# Disentangling Immigrant Residential Clustering

By

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**Abstract**

Our study looks at how immigrants cluster in co-ethnic neighborhoods. Recent studies on the topic struggle with the relative role of economic resources vs. co-ethnic preferences. In addition, the existing research on immigrant residential patterns has not kept pace with recent findings on the role of co-ethnic resources in immigrant adaptation. We systematically examined the effects of three factors on the co-ethnic clustering of immigrants: economic resources, co-ethnic preferences, and the use of co-ethnic information sources. Our study is based on a unique data set that provides rarely available rich information on housing search collected in Toronto in 2006. The findings of the study consistently and clearly suggest that of all preferences, only co-ethnic preference is related to co-ethnic clustering of the two groups when income and use of co-ethnic resources are taken into consideration. Second, though immigrants use various co-ethnic resources to obtain housing information, only the use of co-ethnic real estate agents is related to the clustering. Third, the results show that levels of co-ethnic clustering are not related to the economic resources of immigrants. Nevertheless, cautious in interpreting the results are suggested. Finally, the results reveal that some effects are distinctive to specific groups.

**Introduction**

There is a resurgent interest in social science literature regarding the factors contributing to immigrant residential clustering (Alba, Denton, Leung, and Logan 1995; Clark and Blue 2004; Clark 2003; Iceland and Scopilliti 2008; Logan, Zhang, and Alba 2002; Rosenbaum and Friedman 2006; Rosenbaum and Friedman 2001). This interest is not only a consequence of the high level of immigration to North America in recent decades, but also a reflection of concern for the topic of the broader social structure through which new members of society are sorted into the stratified urban landscape . At the same time, the topic gives indication of a crucial picture of immigrant integration trajectories. Studies have pointed out neighborhood contexts can have detrimental effects on social and psychological well beings of individuals living there (Clark 2003; Massey and Fong 1990; Sampson, Morenoff, and Gannon-Rowley 2002; South, Haynie, and Bose 2005; Zhou 1997).

With the growing literature on the topic in recent decades, it has become apparent that there is confusion regarding the possible reasons for immigrant residential clustering (Charles 2003; Charles 2006b; Clark 1986; Galster 1988). The early formulation of the Chicago sociologists, usually associated with the work of Burgess, argued that newly arrived immigrants, who usually have limited resources, are likely to stay close to one another. As they accumulate more economic resources, they move away from their co-ethnic neighborhoods (Massey 1985).

This conventional understanding of immigrant residential patterns has been challenged in recent years. Studies have shown that neighborhoods where immigrants cluster are not always associated with lower economic resources (Ishizawa and Stevens 2007; Logan, Zhang, and Alba 2002; Zhou Yu 2007). On the contrary, immigrants with economic resources still reside in co-ethnic neighborhoods. To explain these patterns, some of the studies emphasize the importance of individual preference (Bobo and Zubrinsky 1996;

Logan, Zhang, and Alba 2002). They suggest that recent immigrant groups "choose" to settle in co-ethnic clustered neighborhoods even when they have accumulated economic standing.

Although these findings suggest that individual preference should be considered in analyzing the residential patterns of immigrants, few studies have directly explored the effects of co-ethnic preference on residential clustering. Most studies simply refer to these effects with a generic term, "co-ethnic preference," without delineating specific preferences. Co-ethnic preference can imply different tendencies, such as living close to relatives for social support, or to co-ethnic shops for ethnic activities. These specific preferences imply different reasons for co-ethnic clustering. Thus, our understanding of the effect of co-ethnic preference on immigrant residential patterns remains limited. In response to this limitation, Logan, Zhang, and Alba (2002) called for "different research strategies than we have used here (i.e., census data, author added), especially for intensive comparative field studies and original surveys. We are near the limit of what can be accomplished through the analysis of publicly available census data." (p.320)

Not only struggling with the debate about the role of economic resources vs. co-ethnic preferences and suffering from a limited understanding of co-ethnic preference, the existing research on immigrant residential patterns has not kept pace with recent findings on the role of co-ethnic resources in immigrant adaptation. In particular, the research has not incorporated studies on the use of co-ethnic resources in housing search among racial groups, specifically those findings exploring how the role of real estate agents shape white and black residential patterns (Farley 1996; Krysan 2008; Teixeira and Murdi 1997). Co-ethnic resources can have a pronounced influence on immigrant residential patterns. Immigrants with limited networks and little knowledge about the new society most likely employ a variety of co-ethnic resources, such as co-ethnic real estate agents or newspapers, to obtain housing information. Although there are some studies on how co-ethnic real estate agents affect immigrant clustering, they are based on small scale case studies (Teixeira and

Murdi 1997). Virtually no studies compare the influence of various available co-ethnic resources, such as co-ethnic media, on immigrant residential patterns. Given the significant growth of ethnic communities in major cities, the lack of evaluation of the role of co-ethnic resources is a serious omission in our understanding of immigrant residential patterns.

With the limited progress in delineating individual preferences and incorporating the influence of various co-ethnic resources in understanding the residential patterns of immigrants, it is not surprising that (to the best of our knowledge) no study has compared the relative importance of individual socioeconomic resources, individual preferences, and co-ethnic resources. As a result, the discussion is far from resolution.

Our study is based on a unique data set that provides rarely available rich information on housing search collected in Toronto in 2006. Our study extends the literature in three key ways. First, the study refines the understanding of co-ethnic preference by exploring the effects on immigrant residential clustering of various co-ethnic preferences (e.g., co-ethnic friends, co-ethnic shops). Second, we attempt to understand the relative effects of various specific co-ethnic resources (e.g., co-ethnic media, co-ethnic real estate agents) on immigrant residential clustering. Third, we take advantage of the rich data and provide a more comprehensive analysis of the relative importance of three major factors discussed in the literature (i.e., individual socioeconomic resources, individual preferences, and co-ethnic resources). To the best of our knowledge, this is the first systematic and thorough analysis to include various factors discussed in the literature that contribute to immigrant residential clustering. Our setup of the analysis, as suggested by Iceland and Scopilliti (2008) in studying immigrant residential patterns, focuses and compares specific immigrant groups. We included Asian Indians and Chinese in our analysis. They are the two largest immigrant groups in the metropolitan area. This approach enables us to understand patterns common to different groups and to explore differences among them.

In the next section, we discuss how individual economic resources and individual preferences are related to residential clustering among immigrants. These two major factors are not necessarily opposite, but have been presented as alternative factors in the literature. We review some findings on recent immigrant groups and highlight the debate between the two approaches. In addition, we draw from the recent literature on immigration and institutions to discuss the possible role of co-ethnic resources on ethnic clustering.

