Residential Patterns among Religious Groups
(Extended Abstract)

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With recent geopolitical developments and the influence of religious groups in the recent American election, there has been a renewed interest in the sociology of religion. More and more researchers are considering the relevance of religion in relation to politics and community life. Religion provides a perspective to understanding the world. Those who share the same worldview will have similar lifestyles and make similar choices, which cannot be reduced to explanation by class, education or other demographic variables such as race or ethnicity. Such inclusion among members of the same religious group also implies social differentiation. In extreme cases, as illustrated in Samuel Huntington's (2003) famous work, "Clash of Civilizations," religion is considered to be a source of division among groups and a source of conflict.

If people have different religions, and religion shapes certain attitudes and behaviours in community life, how do these religious-cultural differences affect residential patterns? As Park's (1967) classic argument suggests that physical distance reflects the social distance between groups, the study of residential patterns among religious groups provides us a glimpse of their social relations. The study of residential segregation is useful to understanding group relations, including religious groups, in North America. White et al. (2003) succinctly pointed out that although governments in

North America can pass laws against housing discrimination, no legislation constitutes integrated neighborhoods (White, Fong, and Cai 2003).

Despite voluminous studies on the topic of residential segregation, there has been little focus on residential segregation among various major world religious groups. In a recent study, Blanchard (2007) showed that neighbourhoods with a larger proportion of white conservative Christians Protestant congregations are directly associated with higher levels of black and white segregation. Religion does seem to have a connection with residential segregation. However, the study only focused on Christian groups in a few geographic areas.

In this study, we attempt to fill this gap in the research. We explore the segregation patterns of major world religious groups, including Buddhists, Catholics, Hindus, Jews, Muslims, Protestants, and Sikhs in Canadian cities. Among Protestants, we further differentiated conservative, mainline, and orthodox Christians. Mainline Christians consists United Church, Anglican, Lutheran, Presbyterian, Salvation Army, and Methodist. Conservative includes Baptist, Pentecostal, Mennonite, Jehovah's Witness, Church of Jesus Christ of Latter-Day Saint, Christian Reform, Evangelical Missionary, Christian and Missionary alliance, Adventist, Non-Denominational, Hutterite, Brethren in Christ, and "Christian not included elsewhere." Orthodox Christians are Greek Orthodox, Ukrainian Orthodox, Serbian Orthodox, and "Orthodox not included elsewhere."

The Canadian census includes a variable for religion that provides a unique opportunity to explore the residential segregation of different religious groups. As we

explore their segregation patterns, we consider the possible effects of socioeconomic status, immigration status, race and ethnicity.

Overview: Religion in Canadian Cities

TABLE 1 ABOUT HERE

Table 1 shows the proportions of religious identification in Canada's most populous census metropolitan areas. Christianity is the predominant religion in Canada.

Catholics make up about one third of Canada's 10 largest cities. In Montreal and Ottawa, over half the residents identify themselves as Catholic. Mainline Christianity is the second most popular. It is the predominant group in four cities (Kingston, Oshawa, London and Regina). It is also the second largest group in eight cities (Ottawa, Toronto, Hamilton, St. Catherines, Kitchener, Winnipeg, Saskatoon, and Victoria). Conservative Christians are a consistent proportion (between 10 – 15%) across Canadian cities.

Religions such as Judaism, Islam, Hinduism, Buddhism, and Sikhism represent a small proportion compared to Christianity. For the most part, these religions compose less than 3% of Canada's top CMAs. They are mostly found in immigrant gateway cities. The highest proportions of Jews and Muslims are in Toronto and Montreal. The greatest representations of Buddhists and Sikhs are in Western Canada. Buddhists make up close to 4% of Vancouver's population, while Sikhs comprise close to 12% of the population in Abbotsford.

The data illustrate that Christianity is the major religion in most cities. Although others religions exist, they represent a small percentage of the population in most cities.

For the most part, they cluster around the main immigrant gateway cities such as Montreal, Toronto and Vancouver.

Residential Segregation of Religious Groups in Major Canadian Cities

TABLE 2 ABOUT HERE

Drawing from the 2001 Census Tract Data, we calculate the dissimilarity index of each pair of religious groups. The index measures from 0 to 1. The higher the index, the more group members have to relocate to reach the same proportional balance as the proportion of the group in the total city population. The resulting levels of segregation are displayed in Table 2.

Christians are not segregated from one another, as the indices for their subgroups are quite low. Most are below 0.20. Levels of segregation exhibited by Orthodox Christians are higher, but moderate, most below 0.40. Other religious groups are more segregated, as most reach close to 0.45.

Hindus are the second most segregated group. The levels of segregation between Hindus and other religious groups are close to 0.50. Jews are the most segregated group. Jews exhibit moderate segregation from Christians (close to 0.58), and are significantly segregated from Buddhists, Muslims, and Hindus, as the index of dissimilarity hovers around 0.65

Causal Analysis

TABLE 3 ABOUT HERE

Table 3 displays the results of the GLM analysis. We used the GLM because the dependent variable is the dissimilarity index, which ranges from 0 to 1. The model controls tract population size, immigrant population, recent immigrant population, people who do not speak an official language, population from the Middle East, population from South East Asia, people who are university educated.

