

Running Head: INTERFAITH

Choma, B. L., Haji, R., Hodson, G., & Hoffarth, M. (2016). Avoiding cultural contamination: Intergroup disgust sensitivity and religious identification as predictors of interfaith threat, faith-based policies, and islamophobia. *Personality and Individual Differences, 95*, 50-55. <https://doi.org/10.1016/j.paid.2016.02.013>

**Avoiding cultural contamination: Intergroup disgust sensitivity and religious identification
as predictors of interfaith threat, faith-based policies, and Islamophobia¹**



© 2020. This manuscript version is made available under the CC-BY-NC-ND 4.0 license <http://creativecommons.org/licenses/by-nc-nd/4.0/>

¹ Final submitted copy does not reflect changes made before publication.

Abstract

In three samples of Christian undergraduate students ($n=43$, $n=115$, $n=73$), we investigated the relative influence of Christian religious identification and intergroup disgust sensitivity (ITG-DS; an affect-laden individual difference variable reflecting reactivity to disgust and revulsion reactions toward outgroups) on several religious variables: Perceived threat of religious outgroups, attitudes toward faith-based schooling, intercultural child adoption, banning of religious symbols, and Islamophobia. Results revealed that religious identification and ITG-DS are both relevant to interfaith prejudices, but in different ways. With respect to unique predictive effects, ITG-DS emerged as the stronger and more consistent predictor. Meta-analytic integration confirmed that ITG-DS, but not religious identification, robustly predicts Islamophobia. Implications for understanding correlates of religious outgroup prejudices are considered.

Keywords: intergroup disgust sensitivity (ITG-DS), religious identification, Islamophobia, interfaith attitudes, prejudice.

1. Introduction

Islamophobia is pervasive in many Western nations (Geddes, 2013; PEW, 2015). The so-called “clash of cultures” associated with increasing religious and ethnic diversity in the West has elicited debates concerning social policies and customs, with a prominent focus on the difference between traditional-Christian values and practices with those of Muslims. Much of this pushback is rooted in *social identity* concerns. As an example, Stephen Harper (Conservative Prime Minister of Canada, 2006 - 2015) campaigned for re-election in 2015 on a promise to prevent Muslim women from wearing a full face veil during citizenship ceremonies, despite a Federal court ruling this action as unconstitutional. In Harper’s words: “We do not allow people to cover their faces during citizenship ceremonies. Why would Canadians, contrary to our own values, embrace a practice at that time that is not transparent, that is not open and frankly is rooted in a culture that is anti-women” (Chase, 2015). Aside from identity concerns, however, those pushing for restrictions on Muslim practices (e.g., wearing a headscarf, Welch, 2007) are also seemingly *repulsed* (or *disgusted*) by such customs. In the present study, we investigate the role of both Christian religious identification and intergroup disgust sensitivity as predictors of perceived threat of religious outgroups, attitudes toward faith-based schooling, cross-cultural child adoption, banning of religious symbols, and Islamophobia.

1.1. Religious Identification

Religious differences are pervasive in intergroup conflicts (Wellman & Tokuno, 2004), including the Catholic-Protestant conflict in Northern Ireland and the Arab-Israeli conflict in the Middle East. The role of religion in intergroup prejudice has been explored in several ways. For instance, religious fundamentalism, or the belief that there is one true religious teaching to abide by, is associated with intolerance toward outgroups (Altemeyer & Hunsberger, 1992, 2004),

whereas other approaches to religion (intrinsic and journey-oriented quest) are associated with lower prejudice (Allport & Ross, 1967; Hall, Matz, & Wood, 2010; Hunsberger & Jackson, 2005). Our focus is on degree of identification with one's religious group, given the importance of social identity in intergroup relations.

According to Social Identity Theory (SIT; Tajfel & Turner, 1979), identifying with one's religious ingroup fosters ingroup favoritism and outgroup bias, including outgroup prejudice and hostility (see Ysseldyk, Matheson, & Anisman, 2010). In a study of Catholics and Protestants in Northern Ireland, Cairns, Kenworthy, Campbell and Hewstone (2006) showed that Catholics and Protestants who more strongly identified with their religious ingroup showed greater prejudice toward Protestants and Catholics, respectively. Similarly, non-Muslims in Britain who strongly identified as Christian reported greater Islamophobia (Hewstone, Clare, Newheiser, & Voci, 2011; see also Johnson, Rowatt, & Labouff, 2012). Additionally, people who strongly identify with their religious ingroup are more opposed to interfaith relationships (see Cila & Lalonde, 2014; Haji, Lalonde, Durbin, & Naveh-Benjamin, 2011). Hence, strong religious identifiers are expected to be more threatened by and prejudicial towards religious outgroups. Consequently, those strongly identifying as Christian are expected to experience greater interfaith threat and be more opposed to pro-interfaith policies and practices. Yet strong identifiers are expected to be supportive of policies and practices that highlight religious affiliation as such policies and practices reinforce a positive religious identity and emphasise faith-based group differences.