## Literature Review

### Individual Economic Resources

Starting with the Chicago urban sociology, later elaborated upon by the spatial assimilation perspective, residential clustering among immigrants has been seen as a reflection of their economic resources (Massey and Mullan 1984; Massey 1985). According to this perspective, most immigrants come with limited economic resources and settle in ethnic neighborhoods, which are usually associated with lower housing costs. As they accumulate more economic resources, they move out of the ethnic neighborhoods to other locations that have better amenities and usually have more members of the majority group. Research findings have supported this view repeatedly over the decades (Massey and Denton 1987; Massey and Denton 1988). Even in recent studies, findings on recent immigrant groups have shown that an increase in economic resources results in immigrants moving to the suburbs and sharing neighborhoods with whites (Clark 2007; Clark and Ledwith. 2005), or moving into multi-ethnic neighborhoods (Clark and Blue 2004; Massey and Denton 1990). A study of residential patterns among immigrants in gateway cities also demonstrates the same patterns occurring among Asians and Hispanics (Clark and Blue 2004). With all these findings, Clark and Blue (2204) concluded that “class still matters.” Therefore, we expect that economic resources of immigrants are negatively related to their residential clustering.

Although the findings persistently support this argument, the conclusion remains inconclusive when comparing the relative importance of economic resources and individual preferences of immigrants. However, these studies do not address the extent to which the economic factor remains significant when individual preferences and the use of co-ethnic resources are taken into account.

Individual Preferences

In addition to individual economic resources, locational preference has been central to understanding residential clustering among immigrants (Charles 2003). Since the work of Zorbaugh (1961) proposed the concept of "natural area" to understand the urban form, urban sociologists have argued that neighborhoods reflect the clustering of individuals with similar taste and preference. This is particularly true for immigrants who usually have strong preference for their own culture and prefer to maintain contact with co-ethnic members. In a recent study of immigrant neighborhoods, Logan, Alba, and Zhang (2002) even argued that the ethnic community reflects "motives associated more with taste and preference than with economic necessity." (p. 300). Taking a more moderate position, Charles (2006a) concluded it is necessary to develop an integrated model that includes socioeconomic resources and individual preferences. Without doubt, recent research has highlighted the importance of preferences in understanding immigrants' residential clustering.

Although there are many possible "tastes and preferences" that immigrants may consider in their choice of residential location, in-group preference has drawn considerable attention in the study of residential patterns (Bobo and Zubrinsky 1996; Iceland and Scopilliti 2008). In this view, all groups experience ethnocentric tendencies to share neighborhoods with others who have similar social and cultural backgrounds (Bobo and Hutchings 1996). The implicit argument in these studies is that as the size of the co-ethnic group increases in the neighborhood, co-ethnic social support from friends or family members can be obtained more easily, participation in co-ethnic social activities is more convenient, and co-ethnic

shops are closer (Breton 1964). Missing from these studies is an account of how the preferences of different aspects of co-ethnic presence (e.g. family members, co-ethnic shops, and co-ethnic friends) are related to the co-ethnic clustering of immigrants. Without exploring how the preferences of these different aspects of co-ethnic presence affect immigrants' choice of residential locations, we cannot fully appreciate the role of in-group preference.

Among preferences of various aspects of co-ethnic presence, we expect that immigrants more likely prefer to stay close to family members. Social networks of immigrants in the new country are limited and the functions of network members are poorly differentiated, as suggested by Wellman and Wortley (1990). Members of the family, where trust and reciprocity are typically found and enforced, become a natural source of help and support for immigrants. Research has shown that immigrants find social, emotional and financial support from family members (Kibria 1993). Living close to family members helps facilitate that support.

Similarly, we expect that immigrants also prefer to reside in neighborhoods close to friends. Although they seek various types of help from family members, they often use co-ethnic friends to extend their social networks in an unfamiliar environment. Immigrants learn more about the labor market and widen their social activities through co-ethnic friends (Mahler 1999). However, the importance of living close to co-ethnic friends will be reduced if the ethnic community is large enough to have a variety of ethnic organizations, where immigrants can easily obtain help and information and find ethnic activities.

Similar to the discussion on the role of economic resources on residential clustering of immigrants, studies on the relative importance of immigrants' individual preferences as comparing to economic resources and the use of co-ethnic resources is very limited, largely due to the fact that most studies are based on census data.

Ethnic Resources

Recent literature has emphasized the significance of ethnic resources in the process of immigrant adaptation (Alba and Nee 1997; Bloemraad 2006). Alba and Nee (1997) have reformulated the understanding of immigrant adaptation patterns by explicitly acknowledging that immigrant adaptation involves a mechanism that they labeled as distal causes. Distal causes, according to Alba and Nee, refers to larger embedded structures such as co-ethnic resources drawn from co-ethnic institutions and networks.

Although immigrant studies have generally agreed on the importance of ethnic resources, and have explored the role of co-ethnic resources in various aspects of immigrant adaptation, such as job attainment (Ooka and Wellman 2006), political participation (Ramakrishnan 2005), and educational achievement (Portes and Rumbaut 2001), few studies have analyzed how various ethnic resources affect residential clustering of immigrants. It is quite likely that most immigrants, lacking experience and information about the home buying process in the new country, utilize co-ethnic resources in their housing search. While these co-ethnic resources provide information to immigrants, they are sometimes ethnic-biased and may lead to co-ethnic clustering.

Of these co-ethnic resources, research has emphasized the role of co-ethnic real estate agents in housing search. Although co-ethnic real estate agents are important sources of information for immigrants, their information may be biased (Ratner 1996; Teixeira 1995). Since the business contacts of co-ethnic real estate agents tend to be members of their own group, they are likely to promote ethnic neighborhoods with which they are familiar or where they have listings (Palm 1985). Therefore, relying on co-ethnic real estate agents in housing search more likely leads to housing information that is limited to ethnic neighborhoods. Teixeira and Murdie's (1997) study of Portuguese home buyers in Mississauga, a suburb in Toronto with a high concentration of Portuguese, shows that about 54% of Portuguese who employed co-ethnic real estate agents purchased houses in Portuguese concentrated neighborhoods. Studies of ethnic business location also

demonstrate that co-ethnic real estate companies or agents play a critical role in the clustering of ethnic businesses and co-ethnic members (Horton 1995). However, most of these studies are based on small number of cases. General patterns on the effects of co-ethnic real estate agents remain unclear.

Friends are also important co-ethnic resources for immigrants, as they comprise the majority of their networks and provide information from other circles. However, information from friends may be biased and limited as well, as most friends of immigrants are immigrants themselves (Fong 1994; Horton 1995). In particular, housing information can be highly biased towards neighborhoods with which these friends are more familiar, typically neighborhoods with considerable concentration of co-ethnic members.

