ^2 (*df* = 144, *N* = 736) = 316.190); RMSEA = .04 (90% CI = [.03, .05]); CFI = .93]. Comparing the chi-square for the unconstrained model to the constrained measurement model (330.212, 154 *df*) yielded a chi-square difference ($\Delta\chi^{2)}$ value of 14.022 with 10 *df,* which is not statistically significant (*p* = .17). Thus, we can conclude that there is partial invariance across the three countries for the SES out-group model.

Finally, constraining the structural parameters in the path model to be equal across the three countries resulted in as significantly different overall model fit ($\Delta\chi^2$ = 224.724, *df* = 42; *p* <.001). This demonstrates that the paths may not all be the same across the three countries. Results showed that country membership moderated the relationship between having previously dated an out-group member and dating preference, social identity and dating preference, gender and dating preference. Country membership did not moderate the relationship between social approval and dating preference (all significant), age and dating preference (not significant), nor on the path between previous extended contact and dating preference (not significant). The direct effect of previous dating experience on dating preference was significant in the US model (β = .35, *p* = .02), but not significant in the UK model (β = -.03, *p* = .84) nor in the India model (β = .07, *p* = .59). The direct effect of gender on dating preference was significant in the India model only (β = -.29, *p* = .03). Social identity was only a significant model in the US model (β = - .20, *p* = .02).

Discussion

The aim of this was to study an intimate form of intergroup contact to better understand current intergroup relations and to go beyond current knowledge on out-group

dating preferences by examining the role of social approval, social identity and dating experience in out-group dating preferences across different out-group backgrounds (race/culture/ethnicity, religious, socio-economic status) and countries (UK, US, India).

Out-Group Dating Preferences

First, findings revealed differences in dating preferences based on out-group background. Individuals preferred to date others from a different race/culture/ethnic or socio-economic status group over those from another religious out-group. This finding suggests that while individuals are willing to date out-group members, they prefer dating members of some out-groups over others. These results, while unique in context, reveal a similar pattern to past findings which demonstrated that individuals are willing to engage in an interracial relationship, but prefer to date some racial out-groups over others (Robnett & Feliciano, 2011). This finding points to the importance of examining out-group dating preferences across different out-group categories as it captures a better understanding of current relations between different groups (e.g., less social distance between social class groups and greater social distance between religious groups).

Furthermore, findings revealed that out-group dating preference for the three backgrounds varied across countries and varied within each country. For example, in terms of dating preferences across the three samples, participants from India reported a lower preference for a partner from a different race/culture/ethnic out-group compared with individuals from the UK or US who did not differ from each other. Individuals from another religious out-group were the least preferred overall in all samples. Moreover, while individuals from the US gave the highest preference for SES out-group members, individuals from the UK gave highest preference for race/culture/ethnic out-group backgrounds. Furthermore, while differences in preference varied across the backgrounds within the US

and UK, individuals from the India group gave similar preference ratings for all out-group backgrounds.

These patterns of findings demonstrate variation in preferences of individuals from different countries and may attest to the unique intergroup relations within each country/cultural context. For example, poorer historical intergroup race relations in the US and poorer historical class relations in the UK may explain why individuals from the UK were most willing to date out-group racial/cultural/ethnic individuals while individuals from the US were most willing to date SES out-group members. Investigating the reasons for country variation in dating preferences for different outgroup members was beyond the current study's goals; future research is needed to examine the factors underlying these group differences. However, this comparative picture points to the importance of studying out-group dating preference in different contexts without assuming universality.

Social Psychological Factors Predicting Out-group Dating Preferences

In the current study, we investigated several social psychological factors as potential predictors of out-group dating preferences. In support for Hypothesis 1, we found that individuals' perceptions of social approval were pivotal when considering dating an out-group member which emerged as a positive predictor across all out-group backgrounds. While we were able to uniquely capture this pattern across countries, this finding mirrors previous research showing the relationship between perceived social approval and willingness to date out-group members (e.g., Harris & Kalbfleisch, 2000; Liu et al., 1995) and attests to the continued association between group norms and intergroup relations.

Results regarding the role of social identity in willingness to engage in an intergroup romantic relationship indicated that the more individuals identified strongly with their in-group, the less willing they were to date out-group members, supporting Hypothesis 2. This was true for each background category that individuals identified with. These results mirror

related findings in the literature and predictions related to social identity theory (e.g., Brown et al., 2003; Liu et al., 1995). Extending from the previous research, we were able to demonstrate these findings in different contexts.