We use the conservative Christians as the reference group since they exhibit unique characteristics in terms of their religiosity in shaping behaviour, and they have been a group of interest for recent sociological research. The parameter estimates compares the level of segregation for each religion to all other religions in reference to the level of segregation of Conservative Christians from other religions.

After taking the control into consideration, we find the three main Christian groups, Mainline, Conservatives, and Catholics do not appear to be segregated from other groups, as their parameter estimates are negative compared to the conservative Christians.

However, other than Mainline Christians and Catholics, most groups are significantly segregated from all other groups in comparison to Conservative Christians and other groups. Orthodox Christians have a significantly higher level of segregation from other groups compared to the segregation of Conservative Christians and other groups. In particular, we find that Jews, Hindus, and other religions have the highest levels of segregation compared to Conservative Christians and other groups (1.33). We ran separate models for each religion to understand the factors contributing to the general segregation. The main protestant groups (Mainline and Conservative) are not

significantly segregated from other groups except Jews and Hindus. This pattern also holds for Catholics and Orthodox Christians as they are significantly segregated from Jews and Hindus compared to Conservative Christians. In addition, they are both significantly segregated from Buddhists.

If we examine the other religions, the segregation from Jews reappears.

Buddhists, Muslims and Hindus are significantly segregated from Jews when compared to segregation from Conservatives Christians. Muslims in particular are segregated from other religious groups in reference to conservatives Christians (compared to Hindus and Buddhists).

From this table, we can conclude that non-Christian religious groups exhibit moderate segregation from Christian groups. Jews and Hindus have the highest levels of residential segregation among all groups.

Table 1: Percentage of Religion Affliliation by Census Metropolitan Area

	Mainline	Conservative	Catholic	Orthodox	Jewish	Buddhist	Muslim	Hindu
	%	%	%	%	%	%	%	%
St. John's	42.0%	3.9%	48.9%	0.1%	0.1%	0.1%	0.3%	0.2%
Halifax	33.9%	12.4%	37.1%	0.7%	0.4%	0.4%	0.9%	0.3%
Saint Joh	30.5%	16.9%	40.3%	0.1%	0.1%	0.1%	0.3%	0.1%
Chicoutimi - Jonquière	0.2%	1.2%	95.8%	0.0%	0.0%	0.0%	0.1%	0.0%
Québec	0.3%	1.4%	91.7%	0.1%	0.0%	0.2%	0.4%	0.0%
Sherbrook	2.2%	2.8%	87.2%	0.5%	0.0%	0.1%	0.8%	0.0%
Trois-Rivières	0.2%	2.3%	93.7%	0.1%	0.0%	0.0%	0.2%	0.0%
Montréal	2.7%	4.5%	74.4%	2.5%	2.6%	1.1%	3.0%	0.7%
Ottawa - H	16.8%	6.3%	54.0%	1.4%	1.1%	0.9%	4.0%	0.8%
Kingsto	36.4%	10.1%	30.8%	0.7%	0.6%	0.3%	0.6%	0.3%
Oshaw	32.4%	13.6%	30.8%	1.3%	0.3%	0.2%	1.0%	0.4%
Toront	17.0%	10.4%	33.9%	3.4%	3.5%	2.1%	5.5%	4.1%
Hamilto	27.2%	10.9%	35.4%	2.5%	0.6%	0.7%	2.0%	0.6%
St. Catharines - Niagar	28.9%	14.2%	37.2%	1.3%	0.3%	0.3%	0.8%	0.2%
Kitchen	28.0%	14.8%	32.4%	2.3%	0.3%	0.9%	2.2%	1.0%

Table 2 Residential Segregation by Religion

	Mainline	Conservative	Catholic	Orthodox	Jewish	Buddhist	Muslim	Hindu
Mainline		0.186	0.206	0.357	0.566	0.525	0.492	0.566
Conservative			0.188	0.355	0.602	0.474	0.450	0.544
Catholic				0.333	0.600	0.473	0.456	0.546
Orthodox					0.581	0.509	0.455	0.538
Jewish						0.680	0.653	0.641
Buddhist							0.491	0.559
Muslim								0.505
Hindu								

Table 3: Generalized Linear Regression of Segregation Between Two Groups (Independent Variables are Group Characteristics)