Notably, religious identification is primarily concerned with importance of the *ingroup* particularly. However, aversion and disgust toward the *outgroup*, and fear of contamination by the *outgroup*, are theoretically germane to interfaith prejudice. Thus, in addition to considering social identification with one's religious ingroup as a predictor of prejudice, we introduce a

previously untested predictor, the possibility that interfaith prejudice may also stem from a more fundamentally affective or visceral source.

1.2. Intergroup Disgust Sensitivity (ITG-DS)

It is well established that emotions underlie prejudice (Cottrell & Neuberg, 2005; Fiske, Cuddy, Glick, & Xu, 2002; Mackie & Smith, 2002). Following Allport (1954), who primarily focused on the power of aggression, fear, and anxiety as underlying prejudice, researchers have traditionally investigated fear and anxiety (Gaertner & Dovidio, 1986; Greenberg & Kosloff, 2008; Stephan & Stephan, 1985). For instance, intergroup anxiety, or the tendency to experience uncertainty about how to behave toward members of outgroups and subsequent uneasiness and discomfort, is a robust predictor of prejudice (Stephan, 2014).

More recently, disgust has emerged as a fundamental affective construct in understanding prejudice and intergroup attitudes (Hodson & Costello, 2007; Inbar, Pizarro, & Bloom, 2009; Olatunji, 2008; Terrizzi, Shook, & Ventis, 2010). Disgust is a basic emotion characterized by revulsion, withdrawal, and avoidance (Rozin, Haidt, & McCauley, 2000; Rozin, Haidt, McCauley, & Imada, 1997), including avoidance of specific outgroups as a way to protect oneself (e.g., from foreigners who might carry diseases; Schaller & Park, 2011). Of particular interest to the present research, people differ in their general disgust sensitivity (Haidt et al., 1994; Olatunji, Haidt, McKay, & David, 2008). Witnessing a person being physically ill, for instance, will be perceived as more or less disgusting depending on a person's sensitivity to disgust. Yet evidence for a link between *general* disgust sensitivity and prejudice is rather weak and mixed (see Choma, Hodson, & Costello, 2012; Hodson et al., 2013; Hodson, Dube, & Choma, 2015).

Recently, Hodson and colleagues (Choma et al., 2012; Hodson et al., 2013) proposed that people differ in *intergroup* disgust sensitivity (ITG-DS). ITG-DS can be defined as “an affect-laden construct reflecting individual differences in the tendency to experience disgust and revulsion reactions toward ... outgroups” (Choma et al., 2012, p. 500). Individuals higher in ITG-DS are more disgusted and repulsed by the beliefs or practices of outgroups, and seek to avoid contamination from outgroups. ITG-DS predicts prejudice towards diverse groups including Muslims, Jews, gays/lesbians, ethnic minorities, and Blacks; impressively ITG-DS predicts such prejudice, even when controlling for robust ideological and affective predictors (e.g., right-wing authoritarianism, social dominance orientation, intergroup anxiety) and general disgust sensitivity (Choma et al., 2012; Hodson et al., 2013). Furthermore, Hodson et al. (2013) demonstrated that experimentally-induced outgroup disgust only predicted prejudice among individuals higher (*vs.* lower) in ITG-DS. Given that individuals higher in ITG-DS experience more revulsion in response to outgroups, individuals higher (*vs.* lower) in ITG-DS might be threatened by faith-based outgroups. Moreover, to avoid contamination, such individuals may be opposed to social policies and practices promoting interfaith contact, and be supportive of policies and practices that promote the segregation of faith groups. In other words, those higher in ITG-DS are expected to be particularly interested in keeping outgroups away – both physically and symbolically.

1.3. The Present Research

The relative influence of religious identification and ITG-DS on interfaith-related attitudes was investigated in three samples. In addition to perceived threat and Islamophobia, four faith-based policy attitudes were assessed: Attitudes toward faith-based schooling, opposition to diversity education, preference to ban religious symbols, and attitudes toward

cross-cultural child adoption. Given that these attitudes are relevant to the ingroup as well as highlight possible contamination from intergroup contact, we hypothesized that religious identification and ITG-DS would predict greater interfaith threat, opposition to diversity education and cross-cultural child adoption, and greater Islamophobia. We also tested (Sample 1 only) whether religious identification and ITG-DS related to greater implicitly-measured anti-Muslim attitudes (Heiphetz, Spelke, & Banaji, 2013, Study 1). Finally, we expected that religious identification would particularly relate to support for policies like faith-based schooling and opposition to banning religious symbols as such policies serve to strengthen faith group affiliation. Conversely, we expected that ITG-DS would relate to opposition to faith-based schooling and support for banning religious symbols as these policies seek to support religious outgroups.