Results also indicated that individuals with a previous intergroup relationship showed a greater willingness to date out-group members in the future, supporting Hypothesis 3 and past findings showing similar patterns (e.g., Levin et al., 2007; Uskul et al., 2007). Whether or not individuals have previously had known someone who was engaged in an intergroup romantic relationship also emerged as a predictor for willingness to date race/culture/ethnic and socio-economic status out-group partners, supporting Hypothesis 4, but was not as a predictor for dating preference for religious out-group partners. This pattern suggests that further research is needed to understand why extended contact might influence dating preference more for some backgrounds than for others.

Overall these findings demonstrate that not all factors predict out-group dating preferences similarly across all out-group backgrounds, highlighting the importance of investigating out-group dating preferences in different contexts.

Findings Regarding Social Psychological Predictors in Each Sample

Race/culture/ethnic out-group dating preference. Findings revealed country differences concerning the relationships between the social psychological factors and out-group dating preferences. When considering the decision to date race/culture/ethnic out-group individuals, having previously dated members from this out-group emerged as a positive predictor for dating preference only among individuals from the UK only. Individuals' strength of identification with their race/culture/ethnic group was predictive in dating preferences among individuals only from India. Further, whether individuals have had previous indirect contact with intergroup race/culture/ethnic couples was a positive predictor only for individuals from the US only. This is very interesting as extended contact, but not

direct contact was an important factor in the US. Finally, social approval was the only social psychological factor predicting race/culture/ethnic out-group dating preferences across all countries.

Religious out-group dating preference. Country differences also emerged for religious out-group dating preference and the predicting social psychological factors. Identifying with one's religious group emerged as a negative predictor of willingness to engage in a romantic relationship with a religious out-group partner for individuals from India and US only. The lack of religious identity being important among individuals from the UK might be due to the increase of the number of individuals declaring that they identify with having no religion (Office of National Statistics, 2012). Dating experience was important for individuals only in the US. Social approval was a significant positive predictor of out-group dating preferences in all samples, while previous extended contact was not predictive of willingness to date a religious out-group member for all samples.

Socio-economic status out-group dating preference. Finally, when considering to date out-group socio-economic status members, having previous direct dating experience was a positive predictor only for individuals from the US. Social identity was a negative predictor only for individuals from the US. Social approval was a positive predictor for SES out-group dating preference across all countries. Previous extended contact did not predict willingness to date SES out-group members in any country.

These group difference demonstrate that these social psychological factors do not always act comparably in predicting out-group dating preferences across countries. Social approval was the only social psychological factor that similarly predicted out-group dating preference across all backgrounds in each country, which highlights the importance of examining intergroup relations in different contexts to better understand how these factors may vary as a function of country origin.

Limitations and Future Directions

As all studies, this study is also not without its limitations. First, our main limitation is that we combined race/culture/ethnicity into one background category. Future research should examine these categories separately to further tease out if individuals' evaluations vary across different ethnic, cultural, and racial groups. Furthermore, in this study we did not specify which specific group participants thought about when considering to date an out-group member (e.g., dating a lower or higher socio-economic status member). Thus, we cannot infer which race or class participants considered when responding to our questions. We also did not consider participants' own ethnic/cultural/racial, religious or SES background, their current relationship status, and the quality of their past intergroup relationships (if they had any). A future study could examine these as potential moderating factors. In addition, future research should examine country-level predictors of intergroup dating preferences in different cultural settings (e.g., percentage immigrants living in a country; democratization). Moreover, due to recruitment-related reasons, we had an imbalanced representation of participants across the three samples (e.g., UK participants were mostly young women; in India and US the mean age was in mid-thirties; most participants from India were men). Although findings remined similar when we controlled for age and gender in our analyses, findings should be interpreted with caution given these differences between samples. These limitations provide further venues to explore in future research.

Despite its limitations, this research expands existing literature on intergroup romantic relationships by illustrating that dating preferences vary across out-group backgrounds and across samples from different countries. With this research we show how our perceptions of social approval have comparable importance for out-group dating preferences across different out-group categories, not just in the context of dating across racial, cultural, or ethnic boundaries. Additionally, we replicate the importance of racial and ethnic social identity

when predicting out-group dating preferences. We also demonstrate that religious and socio-economic status social identity are similarly important when considering to date out-group individuals. This pattern was also true for direct contact experience, but not for indirect contact experience. Future research should examine other social psychological factors (e.g., intergroup anxiety, self-esteem) that have been associated with out-group dating preferences across different categories.

Furthermore, as we have shown here, when considering a dating partner, individuals' least and most preferred type of out-group and the predictive role played by important social psychological factors can vary widely as a function of where data originate. For example, while we did demonstrate the equal importance of social approval, social identity, and previous direct dating experience on dating preference across out-group categories, we find that these patterns of importance change across cultural context. This strongly highlights the need for researchers to take into account the cultural context as well as the type of out-group that is studied in the domain of intergroup romantic relationships.

