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Models Explaining Exogamy- A Study of 1.5 and Second Generation Asian Immigrants in Canada

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Prairie Metropolis Centre Working Paper Series

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Models Explaining Exogamy - a Study of 1.5 and Second Generation Asian Immigrants in Canada

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Exogamy is an indicator predicting whether immigrants and native-born have crossed the racial/ethnic boundaries in the host country. As integration, transnationalism and pan-ethnicity all explain immigrants' exogamy, this paper examines the model that provides higher explanatory power for Canada's 1.5 and second generation Asian, including Chinese, East Indian, Filipino and Japanese, immigrants' exogamy. The results indicate that although the effects of integration, transnationalism and pan-ethnicity all affect immigrants' marital choice, pan-ethnicity appears to provide a better explanation.

INTRODUCTION

In Canada, 'new immigrants' from the 1960s onwards are largely non-European immigrants, and among them have been a substantial number of people of Asian origins (e.g., Lee & Boyd, 2008). According to Statistics Canada (2009), Asian immigrants accounted for 58% of all recent immigrants in 2006. Scholars and policy makers have thus paid great attention to these immigrants' settlement in Canada. Immigrants' marital choice, as an indicator predicting the level of racial/ethnic boundaries in a host country, has been widely examined in contemporary studies. In this paper, marriage is defined in two categories: exogamy, namely, marriage between spouses of different caste or ethnic group, and endogamy, that is, marriage within a social group and/or the social prevention of marriage between spouses of a different caste or ethnic group (Mann, 1983).

Integration, transnationalism and pan-ethnicity all aim at understanding immigrants' marital choice (Kalmijn, 1998; Lee & Boyd, 2008; Lievens, 1999). According to Gordon (1964), exogamy can be used as an indicator to predict levels of assimilation among immigrants in the host country. Scholars, however, have argued that integration, instead of assimilation, is viewed as a more appropriate term for immigrants' settlement in the host country as it focuses on the process of mutual acceptance and recognition between the majority and minority groups (Alba & Nee, 1997; Heisler, 1992; Li, 2003). The Integration Model assumes that once immigrants have stayed long enough in the host country they will become highly integrated, thus they will be open and capable of handling more intimate relationships with people of other

racess/ethnicity, such as marriage (Huijnk, Verkuyten & Coenders, 2010). In this perspective, the focus mainly lies on immigrants' likelihood of marrying exogamously in the host country. Research studies using exogamy for the examination of immigrants' integration in the host country have been carried out through the decades; with some revealing that integration is not a linear process but one that varies between host countries and among different racial/ethnic groups (Lee & Boyd, 2008; Min & Kim, 2009).

As a complement to integration, the concept of transnationalism has been introduced by scholars who focus on immigrants' attachments to their homelands (Levitt & Waters, 2002). Transnationalism looks at the formation of immigrants' identities in both sending and receiving countries, thus immigrants' attachment and relationship to the homeland are important. Immigrants who hold transnational identities are described as migrants who "rather than severing their ties to their countries of origin and trading one membership for another, increasing numbers of migrants sustain economic, political, and religious ties to their homelands even as they work, vote, and pray in the countries that have received them" (Levitt & Waters, 2002, 2). Some of these immigrants appear to have a tendency to marry someone of the same race/ethnicity, or to find their spouse in their homelands, so called transnational endogamy (Lievens, 1999). Contemporary transnationalism has a different diversity, scale, density and regularity due to globalization and technological means of communication and transportation (Zhou, 2004). As stated by Menjvar (2002), "its analytical potential remains important, as immigrants do remain attached to their families and communities back home while they simultaneously develop bonds in the place of reception" (532).

While transnationalism deals with the international dimension of migration, pan-ethnicity focuses more heavily on the intra-national practices among immigrants in the diaspora. In some literatures, pan-ethnicity is argued to be like transnationalism as minority immigrants' status in the host country is correlated with the power balance between immigrants' homeland and the host country (Roth, 2009). For example, the social status of Japanese immigrants in the USA rose after Japan became a stronger nation after WWII (Takenaka, 2009). A key difference between transnationalism and pan-ethnicity, however, is that studies on pan-ethnicity in immigrant-receiving countries focus on "the structured group interactions between a dominant ethnic majority and the ethnic minorities whom they perceive as homogenous, as

well as relations between those ethnic subgroups” (Roth, 2009, 928). Discrimination is thus an important perspective for pan-ethnicity as power structure is involved.