2. Method

2.1. Participants and Procedure

Christian undergraduate participants from three post-secondary institutions in southern Ontario (Canada) participated in exchange for course credit: **Sample 1** ($n=43$; $mean_{age}=22.88$, $SD=8.19$; 86% female; 90.7% identified as White; religious affiliation: 39.5% Catholic, 18.6% Baptist, 14% Protestant, 9.2% Christian Other, 7% United, 4.7% Anglican, 4.6% each Lutheran and Pentecostal); **Sample 2** ($n=115$; $mean_{age}=19.58$, $SD=4.44$; 86.0% female; ethnicity: 51.3% White, 17.4% other, 16.5% Filipino, 7.0% Chinese, 3.5% Black, 2.6% East Indian, 1.8% West Asian/Middle Easter or Other Asian; religious affiliation: 72.2% Catholic, 11.3% each Protestant and Christian Other, 3.5% Baptist, 1.7% Anglican); and **Sample 3**¹ ($n=73$; $mean_{age}=19.79$, $SD=3.61$; 87.7% female; ethnicity: 78.1% White, 11% Black, 11.0% other, 2.7% Filipino; religious affiliation: 67.1% Catholic, 13.7% each Protestant and Non-Denominational, 2.7% each Orthodox and Christian Other). Participants completed measures of ITG-DS, religious

identification, perceived interfaith threat, interfaith attitudes, and Islamophobia using response scales from 1-*strongly disagree* to 7-*strongly agree* unless stated otherwise. In Sample 1, participants also completed a pro-Christian/Muslim-bias IAT.

2.2. Measures

2.2.1 Intergroup disgust sensitivity (ITG-DS). Participants completed the 8-item Intergroup Disgust Sensitivity scale (Hodson et al., 2013). Items were modified to reflect an interfaith context by replacing “ethnic group” with “religious group” (e.g., “I feel disgusted when people from other religious groups invade my personal space”, “After interacting with another religious group, I typically desire more contact with my own religious group to “undo” any ill effects from intergroup contact”). Higher average scores indicated greater ITG-DS concerning interfaith group interactions (sample α 's: .77, .77, .61).

2.2.2. Religious identification. The centrality subscale of the religious identification scale (Cameron, 2004) was administered. Participants indicated their religious group before completing 4 items (e.g., “In general, the fact that I am [insert religious group] is an important part of my self-image”). Higher average scores indicated greater religious identification (sample α 's: .80, .84, .85).

2.2.3. Perceived interfaith threat. Participants completed an 8-item Intergroup Threat scale (Charlesford & Choma, 2013), modified for an interfaith context (e.g., “Religions other than Christianity undermine traditional values”). Higher average scores indicated a greater tendency to perceive non-Christian religions as socially threatening and threatening to group status (sample α 's: .78, .74 .78).

2.2.4. Faith-based policy attitudes. Items for the four interfaith attitudes scales were developed by the researchers. Three items each were developed to assess *faith-based schooling*

support (“I am in support of publicly funded Catholic schools/Islamic schools/Jewish schools”; sample α 's: .85, .88, .87); *diversity education opposition* (e.g., “Learning about other cultural traditions in public school could dilute Canadian students’ values”, “Learning about other cultural traditions in public schools could make Canadian students confused about their identity”, “Learning about evolution in school could make students confused about their religious beliefs”; sample α 's: .66, .80, .58,); *support for banning religious symbols* (e.g., “Religious symbols of any kind should be banned in Canadian schools or government offices”, “Religious headcoverings (e.g., hijabs, turbans, and yamakas) should be banned in Canadian schools or government offices”, “Only small (discreet) religious symbols should be allowed in Canadian schools or government offices”; sample α 's: .77, .73, .78); and 6-items were developed to tap *opposition to cross-cultural child adoption* (e.g., “Parents who adopt children of other cultural backgrounds will experience a dilution of the values from their culture of origin”, “Similarity between the cultural background of the child and adoptive parents should be a requirement in legal adoptions”, “Parents who adopt children of other cultural backgrounds will experience a dilution of their own culture and values”, “Parents who adopt children from other countries will have to rid the children of foreign habits and customs”, “Parents who adopt children from other countries are susceptible to illnesses that the foreign children may bring with them to Canada”, “Parents who adopt a child from a different religious (or non-religious) background will have to undo any negative effects of the child’s religious (or non-religious) upbringing”; sample α 's: .78, .85, .75). Higher scores indicated greater support for faith-based schools, anti-diversity education attitudes, preference to ban religious symbols, and greater opposition to cross-cultural child adoption.

2.2.5. Islamophobia. The 16-item Islamophobia Scale (Lee, Gibbons, Thompson, & Timani, 2009) was administered. Participants responded to items (e.g., “Muslims want to take

over the world”; “Islam is a religion of hate”) on a scale from 1-*strongly disagree* to 5-*strongly agree*. Higher scores indicated greater Islamophobia (sample α 's: .95, .97, .96).

2.2.6. Christian versus Muslim IAT (implicit Islamophobia). The target concepts were Christian and Muslim nouns taken from the Religions IAT on the Project Implicit website. In one critical block, participants used one key to categorize Christian nouns and pleasant words and another to categorize Muslim nouns and unpleasant words. In another critical block, Muslim nouns and pleasant words were categorized with one key and Christian nouns and unpleasant words were categorized with the other. IAT scores were calculated using the improved *D* scoring algorithm (Greenwald et al., 2003), with more positive *D* scores indicating more favorable implicit attitudes toward Christians (*vs.* Muslims).

3. Results

Means and standard deviations are shown in Table 1 (Sample 1) and Table 2 (Samples 2 and 3). Most of the correlations between religious identification and ITG-DS with interfaith threat, faith-based policy attitudes and Islamophobia were in the anticipated direction, as displayed in Tables 1 and 2.

