
**Transnational Networking and Business Performance: Ethnic Entrepreneurs in Canada**

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Abstract

It is generally acknowledged that transnational networking plays an important role in promoting the performance of ethnic entrepreneurial firms. Yet distinctions between the different types of transnational networking and their effects on business performance have received scant attention in the literature, probably because ethnicity has been considered the main actor in the networking–performance relationship. This paper argues that one of the reasons business performance differs across ethnic entrepreneurial firms is that ethnic entrepreneurs engage in dissimilar types of transnational networking. Analyses of the data generated by 720 ethnic entrepreneurs in Canada revealed that ethnicity, along with human capital and push/pull factors, both of which are part of our conceptual framework, plays a central role in the engagement of different types of transnational networking and that the different types of transnational networking affect business turnover (sales) and business survival (age). Push/pull factors were found to play a marginal role in business performance. These results highlight the competitive market that immigrants and members of ethnic minority groups encounter in the hosting economy and stress the value of transnational networking.

Key Words: transnational entrepreneurship; networks; immigrant entrepreneurs; ethnic entrepreneur; push and pull factors; business performance; business outcomes
1. Introduction

Transnational networking is becoming more the rule than the exception in the present era of globalisation (Levitt 2001); it is associated with the performance of entrepreneurial businesses, and since entrepreneurship is a culture-based phenomenon, has a strong impact on ethnic businesses in particular (Aldrich and Waldinger 1990; Menzies, Brenner, and Fillion 2003; Robinson 2005; Wong and Ho 2004; Zimmer and Aldrich 1987). However, some entrepreneurial values – collectivism versus individualism, tolerance for uncertainty and ambiguity, for example – may not be pervasive or may have limited applicability among certain ethnic groups relative to others (Hofstede 1980, 1991; Hofstede and Bond 1988). Moreover, most studies concur that, quite apart from differences in the business performance of indigenous entrepreneurs and those who are recent newcomers, variations in performance occur across different ethnic groups and in a wide range of businesses, both in niches that function largely in and for the entrepreneurs' particular ethnic communities (Ghosh and Wang 2003; Nolin 2004; Waters 2003; Wong and Ng, 2002) and in businesses with a full range of economic activities that serve broader markets and mixed clienteles in the host countries (Mata 1996; Preston and Giles 1997). Such diversity in the ethnicity and the business activities of entrepreneurs has important bearings on both the manner of transnational networking and business performance.

Business performance is generally gauged by a firm's outcomes; and outcomes are frequently assessed using the goal-oriented, or outcome, approach, which measures progress towards the attainment of organizational goals and objectives (Alsos, Isaksen, and Ljunggren 2006; Boden and Nucci 2000; Fielden et al. 2003; Grilo and Irigoyen 2006; Pfeffer and Salancik 1978). This approach focuses on assessment of the changes and growth of such business measures as profitability, revenues, number of salaried employees, annual sales and so on.

Transnational networking is identified as activities that bridge national borders, carried out by ethnic entrepreneurs mainly with their homeland (Salaff et al. 2003; Saxenian 2002) and aimed at both leveraging and utilizing mutually shareable assets such as information, contacts and trust. Considered a strategy that enhances economic and social mobility in the host country, transnational networking encompasses a broad range of diverse activities, such as visiting the country of origin; maintaining social networks with family, friends and associates in the country of origin; facilitating co-ethnic newcomers' adaptation and assimilation into the host country (by dispatching remittances, information and other resources to prospective emigrant kin and acquaintances); providing financial support; obtaining and disseminating information; recruiting a labour force; and blending knowledge (Aldrich and Cliff 2003; Portes, Haller, and Guarnizo 2002; Saxenian 2002; Robinson 2005). Though not specifically related to entrepreneurial business processes, these activities may contribute to the performance of entrepreneurial businesses in several ways, including through the trustful flow of information, effective communication and avoidance of language difficulties in the host country (Granovetter 1973, 1985). They may act as platforms for, or spring-boards to, better business performance through access to markets beyond those of the host country, the support of fellow transmigrants from the entrepreneur’s homeland in starting or maintaining a business in the host country, and a path for providing financial support to kin in the homeland (Aldrich and Cliff 2003; Portes, Haller, and Guarnizo 2002). The migration of additional family members and associates to the host country is also encouraged by transnational networking, and through this, co-ethnic employment evolves, a practice that reduces risks associated with manpower and financial investments (Min 2005; Salaff et al. 2003; Waldinger 1994). Granovetter (1985) generally concludes that business relations are intermingled with social or emotional relations, the implication being that different aspects of such relations or links may contribute to the different aspects of business performance. Deciphering the impact of the different
types of transnational networking on the success of ethnic businesses would thus seem to be warranted.

Our purpose in this paper is to investigate the types of transnational networking utilized by different ethnic groups of entrepreneurs in Canada and to explore the effects of these types of transnational networking on their business performance while incorporating indicators on entrepreneurs' ethnicity and related factors (push and pull factors and human capital).

The organization of the paper is as follows: in Section 2, we present the conceptual framework and the development of our hypotheses. Section 3 describes the methodology used, including sample, procedures, operationalization and data analysis. Section 4 presents the results of our study, and in the final section we conclude with a discussion of our findings and the implications for theory, practice and policy.

2. Conceptual framework

Most studies that focus on transnational networking in respect to both ethnic entrepreneurs and business performance analyse the practice as a one-dimensional activity; thus, multiple forms of transnational networking have not been sufficiently explored. However, transnational activity is not always comparable amongst different ethnic groups (Menzies et al. 2007; Portes, Haller, and Guarnizo 2002; Robinson 2005), and it is definitely more than a mere term. By applying the concept of transnational networking only to ethnically characterized entrepreneurship, most scholars have limited themselves to a single-faceted concept and failed to take full advantage of the analytical usefulness that the concept may offer to entrepreneurial business performance. Engagement in different types of transnational networking by ethnically dissimilar entrepreneurs may result in different outcomes of business performance and explain the variations found in ethnically differentiated business performance and success. Studies show that some immigrant groups engage in transnational networking activities more than others, that some do not engage in such activities at all, and that there are wide variations in the form and intensity of transnational activities across ethnic groups (Bagwell 2006; Dodd and Patra 2002; Ghosh and Wang 2003; Hiebert and Ley 2003; Nolin 2004; Stiles and Galbraith 2003; Wong and Ng 2002).1

The generally accepted view of the relationship between ethnic businesses and performance measures needs to be reconsidered. A number of studies stress the role of ethnicity to explain disparities in the performance of different ethnic entrepreneurial firms (Aldrich and Waldinger 1990; Rath and Kloosterman 2002; Waldinger 1994) even though educational and professional attainments are considered the significant determinants in entrepreneurial business performance (Robinson 2005). Accepting as fact the perception that the ethnicity of entrepreneurs influences their performance – and thus their business performance – means assuming that certain groups of ethnic entrepreneurs, due to the unique constraints of their ethnicity, are more frequently limited to business opportunities of a lower quality and hence prone to poorer business performance. It is our belief that ethnicity and human capital factors are no longer the main influence on the business performance of ethnic entrepreneurs and that process-oriented factors, such as engagement in different types of transitional networking, have taken the leading role in promoting business performance for ethnic groups.