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Table 1

Descriptive Statistics and Reliability Coefficients of Key Variables for the Total Sample

Independent Variables	Race/Culture/Ethnic *M (SD),α*	Religious *M (SD),α*	Socio-Economic Status *M (SD),α*
Total Sample			
Social Identity (Combined)	4.55 (0.91) .82	4.46 (0.97) .83	4.37 (0.75) .71
Centrality	3.79 (1.27) .73	3.62 (1.38) .75	3.69 (1.13) .62
In group Affect	5.09 (1.19) .75	5.04 (1.23) .73	4.73 (1.27) .77
In group Ties	4.57 (1.14) .69	4.41 (1.19) .69	4.49 (1.04) .63
Social Approval (Combined)	4.39 (1.34) .81	4.18 (1.33) .79	4.55 (1.25) .80
Parents	4.10 (1.74)	3.90 (1.72)	4.39 (1.56)
Friends	4.88 (1.47)	4.69 (1.48)	4.86 (1.39)
Partner Parents and Friends	4.19 (1.49)	3.96 (1.56)	4.39 (1.46)
United Kingdom			
Social Identity (Combined)	4.69 (0.93)	4.35 (0.98)	4.44 (0.73)
Centrality	3.76 (1.45)	3.29 (1.40)	3.49 (1.18)
In group Affect	5.43 (1.08)	5.21 (1.20)	5.05 (1.19)
In group Ties	4.71 (1.15)	4.26 (1.12)	4.58 (0.95)
Social Approval (Combined)	4.69 (1.22)	4.22 (1.33)	4.65 (1.16)
Parents	4.56 (1.64)	3.94 (1.74)	4.56 (1.45)
Friends	5.15 (1.30)	4.73 (1.46)	4.89 (1.38)
Partner Parents and Friends	4.36 (1.38)	3.98 (1.46)	4.49 (1.29)
United States			
Social Identity (Combined)	4.59 (0.96)	4.69 (1.01)	4.34 (0.79)
Centrality	3.74 (1.36)	3.75 (1.59)	3.71 (1.25)
In group Affect	5.24 (1.08)	5.31 (1.18)	4.56 (1.49)
In group Ties	4.53 (1.25)	4.57 (1.33)	4.45 (1.21)
Social Approval (Combined)	4.25 (1.39)	4.21 (1.27)	4.59 (1.26)
Parents	3.91 (1.77)	4.04 (1.59)	4.54 (1.52)
Friends	4.78 (1.56)	4.67 (1.44)	4.86 (1.37)
Partner Parents and Friends	4.07 (1.53)	3.92 (1.55)	4.38 (1.52)
India			
Social Identity (Combined)	4.34 (0.79)	4.33 (0.85)	4.31 (0.98)
Centrality	3.90 (0.87)	3.89 (0.98)	3.89 (0.88)
In group Affect	4.53 (1.13)	4.53 (1.18)	4.52 (1.00)
In group Ties	4.44 (0.99)	4.41 (1.06)	4.41 (0.93)
Social Approval (Combined)	4.18 (1.35)	4.11 (1.42)	4.37 (1.33)
Parents	3.76 (1.74)	3.69 (1.82)	3.99 (1.72)
Friends	4.67 (1.51)	4.66 (1.54)	4.83 (1.41)
Partner Parents and Friends	4.11 (1.82)	3.97 (1.69)	4.28 (1.58)
Dependent Variables Dating Preference			
Total	4.98 (1.36) .88	4.49 (1.38) .85	5.03 (1.19) .84
UK	5.11 (1.25)	4.34 (1.34)	5.01 (1.20)
US	5.06 (1.56)	4.51 (1.51)	5.29 (1.20)
India	4.72 (1.23)	4.66 (1.26)	4.77 (1.23)

Table 2

Dating Experience Frequencies

	Total	UK	US	India
	Yes	Yes	Yes	Yes
Race/culture/Ethnicity				
Direct contact	53%	51%	62%	47%
Indirect contact	84%	91%	87%	73%
Religious				
Direct contact	59%	42%	77%	60%
Indirect contact	78%	76%	85%	74%
SES				
Direct contact	63%	57%	72%	61%
Indirect contact	79%	80%	82%	75%

Note. Frequencies out of a 100 percent.

