
A Study of Entrepreneurs’ Ethnic Involvement utilizing Personal and Business Characteristics

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A Study of Entrepreneurs’ Ethnic Involvement utilizing Personal and Business Characteristics

Abstract

There is increasing ethnic diversity amongst entrepreneurs in many countries mainly through immigration and sometimes due to the increased propensity to venture on the part of various ethnic groups. To increase our knowledge about personal and business characteristics of ethnic entrepreneurs, it has been suggested that a measure of ethnic community involvement would provide a useful analytical tool. In this paper we develop a valid and reliable (.69) Index of Ethnic Involvement (IEI) based on a range of personal and business characteristics with a strong emphasis on Social Capital Theory. Our initial analysis shows the IEI predicts some personal and business characteristics. Future development will include building regression models to predict business outcomes. The IEI, when fully developed, promises to be useful for targeting assistance, education and policy for entrepreneurs and small business owners according to the level of ethnic community involvement.

Key Words: Ethnic entrepreneurship, ethnic involvement, business outcomes, index of ethnic involvement, gender differences, immigrant entrepreneurs.

ACKNOWLEDGEMENTS

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A Study of Entrepreneurs’ Ethnic Involvement utilizing Personal and Business Characteristics.¹

Several theoretical perspectives have been adopted for studying ethnic entrepreneurs. Recent reviews of ethnic entrepreneurship have focused to some extent on social capital theory. For example, Butler and Greene’s (1997) review of ethnic entrepreneurship, highlighted “the importance of a community dimension inherent in the business creation process” and the “significant contributions of community resources to the entrepreneurial activities of group members” (p.281). Deakins’ (1999) concluded from his review that networking was vital to minority business success, that the diversity of ethnic minority enterprises has been overlooked and that there has been too little consideration of the special circumstances and required support necessary for ethnic business owners, particularly for those entrepreneurs who wish to move out of the ethnic market into the mainstream. Rath and Kloosterman (1999) were highly critical in their review on the basis that studies seemed largely driven by government funding and mainly concerned policy directives, and also that many had little theoretical value. They recommended that future studies focus on social capital and ethnic networks, with international comparisons of ethnic groups. These reviews of the literature from the UK (Deakins, 1999), the Netherlands (Rath & Kloosterman, 1999), and the US (Butler & Greene, 1997) all point to the limitations of current knowledge, the lack of currently viable theoretical models and the necessity for future theoretically grounded research.

Ethnic entrepreneurship research studies are generally based on case studies, surveys with small samples, or utilization of secondary databases (e.g. Census data). Obtaining respondent cooperation is particularly difficult as many ethnic group members, especially visible minorities, may be immigrants and not predisposed to research participation, particularly survey research. The large number of different ethnic groups dictates that it will be a considerable time before we amass a comprehensive literature on entrepreneurs from the various ethnic groups. For example, 44% of the population of Canada’s largest city, Toronto (a city with over 2 million people), are immigrants from many different countries (Statistics Canada, Census 2001). Chaganti and Greene (2002), however, have alerted researchers to the importance of studying the level of ethnic involvement across a range of ethnic groups. These authors argue persuasively that the needs and accordingly the policy issues relating to, for example, an ethnic minority entrepreneur, not closely involved with his/her ethnic community, are quite different from an ethnic minority community-centred business owner. Studying level of involvement allows us a complementary measure by which to study ethnic entrepreneurs. As the reviews of literature have pointed out, Social Capital Theory is a promising conduit for conducting research into ethnic entrepreneurship.

The objectives of this study are to develop an Index of Ethnic Involvement (IEI) based on the level of the entrepreneur’s personal, business and personal/business ethnic involvement. Following on from this, we aim to study what differences in personal and business characteristics exist according to the level of ethnic involvement. The field of ethnic entrepreneurship will be enriched by a conceptual tool that examines a range of ethnic groups, according to the ethnic community involvement of individual owner-managers. This method of study has the potential to provide educators, trainers, service providers and policy makers with an efficient method of

¹ We would like to thank the Social Sciences and Humanities Research Council (SSHRC) for its support with this research. We also thank our colleague Jim Brander from the University of British Columbia who manages the financial aspects of this project.
obtaining information about a range of ethnic business owners who may have differing needs depending on their level of ethnic involvement.

BACKGROUND

Wolf (1950) cites Simmel in the late 1800s as one of the early researchers into ethnicity and entrepreneurship, and other notable contributions have been made by Weber (1930) and Schumpeter (1934). According to Butler and Greene (1997), these early writers developed ideas based on the stranger as trader, the social structure of society, the value systems produced and the religious tenets. Historically, ‘Enclave Theory’, ‘Middleman Theory’ and ‘Theories of Immigration’ are the basis for much of the early research into ethnic entrepreneurship. Enclave theory is concerned with immigrants, entrepreneurship and labor market issues (Nee & Nee, 1986). Ethnic enclaves, as well as being economically and culturally linked, have historically been geographically based (Wang, 1999). Middleman theory relates to the type of business that immigrant or ethnic entrepreneurs engage in, and according to Zenner (1991), they often act as traders or negotiators. Theories of immigration are mostly concerned with migration patterns, networks, and economic benefits (Muller, 1993). Current studies, however, suggest that these existing theories need to be augmented (Marger & Hoffman, 1992).