The examination of Canada’s new immigrants’ settlement in the host country increases our understanding of Canada’s current situation and where the future for all citizens could possibly lead. The purpose of this paper is to highlight the factors derived from the three models, integration, transnationalism and pan-ethnicity, and indicate which model provides a better explanation for Asian immigrants’ marital choice in Canada by using the case of Chinese, East-Indian, Filipino and Japanese immigrants of the 1.5 (i.e., those who came to Canada before the age of 14, inclusively, and whose parents were born outside of Canada) and second generation (i.e., those who were born in Canada with one or both parent(s) born outside of Canada).

Integration vs. Transnationalism

As marital choice is somewhat based upon one’s financial ability, which, in turn, is affected by how well immigrants integrate in the host country (e.g., Li, 2000; 2001), immigrants’ levels of income and education are used as factors predicting their exogamy for the Integration Model in this paper. Although issues of immigrants’ devalued foreign credentials may play a part in the income disparity between immigrants and the native-born (Li, 2000, 2001; Wang & Lo, 2005) that could affect immigrants’ social status in the host country, the assumption made here is that it should not have a severe impact on immigrants’ marital choice because such choice also involves issues such as culture, race/ethnicity, and love.

Some scholars, however, argue that immigrants’ socio-economic status could also be viewed as a factor that helps form immigrants’ transnational identity (Menjivar, 2002). For example, educated children of the middle-class family perceive their parents’ transnational connections with the homeland more positively (ibid.). Therefore, whether Canada’s Asian immigrants’ socio-economic status and their family background increase their likelihood of exogamy, which represents high levels of integration, or of endogamy, which represents their transnational identity, remains questionable.

From the perspective of integration, Asian immigrants’ ability to use Canada’s official languages indicates their high levels of integration, and their lack of ability to speak fluent English/French shows low levels of integration, especially after a lengthy residence in Canada. As compared to immigrants who rely

heavily on non-official language(s), those with the ability to speak English/French are able to create different circles of friends (e.g., Ting-Toomey, 1981). Johnson and Jacobson (2005) have found that friendship is critical in affecting people's attitudes toward exogamy. The language barrier is one of the reasons immigrants work in enclaves; it also influences the ways they consume (e.g., they tend to shop in ethnic-specific stores) (Li & Li, 1999). Therefore, the assumption of the Integration Model is that immigrants' use of official languages affects their marital choice.

However, other studies have found that such an assumption does not apply to all racial/ethnic groups (e.g., Ikels, 1985; Kwak & Berry, 2001). For example, in their study of a comparison of Vietnamese, Korean and East-Indian groups, Kwak and Berry (2001, 157) have found that as compared to the Korean adolescents,

The Vietnamese and East-Indian adolescents clearly disagreed with maintaining their ethnic language proficiency over English. Neither age nor length of residence was influential to adolescents' preference on their language proficiencies. Regarding marriage, once again age and length of residence did not influence adolescents' attitudes...These differences were observed because Vietnamese adolescents showed more open views about inter-group marriage than did the other two groups.

According to transnationalism, immigrants' use of their mother tongue(s) with their families or friends is a sign of showing their connections with the homeland. For example, Rumbaut's (2002) study indicates that many U.S. immigrants who speak fluent English still prefer to use their mother tongue(s) with parents, close friends, co-workers and spouse.

Immigrants' fluency in the non-English language (a composite measure of speaking, understanding, reading and writing proficiency measured across the three survey periods) was strongly predictive of more visits [in their homeland], while preference for English was negatively associated with transnational visiting behavior...The role of language emerges here as central to the maintenance of transnational ties, both attitudinally and behaviorally (ibid., 88-90).

Contrary to the assumption that immigrants' use of non-official language(s) represents low levels of integration, transnationalism focuses on immigrants' autonomy in using non-official language(s) as showing attachments to their homeland, or maintaining their transnational ties, which may further reflect on their marital choice.