Co-ethnic resources also include resources drawn from ethnic organizations. With the growing size of immigrant communities, many ethnic organizations and ethnic media have flourished and emerged to serve the needs of new immigrants. One major consequence is that a lot of information, including housing information, is disseminated to the community through these organizations. Information from ethnic organizations also can steer immigrants towards co-ethnic or minority neighborhoods.

Whatever the evidence, most studies are based on census data and do not explore how co-ethnic resources affect co-ethnic clustering among immigrants. Virtually no study has compared the ways in which the use of various co-ethnic resources are related to immigrant clustering. Among various co-ethnic resources, we expect that immigrants are more likely to use co-ethnic real estate agents to search for housing information. Co-ethnic real estate agents are professionals, and they provide full service to their co-ethnic customers in their own language. In addition, we expect that immigrants rely heavily on their relatives and friends. Information from family and friends is considered trustworthy and reliable, unlike information from real estate agents, which may be seen as profit driven. However, we predict that immigrants will be less likely to use co-ethnic organizations in their

housing search, as most of these organizations do not focus their services and information on housing.

In summary, our review of the literature shows that few studies have evaluated how specific co-ethnic preferences and resources affect immigrant residential clustering. In addition, few studies have explored the relative importance of the major factors identified in the literature, i.e., socioeconomic resources, in-group preference, and ethnic resources. In the following analysis, we address this research gap. Before discussing the data and the analysis, we provide an account of Asian Indians and Chinese in Toronto. This information will help with interpretation of the results.

**Asian Indians and Chinese in Toronto**

Asian Indians and Chinese have a long history in Canada. Both groups began to increase after the change in immigration policies in the 1970s. In 1971, the Chinese population in Canada was only 118,815. It had increased to 1,029,395 by 2001 (Li 1998; Statistics Canada 2003d). Similarly, the population of Asian Indians jumped from 67,925 in 1971 to 917,075 in 2001 (Statistics Canada 2003d; The Canadian Encyclopedia 2008). The majority of both groups settled in Toronto. In 2001, Asian Indians and Chinese were the two largest immigrant groups in Toronto: about 473,805 Asian Indians and 409,530 Chinese (Statistics Canada 2003d),[1] representing 10.1% and 8.8% of the total city population respectively (Statistics Canada 2003d). Among them, about 73% of Asian Indians and 78% of Chinese were immigrants (Statistics Canada 2003e). Together, they comprised 33% of the immigrants in Toronto (Statistics Canada 2003e).

About 27% of Asian Indians and 29% of Chinese in Toronto have completed university, whereas only 23% of all Toronto residents have done so. Despite a higher proportion of members with university completion, the average income of the two groups is

[1] The calculation is based on South Asians instead of Asian Indians. Statistics Canada did not release detailed information about Asian Indians. About 80% of South Asians are Asian Indians.

lower than the average in Toronto. In 2001, average employment income was $17,769 for Asian Indians and $18,064 for Chinese, while the Toronto average was $22,655 (Statistics Canada 2003a; Statistics Canada 2003b; Statistics Canada 2003c). These patterns echo the findings from most studies on immigrants' earning in Canada, that recent immigrants have lower income despite higher educational achievement.

Most Chinese settle in middle class suburbs and in the downtown area. Chinese immigrants from Hong Kong brought financial capital with them. Most studies have suggested that large proportion of them residing in co-ethnic neighborhoods, which are not necessary poor (Fong and Gulia 1996; Myles and Hou 2004). A large proportion of South Asians have also settled in suburban areas (Darden 2004). However, locating in suburbs does not imply that they experience residential integration and share neighborhoods with other groups. On the contrary, studies have shown that South Asians are less likely to share neighborhoods with whites as compared to other visible minority groups in Toronto. Using the 1996 census, Darden (2004) showed that the dissimilarity index of South Asians with whites is relatively high (about 50.6.)

As the populations of Asian Indians and Chinese increase, so too do their ethnic businesses. Over the years, Chinese businesses have grown to the point that they are no longer just small retail businesses. According to Lo and Wang (2007) in their study of the Dun and Bradstreet Regional Business Directory, most Chinese businesses are in non-retail industries and vary in size. The increased number of major Chinese shopping malls in suburban areas has attracted many Chinese businesses to concentrate there. As the ethnic economy has grown and become institutionally complete, Chinese turn to co-ethnic services for their daily needs, including the use of co-ethnic real estate agents (Fong, Ooka, and Luk 2005). Asian Indians have also experienced growth in their ethnic businesses. Although many Asian Indian businesses are located within ethnic concentrated neighborhoods, many are dispersed in different parts of the metropolitan area. Thus, the use of co-ethnic

resources among Asian Indian immigrants can be easily accessed even they stay in different parts of the city.

**Data & Methods**

The principal source of data is a survey conducted in 2006. The survey includes information on the socioeconomic background of respondents, their reasons for moving to their current neighborhoods, and their use of various ethnic resources during their search for their current residence. The survey was conducted by telephone in 2006 and covered the Greater Toronto region and its neighboring districts[2]. Household heads between the ages of 19 and 65 were interviewed.

The second major source of data is drawn from tract level data from the 2001 Canadian census. The survey data was merged with the tract level data according to the postal codes of the respondents' current addresses in order to obtain information about the group composition of their neighborhoods. 439 respondents (Chinese or Asian Indian immigrants) were included in the analysis.

Dependent Variable:

The dependent variable in our study is the proportion of co-ethnic population in the respondent's neighborhood, based on the census tract data. The key independent variables are the respondent's economic resources, neighborhood preferences and use of ethnic resources.

Economic Resources:

Economic resources are measured by the income levels of respondents. There are eleven response categories for economic level. We regrouped the income information into three categories: low (less than $19,999), middle (between $20,000 and $59,999), and high ($60,000 and above).

[2] The survey sample covers the four neighboring districts of the Greater Toronto Area including Halton, Peel, York and Durham.

Neighborhood Preferences

Housing search information is based on the respondent's explanation of why they moved into their current neighborhood. In the survey, we provided 15 reasons for moving into a neighborhood, and respondents could choose any of them. These items range from safety to physical environment to proximity to family members. Of the 15 items, three are related to different aspects of co-ethnic presence: co-ethnic friends, family members, and co-ethnic shops/malls. The questions were set up to allow us to compare various aspects of co-ethnic presence with respect to a set of social and physical characteristics in the respondents' current neighborhoods.