Table 1

Means, standard deviations and correlations for Sample 1

| | Mean (SD) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|-------------|------------------|-------|--------|--------|-------|-------|-------|-----|
| 1. Religious identification | 4.15 (1.69) | | | | | | | | |
| 2. Intergroup Disgust Sensitivity (ITG-DS) | 2.44 (1.09) | .34* | | | | | | | |
| 3. Interfaith threat | 3.17 (1.08) | .51** | .30* | | | | | | |
| 4. Faith-based schooling support | 4.33 (1.46) | -.21 | -.33* | -.41** | | | | | |
| 5. Diversity education opposition | 3.36 (1.28) | .25 | .33* | .43** | -.17 | | | | |
| 6. Support for banning religious symbols | 2.55 (1.41) | .07 | .39** | .10 | -.37** | -.05 | | | |
| 7. Opposition to cross-cultural child adoption | 2.86 (1.09) | .29 [‡] | .50** | .31* | -.35* | .27 | .44** | | |
| 8. Islamophobia | 2.18 (0.82) | .44** | .60** | .55** | -.44** | .47** | .34** | .46** | |
| 9. Implicit Association Test (IAT) | 0.54 (0.37) | .25 | -.04 | .24 | -.20 | .14 | .12 | .22 | .16 |

Note. $N=43$. * $p<.05$, ** $p<.010$, [‡] $p=.059$.

Table 2

Means, standard deviations and correlations for Samples 2 and 3

| | Mean (SD) Sample 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Mean (SD) Sample 3 |
|--|-----------------------|-------|-------|-------|--------|------------------|-------|-------|-------|-----------------------|
| 1. Religious identification | 4.29 (1.67) | | .15 | .23* | -.20 | .08 | -.29* | .00 | -.02 | 4.17 (1.63) |
| 2. ITG-DS | 2.85 (1.13) | .20* | | .46** | -.07 | .40** | .30* | .32** | .56** | 2.11 (0.82) |
| 3. Interfaith threat | 2.01 (1.04) | .16 | .51** | | -.34** | .47** | .39** | .31** | .64** | 2.67 (0.99) |
| 4. Faith-based schooling support | 4.68 (1.72) | .27** | -.15 | -.15 | | -.03 | -.12 | .08 | -.17 | 5.31 (1.31) |
| 5. Diversity education opposition | 3.18 (1.63) | .29** | .39** | .26** | .07 | | .32** | .53** | .52** | 2.94 (1.20) |
| 6. Support for banning religious symbols | 2.65 (1.43) | -.23* | .38** | .15 | -.39* | .18 [‡] | | .47** | .56** | 2.17 (1.78) |
| 7. Opposition to cross-cultural child adoption | 2.76 (1.31) | .15 | .35** | .15 | .01 | .44** | .38** | | .53** | 2.79 (1.03) |
| 8. Islamophobia | 1.74 (0.88) | .03 | .57** | .65** | -.30** | .21* | .38** | .34** | | 1.70 (0.72) |

Note. * $p < .05$, ** $p < .010$, [‡] $p = .057$. Results for Sample 2 are reported below the diagonal; results for Sample 3 are reported above the diagonal. ITG-DS = intergroup disgust sensitivity.

To test the unique predictive effects of religious identification and ITG-DS, regression analyses were conducted for each of the criteria, with religious identification and ITG-DS entered as simultaneous predictors. The standardized regression coefficients for the regression analyses discussed below are shown in Table 3.

3.1.1. Sample 1 ($n=43$). Religious identification significantly uniquely predicted greater perceived interfaith threat and greater Islamophobia. ITG-DS significantly uniquely predicted support for banning religious symbols, opposition to cross-cultural child adoption attitudes, and greater Islamophobia, and marginally predicted opposition to faith-based schooling, and diversity education opposition. ITG-DS did not uniquely predict interfaith threat or implicit attitudes. Religious identification did not uniquely predict any of the faith-based policy attitudes or implicit bias against Muslims.

3.1.2. Sample 2 ($n=115$). Religious identification significantly uniquely predicted support for faith-based schooling, diversity education opposition, and opposition to banning religious symbols. ITG-DS significantly uniquely predicted greater interfaith threat, opposition to faith-based schooling, diversity education opposition, support for banning religious symbols, opposition to cross-cultural child adoption, and greater Islamophobia. Religious identification did not uniquely predict interfaith threat, cross-cultural child adoption attitudes, or Islamophobia.

3.1.3. Sample 3 ($n=73$). Religious identification only significantly uniquely predicted opposition to banning religious symbols. ITG-DS significantly uniquely predicted greater interfaith threat, opposition to diversity education, support for banning religious symbols, opposition to cross-cultural child adoption, and greater Islamophobia. ITG-DS did not predict faith-based schooling.