Immigrants' religion, a "vital ingredient of a group's cultural heritage" (Gordon, 1964, 79, as cited in Alba & Nee, 1997, 829), is assumed to affect immigrants' marital choice, because from the perspective

of integration, the importance of matching similar religions among immigrants is suspected to decline (if not disappear) once integration begins. On the other hand, based on the perspective of transnationalism, religion is a mechanism for maintaining immigrants' transnational identity because it may "foster the transmission of ethnicity and ethnic socialization from the parent generation to that of their children..." (Rumbaut, 2002, 90). The place where immigrants practice their religion is an "institutional arena...which provides ample opportunities for the first (the parent) generation to remain connected to their homeland and which, for this reason, might be one of the few institutional spaces that permit the children to do the same" (Menjvar, 2002, 539). Thus, this paper examines whether Asian immigrants value the importance of matching similar religions with their prospective spouses.

Pan-ethnicity

"Espiritu (1992) reveals how Asian panethnicity in the U.S. is institutionalized through government efforts to lump Asian Americans together in electoral politics, social service funding, and census classification, and through panethnic responses to anti-Asian violence from whites" (cited in Roth, 2009, 928). This statement expresses that pan-ethnicity is formed by institutional discrimination. Others have found that pan-ethnicity can also be explained by "changes taking place in their countries of residence" (i.e., immigrants' improved social status), not necessarily a "by-product of shared ancestry" or discriminative threats from the ethnic majority (Takenaka, 2009, 1325). For example, Takenaka (2009, 1328) has stated that

Japanese descendants across the Americas have cultivated diasporic ties, not so much because of marginalization and victimization...but because of their elevated social status and increasing assimilation in the host society as well as diasporas' changing relationship to Japan.

Pan-ethnicity has thus been argued to be transnational, or as a form of extended transnationalism that may influence aspects of immigrants' lives (Roth, 2009; Takenaka, 2009). For instance, "when sending and receiving societies have strong, enduring links and high levels of transnational activity, a transnational social field develops, providing nationals with a dual frame of reference that makes each location relevant for daily life in the other"; such an argument is supported by that people of Puerto Rican and Dominican Republic ancestry identify themselves as Latinos as often as migrants from those countries to the USA (Roth, 2009, 928).

Although some of the factors overlap in the literature, debates arise as to which model -- integration, transnationalism or pan-ethnicity -- is better at explaining immigrants' marital choice in a broader sense. In this paper, when 1.5 and second generation Chinese, East-Indian, Filipino and Japanese immigrants' spouses belong to a different race (i.e., Caucasian) or ethnicity (i.e., Chinese vs. Korean) they are defined as exogamous. The Integration Model assumes that 1.5 generation immigrants may experience lower levels of integration by marrying endogamously to those of the same race/ethnicity, while second generation immigrants could show higher levels of integration by marrying exogamously. The Transnationalism Model focuses on immigrants' strong attachments to the homeland, which may decrease the likelihood for immigrants of both 1.5 and second generations to choose exogamy, and vice versa. The Pan-ethnicity Model examines the effects of immigrants' experiences of discrimination on their exogamy. Asian immigrants may find a spouse with a similar background to avoid discrimination in marriage.

METHOD

This paper is based on my ongoing study of the effects of integration, transnationalism and pan-ethnicity on the marital choice of 1.5 and second generation Asian immigrants in Canada. The Ethnic Diversity Survey (EDS), derived from the 2001 Census, provides information on respondents' marital choice by showing a comparison between the respondent's and spouse's ethnic ancestry¹. The target population includes "persons aged 15 years or over living in private households in the 10 provinces. The population does not include persons living in collective dwellings, persons living on Indian reserves, persons declaring an Aboriginal origin or identity in the 2001 Census, or persons living in Northern and remote areas" (Statistics Canada, 2003). The survey has 41,695 unweighted cases, which represents 23,092,643 weighted cases for the target population.

In this paper, respondents' ethnicity is defined according to their first response of the ethnic or cultural origin of their ancestor as it is assumed to be their most prior answer. Due to the limitation of the data, Asian immigrants include only Chinese, East Indian, Filipino and Japanese of generation 1.5 (born outside Canada and who came to Canada before the age of 14) and second generation (born in Canada

¹ The Ethnic Diversity Survey (EDS) provides information about whether respondents claim their ethnic ancestry is completely the same (defined as endogamy) or different (defined as exogamy) with their spouse. The respondents who claim their ethnic ancestry to be partly the same with their spouse are treated as missing in this paper because of its difficulty in definition.

who have one or both parents born outside Canada). The total unweighted cases of the 1.5 generation Chinese, East Indian, Filipino and Japanese immigrants who are either endogamous or exogamous are 370, which represent 85,248 weighted cases for the target population. The total unweighted cases of the second generation of the same four ethnic groups that are either endogamous or exogamous are 426, which represent 91,577 cases for the target population. A combination of the 1.5 and second generation Asian immigrants is applied in the logistic regression models because of limited case numbers in the equations after all factors are controlled for (see Table 3).