It has become increasingly clear over the last decade that ethnic immigrants do not simply settle in the host country; rather, they maintain networking with or for their families or friends in their places of origin – they engage in transnational networking. Transnational networking indicates the occurrence of a multi-stranded relations process where many immigrants conduct a substantial part
of their social, economic and cultural lives in their place of origin while working, living and settling in a host country (Basch, Schiller, and Blanc 1994). It includes activities such as receiving or sending collective financial remittances; the establishment of hometown and ethnic-affiliated associations; returns/visits home, either temporarily or permanently; the financial support of and regular communication with relatives left behind; the establishment of professional and social links in the host country and across borders; maintaining familial relations across global space; and the formation of cross-border entrepreneurship and business networks (Foner 2001; Levitt 2001; Portes, Haller, and Guarnizo 2002; Walton-Roberts 2003). The varying degrees to which different ethnic immigrant groups engage in such transnational practices seems to be linked to the circumstances of their arrival and the conditions of their homelands (Kelly 2003; Mahler 2001), that is, the push and pull factors that motivate immigrants to become entrepreneurs. Incorporating different practices of transnational networking into the set of determinants associated with business performance may present, and explain, another scenario, one where ethnically diverse entrepreneurs engage in dissimilar types of networking, which subsequently affects the measures of performance of their respective businesses.

It is therefore essential to regard transnational networking as a multi-faceted activity characterized by different practices and activities and to explore the effects of transnational networking on entrepreneurial business performance in relation to ethnic-group identities.

2.1 Ethnic entrepreneurs and transnational networking

Many immigrants in Canada, the USA and other affluent countries have integrated into the economic and social mainstream of their host country without completely abandoning their ties with their homelands; they maintain these ties through, for example, visits, phone and electronic contacts, and business links. This explains to some degree how transnational networking has evolved. The multiplicity of entrepreneurial firms whose business activities span national and geographic borders and the volume of business-oriented networking by ethnic entrepreneurs across these borders illustrate the magnitude of transnational networking. However, although transnational networking activities are both numerous and varied, they remain an integral part of the attempts of ethnic entrepreneurs to adjust to and integrate into the host country (Bagchi 2003; Min 2005). Such activities enable ethnic entrepreneurs to exploit different markets rather than limit their businesses to the co-ethnic market (Bates 1994; Menzies et al. 2007; Walton-Roberts and Hiebert 1997). Many studies show that businesses owned and operated by ethnic entrepreneurs in their co-ethnic communities are smaller and less financially successful than mainstream businesses because of the lack of opportunities the co-ethnic market offers (Butler and Greene 1997).

Additionally, not all networking ties are of similar composition or of equal importance to the different ethnic groups of entrepreneurs (Sequeira & Rasheed, 2006). Networking can range from single-dimensional, intra-ethnic networking among entrepreneurs and the self-employed, which serves as a path to better business performance for some, to a far-reaching web of cross-country ties and an alternative path to business success (Renaud 2002; Owusu 2003; Waters 2003).

The push/pull models were adapted from migration literature (Lee 1966; Ravenstein 1889) for studies on ethnic entrepreneurship (Chavan and Agrawal 2002; Dhaliwal and Adcroft 2005; Herring 2004). We will argue that these models seem to play a prominent role in the engagement of ethnic groups in transnational networking. Transnational networking is generally concerned with obtaining the necessary resources to migrate and incorporates such related factors as measures of human capital (that is, educational and professional qualifications and relevant business
experience) and the intended length of stay in the host country (Portes, Haller, and Guarnizo 2002; Robinson 2005).

Transnational networking can be broadly distinguished by several measures, but except for one identified type – co-ethnic enclave networking – has not been classified into specific types to date (Portes 2001; Portes, Guarnizo, and Landolt 1999). Co-ethnic enclave networking refers to an interdependent ethnic network of social and business relationships with associates of the country of origin that is geographically concentrated and viewed as a source of social cohesion and economic support. It is based on providing the members of ethnic groups with opportunities to find employment in co-ethnic businesses, launch their own businesses with the support of co-ethnic associates, buy and/or supply co-ethnic merchandise and more (Bates 1994; Portes 2001; Portes, Guarnizo, and Landolt 1999; Salaff et al. 2003; Waldinger 1994). Co-ethnic enclave networking seems to be relevant to the phenomenon of transnationalism by linking together the societies of origin and settlement through which ethnic immigrants create social and business fields that cross national borders. Other practices investigated as measures associated with transnational networking may be categorized into those associated with pull factors in entrepreneurship, including the cross-border blend of international and homeland sources of scientific and industrial knowledge (that is, an entrepreneurship knowledge diffusion); worldwide professional networking; visits to the country of origin for business and professional interests (Chiswick and Miller 2002; Heenan 2005; Hiebert and Ley 2003; Li 2000; Robinson 2005; Saxenian 2005; Whyte 1996); and measures associated with push-oriented factors in entrepreneurship, such as the search for business and/or employment opportunities in the host country due to conditions in the country of origin; receiving remittances from family in the country of origin; or the financial support of relatives left behind. (Foner 2001; Ghosh and Wang 2003; Hiebert and Ley 2003; Levitt 2001; Portes, Haller, and Guarnizo 2002; Walton-Roberts 2003; Wong and Ng 2002).

The interrelationship that seems to exist between the measures of transnational networking and the push/pull factors, along with human capital (for example, professional interests, the diffusion of scientific knowledge), coupled with the dearth of existing typology of transnational networking, challenged us to categorize transnational networking by such interrelationships.