Table 3

Religious Identity and Intergroup Disgust Sensitivity (ITG-DS) as Simultaneous Predictors of Interfaith Attitudes

| Outcomes: | Interfaith Threat | Support for Faith Schooling | Diversity Education Opposition | Ban Religious Symbols | Cross- cultural Adoption Opposition | Islamophobia | Muslim IAT |
|---------------------------|----------------------|-----------------------------------|--------------------------------------|-----------------------------|--|--------------|---------------|
| Sample 1 (<i>n</i> =43) | | | | | | | |
| Religious Identity | .46** | -.10 | .14 | -.09 | .11 | .25* | .30 |
| ITG-DS | .15 | -.30 | .29 | .44** | .49** | .53** | -.15 |
| <i>R</i> ² | .28 | .12 | .14 | .17 | .29 | .44 | .08 |
| Sample 2 (<i>n</i> =115) | | | | | | | |
| Religious Identity | .04 | .33** | .22* | -.33** | .08 | -.10 | |
| ITG-DS | .51** | -.26** | .34** | .43** | .29** | .57** | |
| <i>R</i> ² | .27 | .14 | .19 | .23 | .11 | .31 | |
| Sample 3 (<i>n</i> =73) | | | | | | | |
| Religious Identity | .17 | -.19 | .03 | -.34** | -.04 | -.10 | |
| ITG-DS | .43** | -.04 | .39* | .35** | .33** | .58** | |
| <i>R</i> ² | .24 | .04 | .16 | .20 | .11 | .33 | |

Note. ITG-DS = intergroup disgust sensitivity. Standardized coefficients are displayed. **p*<.05 ***p*<.01.

3.2. Meta-analytic results. Meta-analytic values, weighted by sample size, were calculated based on the zero-order correlations (see Table 4) and partial correlations (see Table 5) across the three samples. Both sets of results show that religious identification is associated with greater interfaith threat, opposition to diversity education, and opposition to banning religious symbols. However, the meta-analytic values for religious identification were not significant for opposition to faith-based schooling, cross-cultural child adoption, or Islamophobia. The meta-analytic values for the zero-order and partial correlations showed that ITG-DS relates to greater interfaith threat, opposition to faith-based schooling, opposition to diversity education, supporting or banning religious symbols, opposition to cross-cultural child adoption, and greater Islamophobia.

Table 4

Meta-analytic summary of zero-order correlations

| | Study 1 | | Study 2 | | Study 3 | | Meta-analytic (95% CI) | |
|---|------------------|--------|---------|--------|---------|--------|--------------------------------|-----------------------|
| | RI | ITG-DS | RI | ITG-DS | RI | ITG-DS | RI | ITG-DS |
| Interfaith threat | .51** | .30* | .16 | .51** | .23* | .46** | .25*** (.12,.37) | .46*** (.35,.56) |
| Faith-based schooling support | -.21 | -.33* | .27** | -.15 | -.20 | -.07 | .04 (-.09, .17) | -.16* (-.28, -.03) |
| Opposition to diversity education | .25 | .33* | .29** | .39** | .08 | .40** | .22** (.09, .34) | .38*** (.27, .49) |
| Support for banning religious symbols | .07 | .39** | -.23* | .38** | -.29* | .30** | -.20** (-.32, -.07) | .36*** (.24, .47) |
| Opposition to cross-cultural child adoption | .29 [†] | .50** | .15 | .35** | .00 | .32** | .13 [†] (.00, .26) | .37*** (.25, .48) |
| Islamophobia | .44** | .60** | .03 | .57** | -.02 | .56** | .09 (-.04, .22) | .57*** (.48, .65) |

Note. RI = religious identification; ITG-DS = intergroup disgust sensitivity. [†] $p=.053$, * $p<.05$, ** $p<.01$, *** $p<.001$.

Table 5

Meta-analytic summary of partial correlations

| | Study 1 | | Study 2 | | Study 3 | | Meta-analytic (95% CI) | |
|---|---------|--------|---------|--------|---------|--------|------------------------|--------------|
| | RI | ITG-DS | RI | ITG-DS | RI | ITG-DS | RI | ITG-DS |
| Interfaith threat | .45*** | .16 | .05 | .50*** | .19 | .44*** | .17* | .43*** |
| Faith-based schooling support | -.11 | -.28 | .33*** | -.26** | -.19 | -.04 | (.04, .30) | (.32, .53) |
| Opposition to diversity education | .16 | .27 | .23* | .34*** | .03 | .39*** | .09 | -.20** |
| Support for banning religious symbols | -.08 | .39** | -.34*** | .43*** | -.35*** | .36** | (-.04, .22) | (-.32, -.07) |
| Opposition to cross-cultural child adoption | .15 | .44** | .09 | .29*** | -.05 | .32** | .15* | .35*** |
| Islamophobia | .31* | .53*** | -.12 | .55*** | -.12† | .57*** | (.02, .28) | (.22, .46) |
| | | | | | | | -.30*** | .40*** |
| | | | | | | | (-.42, -.18) | (.29, .51) |
| | | | | | | | .06 | .33*** |
| | | | | | | | (-.08, .19) | (.21, .44) |
| | | | | | | | -.04 | .56*** |
| | | | | | | | (-.17, .09) | (.46, .64) |

Note. Partial correlations control for the other predictor. RI = religious identification; ITG-DS = intergroup disgust sensitivity † $p=.052$, * $p<.05$, ** $p<.01$, *** $p<.001$.