Sources of Housing Information:

We provided a list of 14 possible sources and asked respondents to identify how they received information during their housing search. 6 of the 14 items are related to co-ethnic sources: co-ethnic real estate agent/broker, relatives or family members, co-ethnic friends, co-ethnic employer/co-workers, co-ethnic cultural/religious groups and associations, and co-ethnic newspapers. Other possible sources range from the Internet to non-ethnic newspapers.

Although the list of factors affecting the choice of current neighborhood and the list of sources for obtaining housing information are not exclusive, they are extensive enough to cover a variety of choices and sources. However, our data do not show the frequency of using the sources. Therefore, the results should be interpreted with caution.

Control Variables

In our multivariate analysis, we also controlled for a set of demographic factors. The socio-demographic factors include the respondent's age, gender, language ability, number of years in Canada, and education. Studies have suggested that the younger generation is more likely to interact with different ethnic groups (Portes and Rumbaut 2006), and that females, especially immigrants, adapt better to a new country than male among immigrants

from Asian countries (Hondagneu-Sotelo 1994; Kibria 1993; Qin-Hilliard 2003). Thus, household heads who are younger or female are more likely to reside in neighborhoods with lower proportions of co-ethnic members. At the same time, those who do not speak English well or who arrived only recently are more likely to rely on co-ethnic support. (Logan, Alba, and Leung 1996) The education variable indicates whether the respondent completed university. Previous studies have documented that individuals with education usually reside in neighborhoods with better housing qualities (Massey and Fong 1990; Pattillo 2000). Thus, we expect that those who speak English less well, have spent less time in the new country, and have not completed university will be less likely to share neighborhoods with other groups.

We also controlled for family characteristics, including marital status and presence of at least one child under age 18 in the family. Immigrants who are married and families with young children are more likely to be concerned about the integration of their children and more likely to reside in neighborhoods with fewer co-ethnic members. Therefore, we expect that married respondents or those with at least 1 child under age 18 will be less likely to share neighborhoods with their own group.

In addition, we controlled for the intensity of feeling discriminated against and for the homeownership status of the respondent. Individuals who feel discriminated against may feel uncomfortable sharing neighborhoods with other groups (Magee, Fong, and Wilkes 2008). Thus, they are more likely to reside in neighborhoods with their own group. We constructed a variable from the survey that measures the intensity of discrimination. The measure is based on the respondent's evaluation of feeling discriminated against in Canada because of five unique characteristics: ethnicity, culture, race, skin color and accent. Respondents were asked to evaluate each item in a likert scale from "strongly disagree" (0) to "strongly agree" (4). We then constructed a scale as a sum across the five items. A maximum score of 20 will indicate that the individual has felt a great amount of

discrimination. This variable allows us to control for the general level of discrimination that an individual has experienced.

Finally, we controlled for home ownership. In order to maintain the value of this major "investment", respondents who own homes are more likely to reside in better neighborhoods, usually associated with higher proportions of other groups.

**Results**

TABLE 1 HERE

To begin our analysis, we use census data[3] to show the distribution of Chinese and Asian Indian foreign born and Canadian born populations in neighborhoods with different co-ethnic compositions. The results clearly show that for both groups, the co-ethnic clustering level is higher for foreign born than Canadian born. About 35% of Chinese immigrants and 11% of Asian Indian immigrants are living in neighborhoods with 30% or more of their own group. Yet, none of the Canadian born Chinese or Asian Indians is residing in neighborhoods with more than 20% of their own group. The higher level of clustering among immigrants maintains a pattern long documented in earlier research based on European immigrants in the last century, and shows that it still holds in the new millennium among new immigrant groups. However, the question we now address is how these new immigrants cluster.

TABLE 2 ABOUT HERE

Table 2 helps us determine whether co-ethnic clustering among immigrants is largely a reflection of their limited economic resources, as earlier studies have suggested. We have made separate reports of the average household income levels of neighborhoods in relation to their proportions of co-ethnic populations of Asian Indian and Chinese immigrants. If the

[3] The Asian Indian information is based on the count of South Asians in the 2001 census. Census published data do not provide separate information about the immigrant and Canadian born populations of Asian Indians. However, Asian Indians comprise about 80% of the total South Asian population in Toronto. **[**Statistics Canada. 2008. "Ethnic Origin, Sex and Single and Multiple Responses for Population (20% sample), Canadian Overview Tables (accessed May 2008).". Thus, the South Asian information predominantly reflects the situation for Asian Indians.

previously documented relationship holds, we should expect a negative relationship between co-ethnic clustering levels and average household income level. We also have reported the distribution of the native born populations of the two groups for reference.

Our findings show some support for the relationship between immigrant co-ethnic clustering and income level, but they do not fall clearly into the patterns suggested by past research. Co-ethnic clustering levels of Chinese immigrants seem not to relate to the average household income of their neighborhoods. For instance, neighborhoods where the proportion of Chinese is 10% or less have an average household income of about $67,4420, while neighborhoods with a higher co-ethnic concentration (61% to 70%) have a higher average household income (about $69,043). These results echo recent findings by Logan, Zhang, and Alba. (2002) that co-ethnic clustering in neighborhoods does not necessarily reflect a lower economic standing in the neighborhoods. However, the findings support the negative relationship between co-ethnic clustering level and average income in neighborhoods among Asian Indian immigrants. A higher level of co-ethnic clustering clearly is associated with a lower level of average household income for Asian Indian immigrants.

In short, the data only partially support the relationship of higher co-ethnic clustering with lower economic resources in the neighborhoods. However, the descriptive data cannot access the relative importance of income in comparison to locational preferences and the use of co-ethnic sources of information. In addition, the analysis did not control for the possible effect of the socio-demographic backgrounds of respondents. Before we address these limitations, we provide further descriptive information about individual preferences and the use of co-ethnic information sources by the two groups.

TABLE 3 ABOUT HERE

Table 3 shows the reasons cited for moving to current neighborhoods. The analysis is based on the survey question asking respondents to check any of 15 listed factors that affected their choice of neighborhood. To summarize the patterns, we performed a factor

analysis with varimax rotation to determine the underlying structure of all 15 factors. The analysis shows four independent factors among all the choices. Of these four factors, "co-ethnic presence" is one of the independent and crucial factors. We label the other three factors as reasons related to "physical and social neighborhood qualities," "accessibility to school and work," and "cost and other factors".

There are similarities in the reasons given by Asian Indians and Chinese. Both groups are more likely influenced by social and physical neighborhood qualities, followed by accessibility to schools and workplace. Co-ethnic presence is less frequently cited as a reason for moving into current neighborhoods. The concern of immigrants about the social and physical neighborhood qualities as they take root in the new country is no different from the concern of native born members as they establish their families. Results suggest that ethnic preference is not as important a factor to consider as the preference for desirable social and physical amenities.