2.2 Push factors and human capital

Push factors and lower levels of relevant human capital of potential transmigrants are more commonly associated with specific ethnic groups and with an enclave mode of assimilation in the host country. Characteristic of these groups is ongoing co-ethnic enclave networking, both within the host country and with their respective communities in their homeland. This is typical of Vietnamese, Italian and Chinese entrepreneurs, as several studies have shown (Ghosh and Wang 2003; Hiebert and Ley 2003; Wong and Ng 2002). Vietnamese transmigrants who have left their country because of poverty, scarcity of opportunities and an overall lack of relevant human capital, as well as the more recent arrivals from other Asian countries, tend to maintain networking connections that are more tightly restricted to smaller groups, usually of family and friends. Their networking is characterized by remittances to relatives in the homeland and by assisting newcomers from their countries of origin (Bagwell 2006). Italians also demonstrate ethnicity-bound networking; this is especially true of the earlier immigrants, among whom push factors were more significant than pull factors. Studies on Italian business networks have found significant ethnicity-bound networking, characterized by closure to outsiders and access mainly through family referrals, as kinship plays a major role (Barbieri 1997; Greve and Salaff 2003; Kelly 2003). Italian entrepreneurs lacking easy entrance through family and kinship ties have had to expend considerable time and effort to broaden their networks (Perlmann 2005).
Studies on Chinese immigrant entrepreneurs with low levels of education frequently describe them as exemplifying immigrant groups dependent on their ethnic communities for labour recruitment and the exchange of services and goods for their entrepreneurial firms (Chan and Cheung 1985; Chu 1996; Light 2002; Marger and Hoffman 1992), both within and outside of the host country's borders (Douw, Cen, and David 2001). Such groups maintain close ties with their co-ethnic associates in their places of origin, upon whom they frequently depend for purchasing merchandise, and are also more likely to be actively affiliated both socially and communally with places of worship (for example, church, temple) (Landolt 2001; Min 2005; Robinson 2005; Tseng 1995). They are usually comprised of more recently arrived immigrants, who may be entrepreneurs, unskilled labourers and/or refugees, most of whom have immigrated to affluent host countries from poor countries (Robinson 2005). While they are still newcomers in the host country, the transmigrants often receive assistance in the form of information and financial aid from family or community members in their home country (Leung 2003; Light 2006) in addition to the assistance in business, financial, social and civil matters proffered by their co-ethnic predecessors already integrated in the host country (Rath and Kloosterman 2002; Robinson 2005). Push factors and a higher level of human capital are associated with worldwide professional and business networking and are usually characterized by periodic visits to the immigrants' country of origin to reconnect with sources of financial support and to ensure higher business performance (Portes, Haller, and Guarnizo 2002; Renzulli, Aldrich, and Moody 2000).

Here, too, the transmigrants from poor countries migrate to more affluent countries, but their higher education and capabilities pave the way to new networks through schools, financial investment connections and various non-ethnic organizations. Studies on highly educated and/or highly skilled Vietnamese entrepreneurs (Bui 2001) and on Chinese and Indian entrepreneurs (Saxenian 2002; Saxenian and Hsu 2001) illustrate how social and professional networks are constructed through the formal organizations in which these experienced or professionally trained immigrants are involved. Related to the global shift to outsourcing, some of this group of immigrants return permanently to their native countries to become home-based transnational entrepreneurs. This is especially true for Indians, for whom such networking facilitates the accumulation of experience and learning for use in the home country (Walton-Roberts 2003). Chinese entrepreneurs seem to be more intensively engaged in transnational business and professional networking than their Vietnamese and Indian counterparts (Douw, Cen, and David 2001; Saxenian 2002). Vietnamese entrepreneurs do not seem to associate socially outside their ethnic group (Bates 1994) and, overall, highly educated members of this community remain disengaged and isolated from the mainstream community (Bui 2001). The global ties of highly educated and highly skilled professional entrepreneurs facilitate trade and provide important competitive advantages for all these ethnic groups.

Jewish immigrant entrepreneurs, usually from Eastern Europe and no longer recent arrivals in either Canada or the USA, but otherwise fitting the push factor and the high human capital category, tend to engage in several types of transnational networking. Self-employment is generally common among Jewish immigrants, especially in the US (Godley 2000; Razin and Light 1998); they are somewhat less dependent on information from their co-ethnic communities in the host country and are both capable and strongly motivated to achieve their entrepreneurial goals (Diner 2004; Levine 2005; Lewin-Epstein et al. 2003; Soyer 2001). The majority of Jewish-owned businesses pass from father to son and often employ co-ethnic workers (Reitz 1990). Thus, most Jewish-owned businesses are clustered in a few business niches, develop a well-established enclave economy in Canada (Thompson 1989; Marger and Hoffman 1992) and maintain co-ethnic
networking. Jewish entrepreneurs do not rely exclusively on local customers but instead engage a wider clientele base (Lee 2002) and develop a business-oriented networking type (Gold 1994; Lewin-Epstein et al. 2003).

**2.3 Pull factors and human capital**

Pull factors and a lower level of human capital are considered to underlie 'chain-migration' situations, in which co-ethnic members from the country of origin migrate to a host country where a significant number of their countrymen have already settled and where they assume they will find more earning opportunities in a cost-efficient and risk-minimizing way (Light 2002; Massey 1988). A characteristic of chain-migration is assistance to newcomers by co-ethnic migrants who already live in and are integrated, at least to some degree, in the host country and who provide information, money for basic expenses, a place to stay upon arrival, emotional support and perhaps a job. Several studies have shown that in a number of countries, families decide to use some of their money to finance the migration of one of their adult members to an affluent country, from which he or she will send remittances to support those who have remained (O'Neil 2003; Robinson 2005). In these cases, transnational networking of ethnic entrepreneurs is both outwards, through remittances to families in the homeland, and inwards, through facilitation of the settlement of newcomers from the country of origin.

Pull factors and a higher level of human capital are also associated with 'brain circulation' (Robinson 2005; Saxenian 2005), which refers to a multi-directional networking process that spans borders beyond those of the immigrants' homelands and host countries. Members of this group use networking to create promising new opportunities when they return to their own countries and to develop new economies there (Li 2000; Saxenian 2002). This type of transnational networking differs from that motivated by push factors, where highly educated ethnic entrepreneurs immigrate to a more attractive country for specific opportunities related to their training and where transnational networking is characterized mainly by the search for such opportunities. Recently, for example, highly educated immigrants from China, Korea and other East Asian countries, usually fluent in English, have taken advantage of diverse forms of transnational networking to immigrate to countries with suitable and attractive conditions in the labour market (Chiswick and Miller 2002; Robinson 2005) and some have already returned permanently to their native countries to start new technologically advanced companies or work for established firms (Hiebert and Ley 2003; Robinson 2005; Saxenian 2002; Whyte 1996). Newcomer Israeli entrepreneurs – mostly highly educated and professional – also establish worldwide business networking (Heenan 2005).

We propose that by bringing together these three loosely connected bodies of knowledge – transnational networking, push and pull factors associated with becoming entrepreneurs in the host country, and human capital – the performance of ethnic businesses might be better understood. Drawing on research in ethnic entrepreneurship, we find that each of these bodies of knowledge has contributed findings related to business performance, but further integration of the three is warranted in order to advance the topics related to business performance in theory and practice.

**2.4 Dimensions of performance in entrepreneurial businesses**

Business performance is a multi-faceted matter and not always easily measurable (Haber and Reichel 2005; Kalleberg and Leicht 1991; Shane and Venkataraman 2000). In addition, most studies that address business determinants and their results have examined only the direct relationship between sets of practices and outcomes. In our literature search we could find no research that looked at whether various types of transnational networking influenced business
performance (Owusu 2003; Saxenian 2002, 2005). For example, transnational activities that may play an important role in business performance, such as remittances to families that have remained in the places of origin, visits to the homeland and membership in transnational professional or social associations, have not been sufficiently investigated in the research on ethnic entrepreneurship (Rafiq 1992; Robinson 2005; Qadeer 1998; Werbner 1990).