4. Discussion

The present research, spanning three different samples, suggests that interfaith prejudice may involve disgust reactions toward outgroups as much as, if not more than, religious identification. In all three samples, individuals higher (*vs.* lower) in ITG-DS: Perceived non-Christian religious outgroups as more threatening, opposed diversity education and cross-cultural child adoption, supported banning of religious symbols, and expressed Islamophobic attitudes. Thus, higher ITG-DS-individuals' tendency to experience disgust and revulsion toward outgroups predicted support for policies and practices that restrict religious outgroups' religious expression and customs, and limited "contamination" via intergroup contact, consistent with research showing that ITG-DS can predict prejudice (Choma et al., 2012; Hodson et al., 2013, 2015). In the meta-analytic integration, ITG-DS related to opposition to faith-based schooling (but was significant only in Sample 1²). The meta-analysis on the zero-order correlations further corroborates the association between ITG-DS and interfaith threat, faith-based policy attitudes, and Islamophobia.

The association between ITG-DS and implicit anti-Muslim attitudes was near zero (Sample 1). Although one might anticipate that a more "intuitive" and affective variable (ITG-DS) might correlate with implicit prejudice, our finding is consistent with research showing that explicit measures can be uncorrelated with implicit measures (see Hofman, Gawronski, Gschwendner, Le, & Schmitt, 2005). This relation was only explored in Sample 1 given the null finding.

To be clear, social identification was also a relevant predictor of interfaith-related attitudes. Consistent with SIT (Tajfel & Turner, 1979), stronger Christian identification related to perceiving non-Christian outgroups as more threatening. The relations between Christian

identification and the various faith-based policy attitudes, however, were inconsistent across samples. The predicted relations between religious group identification with support for faith-based schooling and opposition to diversity education were only significant in Sample 2.

Stronger identification also related to opposition to banning religious symbols (but this relation was not significant in Sample 1). Stronger identification related to opposition to cross-cultural child adoption and Islamophobia (see also Hewstone et al., 2011), but only in Sample 1. It is possible that sample size differences might account for the inconsistency across samples.

Addressing this issue, the meta-analysis results on the zero-order correlations showed that religious identification relates to interfaith threat, opposition to diversity education, cross-cultural child adoption, and banning religious symbols, but not faith-based schooling or Islamophobia.

Therefore, the present study shows some support for the notion that stronger Christian identification relates to opposition to pro-interfaith policies and practices, and support of policies and practices that foster religious expression.

Despite this general pattern, there was inconsistency in the direction of relation between religious identification and faith-based schooling attitudes. In Samples 1 and 3 Christian identification showed a non-significant trend toward opposition to faith-based schooling. Yet, in Sample 3 (the most ethnically diverse sample, from the multicultural city of Toronto), Christian identification related to greater support for faith-based schooling. Closer examination of relations with individual items shows that in Sample 3 religious identification related to support for funding Catholic, Islamic, and Jewish schools. Conversely, in Samples 1 and 2 religious identification related to less support for Islamic schools only; hence, in Samples 1-2 the link might have more to do with anti-Islam attitudes specifically, as opposed to faith-based school attitudes generally. Although it is possible that differences in religion content could explain the

discrepancy, this seems unlikely in the present study as Catholic was the dominant affiliation across samples. Rather, living in a multicultural city may provide more opportunities for intergroup interactions fostering more tolerant and open attitudes (Allport, 1954; Haji & Lalonde, in press; Pettigrew & Tropp, 2006).

When pitted against each other, ITG-DS outperformed Christian identification as a stronger and more consistent predictor of interfaith attitudes and anti-Muslim prejudice. Whereas ITG-DS predicted greater prejudice and opposition to all of the interfaith policies and practises, Christian religious identification predicted support for faith-based schooling and opposition to banning religious symbols (i.e., a policy promoting religious freedom and expression). The meta-analysis on the partial correlations clearly demonstrates that ITG-DS is a particularly potent predictor of Islamophobia relative to religious identification. Indeed, the meta-analytic partial correlation value for ITG-DS was $.56, p < .001$ (CI: $.46, .64$), but only $-.04, p = ns$ (CI: $-.17, .09$) for religious identification. Further, the magnitude of the meta-analytic values for the partial and zero-order correlations was notably stronger for ITG-DS (values ranged from $.20$ to $.56$) than religious identification (ranged from $.04$ to $.30$). In other words, interfaith prejudice is more robustly associated with affective disgust reactions toward the outgroup than attachment to the ingroup.

The lack of relation between religious identification and Islamophobia is consistent with other research showing that the relation between religious identification and prejudice is not always positive, particularly when religiosity is taken into account. Indeed, the relations between religious identification and prejudice are more complex when different dimensions of religiosity are considered (Altemeyer & Hunsberger, 2004; Haji & Hall, 2014; Haji & Lalonde, in press; Hunsberger & Jackson, 2005). Our research indicates that although group identification is

relevant to aspects of interfaith prejudice, it may not be the most powerful driving force underlying interfaith prejudice. Of course, religious-based prejudices can be particularly virulent given that they are associated not only with social identity and competition concerns (Hunsberger & Jackson, 2005) but also with existential concerns relevant to eternal life and the afterlife (Vail et al., 2010). Here we were particularly interested in religiosity as attachment to one's religious group. Other researchers might pursue whether other religion dimensions, like intrinsic, extrinsic, or quest religiosity, or the unique tenets of specific religions, moderate the present findings (or predict interfaith prejudice, alongside ITG-DS).