	General	Conserv	Mainline	Catholic	Orthodox	Jewish	Buddhist	Muslim	Hindu
Mainline	-0.53 ***	ref		-1.613 ***	-0.33 *	-0.46 **	0.21	0.10	0.03
Catholic	-0.74 ***	-2.41 ***	-2.18 ***		-0.11	-0.17	-0.04	0.00	0.05
Orthodox	-0.42 ***	-1.29 ***	-0.64	0.432		-0.03	0.15	-0.13	0.23
Jewish	0.45 ***	0.18	0.39	1.374 ***	0.08		1.01 ***	0.53 **	1.01 ***
Buddhist	-0.42 ***	-1.41 ***	-0.42	0.473	-0.55	-2.10 ***		0.35	0.59
Muslim	-0.55 ***	-1.15 **	-0.33	0.793	-0.65 *	-0.29	-0.34		0.36
Hindu	0.19	-0.91 **	0.13	1.262 ***	-0.28	-0.38	-0.27	-0.67 ***	
Conservative	ref			ref	ref	ref	ref	ref	ref
CMApopSize	0.010 ***	0.005	0.030	0.001	0.014 *	0.026 **	0.011 **	0.015 **	0.023 **
Grp1popSize	0.83 ***	-4.28 ***	0.41	3.618 ***	-1.04	0.34	-0.15	-0.08	-0.68
Grp2popSize	0.21	2.52 ***	2.97 *	4.572 ***	-10.93	4.08	-18.31 ***	-17.32 ***	-19.27 *
Grp1Immg	0.87 *	-2.15	-0.63	6.980 ***	0.97	-1.31	-0.10	-0.77	-1.49 **
Grp2Immg	0.51	2.58 ***	0.77	0.244	1.14 *	-0.21	1.55	-2.29 *	-1.86
Grp1Immg1991	-0.97	0.61 *	-14.29	-11.867 **	-0.80	1.05	0.58	1.17 *	0.90
Grp2Immg1991	-0.38	-0.95	-0.16	-0.258	-1.22 *	0.49	-0.30	1.06 *	0.79
Grp1NoOffLang	-1.12	-15.24	-263.04	-27.429 *	2.28	-0.67	0.37	-0.88	-2.91
Grp2NoOffLang	0.85	1.65	0.96	1.145	1.84	-0.43	0.03	-0.23	-0.68
Grp1WCAMidEast	1.30	15.05	329.66	-56.037 *	-0.20	-1.34	-3.12	2.48 ***	0.16
Grp2WCAMidEast	1.76 **	-0.37	0.56	0.492	1.09	-2.36	0.03	-0.27	4.52
Grp1SouthEAsia	0.19	15.45 *	197.91	2.436	-14.26 ***	-1.47	1.03 **	0.08	0.45
Grp2SouthEAsia	0.74 *	0.04	0.62	1.194	-0.14	2.62 **	0.39	-13.25 *	-15.84
Grp1University	-0.50	-5.40 ***	-1.92	3.155 *	-0.19	1.73 **	-0.46	0.81	-1.71 **
Grp2University	0.21	0.13	-0.01	0.815	-0.05	-3.06 ***	0.65	-0.64	-0.07
N	580	132	132	132	132	111	132	132	125
DF	557	110	110	110	110	89	110	110	103
Intercept	-0.16	1.03	-0.34	-3.72	-0.36	1.63	-1.12	1.48	2.02
Log Likelihood	385.04	151.63	85.36	127.77	137.05	135.05	170.82	172.99	162.19

Table 4: Generalized Linear Regression of Segregation Between Two Groups (Independent Variables are Group Differences)

	General	Conserv	Mainline	Catholic	Orthodox	Jewish	Buddhist	Muslim
Mainline	-0.44 ***	ref		-1.08 ***	-0.21	-0.43 **	0.16	0.05
Catholic	-0.46 ***	-1.11 ***	-0.79 **		-0.28	-0.44 *	-0.08	-0.10
Orthodox	-0.22 ***	-0.45 *	-0.25	-0.46		-0.13	-0.15	-0.23 *
Jewish	0.53 ***	0.96 ***	0.58 **	0.97 **	0.28		0.53 **	0.66 **
Buddhist	0.25 *	-0.47	-0.13	0.03	-0.17	-1.06 *		-0.02
Muslim	0.40 ***	0.23	-0.02	-0.20	-0.09	0.52	-0.08	
Hindu	0.22 **	0.36	0.54	0.13	0.08	0.20	-0.14	0.04
Conservative	ref	ref	ref	ref	ref	ref	ref	ref
CMApopSize	0.015 ***	-0.002	0.027 ***	0.023 ***	0.011 **	0.026 ***	0.011 ***	0.0003
GrppopSizeDiff	-0.16	-4.59 ***	1.15 *	-0.83	-1.57 *	0.98	-0.21	0.11
GrpImmgDiff	0.62 **	0.69	0.32	2.09 *	-0.04	0.17	-0.13	-0.38
GrpImmg19910Diff	-0.34	0.11	-0.38	-0.71	-0.70	-1.14	-0.67	0.23
GrpNoOffLangDiff	-1.21	1.53	1.94	-0.97	0.76	2.78	-3.03 ***	1.24
GrpWCAMidEastDiff	-2.23 ***	-1.82	1.39	0.01	-0.41	-1.59	-0.98	-2.33 **
GrpSouthEAsiaDiff	-0.31	0.52	0.86	-0.58	0.21	2.76 ***	0.26	-0.19
GrpUniversityDiff	0.12	-1.03	0.31	-0.34	0.21	-1.59 ***	0.94 *	-0.36
N	580	132	132	132	132	111	136	132
DF	564	117	117	112	117	96	117	117
Intercept	0.01	0.22	-1.00	-0.54	0.04	0.66	0.34	0.55
Log Likelihood	375.52	117.64	79.86	74.56	114.04	124.64	152.75	159.58

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