The main factor examined in measurements of business performance is outcomes. Outcomes are frequently assessed through an objective assessment, based on 'hard data' measures of the business, and a goal-oriented approach that evaluates progress towards the attainment of business goals and objectives (Pfeffer and Salancik 1978). Since small and/or new businesses are not usually expected to be profitable during their first years of existence and changes may not emerge in the number of salaried employees or in annual sales growth during those early years, the goal-oriented approach in assessing performance is likely to be less indicative for evaluating new enterprises. Such evaluations therefore have to be based on existing business indicators, that is, on sales, the number of salaried full- and part-time workers, and the age of the business, rather than on changes in these indicators.

The beneficial nature of the relationship between networks and business performance is found in entrepreneurship literature. Networks are considered an investment in human and social capital for the entrepreneur’s future use (for example, customers, partnerships, opportunity identification and exploitation). However, these relationships are not as simple as they may appear; in his discussion on the firm’s growth from a networking perspective, Johannisson (2000) indicated a number of reasons that obstruct identification of definitive relationships between networks and business performance. This caution, along with the scarcity of research exploring the relationships between transnational networking and business performance, provides a strong rationale for our study.

Moreover, the impact of transnational networking on business performance is described in general terms, disregarding the specific measures of business performance that might be affected by transnational networking, such as business profitability, survival rates, point of financial break-even, growth in number of customers, sales and so on. The role and function of the different types of transnational networking on business performance measures remains insufficiently studied.

The importance in elevating to the academic and public debate the topic of ethnic entrepreneurs, especially immigrants' businesses performance, comes from the constraints they face in constructing beneficial networks in the hosting country (Ley 2000; Owusu 2003; Zimmer and Aldrich 1987). Although not comprised of a one-way model of flow of people from the poorer to the richer countries, most immigrant communities are not engaged in the networked organizational systems of the hosting countries, at least not during the first years of residency; thus they may construct networking in their ethnic communities in the hosting countries or construct transnational networks with homeland counterparts. The latter may act as a more responsive or even rewarding mechanism than either ethnic-bound networking or attempts to pass through the hosting countries' barriers for networking inside the hosting labour market, as these immigrants may mobilize and transfer business-oriented determinants (financial resources, knowledge, technology) from and back to their homelands.

The aforementioned review suggests that measures of transnational networking were found to be associated with both human capital measures and push/pull factors; specifically, ethnic groups possessing different levels of human capital and/or attracted to entrepreneurship by 'pull' factors (for example, better opportunities, better climate, low taxes, more room for professional activities, professional opportunities) versus 'push' factors (for example, job loss, lack of professional
opportunities, not mastering the host country's language) were differently engaged in types of transnational networking. Such categorization of transnational networking is ignored in research; thus its potential effects on the business performance of ethnic entrepreneurs is also lacking.

Taken together, the aforementioned review, which is summarized in Figure 1, suggests that the importance of the relationship between types of transnational networking and business performance within co-ethnic groups of entrepreneurs has been underestimated.

An in-depth investigation of the types of transnational networking engaged in by different ethnic groups of entrepreneurs in Canada is, therefore, the purpose of the present study. We posit two main hypotheses for investigation, based on the background literature discussed previously. The first hypothesis deals with an attempt to identify the main transnational networking types used by specific ethnic groups; and the second hypothesis attempts to examine the effects of ethnicity, push and pull factors, human capital and types of transnational networking on specific measures of business performance.

H.1. Entrepreneurs of different ethnic groups (Chinese, Indians/Sikhs, Italians, Jews and Vietnamese) are engaged in different types of transnational networking.

H.2. Transnational networking, push/pull factors, human capital and personal (ethnicity, age and gender) determinants have different effects in each measure of immigrants' entrepreneurial business performance, that is, sales, business age and business size.

3. Method

3.1 Sample and procedures

The study sample consists of 720 lead entrepreneurs from five ethnic groups (Chinese, Italian, Jewish, Indian/Sikh and Vietnamese) chosen according to incidence within the three largest cities in Canada (Toronto, Montreal, Vancouver). Approximately 50 lead entrepreneurs were interviewed from each ethnic group in each of the three cities. Interviews were conducted most often in the language of the target ethnicity. Graduate students from the various ethnic groups were trained to assist with our study and conducted most of the interviews. Interviews took about one to two hours to complete and were conducted over a four-year period, starting in 2000. We adopted a snowball sampling strategy, beginning with recommendations from ethnic community groups and community leaders and then from the various lead entrepreneurs who had been interviewed. Members of the research team contacted the local business associations for the various ethnic groups, in each of the three cities, to solicit support for this research and to ascertain potential participants for the study. In addition, contacts of the lead researchers and those of the graduate students who conducted the interviews, and were members of each ethnic group studied, assisted with initial contacts to facilitate the snowball iterations. Some potential respondents refused to participate in our interviews; we estimate this to be about 20% of all approached. Because in Canada a high proportion of self-identified ethnic entrepreneurs are immigrants, there was considerable suspicion that we were collecting information on behalf of government authorities. Generally, the ethnic entrepreneurs approached to be interviewed required strong assurance of the confidentiality and anonymity of the data collected. Strict ethical guidelines were followed in this study, including obtaining university ethics committee approval.
The sample consists of 530 (73.8%) immigrants and 188 (26.2%) Canadian-born ethnic entrepreneurs. The majority of the Asian ethnic groups are immigrants – of the Chinese, 149 (98.3%) are immigrants; the Vietnamese consist of 140 (96.6%) immigrants; and the Indians/Sikhs include 112 (82.4%) immigrants. The Italian group includes 62 (45.9%) immigrants and the Jewish entrepreneurs 67 (44.4%) immigrants. Distribution of the businesses owned by the different ethnic groups shows that 253 (35.5%) entrepreneurs have their businesses in the retail sector, of whom most are Chinese (n=61; 24.1% of the total numbers of entrepreneurs in the commerce sector), followed by the Italians (n=57; 22.5%) and the Indians/Sikhs (n=49; 19.4%); while 277 (38.8%) of the entrepreneurs run businesses in the services area, mostly Vietnamese (n=68; 24.5%) followed by the Indians/Sikhs (n=56; 20.2% of the total numbers of entrepreneurs in the services sector). The manufacturing sector includes 96 ethnic entrepreneurial businesses, with the Jewish group (n=25; 24% of the entrepreneurs in the manufacturing sector) the most represented ethnic group in manufacturing, followed by the Indians/Sikhs (n=21; 21.9%) and the Italians (n=20; 20.8%).