Four logistic regression models are tested in this paper: the first model compares general differences in choice of exogamy between generations, the four ethnic groups- Chinese, East Indian, Filipino and Japanese, and genders. The second model includes the effects of integration, such as age, place of residence, education and language use. The third model adds father's education², spouse's place of birth, religion, respondents' family and traditional ties for the examination of transnationalism. And, the last pan-ethnicity model contains the effects of group belonging and discrimination on these Asian immigrants' exogamy.

FINDINGS

Percentage Distribution of Endogamy and Exogamy

The results in Table 1 indicate that Chinese and East Indian immigrants show the highest percentage of endogamy among all 1.5 generation Asian immigrant groups (76.6% and 63.5%). One possible explanation may be that although Chinese parents can tolerate their children having a casual date with a Caucasian, it is still disapproved of, especially when marriage becomes a possibility (Weiss, 1970). In the case of Filipino immigrants, Nadal's (2004) finding could explain their low endogamous and high exogamous rate: "their background is a blend of aboriginal Pilipino roots, combined with Spanish and American cultures, along with traces of Malay, Muslim, East Asian, Pacific Islander, and Indonesian influences" (46); therefore, their experiences of race/ethnicity may differ from other Asian immigrants in North America.

² Only father's education is included in the regression models because the data does not have sufficient information for mother's education.

Table 1: Percentage description of 1.5 generation Asian immigrants' marital choice

	Chinese	East Indian	Filipino	Japanese
Endogamy	76.6% (n=13,168)	63.5% (n=16,890)	31.4% (n=2,446)	42.9% (n=539)
Exogamy	23.4% (n=4,031)	36.5% (n=9,707)	68.6% (n=5,354)	57.1% (n=717)
Total	100% (n=17,199)	100% (n=26,597)	100% (n=7,800)	100% (n=1,256)

Note: all results are weighted.

For second generation Asian immigrants, Japanese and East Indian immigrants show the highest percentage of marrying endogamously (55.2% and 49.9%), and Filipinos again have the lowest percentage of endogamy (36.4%). In contrast with the 1.5 generation, second generation Chinese immigrants show a higher percentage of exogamy (51.2%) and Japanese immigrants show a lower percentage (44.8%). The results indicate that integration may not be the best approach to explain Asian immigrants' marital choice as their patterns of exogamy are not linear. Ethnic identity resurgence in subsequent generations of certain racial or ethnic groups is possible (Qian & Lichter, 2007; Rosenthal & Feldman, 1992; Ting-Toomey, 1981).

Table 2: Percentage description of second generation Asian immigrants' marital choice

	Chinese	East Indian	Filipino	Japanese
Endogamy	48.8% (n=11,194)	49.9% (n=3,255)	36.4% (n=1,063)	55.2% (n=4,191)
Exogamy	51.2% (n=11,753)	50.1% (n=3,269)	63.6% (n=1,861)	44.8% (n=3,396)
Total	100% (n=22,947)	100% (n=6,524)	100% (n=2,924)	100% (n=7,587)

Note: all results are weighted.

Probability of Exogamy among Asian Immigrants

Table 3: Logistic regressions coefficients predicting 1.5 and second generation Asian immigrants' exogamy

	Model 1		Model 2		Model 3		Model 4	
	B	Odds	B	Odds	B	Odds	B	Odds
1.5 generation	-.769***	.463	-.030	.971	-1.187***	.305	-1.846***	.158
Chinese	.264***	1.302	.855***	2.352	1.437***	4.210	1.444***	4.236
East Indian	-.114***	.892	.380***	1.462	-1.951***	.142	-2.530***	.080
Filipino	-1.209***	.298	-.685***	.504	-3.062***	.047	-3.575***	.028
Female	.783***	2.187	1.125***	3.080	1.833***	6.254	2.367***	10.669
Integration								
45 to 54			-.008	.992	1.895***	6.650	2.378***	10.786
35 to 44			-.176***	.839	-.437***	.646	-.243***	.784
Non-CMAs			-1.967***	.140	-.659***	.517	-1.884***	.152
Other CMAs			-1.072***	.342	-1.775***	.170	-2.394***	.091
Earned doctorate, master's or medicine related degree			1.282***	3.603	16.218	1.105E7	16.203	1.089E7