Despite the similarities, there are differences between Asian Indian and Chinese immigrants in their specific reasons for moving to their current neighborhoods. Although the largest percentages of both groups consider the social and physical neighborhood qualities to be important, Chinese immigrants are more concerned about neighborhood safety than Asian Indian immigrants, while more Asian Indian immigrants cited the importance of housing cost. Among various aspects of co-ethnic presence, a considerable percentage of both Asian Indian and Chinese immigrants consider proximity to family members to be an important factor in their move to their current neighborhoods. In addition, proximity to co-ethnic shops/malls is as often cited by Chinese immigrants, and proximity to friends by Asian Indian immigrants. The pattern for Chinese immigrants may reflect that the Chinese communities are more concentrated and institutionally complete, and therefore attractive to immigrants.

TABLE 4 ABOUT HERE

Table 4 identifies various information sources used by respondents to find housing in their current neighborhoods. The findings are based on the question that asked respondents to identify which of 14 listed sources they used to collect information during their housing search. We grouped these sources into three major categories: self-search/media, co-ethnic sources, and non-co-ethnic sources. In our discussion, we are especially interested to understand how often ethnic sources were used. We did not use factor analysis because a number of items have only a few cases.

The results show that the most popular avenue of Asian Indian and Chinese immigrants to obtain housing information from their own research. About 42% of Asian Indian and 38% of Chinese immigrants either walked or drove around to find information. The patterns reflect that, like many individuals, most immigrants make an active and personal effort to locate their "dream" neighborhoods. After all, purchasing a home is a major investment for most individuals. However, the immigrants studied were less likely to use the Internet, even though it has easily accessible housing information.

The patterns of using co-ethnic information sources to obtain housing information are very similar for both groups. Co-ethnic real estate agents/brokers, relatives/family members, and co-ethnic friends are the most frequently used co-ethnic sources for obtaining housing information. This pattern echoes findings suggesting the importance of family and friendship networks in the immigrant adaptation process. However, it is important to point out that Chinese immigrants made more use of co-ethnic real estate agents/brokers to obtain housing information. About 48% of Chinese immigrants obtained housing information from co-ethnic real estate agents/brokers, in contrast to only 29% of Asian Indian immigrants. Though Asian Indian immigrants do not employ co-ethnic real estate agents/brokers as readily as the Chinese immigrants, both groups frequently obtained housing information from co-ethnic friends. About 25% of both groups received housing information from co-ethnic

friends. However, both groups were less likely to seek information from co-ethnic employers/co-workers, religious/cultural groups, or co-ethnic newspapers.

The results so far suggest that immigrants are more likely than native born groups to cluster with co-ethnic members. We postulate that the clustering is related to their differences in individual economic resources, individual preferences and ethnic information sources. As our descriptive statistics have shown in Table 2, immigrant residential clustering does not necessarily reflect their economic resources. Findings in Table 3 further suggest that though co-ethnic presence is one of the factors that concern most Asian Indian and Chinese immigrants, social and physical qualities are the most cited reasons for moving into their current neighborhoods. Table 4 reveals that both groups obtain housing information from co-ethnic real estate agents/brokers and co-ethnic friends. However, Chinese immigrants are more likely to use co-ethnic real estate agent/brokers. In the following section, we report multivariate analysis to delineate the relative importance of individual socioeconomic resources, individual preferences and co-ethnic information sources in contributing to immigrant residential clustering.

Causal Models

TABLE 5 ABOUT HERE

Table 5 shows the OLS regression results, which indicate the relative importance of individual socioeconomic resources, individual preferences, and co-ethnic information sources to the level of co-ethnic clustering. For economic resources, we include income variables. Income is measured by three variables: low income (i.e., less than $20,000), medium income (i.e., $20,000-$59,999), and the contrast category of high income (i.e., $60,000 and above). From factor analysis, we used the factor score to create three variables to capture individual preferences. We did not include the fourth factor, cost and other reasons, because that factor is highly correlated with the income variables. In our discussion, we focus on the preference of co-ethnic presence. Finally, we include three co-

ethnic sources of information in the analysis: co-ethnic real estate agent/broker, relatives and co-ethnic friends, and other co-ethnic resources (including co-ethnic employers or employees, co-ethnic cultural/religious groups, and co-ethnic newspaper), to explore how these different sources affect the co-ethnic clustering level. We combined some categories because of small number of cases. Although we could include non-ethnic resources and self-search information in our analysis, they are not the major issues addressed in the paper and the inclusion can further limit the degree of freedom of the analysis.

In the model, we also controlled for socio-demographic background of individuals: age, education, marital status, homeownership status, presence of at least one child who is less than 18 years of age in the household, gender, years of residence in Canada, and the level of discrimination perceived.

Column 1 only includes individual preferences and a set of control variables. Columns 2 and 3 include variables regarding use of various co-ethnic sources for housing information and the control variables. Homeownership status is highly correlated with using co-ethnic real estate agents/brokers. (Over 90% of the people who obtained housing information from co-ethnic real estate agents are homeowners,) Therefore, we ran two models for each group. We included using co-ethnic real estate agents/brokers in the model reported in Column 2 and homeownership variable in the model reported in Column 3. Though the results are very similar, we have reported both models for reference. Columns 4 and 5 report the models with income and control variables (Column 4 shows results of the model including co-ethnic real estate agents/brokers; Column 5 reports results of the model with homeownership). The final two models reported in Columns 6 and 7 include all three sets of factors to explore their relative effects. We ran the same set of models for Asian Indians and Chinese.

When only individual preferences and the control variables are included, only the preference for co-ethnic presence is significantly related to co-ethnic clustering for both

Chinese and Asian Indian immigrants. The concern of the accessibility to school and work is associated with lower co-ethnic clustering for Chinese immigrants only. Although the level of co-ethnic clustering is not associated with any socio-demographic backgrounds (except marital status) of Chinese immigrants, it is associated with various socio-demographic backgrounds of Asian Indian immigrants. Asian Indian immigrants who are younger, married, and less educated are more likely to reside in neighborhoods with a higher percentage of co-ethnic presence.

Columns 2 and 3 report results of models that include use of co-ethnic information sources and control variables. One of the models includes an indicator for use of co-ethnic real estate agents/brokers and one includes an indicator of homeownership. For Chinese, the results show that the level of co-ethnic clustering is associated with the use of co-ethnic real estate agents/brokers. When homeownership is included, the homeownership and using other co-ethnic resources are statistically significant. Taken together, the findings suggest that the clustering of Chinese immigrants is significantly related to the information source of co-ethnic real estate agents/brokers. As a considerable number of Chinese use co-ethnic real estate agents/brokers, and therefore are likely to be steered to co-ethnic neighborhoods, the consequence is that most Chinese homeowners reside in neighborhoods with high proportions of their own group. For Asian Indians, only the use of information from relatives/family members/co-ethnic friends is related to their co-ethnic clustering.