3.2 Instrument

Interviews followed a standard format, utilizing a pre-tested questionnaire that had closed, semi and open-ended questions. The questions related to the human, financial and social capital factors, as well as to networks of immigrant and ethnic entrepreneurs. During the analysis stage, 20 respondents with missing data were omitted.

3.3 Dependent variable: Business performance

This variable is represented by three measures: business sales in Canadian dollars (Kalleberg and Leicht 1991); business survival, using the business's age as proxy (Kalleberg and Leicht 1991; Robb 2002); and business growth, using the number of full-time employees in the business as an indicator.

3.4 Independent variables

(a) Transnational networking types

Several indicators comprise transnational networking: (1) facilitation of contacts for newcomers from the entrepreneur's country of origin (Yes/No); and two dummy variables on the kind of assistance offered (Saxenian 2002) through (2) financial support and (3) contacts and ties; (4) the frequency of visits to the country of origin; and three dummy variables of the reasons for homeland visits for (5) business only, (6) family only and (7) both business and family (Bui 2001; Pendakur and Pendakur 1998); three variables representing membership in associations composed of members of the ethnic groups in orientation to (8) business, (9) profession or trade and (10) social (that is, sports clubs, churches, temples, etc.) (Hiebert 2002; Light 2002; Wheeler et al. 2005). For sources of financing the business differentiated by the start-up stage and the current business stage, two indicators were chosen for the start-up stage: (11) loans from family and (12) loans from co-ethnic group members in and/or outside Canada; and currently meeting the financial needs was represented by two variables: (13) loans from the family and (14) loans from the ethnic group in and/or outside homeland (Bagchi 2003; Greve and Salaff 2003; Renzuilli, Aldrich, and Moody 2000).
(b) Ethnicity
Five ethnic groups are included in the study. The sample is comprised of 151 (21%) Chinese entrepreneurs, 135 (18.8%) Italians, 145 (20.2%) Vietnamese, 136 (18.9%) Indians/Sikhs and 151 (21%) Jewish entrepreneurs. Ethnic affiliation was established through self-reports.

(c) Push and pull factors
Four groups of variables measure the push and pull factors of the reasons to immigrate to Canada. Push factors (negative home conditions) were represented by economic (instability, poor life conditions, no future prospects, economic collapse, etc.) and political (refugees, terror, instability, topics of human rights, communism, etc.) reasons, referring to homeland. Pull factors were represented by entrepreneurial (searching for entrepreneurial opportunities, investments, creating a business, etc.) and familial (joining relative(s) and family already settled in Canada, marriage with Canadian citizen, developing the well-being of the family, etc.) reasons, referring to the hosting country.

(d) Human capital
The main variable representing human capital here is (a) level of education (Greene 2000), since work experience of ethnic groups might bias the results. (b) Length of stay (Hiebert and Ley 2003; Fortes, Haller, and Guarnizzo 2002; Robinson 2005); (c) gender (1 – men, 2 – women) (Green and Cohen 1995; Shane 2000); (d) age; (e) residence in a predominantly co-ethnic neighborhood representing the co-ethnicity and, mainly, location-bounded self-employment (Kloosterman, van der Leun, and Rath 1999; Salaff et al. 2003); and (f) sector of the entrepreneurial business – retail, services or manufacturing (Lo et al. 2001; Menzies, Brenner, and Filion 2003) – are also included as all are important indicators for both transnational networking and business performance.

4. Results
To determine if entrepreneurs of ethnic groups are engaged in different types of transnational networking, as posited in the first research hypothesis, two procedures were employed. Since the literature only partially addresses ethnic entrepreneurs' engagement in different types of transnational networking, an exploratory analysis was needed. A factor analysis was executed for the variables included as measures of the transnational networking. The factor analysis was employed here to enable classification of the variables comprising it, and to thus facilitate the detection of structures in the relationships between the variables (Pedhazur and Schmelkin 1991); it can simultaneously deal with multiple variables, compensate for random error and invalidity, and disentangle complex interrelationships and classify them into their major and distinct regularities. All included variables were transferred to z-scores in order to create standard scores for variables of different categories.

The results of the factor analysis show that while extracting factors with eigenvalues of 1.0 or higher, six factors explaining approximately 61% of the total variance emerged. However, since the total percentage of variance explained by the three first factors contributed more meaningfully than the others, and because the later factors (fourth to the sixth) might be harder to interpret, a procedure was executed that limited the number of factors to three. These three factors explain about 35% of the overall variance, with the first factor explaining approximately 13% of the variance, the second approximately 11%, and the third approximately 10.5% of the total variance.
Looking at the rotated matrix, the first factor has high loadings\textsuperscript{12} in three variables associated with being a member in affiliations within the ethnic community: (a) business, (b) professional and (c) social (MEMBERSHIP). Visiting the country of origin (three variables) for (a) family only, (b) business only and (c) both family and business is strongly associated to the second factor (VISITING); and the third factor is strongly associated with receiving financial assistance (loans) from family and members of the ethnic community in and/or outside the host country at the start-up stage and at present (three variables) (ASSISTANCE). Alphas of reliability tests were satisfactory for the factors.

The loadings of each of the factors were computed and the factors then were employed in a one-way anova analysis in order to differentiate between the engagements in different types of transnational networking according to the different ethnicities of the entrepreneurs. The one-way anova analysis was chosen as it provides comparisons of the means of each type of transnational networking, among the five ethnic groups noted above. The analysis (Table 1) indicates significant differences between the ethnic groups’ engagement in each of the types of transnational networking. The descriptive figures show that Chinese and Italian entrepreneurs are more likely to engage in MEMBERSHIP in associations of their respective ethnic communities, both in and outside of Canada, while Jewish entrepreneurs are the least likely to be members of such associations. VISITING characterizes the transnational networking of Vietnamese entrepreneurs, indicating the greater likelihood of them travelling to their country of origin for business reasons, visiting family or both, while for Indian/Sikh and Italian entrepreneurs, negative measures of this factor emerge. The means of each ethnic group in engaging ASSISTANCE appear higher than those for the previous factors: the means for Vietnamese and Chinese entrepreneurs were the highest, indicating receipt of remittances from members of their families and/or communities inside and outside Canada, while those for Italians and Indians/Sikhs were negative, indicating that they are less likely to receive remittances from their communities.

These results prompted us to explore the role of transnational networking, ethnicity, push/pull factors and human capital in relation to business performance (H.2). For the investigation of the second research hypothesis, three regression analyses were performed (Table 2) for each of the included measures of business performance (that is, sales, business age and number of full-time and part-time employees in the business [dependent variables]). The independent variables included in these analyses are transnational networking (three factors); ethnicity (four dummy variables: Chinese, Indian/Sikh, Italian and Vietnamese. Jews\textsuperscript{13} were the omitted group for; push/pull determinants (four dummy variables), educational level representing the human capital and personal characteristics (that is, length of stay in Canada, age and gender). All equations appeared significant; however, while the higher percentage of the explained variance in the age of the business is about 45% according to the adjusted $R^2$ and in the business sales is around 23%, the percentage of the explained variance for the number of full- and part-time employees is lower (about 3.5%), raising doubts on its applicability for predicting the business size (employees) using the included variables.