Bachelor's or undergraduate degree		.967***	2.629	14.652	2.309E6	13.038	4.595E5
Diploma or certificate from college		.901***	2.462	14.340	1.690E6	12.167	1.924E5
Some college or university		1.583***	4.869	13.496	7.266E5	12.587	2.927E5
High school diploma		1.902***	6.696	13.894	1.081E6	12.204	1.995E5
Household income		.834***	2.302	-1.882***	.152	-2.363***	.094
Official languages at home		-1.125***	.325	-.851***	.427	-1.838***	.159
Official languages with friends		-.889***	.411	-.463***	.630	-.223**	.800
Official languages at work		-.909***	.403	-3.377***	.034	-4.178***	.015
Transnationalism							
<i>Father's education</i>							
Less than high school or no schooling				-.505***	.604	-.658***	.518
High school graduate				.529***	1.698	1.539***	4.661
Some college or university				-1.730***	.177	-2.724***	.066
Spouse born outside of Canada				-1.524***	.218	-1.803***	.165
Same religion				-.458***	.633	.319***	1.376
Contact with family in homeland				.340***	1.405	.384***	1.469
Traditional culture and custom				-1.600***	.202	-1.756***	.173
Pan-ethnicity							
Sense of belonging to ethnic group						-.012	.988
Overall feel uncomfortable because of respondent's ethnicity, culture, race, skin colour, language, accent or religion						1.237***	3.444
Never feel being discriminated because of respondent's ethnicity, culture, race, skin colour, language, accent or religion in the past 5 years						-2.092***	.123
Constant	.747***	2.111	-.016	.984	1.743	5.712	3.880
Cox & Snell R ²	.088		.296		.542		.573
-2 LL	118388.363		60441.335		17364.622		15231.112
N	429		251		121		121

Note: all results are weighted.

* P <= .05; ** p <= .01; *** p <= .001

The results in model 1 ($R^2 = .088$) indicate that, in general, 1.5 generation immigrants are less likely than second generation immigrants to marry exogamously (odds ratio = .46), which satisfies the assumption for generational differences in marital choice. Both East Indian and Filipino immigrants are more likely than Japanese immigrants to choose exogamy, but not Chinese immigrants. The results coincide with the findings that the maintenance of traditional values such as filial piety is important for the Chinese (Lin & Liu, 1999; Uskul, Lalonde, & Cheng, 2007; Wong, 1998). And, Asian female immigrants

are about twice more likely than males to choose exogamy, which may be due to that traditional Asian values are more oppressive for women comparing to the Canadian culture (i.e., wives' role in taking care of the husbands' parents), so Asian immigrant women's likelihood of marrying endogamously reduces in Canada.

The results in model 2 indicate the effects of integration with an increase in R-square ($R^2 = .296$). Surprisingly, generational differences for these four Asian ethnic groups in exogamy become insignificant. Chinese immigrants are about 2.4 times more likely than Japanese to choose endogamy, as is the case for East Indian immigrants, but the odds ratio is that about 1.5. Asian female immigrants are more likely than males to choose exogamy. Those between the ages of 35 and 44 are less likely than those between the ages of 25 and 34 to choose exogamy.

Both 1.5 and second generation Asian immigrants who live in non-Census Metropolis Areas (non-CMAs) and other CMAs are more likely to choose exogamy than those who live in Toronto, Montreal or Vancouver. The results partly coincide with the findings that exogamy is less likely to happen among Asian immigrants in Ontario and British Columbia (Lee & Boyd, 2008).

The results in model 2 indicate that compared to those Asian immigrants with less than high school education or no schooling, all other Asian immigrants of different educational levels are more likely to marry exogamously. For example, immigrants who have a high school diploma are about 7 times more likely than those who have less than a high school education or no schooling to choose exogamy. Asian immigrants' levels of household income are also positively associated with exogamy. Second generation and 1.5 generation Asian immigrants' use of Canada's official languages shows significant effects in all models. Immigrants who mainly speak English/French with their friends have the highest probability in choosing exogamy (odds ratio = .411).