Table 3

Correlations Between Out-Group Predictor and Outcome Variables for the Entire Sample

Race/Culture/Ethnicity						
		1.	2.	3.	4.	5.
1.	DP					
2.	SA	.60***				
3.	SI	-.08**	-.004			
4.	Dated	.25***	.15***	-.05		
5.	Known	.213***	.138***	.104**	.266**	-
Religious						
		1.	2.	3.	4.	5.
1.	DP					
2.	SA	.62***				
3.	SI	-.25***	-.17***			
4.	Dated	.24***	.17***	-.02		
5.	Known	.09**	.05	.05	.33***	-
Socio-Economic Status						
		1.	2.	3.	4.	5.
1.	DP					
2.	SA	.51***				
3.	SI	-.12***	-.01			
4.	Dated	.19***	.15***	-.03		
5.	Known	.18***	.12**	.03	.35***	-

Note. * $p < .10$, ** $p < .05$, *** $p < .001$. DP = dating preference, SA = social approval, SI = social identity, Dated = previously dated out-group member, Known = have known someone who has dated an out-group member.

Table 4

Unstandardized Path Coefficients From Unconstrained Multiple-Group Path Models by Cultural Group

	Dated →DP		SA→ DP		SI→DP		G → DP		Known →DP		Age →DP	
R/C/E Model												
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
UK	.264**	.130	.853***	.089	-.077	.085	.390**	.166	.063	.235	-.009	.019
US	.258	.160	.841***	.084	-.119	.078	.040	.145	.785***	.229	.000	.007
India	.136	.154	.420***	.077	-.188**	.093	-.361**	.153	.283*	.162	-.003	.009
Religious Model												
	Dated →DP		SA→ DP		SI→DP		G → DP		Known →DP		Age →DP	
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
UK	.181	.137	.836***	.077	-.078	.083	.012	.170	.044	.157	-.024	.019
US	.448**	.200	.939***	.111	-.245**	.076	.001	.147	.052	.233	.013*	.007
India	.269*	.160	.529***	.072	-.152**	.074	-.037**	.154	-.039	.166	-.001	.009
SES Model												
	Dated →DP		SA→ DP		SI→DP		G → DP		Known →DP		Age →DP	
	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.	Est.	S.E.
UK	-.027	.135	.929***	.107	.001	.009	.092	.162	.231	.165	-.016	.018
US	.349**	.148	.536***	.079	-.203**	.090	-.064	.124	.175	.176	.003	.006
India	.070	.131	.287***	.058	-.108	.081	-.286**	.131	.250*	.142	.001	.008

Note. *Dated:* previously dated out-group member, *SA:* social approval, *SI:* social identity, *G:* gender, *Known:* previously known someone who has dated an out-group member, *DP:* out-group dating preference, *Est.:* estimate

*$p < .10$, **$p < .05$, ***$p < .001$

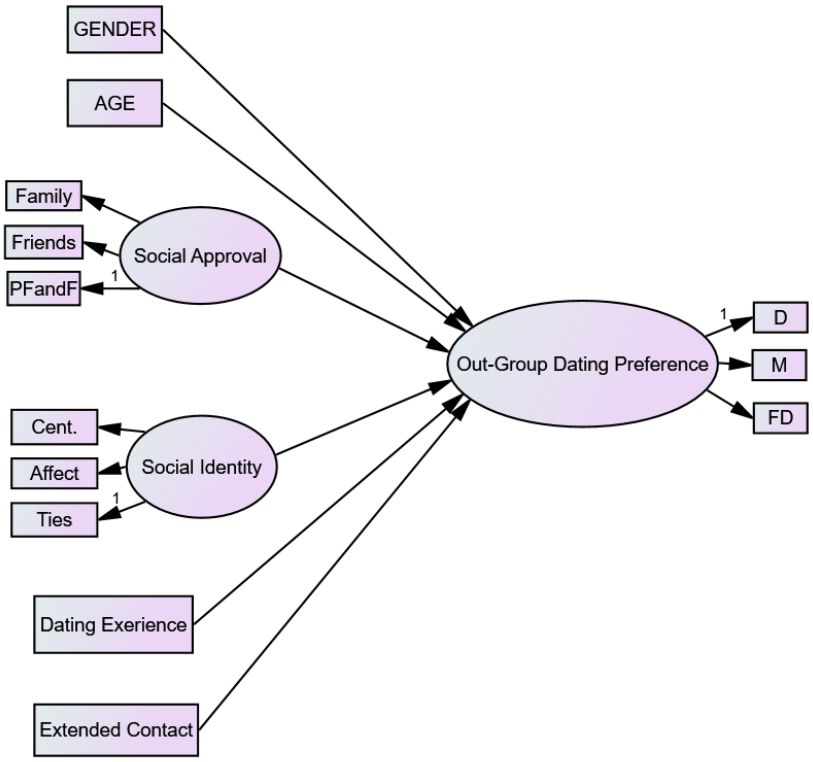

Figure 1. Predicting dating preference across countries. This figure illustrates the basic exploratory multiple group SEM model used to predict out-group dating preferences including scale items for each latent variable. See Table 4 for estimates for each model.