From the first analysis of the business sales, it emerged that transnational networking, educational level and being a Chinese immigrant have a significant impact on entrepreneurial business sales, while the push/pull variables emerged as insignificant in affecting business sales. ASSISTANCE, MEMBERSHIP and VISITING significantly and positively affect business sales, suggesting that entrepreneurs who are engaged in any transnational networking of the types included are more
probable to increase their rates of sales. As regards ethnicity, being Chinese emerged as significant with a negative relationship to business sales, indicating that as compared to being Jewish (the omitted group for reference), being Chinese is associated with lower sales rates. Educational level, representing the human capital category, emerged significantly and positively related to sales, indicating that more highly educated entrepreneurs are more apt to have higher sales rates; and of the personal determinants, length of residency in Canada is significantly and positively related to business sales. Gender appeared significantly and negatively related to turnover, indicating that the earlier arrival entrepreneurs were more likely to increase their business sales, while men were more likely than women to have higher sales rates.

The second equation with business age as the dependent variable shows a different picture, one in which only one of the transnational networking measures, that is, MEMBERSHIP and being Italian or Vietnamese, significantly affects business age. Educational level and push/pull indicators appear insignificant in the context of business age. It appears that engagement in MEMBERSHIP is significantly and positively related to business age, suggesting that the longer the time in business, the more the owner is associated with formal associations. Of the ethnicity variables, being Italian or Vietnamese was significantly and negatively associated with business age, suggesting that businesses owned by Italians and Vietnamese, as compared to Jewish-owned businesses, are less likely to survive a long time. The personal determinants emerged as significant, with length of stay in Canada and the respondent's age both significantly and positively related to business age. Not unexpectedly, older respondents had businesses that had been in existence for longer, as had those who had lived in Canada for longer periods of time.

Finally, the third equation, with the number of full- and part-time workers as the dependent variable, emerged with disappointing results, as the variables included explain the total variance of the business size (employees) only marginally. Yet it is important to note that as opposed to the previous performance measures introduced, delving into the independent variables, one of the push/pull measures, pull-oriented family reasons significantly and positively affect business size (employees). Length of residency in Canada has a significant and positive impact on business size (employees) as well.

The results of this analysis support, at least partially, our hypotheses in stressing the role of the types of transnational networking, human capital and ethnicity in the business performance of entrepreneurial ethnic ventures.

5. Conclusion

This paper has explored the close and complementary relationships between transnational networking and business performance measures among ethnic minority entrepreneurs, many of whom were immigrants in Canada. Transnational networking does not comprise a single-faceted construct but rather integration of multiple actions of a cross-border nature, where the interests of these lines of activities are the same. Two major lines of empirical investigations on ethnic entrepreneurs' pathways for higher business performance appear, both associated with theories of ethnic enclave economies versus cross-border business activities (Itzigsohn and Cabral 1999). The first focuses on human capital, especially on educational level and professional experience and the ability to master the language of the majority of the residents in the hosting country (Gould 1994); while the second considers the predominance of push and pull factors embedded in the migration
models (Lee 1966; Ravenstein 1889) for incorporation in the hosting labour market. Relatively few studies include transnational networking in these inquiries (Mahler 2001; Portes 2001; Portes, Guarnizo, and Landolt 1999); specifically, little is known about transnational networking effects on ethnic entrepreneurial business performance.

Figure 2 presents the main results of this study. We first compared the transnational networking engagement of Chinese, Italian, Vietnamese, Indian/Sikh and Jewish lead entrepreneurs from Montreal, Toronto and Vancouver. The results indicate, as hypothesized, that ethnic entrepreneurs were differently engaged in the activities of transnational networking: Chinese and Italians were mainly involved in formal, business and professional ethnic associations and ethnic social clubs, supporting the relatively few studies on this found in the literature (Ghosh and Wang 2003; Hiebert and Ley 2003; Leung 2003; Wong and Ng 2002). Vietnamese were found to maintain the strongest business and family links with their homeland by visiting their homeland more frequently; these findings are consistent with the patterns reported in the research literature on immigrants from the Asian countries, especially the highly educated and those immigrating for pull-oriented reasons (Chiswick and Miller 2002; Saxenian 2002). Our results also show that both Chinese and Vietnamese are relatively more frequently remittance receivers from their ethnic communities in and outside Canada; these findings support previous findings on Chinese entrepreneurs (Light 2006) but contradict other results on Vietnamese (Bagwell 2006), where they are presented as remittance transferors to their homeland and more dedicated to assisting ethnic newcomers rather than as remittance receivers.

The results for our second hypothesis reveal the significant role of transnational networking on business performance measures, especially on business sales and business age (survival). Additionally, the results stress the minor role of the push/pull factors on business performance. Ethnicity and educational level emerged as significant, with educational level having a moderated effect and ethnicity, especially being Chinese, Vietnamese or Italian, having an intense effect on business performance measures. The limited significant levels we observed in one of the business performance measures, business size (employees), could be explained by the difference in the types of businesses and their potential growth ability. Moreover, the results may be biased, as outsourcing personnel, which has been widely implemented in entrepreneurial firms and SMEs and which to a certain degree misrepresents business size, may not be included as 'employees' by some entrepreneurs. This study is the first step in investigating ethnic entrepreneurs' business performance driven from a research framework that includes push/pull factors, human capital, ethnicity and transnational networking.

The predominance of transnational networking and the marginal role of the push/pull factors in ethnic entrepreneurs' business performance may be interpreted by underlining the structural market processes ethnic immigrants meet in the host country, where performance is the 'name of the game' and performance is represented by educational level and by the quality of transnational networking that the ethnic entrepreneurs possess. Broadly speaking, ethnic entrepreneurs meet a transparent market where the pathway for successful performance is apparent and open for everybody, regardless of their ethnicity or push/pull factors. Alternatively, these same results may reflect hidden processes in the hosting market in which barriers are faced by ethnic immigrants and entrepreneurs, and thus the push/pull factors (that is, the reasons for immigration) are disregarded; thus we observed a marginal role of the push/pull factors in our analyses. This aspect of interpretation might imply the limited opportunities the hosting labour market provides to immigrant entrepreneurs to realize their basic reasons for immigrating. Both interpretations of our results might reflect the competitive market ethnic immigrants encounter, one in which the race for valuable resources such as transnational networking starts immediately on arrival. Our results
show that the length of stay in the hosting country plays an important role in businesses performance, implying the relatively satisfactory adjustment of ethnic entrepreneurs in the hosting labour market.