Columns 4 and 5 includes the income level of respondents and the control variables. The co-ethnic clustering of both Asian Indian and Chinese immigrants is not related to their income level. The insignificant relationship of income and co-ethnic clustering is consistent with the findings of other Canadian housing studies (Fong 1997). These studies suggest that the pattern reflects Canadian social policies whereby governments have actively promoted socially mixed housing. Nevertheless, the results suggest that the co-ethnic

clustering of Asian Indian, but not Chinese, immigrants is related to some of the control variables, especially the socio-demographic backgrounds.

In the next two models (Columns 6 and 7), we include all three sets of variables (i.e., individual preferences, employing co-ethnic information sources, and income) and the control variables. The purpose of these models is to explore the relative importance of the three sets of variables. Adding co-ethnic information sources and income to the model, the preference for accessibility to school and work no longer is significant for the level of co-ethnic clustering among Chinese immigrants. On the contrary, preference of co-ethnic presence remains the only preference significant to the level of co-ethnic clustering of both Chinese and Asian Indians. In addition, the effect remains strong whether or not homeownership is considered.

The use of any co-ethnic sources to obtain information during housing search is not related to co-ethnic clustering when all three co-ethnic sources included in the model among Asian Indian immigrants. However, obtaining information from relatives/family members/co-ethnic friends becomes significant when only two co-ethnic sources are included and the magnitude of the effect is not substantial. It suggests the important role of the co-ethnic family and friendship networks in affecting the clustering of Asian Indian immigrants. For Chinese immigrants, only the use of co-ethnic real estate agents/brokers remains significant. The same pattern occurs as in the models that do not control for preferences and income level. That homeownership is significantly related to co-ethnic clustering when the variable of using co-ethnic real estate agents/brokers is not included.

Finally, income still does not show a significant relationship to the co-ethnic clustering of Asian Indian or Chinese immigrants even when controlling for locational and co-ethnic preferences. The only one of the socio-demographic variables that is related to the clustering of Chinese is marital status. However, socio-demographic variables are related to the clustering of Asian Indians. Asian Indian homeowners who are young, less educated,

and married are more likely to cluster with other Asian Indians. It should be noted that throughout all models, previous experiences of discrimination are not related to co-ethnic clustering.

**Conclusion**

Our study looks at how immigrants cluster in co-ethnic neighborhoods. We systematically examined the effects of three factors on the co-ethnic clustering of immigrants: economic resources, co-ethnic preferences, and the use of co-ethnic information sources. The analysis delineated how specific co-ethnic locational preferences and specific co-ethnic information sources are related to the clustering of immigrants. In addition, we explored the relative importance of the three factors.

Drawing from a unique data set collected in Toronto, we focused our analysis on two recently arrived immigrant groups, Asian Indians and Chinese. The findings revealed a number of important observations about the influence on co-ethnic clustering among immigrants of locational preference, the use of co-ethnic resources, and economic resources.

First, the findings consistently and clearly suggest that of all preferences, only co-ethnic preference is related to co-ethnic clustering of the two groups when income and use of co-ethnic resources are taken into consideration. The findings highlight the importance of incorporating co-ethnic preference in understanding co-ethnic clustering. Among various aspects of co-ethnic presence, a considerable percentage of both Asian Indian and Chinese immigrants consider proximity to family members to be an important factor of moving into current neighborhoods. In addition, Chinese immigrants also often cite proximity to co-ethnic shops/malls.

Second, though immigrants use various co-ethnic resources to obtain housing information, only the use of co-ethnic real estate agents is related to the clustering of Chinese, but not of Asian Indians. Obtaining co-ethnic resources from other co-ethnic

sources do not relate to the clustering. In fact, the co-ethnic clustering of Asian Indians is not related to their use of co-ethnic resources at all when all three sources are considered. This pattern suggests that using co-ethnic resources in housing search does not always lead to co-ethnic clustering.

Third, the results show that levels of co-ethnic clustering are not related to the economic resources of immigrants. Nevertheless, we are cautious in interpreting the results, because our data are based on individual income, while other studies have repeatedly shown that most immigrants pool resources with family members. In addition, Canadian governments have been heavily involved in the housing market to ensure minimal residential economic disparity through various programs, such as subsidized housing, rent-geared-to-income, and co-op housing. Despite these considerations, the two largest immigrant groups in Canada clearly are not affected in their housing choices by their economic standing.

The results reveal that some effects are distinctive to each group. The use of co-ethnic real estate agents is strongly related to co-ethnic clustering only for Chinese immigrants. One possible explanation is that Chinese real estate businesses are part of the larger, well established Chinese ethnic economy, which can serve as a centripetal force to draw Chinese together. It is also possible that Chinese real estate agents tend to have limited English ability and therefore have to rely more on co-ethnic information, which in turn leads their clients to areas of ethnic clustering.

Some socio-demographic factors are related to Asian Indian immigrants but not to Chinese immigrants. It therefore seems that the clustering of Chinese immigrants can largely be determined by preferences and the use of co-ethnic sources of housing information (Myles and Hou 2004). However, for Asian Indian immigrants, besides the preference of co-ethnic presence, those who are younger, married, and have a lower level of education are more likely to live in neighborhoods with lower levels of co-ethnic clustering.

The findings have significant implications for future studies on immigrant residential patterns. Future studies should be aware of possible differences in factors affecting the residential patterns of specific groups. These differences may be related to the cohesiveness and enclosure of specific ethnic communities. They also may be related to the historical context at the time of arrival and the cultural characteristics of each immigrant group (Iceland and Scopilliti 2008). These differences in turn can uniquely affect how locational preferences, co-ethnic information sources, and economic resources affect the residential integration of each group.

Although the findings are based on only two immigrant groups in one city, they suggest that the residential patterns of immigrants, rather than simply reflecting the constraints of their economic resources, may indicate their preferences and the consequences of using co-ethnic resources. Without doubt, some of today's ethnic neighborhoods reflect a more complicated process of immigrant adaptation (Logan, Zhang, and Alba 2002). The discussion should not focus on whether residential patterns of immigrants are determined by economic factors or by preference. It should explore the relative importance of economic factors and preference with consideration of the use of co-ethnic resources. Thus, future study should go beyond census data to capture these complexities to obtain a more accurate picture of co-ethnic clustering. Since studies (Krysan 2008) have shown that renters and buyers may use different housing search strategies, future research should explore the differences among immigrants.