Model 3 ($R^2 = .542$) on Table 3 shows generational differences in exogamy after all factors for transnationalism are controlled for: although 1.5 generation immigrants are still less likely than the second generation to choose exogamy, the probability has decreased to about .31 times. The results indicate that except for Chinese immigrants who are about 4 times more likely to choose endogamy, both East Indian and Filipino immigrants are more likely than Japanese to choose exogamy. Asian female immigrants become about 6 times more likely to choose exogamy in this model.

Age also figures in: Asian immigrants between the ages of 45 and 54 of both generations are about 7 times more likely than those between the ages of 25 and 34 to choose exogamy. The opposite goes for those between the ages of 35 and 44 with an odds ratio of .05. The effects of transnationalism have decreased the probability for Asian immigrants who live in other CMAs to choose exogamy (odds ratio = .17).

The effects of Asian immigrants' socio-economic status on their exogamy become weak as their levels of education show insignificant results and their levels of household income indicate a negative association with exogamy. Similarly with the results in model 2, this model indicates that compared to Asian immigrants who only use non-official languages with their friends, Asian immigrants who mainly use English/French with their friends have the highest probability of choosing exogamy (odds ratio = .63).

Asian immigrants' fathers' levels of education show significant effects on exogamy. For example, immigrants whose father has a high school graduate education are about twice more likely than those with a father of college or university graduate to choose exogamy. Asian immigrants of both generations who choose endogamy are more likely to have a spouse born outside of Canada, which means the spouse may be an immigrant as well. Immigrants who share the same religion with their spouse or have no religion are more likely to choose endogamy compared to those couples who have different religions when all factors for transnationalism are controlled for.

Contrary to the assumption of transnationalism, both 1.5 and second generation Asian immigrants' frequency of contact with their family members in the homeland is positively associated with their exogamy (odds ratio = 1.41). However, the more important they value their traditional culture and custom, the less likely the exogamy.

The Pan-ethnicity Model reflects the effects of pan-ethnicity on immigrants' exogamy with a high R-square explanation ($R^2 = .573$). After taking all factors into account, the difference in probability for exogamy between 1.5 and second generation Asian immigrants narrows significantly to about .16 times. The results indicate that the effects of race/ethnicity and issues of discrimination in Canada have a significant impact on immigrants' exogamy. Chinese immigrants show a high probability of choosing endogamy comparing to Japanese (odds ratio = 4.24). Although both East Indian and Filipino immigrants

are more likely than Japanese to choose exogamy, the odds ratios are very small. Gender effects are the strongest in this model as females become about 11 times more likely than males to choose exogamy.

Asian immigrants between the ages of 45 and 54 are also about 11 times more likely than those between the ages of 25 and 34 to choose exogamy. The probability for those who live in other CMAs to choose exogamy narrows to about .09 times when the effects of pan-ethnicity are controlled for. The effects of socio-economic status on these Asian immigrants' exogamy remain insignificant. Again, immigrants who mainly use English/French with friends have the highest probability of choosing exogamy (odds ratio = .80) but with a lower significance level. Immigrants who mainly use English/French at work have the lowest probability of choosing exogamy (odds ratio = .02).

By using Asian immigrants whose father is a college or university graduate as the reference group, immigrants with a father who has less than high school education or no schooling are less likely to choose exogamy (odds ratio = .52), and those with a father who is a high school graduate are more likely to choose exogamy (odds ratio = 4.66). Both 1.5 and second generation Asian immigrants are more likely to choose a spouse born outside of Canada for endogamy. Endogamy is thus more likely to happen between immigrants rather than between an immigrant and a native-born. Model 4 shows immigrants who share the same religion with their spouse or have no religion are more likely to choose exogamy. The frequency of contact between immigrants and their family members in the homeland is again positively associated with exogamy with an odds ratio of about 1.47. The results again contradict the assumption of transnationalism.

The results in model 4 indicate that if an immigrant has never felt uncomfortable because of his/her ethnicity, culture, race, skin color, language, accent or religion in the host country, s/he is more likely to choose exogamy (odds ratio = 3.44). Although immigrants may still choose endogamy even if they have never felt being discriminated against because of the same reasons in the past 5 years when surveyed, this could be due to the limitation of the data that it does not reveal the time at marriage or the number of years the respondents are married for.