Transnational networking appears in this study as a dynamic phenomenon that calls for further research. It would seem to be as a good starting point for enhancing business success in practical terms for ethnic and immigrant entrepreneurs, but it might be even more beneficial to extend this research to the wider possibilities of foreign networking.

From an academic perspective, future investigations might build on this study by analyzing the relationship of transnational networking with different measures of business performance among ethnic groups through a culture-based model such as Hofstede’s (1980). Through such categorization, the unique effects of transnational networking on business performance for each cultural dimension, rather than for each ethnic group, could be determined. Various ethnic groups that share similar cultural values, would be treated as one cultural group, whereas ethnic groups that hold diverse values would be divided into different cultural dimensions, instead of by ethnicity.14 As such, the role of culture rather than of ethnicity would be strengthened in determining ethnic business performance.

Future research may broaden the scope of investigation to other ethnic groups in Canada or elsewhere. Different aspects may be included for each cultural dimension and the complexity of the relationships between business performance and transnational networking (Johannisson 2000) could be simplified.

From a practical perspective, the implications of this study for policy-making are critical; the establishment and management of stable, enduring transnational networks of different types should lead to more successful business performance for immigrant and ethnic minority entrepreneurs.

Network information that can assist with entrepreneurship development should be made widely available on the web. That may mean we have come to an era where policy-makers could look at the possibilities of cross-fertilization networks of various ethnic and immigrant entrepreneurs: information about the ways and means to use the most competitive expertise of the motherland of immigrant and ethnic entrepreneurs, where people increasingly speak English as a second language, should be studied and disseminated. This could be done by extending the existing information available on web sites like www.ontario.canada.com in sections such as Starting a Small Business in Ontario. Policy-makers need to look at setting up more training programs for ethnic, immigrant and, indeed, all entrepreneurs about the use of foreign networks to develop their businesses.
Notes

1 The differences between ethnic groups are linked to different cultural factors. For instance, Brenner, Célas and Toulouse (1992) found that political factors in Haiti made Haitians in Montreal view entrepreneurship with suspicion. Chua (2003) showed how some ethnic groups have specialized in exploiting market opportunities and hence are overrepresented in entrepreneurial activities.

2 Push factors include negative home conditions that impel the decision to migrate, for example, loss of a job, lack of professional opportunities, overcrowding, famine, war, pestilence and lack of personal security. Pull factors include positive attributes perceived to exist at the new location, for example, jobs, better climate, low taxes, more room for professional activities, and professional opportunities.

3 Lower/higher levels of human capital address to educational levels, skilled/unskilled job experience, acquiring professional training relevant to the job, etc.

4 A discussion on refugees is beyond the scope of the present study.

5 The Maryland/Israel Development Center, http://www.marylandisrael.org/pages/programs-services.php

6 Many papers have already been published on this research project. They can be downloaded free of charge at http://web.hec.ca/creationentreprise/CERB/.

7 Industry categories were as follows: services (including transportation, real estate, restaurant, financial, education and IT); manufacturing (including construction); and retail (including wholesale).

8 We acknowledge the difficulty of using employee growth as a measure of business growth. It should be noted that SMEs can increase turnover, etc. without an increase in number of employees.

9 We considered membership in associations as a first step towards transnational networking, since these associations consist of people of the ethnic group residing in Canada as well as newcomers and visitors from their homeland. Most of these associations maintain ties with professional associations at home (Bagchi 2003; Kasinitz 1992).


11 The Principal Components method was chosen since it allows for combining two or more variables, which could be correlated, into one factor, and the Varimax rotation was used to maximize the variance of the ‘new’ factors. We introduced all the included variables into a Principal Components factor analysis, so that each common factor would be represented by at least three or four variables (Fabrigar, Wegener, MacCallum and Strahan 1999) in oblique rotation, and used the comprehensibility rule in limiting the number of factors to those whose dimension of meaning is readily comprehensible.

12 For all factors we included only variables emerged with loadings above 0.6.

13 In order to avoid problems with collinearity in the model, the general rule for creating dummy variables is that the number of dummy variables included in the regression model is the number of modalities minus 1; the omitted variable then turns to be as the reference group. The coefficients for the included dummy variables represent how much the means of the included dummy variables are above or below the mean for the reference group, which turn to zero (Hardy 1993). The choice of the reference group is arbitrary; it is usually the last variable entered in the equation that automatically turns to a reference group. In our case, it was the group of Jewish entrepreneurs.

14 For example, Gasse (1977) found different values tendency among Canadians – for example, a tendency for English-Canadians to value open-mindedness more than French-Canadians.
References


Table 1. One-way Anova, F, Means and Standard Deviation\(^1\) for the types of transnational networking and the ethnic group of entrepreneurs (alphabetic order).

<table>
<thead>
<tr>
<th></th>
<th>MEMBERSHIP</th>
<th>VISITING</th>
<th>ASSISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=707</td>
<td>N=717</td>
<td>N=639</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>.126</td>
<td>.091</td>
<td>.215</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.459</td>
<td>1.574</td>
<td>1.218</td>
</tr>
<tr>
<td>Indian/Sikh</td>
<td>.006</td>
<td>-.181</td>
<td>-.250</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.198</td>
<td>1.052</td>
<td>.566</td>
</tr>
<tr>
<td>Italian</td>
<td>.160</td>
<td>-.147</td>
<td>-.292</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.396</td>
<td>1.270</td>
<td>.472</td>
</tr>
<tr>
<td>Jewish</td>
<td>-.232</td>
<td>.087</td>
<td>-.076</td>
</tr>
<tr>
<td>S.D.</td>
<td>.857</td>
<td>.928</td>
<td>.926</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>-.038</td>
<td>.128</td>
<td>.309</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.229</td>
<td>1.118</td>
<td>1.525</td>
</tr>
</tbody>
</table>

\(F = 2.268; df=4, p < .05^*\) \(F = 4.143; df=4, p < .01^*\) \(F = 8.745; df=4, p < .00^{**}\)

\(^1\) Transferred to z-scores
Table 2. Regression analyses for the three measures of business performance as dependent variables with types of transnational networking, ethnicity,\(^1\) push/pull indicators, educational level and personal measures.