The immigration wave of the last few decades has challenged our conventional understanding of immigrant adaptation. This study has provided a detailed analysis of co-ethnic clustering of two groups in one Canadian city, and has addressed various arguments raised in recent studies. Our findings suggest that preference of co-ethnic presence and the use of co-ethnic real estate are important factors that affect residential clustering among immigrants. Future studies should go further to comparatively examine how income,

locational preferences, and the use of co-ethnic resources affect other groups in other metropolitan areas. In addition, our study is limited by the cross sectional nature of the data. Future studies should use longitudinal data to explore changes in the importance of factors over the course of immigrant integration.

As Massey and Mullan (1984) have suggested, integration cannot occur in a vacuum. Spatial integration of immigrants is critical to our understanding of other aspects of integration. Therefore, a full understanding of the current immigrant adaptation process cannot be achieved without a better understanding of their residential patterns.

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Table 1: Distribution of Chinese and South Asians by Co-Ethnic Composition in Neighborhoods and Nativity, 2001

| | Chinese | | | | South Asian | | | |
|---|---|---|---|---|---|---|---|---|
| Proportion of Own Group | Foreign Born | % | Native Born | % | Foreign Born | % | Native Born | % |
| 0.00-0.10 | 102950 | 32.8 | 77990 | 88.2 | 118025 | 34.0 | 94120 | 79.7 |
| 0.11-0.20 | 51550 | 16.4 | 10385 | 11.8 | 112240 | 32.3 | 23985 | 20.3 |
| 0.21-0.30 | 48060 | 15.3 | 0 | 0.0 | 69890 | 20.1 | 0 | 0.0 |
| 0.31-0.40 | 56985 | 18.2 | 0 | 0.0 | 36905 | 10.6 | 0 | 0.0 |
| 0.41-0.50 | 33230 | 10.6 | 0 | 0.0 | 10260 | 0.0 | 0 | 0.0 |
| 0.51-0.60 | 15075 | 4.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 0.61-0.70 | 5965 | 1.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 0.71-0.80 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 0.81-1.00 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

Source: 2001 Canadian Census

Table 2: Distribution of Chinese and South Asians by Average Household Income in Neighborhoods and Nativity, 2001

| Average Co-Ethnic Population (in '000) | Chinese | | South Asian | |
|---|---|---|---|---|
| | Foreign Born | Native Born | Foreign Born | Native Born |
| 0-10 | 67442.35 | 70080.0 | 73993.85 | 70116.11 |
| 11-20 | 67208.65 | 68447.8 | 63346.11 | 72623.81 |
| 21-30 | 65816.06 | 0 | 61027.82 | 0 |
| 31-40 | 63921.18 | 0 | 56032.85 | 0 |
| 41-50 | 70314.65 | 0 | 52781.2 | 0 |
| 51-60 | 64058.93 | 0 | 0 | 0 |
| 61-70 | 69043.44 | 0 | 0 | 0 |
| 71-80 | 0 | 0 | 0 | 0 |
| 81-100 | 0 | 0 | 0 | 0 |

Source: 2001 Canadian Census

Tables 3: Reasons for Moving to Current Neighborhoods by Chinese and Asian Indian Immigrants

| Reasons for Moving into Current Neighborhood | Chinese Immigrants (N=149) % | Asian Indian Immigrants (N=270) % |
|---|---|---|
| **Physical and Social Neighborhood Qualities** | | |
| Better Neighborhood | 52.7 *(n=79)* | 45.6 *(n=202)* |
| Safer | 52.7 *(n=79)* | 40.4 *(n=179)* |
| Better Quality Housing | 48.0 *(n=72)* | 45.2 *(n=194)* |
| More Space | 37.3 *(n=56)* | 34.1 *(n=92)* |
| More Privacy | 27.3 *(n=41)* | 30.7 *(n=83)* |
| More Independence | 34.0 *(n=51)* | 28.9 *(n=78)* |
| **Co-Ethnic Presence** | | |
| Closer to Family Members | 25.3 *(n=38)* | 31.9 *(n=86)* |
| Closer to Co-Ethnic Friends | 21.3 *(n=32)* | 27.78 *(n=75)* |
| Closer to Co-Ethnic Malls/Stores | 26.7 *(n=40)* | 22.96 *(n=62)* |
| **Accessibility to School and Work** | | |
| Closer to Current Work or School | 36 *(n=54)* | 25.9 *(n=70)* |
| Closer to Better Schools | 38.7 *(n=58)* | 45.9 *(n=182)* |
| Closer to Finding Work or Better Employment Prospects | 20.7 *(n=31)* | 27.4 *(n=74)* |
| **Cost & Other Reasons** | | |
| Cost: It's Cheaper | 18.7 *(n=28)* | 32.6 *(n=88)* |
| Grew up in this Neighborhood | 6.7 *(n=10)* | 3.0 *(n=8)* |
| Other Reasons | 12 *(n=18)* | 4.1 *(n=11)* |

Source: 2006 Survey on Immigrant Adaptation in Toronto

Table 4:Iinformation Sources Used by Respondents to Find Housing in Their Current Neighborhoods

| Information Sources | Chinese Immigrants (N=149) % | Asian Indians Immigrants (N=270) % |
|---|---|---|
| Self Research / Media | | |
| Walked or Drove around | 38.0 *(n=57)* | 41.9 *(n=113)* |
| Internet | 19.3 *(n=29)* | 16.2 *(n=68)* |
| Newspaper in English or French | 18.0 *(n=27)* | 25.93 *(n=70)* |
| Co-Ethnic Resources | | |
| Co-Ethnic Real Estate Agent/Broker | 48.0 *(n=72)* | 29.3 *(n=123)* |
| Relative or Family member | 13.3 *(n=20)* | 20.0 *(n=54)* |
| Co-Ethnic Friends | 22.0 *(n=33)* | 25.9 *(n=70)* |
| Co-Ethnic Employer/Co-workers | 1.3 *(n=2)* | 1.5 *(n=4)* |
| Co-Ethnic Cultural/Religious Group and Association | 2.7 *(n=4)* | 1.85 *(n=5)* |
| Co-Ethnic Newspaper | 8.7 *(n=13)* | 9.3 *(n=25)* |
| Non-Ethnic Resources | | |
| Non-Ethnic Real Estate Agent/Broker | 15.3 *(n=23)* | 17.8 *(n=48)* |
| Non-Ethnic Friends | 8.0 *(n=12)* | 6.7 *(n=18)* |
| Non-Ethnic Employer/Co-workers | 3.3 *(n=5)* | 0.7 *(n=2)* |
| Non-Ethnic Cultural/Religious Group and and Association | 0.7 *(n=1)* | 0.4 *(n=1)* |
| Non-Ethnic Institution (Immigrant Agency, School, Community Centre, Other Government Agencies) | 6.7 *(n=10)* | 4.0 *(n=17)* |