DISCUSSION AND CONCLUSION

The changes in odds ratio for generational differences in exogamy indicate different effects of integration, transnationalism and pan-ethnicity on Asian immigrants' marital choice in Canada (see Table

3). Surprisingly, the Integration Model shows insignificant effects on generational differences in exogamy. This could be interpreted as meaning that integration may not have the most explanatory power when examining differences in exogamy between these 1.5 and second generation Asian immigrants, but it could show more effects when the generation gap becomes wider. The results indicate that the Pan-ethnicity Model significantly narrows the generational differences in exogamy with a high R-square explanation.

Both 1.5 and second generation Chinese immigrants appear to be the most unlikely group to choose exogamy in all models. Studies have found that when Chinese immigrant children are choosing a spouse, Chinese parents know that they cannot “impose their choices on their children, nor can they realistically expect to veto particular candidates put forward by their children, but they do continue to exercise the role of facilitator through their own social network” (Ikels, 1985, 258). Parental influence has a strong impact in Chinese families because filial piety is “taught at a very young age and reinforced throughout life...Duty, obligation, importance of the family name, service, and self-sacrifice to the elders” are all important principles to be followed (Wong, 1998, 287). The results in this paper contradict the findings that Japanese immigrants in Canada are the most likely group to choose exogamy (Milan, Maheux & Chui, 2010) as both East Indian and Filipino immigrants show more likelihood in choosing exogamy. However, this could be due to the fact that this study examines only the differences between 1.5 and second generation Chinese, East Indian, Filipino and Japanese immigrants. Different results could be shown if Asian immigrants of subsequent generations are included as the numbers of third and fourth generation Japanese immigrants are high in Canada.

Gender effects remain consistent in all models: Asian female immigrants are far more likely than males to marry exogamously, especially when factors for pan-ethnicity are introduced. Min and Kim (2009) explain this gender difference on exogamy as Asian male immigrants tend to be more patriarchal than their white or other minority counterparts, which decreases Asian female immigrants’ levels of willingness to choose endogamy.

Both 1.5 and second generation Asian immigrants who live in non-CMAs or other CMAs are more likely to choose exogamy than those who live in Toronto, Montreal or Vancouver in all models. However, the probability for immigrants who live in other CMAs to choose exogamy reduces to a small odds ratio

(.09) in model 4. The results indicate the effects of structure on these immigrants' exogamy. Kalmijin (1998) has stated that endogamy is lower in a homogenous population, and in the case of this paper, non-CMAs probably have more homogenous population, as the number of immigrant populations is lower in those areas. Furthermore, the availability of marriage pool may partly cause the results; the chance of finding a marriageable spouse of the same race/ethnicity in areas with a low number of immigrant populations is less likely.

Immigrants' levels of education show an effect only in the Integration Model. This could mean that education is a necessary but insufficient factor for immigrants' exogamy. In the Integration Model, both generations of Asian immigrants have higher odds ratio of marrying exogamously if their levels of education are higher than less than a high school graduate or no schooling. The results contradict with a USA study's finding: "as intermarriage declined at the extremes of the education distribution, intermarriage among those in the middle portion of the distribution increased" (Schwartz & Mare, 2005, 621). The results in this paper indicate that exogamy becomes less likely (in terms of lower odds ratios) when immigrants have a diploma or certificate from college, or a university degree.

Some argue that interracial marriage involves forms of exchange, such as socio-economic status, between spouses (Fu & Heaton, 2000). However, the results in this paper show that the exchange of education and income between exogamous Asian immigrants of the 1.5 and second generation in Canada appear unlikely. If one's socio-economic status is defined by his/her educational and income level, the results in model 3 and 4 indicate that socio-economic status does not have much positive impact on these 1.5 and second generation Chinese, East Indian, Filipino and Japanese immigrants' exogamy, as education shows no significant effects and exogamy is negatively associated with immigrant couples' household income when different factors are controlled for.