Further, it is possible that the inconsistency in identification-based findings may be attributed to demographic differences across samples: Sample 1 was small and had the least ethnic diversity and likely the least interreligious group contact; whereas Sample 2 was larger, ethnically-diverse, and likely had the most interreligious group contact. Although the influence of intergroup contact on intergroup attitudes is well documented (e.g., Pettigrew & Tropp, 2006), additional research is needed to further explore the impact of factors like ethnic diversity on interfaith attitudes and the extent to which prediction of such attitudes generalizes across different demographic regions (Haji & Lalonde, in press). Despite some minor differences, the present results show a consistent pattern across regions with varying demographic diversity, and this is substantiated by the meta-analytic findings.

4.1. Conclusion

Compared to religious identification, ITG-DS emerged as the stronger and more consistent predictor of interfaith threat, faith-based policy attitudes, and Islamophobia; consistent with research (Hodson et al., 2013) suggesting that ITG-DS might be a powerful force driving prejudice and related policy attitudes, even when robust predictors like group identification are

taken into account. Specifically, we have shown the ITG-DS predicts opposition to social policies or practices that have an increasing relevance in multicultural societies. Indeed, our research suggests that disgust plays a critical role in interfaith conflict, given its predictive power, even when controlling for the level of religious group attachment. Our research contributes to literature illustrating the affective underpinnings of prejudice, and the unique importance of ITG-DS. We encourage researchers to test the role of ITG-DS in prejudice in other religious, ethnic, and national contexts, and in relation to other robust predictors of intergroup attitudes. Given that (elaborated) imagined contact reduces the power of ITG-DS in predicting attitudes toward the homeless (Hodson et al., 2015), future researchers could also explore ways to reduce the prediction of religious restrictions by ITG-DS.

Footnotes

¹ After completing measures of ITG-DS, interfaith threat and religious identification, participants in Sample 3 were randomly assigned to an interfaith threat or control condition. The manipulation was uninfluential, with no between-condition differences on any outcomes.

References

- Allport, G. W. (1954). *The Nature of Prejudice*. Cambridge: Addison-Wesley.
- Allport G. W. & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5(4), 432-443.
- Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, question, and prejudice. *The International Journal for the Psychology of Religion*, 2(2), 113-133.
- Altemeyer, B., & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *International Journal for the Psychology of Religion*, 14, 47-54.
- Cairns, E., Kenworthy, J., Campbell, A., Hewstone, M. (2006). The role of in-group identification, religious group membership and intergroup conflict in moderating in-group and out-group affect. *British Journal of Social Psychology*, 45, 701-716.
- Cameron, J. E. (2004). A three-factor model of social identity. *Self and Identity*, 3, 239-262.
- Charlesford, J. & Choma, B. L. (2013). *Intergroup threat scale*. Unpublished data.
- Chase, S. (2015, March 10). Niqabs 'rooted in a culture that is anti-women,' Harper says. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/>
- Choma, B. L., Hodson, G., & Costello, K. (2012). Intergroup disgust sensitivity as a predictor of Islamophobia: The modulating effect of fear. *Journal of Experimental Social Psychology*, 48, 499-506.
- Cila, J., & Lalonde, R. N. (2014). Personal openness toward interfaith dating and marriage among Muslim young adults: The role of religiosity, cultural identity, and family connectedness. *Group Processes & Intergroup Relations*, 17 (3), 357-370.

- Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to “prejudice”. *Journal of Personality and Social Psychology, 88*, 770–789.
- Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878–902.
- Gaertner, S. L., & Dovidio, J. F. (1986). The aversive form of racism. In J. F. Dovidio, & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61–89). Orlando, FL: Academic Press.
- Geddes, J. (October 3, 2013). Canadian anti-Muslim sentiment is rising, disturbing new poll reveals. *MacLean's magazine*. Retrieved from: <http://www.macleans.ca/politics/land-of-intolerance/>
- Greenberg, J., & Kosloff, S. (2008). Terror management theory: Implications for understanding prejudice, stereotyping, intergroup conflict, and political attitudes. *Social and Personality Psychology Compass, 2*, 1881–1894.
- Greenwald, A. G., Nosek, B. A., & Banai, M. R. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology, 85*(2), 197-216.
- Haidt, J., McCauley, C., & Rozin, P. (1994). Individual differences in sensitivity to disgust: A scale sampling seven domains of disgust elicitors. *Personality and Individual Differences, 16*, 701-713.
- Haji, R., & Hall, D. (2014). Religious quest orientation: Rising against fundamentalism. *Intellectual Discourse, 22*, 73-88.