Source: 2006 Survey on Immigrant Adaptation in Toronto

Table 5: OLS Regression on Proportion of Co-Ethnic in the Neighborhood

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|---|---|---|---|---|---|---|
| **Asian Indian Immigrants** | | | | | | | |
| **Individual Preferences** | | | | | | | |
| Physical and Social Nieghborhood Qualities | -0.015 | | | | | -0.013 | -0.014 |
| Co-Ethnic Presence | 0.033 *** | | | | | 0.030 ** | 0.032 ** |
| Acessibility to School and Work | -0.017 | | | | | -0.018 | -0.018 |
| **Co-Ethnic Resources** | | | | | | | |
| Co-Ethnic Real Estate Agent/Broker | | 0.013 | | | | 0.017 | -- |
| Relatives/Family Members/Co-Ethnic Friends | | 0.027 * | 0.029 * | | | 0.015 | 0.016 * |
| Other Co-Ethnic Resources (Religious/Cultural Groups and Associaiton, Ethnic Newspapers) | | -0.002 | -0.003 | | | -0.003 | -0.005 |
| **Economic Resources** | | | | | | | |
| Low Income (less than $20,000) | | | | -0.018 | -0.014 | -0.033 | -0.027 |
| Middle Income ($20,000 - $59,999) | | | | 0.015 | 0.016 | 0.003 | 0.005 |
| High Income (over $60,000) | | | | ref | ref | ref | ref |
| **Control Variables** | | | | | | | |
| Homeownership | 0.034 * | | 0.027 | | 0.020 | -- | 0.030 |
| Age | -0.002 ** | -0.002 ** | -0.002 ** | -0.002 ** | -0.002 ** | -0.002 ** | -0.002 ** |
| Female | -0.017 | -0.015 | -0.013 | -0.013 | -0.014 | -0.012 | -0.011 |
| At least 1 Child Under 18 | -0.007 | -0.009 | -0.010 | -0.008 | -0.009 | -0.011 | -0.012 |
| Married | 0.039 * | 0.047 * | 0.043 * | 0.045 * | 0.042 * | 0.045 * | 0.040 * |
| Intensity | -0.001 | -0.001 | -0.001 | -0.002 | -0.002 | -0.002 | -0.002 |
| Years in Canada | 2.3E-04 | 0.001 | 0.000 | 1.2E-04 | -1.5E-04 | 5.0E-04 | 1.3E-04 |
| English Speaking Abilities | -0.007 | -0.023 | -0.023 | -0.030 | -0.029 | -0.016 | -0.014 |
| University Education | -0.040 * | -0.057 ** | -0.057 ** | -0.058 ** | -0.057 ** | -0.043 * | -0.041 * |
| | | | | | | | |
| Intercept | 0.186 | 0.188 | 0.183 | 0.218 | 0.208 | 0.214 | 0.202 |
| N | 270 | 270 | 270 | 270 | 270 | 270 | 270 |
| degrees of freedom | 12 | 11 | 11 | 10 | 11 | 16 | 16 |
| Adjusted R-square | 0.143 | 0.082 | 0.090 | 0.087 | 0.089 | 0.142 | 0.151 |

Notes: *p<0.05, **p<0.01, *** p<0.001; ref = reference category

Sources: 2006 Survey on Immigrant Adaptation in Toronto, 2001 Canadian Census

Table 5 (con't): OLS Regression on Proportion of Co-Ethnic in the Neighborhood

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|---|---|---|---|---|---|---|
| **Chinese Immigrants** | | | | | | | |
| **Individual Preferences** | | | | | | | |
| Physical and Social Nieghborhood Qualities | 0.028 | | | | | 0.021 | 0.018 |
| Co-Ethnic Presence | 0.084 ** | | | | | 0.073 ** | 0.080 ** |
| Acessibility to School and Work | -0.077 * | | | | | -0.063 | -0.065 |
| **Co-Ethnic Resources** | | | | | | | |
| Co-Ethnic Real Estate Agent/Broker | | 0.077 * | | | | 0.065 * | -- |
| Relatives/Family Members/Co-Ethnic Friends | | 0.009 | 0.015 | | | 0.007 | 0.012 |
| Other Co-Ethnic Resources (Religious/Cultural Groups and Associaiton, Ethnic Newspapers) | | 0.106 | 0.135 * | | | 0.067 | 0.093 |
| **Socioeconomic Resources** | | | | | | | |
| Low Income (less than $20,000) | | | | 0.010 | 0.023 | -0.034 | -0.016 |
| Middle Income ($20,000 - $59,999) | | | | -0.014 | 0.000 | -0.024 | -0.002 |
| High Income (over $60,000) | | | | ref | ref | ref | ref |
| **Control Variables** | | | | | | | |
| Homeownership | 0.089 * | | 0.105 ** | | 0.092 * | -- | 0.100 * |
| Age | 0.002 | 1.2E-04 | 1.4E-04 | 0.001 | 0.001 | 0.001 | 0.001 |
| Female | 0.005 | 0.002 | 0.001 | 0.001 | -0.004 | 0.009 | 0.008 |
| At least 1 Child Under 18 | -0.011 | -1.2E-04 | -0.006 | 0.000 | -0.002 | -0.010 | -0.014 |
| Married | -0.097 * | -0.088 | -0.097 * | -0.090 | -0.100 * | -0.088 | -0.094 * |
| Intensity | 0.011 | 0.010 | 0.010 | 0.008 | 0.010 | 0.010 | 0.010 |
| Years in Canada | -0.002 | 0.001 | -0.001 | 4.9E-05 | -0.001 | -3.9E-04 | -0.002 |
| English Speaking Abilities | -0.038 | -0.026 | -0.044 | -0.044 | -0.055 | -0.017 | -0.030 |
| University Education | 0.046 | 0.010 | 0.021 | 0.015 | 0.027 | 0.027 | 0.042 |
| | | | | | | | |
| Intercept | 0.138 | 0.232 | 0.229 | 0.277 | 0.231 | 0.179 | 0.148 |
| N | 149 | 149 | 149 | 149 | 149 | 149 | 149 |
| degrees of freedom | 12 | 11 | 11 | 10 | 11 | 16 | 16 |
| Adjusted R-square | 0.112 | 0.057 | 0.063 | -0.014 | 0.0172 | 0.092 | 0.106 |

Notes: *p<0.05, **p<0.01, *** p<0.001; ref = reference category

Sources: 2006 Survey on Immigrant Adaptation in Toronto, 2001 Canadian Census