All results show that 1.5 and second generation immigrants' use of Canada's official languages is positively associated with exogamy. The most influential condition is when immigrants mainly use English/French with their friends. Immigrants could be more likely to meet a spouse of different race/ethnicity if they are able to use English/French in their private lives, which indicate the effects of integration. Johnson and Jacobson (2005) have found that "under favorable conditions...can pertinent information about other groups be obtained, synthesized, and formulated into positive reactions so that

good relationships develop. In such conditions, interracial friendships evolve, and romantic relationships and inter-marriage become more probable” (388). Although immigrants who mainly speak English/French at work are also more likely than those who speak their non-official language(s) at work to choose exogamy, the odds ratio reduces significantly in the Pan-ethnicity Model. It could be that the workplace is full of competition and power struggle, thus issues of cultural difference and race/ethnicity would have an impact on immigrants’ marital choice even when they are able to fluently use Canada’s official languages at work. Johnson and Jacobson (2005) state that “although the workplace provides individuals with opportunities for contact with members of other groups, such contact is often hierarchical, distant, and impersonal” (389).

Father’s education, which is associated with an immigrant family’s socio-economic status, is a strong factor in predicting children’s exogamy. The results in this paper contradict with the assumption of transnationalism: immigrant children who are from families with higher socio-economic status are more likely to stay connected with their homeland because their families may have stronger connections with their homeland that would influence their children’s marital choice (Menjivar, 2002). In the Transnationalism Model, Asian immigrants whose father is a high school graduate are about twice more likely than those whose father has college or university education to choose exogamy. Similarly, in the Pan-ethnicity Model immigrants whose father is a high school graduate are about five times more likely than those whose father has college or university education to choose exogamy. Since father’s education is associated with the family’s socio-economic status, the results in this paper show that Asian immigrants from families with lower socio-economic status may be more likely to choose exogamy. However, it is important to note that cases of Asian immigrants who are raised by single mother are automatically excluded in this paper because mother’s education is not used.

Asian immigrants who choose endogamy are more likely to have a spouse born outside of Canada. Min and Kim (2009) have found that in the USA, native-born Asians, including Chinese, Filipino, Indian, Japanese, Korean and Vietnamese, have the highest rate of cross-generational endogamy; and about two-thirds of these native-born groups marry immigrants of the 1.5 generation. The results in this paper indicate that Canada’s Asian immigrants tend toward finding another immigrant for endogamy when factors for transnationalism and pan-ethnicity are controlled for. However, when issues of

discrimination towards immigrants are introduced in model 4, the probability for immigrants to marry a spouse born outside of Canada decreases (odds ratio = .17).

As shown in model 3, Asian immigrants of the 1.5 and second generation who choose endogamy are likely to have a spouse of the same religion or no religion. However, in model 4 immigrants would still choose endogamy even when they do not have the same religion with their spouse. The results could possibly be explained by the assumption of integration: the importance of matching similar religions among immigrants when choosing a spouse is suspected to decline (if not disappear) once integration begins.

Both models of transnationalism and pan-ethnicity indicate positive effects of the connections immigrants have with their family members in the homeland on their choice of exogamy. In other words, whether 1.5 and second generation Asian immigrants have strong attachments or close relationships with the people in their homeland does not affect their choice of exogamy in the host country of their migration. The importance of how these immigrants value their traditional culture and custom, on the other hand, are more likely to influence their choice of endogamy, as the associations in both models are negative. However, when the discrimination factors are introduced in model 4, the odds ratio for immigrants who value the importance their traditional culture and custom to choose endogamy slightly decreases to .17 (from .20 in model 3).

Both 1.5 and second generation Asian immigrants' overall experiences of being discriminated against because of their ethnicity, culture, race, skin colour, language, accent or religion in Canada are negatively associated with exogamy. Those immigrants who have never felt uncomfortable or being discriminated against because of their ethnicity, culture, race, skin colour, language, accent or religion in Canada are about 3.44 times more likely to choose exogamy. Although the results in model 4 indicate that in the past 5 years, those immigrants who have never felt being discriminated against because of the same reasons are likely to choose endogamy rather than exogamy, and the results could be limited by the data in that it only asks about respondents' experiences in the past 5 years but not longer, and it does not reveal the time of marriage of these respondents.

Overall, although the results show some effects of integration and transnationalism on 1.5 and second generation Asian immigrants' exogamy, both models' main assumptions fail to predict the

exogamous patterns of these immigrants. For example, generational differences in exogamy have significantly decreased when factors for pan-ethnicity are introduced. This paper therefore concludes that although integration, transnationalism and pan-ethnicity affect immigrants' exogamy all together, gender and immigrants' experiences of discrimination and marginalization have a greater impact on their exogamy. The Pan-ethnicity Model may provide a slightly better explanation for 1.5 and second generation Asian immigrants' marital choice.

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