- Haji, R. & Lalonde, R. N. (in press). If a close friend is from another religion, are you more open to other faiths? In M. Seedat, S. Suffla, & D. Christie (Eds.), *Enlarging the Scope of Peace Psychology: African and World-Regional Contributions*. New York: Springer.
- Haji, R., Lalonde, R. N., Durbin, A., & Naveh-Benjamin, I. (2011). A multidimensional approach to identity: Religious and cultural identity in young Jewish Canadians. *Group Processes and Intergroup Relations, 14*, 3-18.
- Hall, D. L., Matz, D. C., & Wood, W. (2010). Why don't we practice what we preach? A meta-analytic review of religious racism. *Personality and Social Psychology Review, 14*, 126-139.
- Heiphetz, L., Spelke, E. S., & Banaji, M. R. (2013). Patterns of implicit and explicit attitudes in children and adults: Tests in the domain of religion. *Journal of Experimental Psychology: General, 142*(3), 864-879.
- Hewstone, M., Clare, A., Newheiser, A-K., & Voci, A. (2011). Individual and situational predictors of religious prejudice: Impact of religion, social dominance orientation, intergroup contact, and mortality salience. *TPM, 18*(3), 143-155.
- Hodson, G., Choma, B. L., Boisvert, J., Hafer, C. L., MacInnis, C., & Costello, K. (2013). The role of intergroup disgust in predicting outgroup prejudice. *Journal of Experimental Social Psychology, 49*, 195-205.
- Hodson, G., Dube, B., & Choma, B. L. (2015). Can (elaborated) imagined contact interventions reduce prejudice among those higher in intergroup disgust sensitivity (ITG-DS)? *Journal of Applied Social Psychology, 45*, 123-131.
- Hodson, G., & Costello, K. (2007). Interpersonal disgust, ideological orientations, and dehumanization as predictors of intergroup attitudes. *Psychological Science, 18*, 691-698.

- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005a). A metaanalysis on the correlation between the implicit association task and explicit self-report measures. *Personality and Social Psychology Bulletin, 31*, 1369–1385.
- Hunsberger, B., & Jackson, L. M. (2005). Religion, meaning, and prejudice. *Journal of Social Issues, 61*(4), 807-826.
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than liberals. *Cognition and Emotion, 23*, 714–725.
- Johnson, M. K., Rowatt, W. C., & Labouff, J. P. (2012). Religiosity and prejudice revisited: In-group favoritism, out-group derogation, or both? *Psychology of Religion and Spirituality, 4*, 154-168.
- Lee, S. A., Gibbons, J. A., Thompson, J. M., & Timani, H. S. (2009). The Islamophobia scale: Instrument development and initial validation. *The International Journal for the Psychology of Religion, 19*, 92-105.
- Mackie, D. M., & Smith, E. R. (Eds.). (2002). *From prejudice to intergroup emotions: Differentiated reactions to social groups*. New York: Psychology Press.
- Olatunji, B. O. (2008). Disgust, scrupulosity and conservative attitudes about sex: Evidence for a meditational model of homophobia. *Journal of Research in Personality, 42*, 1364-1369.
- Olatunji, B. O., Haidt, J., McKay, D., & David, B. (2008). Core, animal reminder, and contamination disgust: Three kinds of disgust with distinct personality, behavioral, physiological, and clinical correlates. *Journal of Research in Personality, 42*, 1243–1259.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751-783.

- PEW Research Centre (2015). Chapter 3. Anti-minority sentiment not rising. *Pew Research Centre Global Attitudes and Trends*. Retrieved from <http://www.pewglobal.org/2015/06/02/chapter-3-anti-minority-sentiment-not-rising/>
- Rozin, P., Haidt, J., & McCauley, C. (2000). Disgust. In M. Lewis, & J. Haviland (Eds.), *Handbook of emotions* (pp. 637–652). (2nd ed.). New York: Guilford Press.
- Rozin, P., Haidt, H., McCauley, C. R., & Imada, S. (1997). The cultural evolution of disgust. In H. M. Macbeth (Ed.), *Food preferences and taste: Continuity and change* (pp. 65-82). Oxford, England: Berghahn.
- Schaller, M., & Park, J. H. (2011). The behavioral immune system (and why it matters). *Current Directions in Psychological Science*, 20, 99-103.
- Stephan, W. G. (2014). Intergroup anxiety: Theory, research and practice. *Personality and Social Psychology Review*, 18, 239-255.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, 41, 157-175.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 34–47). Pacific Grove, CA: Brooks/Cole.
- Terrizzi, J. A. Jr., Shook, N. J., & Ventis, L. (2010). Disgust: A predictor of social conservatism and prejudicial attitudes toward homosexuals. *Personality and Individual Differences*, 49, 587-592.
- Vail, K. E. III., Rothschild, Z. K., Weise, D. R., Solomon, S., Pyszczynski, T., & Greenberg, J. (2010). A terror management analysis of the psychological functions of religion. *Personality and Social Psychology Review*, 14, 84-94.

- Welch, T. (2007). The prohibition of the Muslim headscarf: Contrasting international approaches in policy and law. *The Denning Law Journal*, 19, 181-217.
- Wellman, J. K., & Tokuno, K. (2004). Is religious violence inevitable? *Journal for the Scientific Study of Religion*, 43, 291-296.
- Ysseldyk, R., Matheson, K., & Anisman, H. (2010). Religiosity as identity: Toward an understanding of religion from a social identity perspective. *Personality and Social Psychology Review*, 14(1), 60-71.