<table>
<thead>
<tr>
<th>Dependent variable – Sales</th>
<th>B</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of transnational networking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership</td>
<td>.732</td>
<td>.112</td>
<td>2.208*</td>
</tr>
<tr>
<td>Visiting</td>
<td>.475</td>
<td>.138</td>
<td>2.601**</td>
</tr>
<tr>
<td>Assistance</td>
<td>.098</td>
<td>.116</td>
<td>2.249*</td>
</tr>
<tr>
<td>Ethnicity (alphabetic order)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>-.724</td>
<td>-.182</td>
<td>-.2.474*</td>
</tr>
<tr>
<td>Indian/Sikh</td>
<td>-.241</td>
<td>-.057</td>
<td>-.809</td>
</tr>
<tr>
<td>Italian</td>
<td>-.044</td>
<td>-.008</td>
<td>-.120</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>-.337</td>
<td>-.103</td>
<td>-.1.298</td>
</tr>
<tr>
<td>Human capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational level</td>
<td>.161</td>
<td>.135</td>
<td>2.719*</td>
</tr>
<tr>
<td>Push/pull factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pull entrepreneurial reasons</td>
<td>-.071</td>
<td>-.009</td>
<td>-.1.85</td>
</tr>
<tr>
<td>Pull family reasons</td>
<td>-.072</td>
<td>-.019</td>
<td>-.3.68</td>
</tr>
<tr>
<td>Push political reasons</td>
<td>-.130</td>
<td>-.034</td>
<td>-.6.22</td>
</tr>
<tr>
<td>Push economic reasons</td>
<td>-.289</td>
<td>-.054</td>
<td>-.1.072</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of stay in Canada</td>
<td>.023</td>
<td>.152</td>
<td>2.360*</td>
</tr>
<tr>
<td>Respondent's age</td>
<td>.007</td>
<td>.039</td>
<td>.6.89</td>
</tr>
<tr>
<td>Respondent's gender</td>
<td>-.634</td>
<td>-.163</td>
<td>-.3.386**</td>
</tr>
</tbody>
</table>

Sales: \(R = .403; R^2 = .263; \) Adj \(R^2 = .231; F (12, 407) =5.067; p < .00**.\)

\(^1\) As required, Jews were the ethnic group temporarily omitted from this analyses, while categories from the same variable were transformed to different dummy variables.
(Table 2 cont’d)

<table>
<thead>
<tr>
<th>Dependent variable – Business age</th>
<th>B</th>
<th>β</th>
<th>T (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of transnational networking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership</td>
<td>3.122</td>
<td>.092</td>
<td>2.350*</td>
</tr>
<tr>
<td>Visiting</td>
<td>1.060</td>
<td>.058</td>
<td>1.414</td>
</tr>
<tr>
<td>Assistance</td>
<td>.036</td>
<td>.008</td>
<td>.211</td>
</tr>
<tr>
<td>Ethnicity (alphabetical order)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>-1.433</td>
<td>-.069</td>
<td>-.1.191</td>
</tr>
<tr>
<td>Indian/Sikh</td>
<td>-1.253</td>
<td>-.056</td>
<td>-.1.015</td>
</tr>
<tr>
<td>Italian</td>
<td>-2.796</td>
<td>-.1.01</td>
<td>-.1.940*</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>-3.206</td>
<td>-.1.64</td>
<td>-.2.650*</td>
</tr>
<tr>
<td>Human capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational level</td>
<td>-.433</td>
<td>-.069</td>
<td>-.1.796</td>
</tr>
<tr>
<td>Push/pull factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pull entrepreneurial reasons</td>
<td>.067</td>
<td>.002</td>
<td>.042</td>
</tr>
<tr>
<td>Pull family reasons</td>
<td>.464</td>
<td>.023</td>
<td>.586</td>
</tr>
<tr>
<td>Push political reasons</td>
<td>-.143</td>
<td>-.007</td>
<td>-.1.67</td>
</tr>
<tr>
<td>Push economic reasons</td>
<td>-1.166</td>
<td>-.043</td>
<td>-.1.096</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of stay in Canada</td>
<td>.291</td>
<td>.395</td>
<td>.7.299**</td>
</tr>
<tr>
<td>Respondent's age</td>
<td>.338</td>
<td>.380</td>
<td>.8.835**</td>
</tr>
<tr>
<td>Respondent's gender</td>
<td>-.653</td>
<td>-.032</td>
<td>-.8.59</td>
</tr>
</tbody>
</table>

Business age: $R = .686; R^2 = .470; \text{Adj } R^2 = .451; F (12, 427) = 24.289; p < .00**.$
Figure 1.
Theoretical Background – Push-Pull and Human Capital Factors and Transnational Networking among Ethnic Groups

<table>
<thead>
<tr>
<th>Push Factor for Immigration</th>
<th>References</th>
<th>Pull Factors for Immigration</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Human Capital</strong></td>
<td>* enclave, ethnicity-bound networking within the host country; * sending remittances to relatives in homeland; * assisting newcomers of their ethnic group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bagwell, 2006; Ghosh and Wang, 2003; Hibert and Ley, 2003; Wong and NG, 2002</td>
<td>* inwards transnational networking, e.g., assistance to newcomers with information, money, support and jobs; * outward with members in homeland financing the migration of their adult member(s); and immigrants dispatch remittances after being settled, to their families in homeland</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Light, 2002; Massey, 1988; O’Neil, 2003; Robinson, 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a networking closure mechanism to outsiders exists</td>
<td>Barbieri, 1997; Greve and Salaff, 2003; Kelly, 2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Higher Human Capital</strong></td>
<td>* engaging ethnic exchange of labor, merchandise, goods and services; * obtaining informative, financial and business aid from their homeland community</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bagwell, 2006; Chan and Cheung, 1985; Douw, Cen and David, 2001; Chu, 1996; Ghosh and Wang, 2003; Hibert and Ley, 2003; Light, 2002; Ma 1999; Marger and Hoffman, 1992; Wong and NG, 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>visiting their homeland frequently for business reasons and return to their homeland and start new technology advanced companies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chiswick and Miller, 2002; Li, 2000; Robinson, 2005; Saxenian, 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>construct professional networks through formal organization (schools, work), business connections (conferences, investment cooperation) and non-ethnic organization;</td>
<td>Douw, Cen and David, 2001; Saxenian, 2002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>world-wide professional/business; and transnational business-oriented</td>
<td>Lee, 1999; Lewin-Epstein, Semyonov, Kogan and Wanner, 2003; Marger and Hoffman 1992; Thompson 1989</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>establish world-wide business networks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heenan, 2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 2.
Research results of main relationships tested.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Transnational networking</th>
<th>Business performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td></td>
<td>Sales – turnover of sales in $</td>
</tr>
<tr>
<td>Italians</td>
<td></td>
<td>Age of the business</td>
</tr>
<tr>
<td>Vietnamese</td>
<td></td>
<td>Business size – number of full-time employees</td>
</tr>
<tr>
<td>Indians/Sikhs</td>
<td>Membership – in ethnic-affiliated associations for business, professionally and socially</td>
<td></td>
</tr>
<tr>
<td>Jews (control group)</td>
<td>Visiting – visits in country of origin for business, family and both</td>
<td></td>
</tr>
<tr>
<td>Push Factors</td>
<td>Assistance – receiving financial assistance from family/members of the ethnic community in/outside Canada</td>
<td></td>
</tr>
<tr>
<td>Pull Factors</td>
<td></td>
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</tr>
<tr>
<td>Human capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal factors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Stay in Canada</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Effects for H.1. Effects for H.2. Insignificant effects