Ethnic Involvement and Social Capital Theory

The Social Capital Theory (Adler & Kwon, 2002) literature argues that the benefits, derived from belonging to a particular ethnic group and the use of the associated networks, greatly enhance the start-up and continuing business success of an ethnic business (for example, Aldrich & Zimmer, 1986; Bonacich, Light & Wong, 1977; Boubakri, 1990; Deakins, Majmudar & Paddison, 1997; Dhaliwal, 1998; Dyer & Ross, 2000; Iyer & Shapiro, 1999; Light, 1984; Peterson & Roquebert, 1993; Ram, 1994; Teixeira, 1998; Waldinger, 1988). According to Social Capital Theory, the advantages, often termed “social capital”, include the use of co-ethnic employees, co-ethnic markets, co-ethnic suppliers, community sources of capital, advice and information, as well as membership in ethnic community organizations. Social capital (Portes, 1998; Woolcock, 1998) contributes to human capital (Coleman, 1998), which according to Becker (1993) includes education, experience and the influence of the family and usually includes age (Gimeno et al., 1997). Financial capital (income level and wealth) can also be increased by the use of social capital (Portes, 1998).

It is commonly acknowledged that high involvement in an ethnic community is both “developmental and destructive” (Woolcock, 1998, 186). For example, co-ethnic labor can be viewed as training would-be competitors (Lee, 1999). Catering to co-ethnic markets, in some instances, can increase the likelihood of business failure (Bates 1994a,b; Phizacklea & Ram, 1996; Shin & Han 1990; Torres, 1988; Walton-Roberts et al., 1997), sometimes due to market saturation (Lee, 1999), and fierce competition amongst ethnic entrepreneurs chasing the same market (Iyer & Shapiro, 1999; Lee, 1999; Marger, 1990; Ram, Abbas, Sanghera & Hillin, 2000; Razin & Light, 1998).

The degree of community involvement, according to Woolcock (1998), Portes and Sensenbrenner (1993), and Portes (1998) varies according to ethnic group. For example, if there is greater societal prejudice against a particular ethnic group and discrimination regarding rewards and opportunities, then there will be a greater need for members of the ethnic group to remain more involved with their ethnic community in a variety of ways. This embeddedness (Granovetter, 1985; Li, 1997), according to Woolcock, (1998) includes social, economic, cultural, and political aspects. The literature reports some instances of ethnic entrepreneurs not closely involved with
their ethnic group. For example, Bates (1994) reports that Asian business owners rely less on co-ethnic employees and customers but Vietnamese owners rely more on their co-ethnic group. This finding was supported regarding Asians (Hindu, Sikh, Muslim) in Northern Ireland (Birley & Ghaie, 1992). However, high-density networks, considered vital to business success, have been reported in many studies, across virtually all ethnic groups. Far fewer studies report restricted use of ethnically derived social capital, and low-density networks, where the ethnic network is not considered vital to business success (e.g. Boyd, 1990, Pessar, 1995). (For a review of the use of social capital and various ethnic groups, see Menzies, Brenner and Filion, 2003.) Often the lack of network use is reported as a feature of entrepreneurs who are refugees with smaller networks and less opportunity to utilize social capital features (Gold, 1988, 1992).

Chaganti and Greene (2002) examined the background characteristics, business linkages, values, business goals and business strategies of ethnic business owner-managers with high and low community involvement. Their findings did not support the proposition that high and low involvement entrepreneurs had different cultural values, or varied according to the importance of business goals or had different business strategies, or goal satisfaction. However, statistically significant differences were found for some personal resources and business characteristics as well as for some measures of business performance.

**Personal Attributes and Business Outcomes: Human Capital Theory**

The extant ethnic-related literature reports a wide range, as would be expected, across human capital variables. Studies with an ethnic focus report that higher educational qualifications enhance both the likelihood of being an entrepreneur (Bates & Dunham, 1993; Boyd, 1990; Hisrich & Brush, 1986; Marger, 1989; Pessar, 1995), and also the chances for greater success (Basu, 1998; Bates, 1994; Birley & Ghaie, 1992). Although some studies report that more education leads to a lower chance of becoming self-employed (e.g. Evans, 1989; Mesch & Czamanski, 1997). Greater business experience has also been found to lead to self-employment (Evans, 1989) and to enhance business success (Basu, 1998). Chaganti and Greene (2002) found that some personal characteristics (e.g. education, industry experience, foreign work experience) were significantly lower for ethnic entrepreneurs who were highly involved in their ethnic community.

In general, businesses owned and operated by ethnic entrepreneurs are reported in the literature as smaller and less successful than mainstream businesses (Butler & Greene, 1997). A variety of reasons are proposed, including a lack of social capital, financial capital, human capital, discrimination, prejudice, language problems, and limited markets if remaining within the co-ethnic market (Bates 1994a,b; Phizacklea & Ram, 1996; Shin & Han 1990; Torres, 1988; Walton-Roberts et al., 1997). Class resources (capital for start-up, education, previous experience and parent’s occupation) have been found to be more important in business success than ethnic involvement (Marger, 1989) and more successful business owners have been found to make less use of social capital (Shin & Han, 1990). Bates & Dunhame (1993), for example, report that business success is inversely correlated with the use of social capital resources among Asian immigrant subgroups in the US. Overall, however, regarding business performance variables, the existing literature is sparse (Iyer & Shapiro, 1999; Chaganti & Greene, 2002). In the study by Chaganti and Greene (2002) it was found that highly involved ethnic entrepreneurs had firms started more recently, and that they were more likely to be sole proprietors in service sector businesses than less involved ethnic entrepreneurs. These authors had hypothesized that entrepreneurs who were more highly involved in their ethnic community would show weaker business performance. There was, however, no clear finding regarding performance. The least involved owners had larger businesses when measured by number of employees, while the more
involved showed a higher return on sales. Regarding satisfaction, Chaganti and Greene (2002) found no significant difference between level of involvement and degree of personal satisfaction.

We will now present the rationale for studying the level of ethnic involvement. We present detailed information on the development of an Index of Ethnic Involvement. The results section includes the analysis and testing of this Index, which is in its early stages.

**RATIONALE AND OBJECTIVES**

**Rationale**

In this paper we investigate the ethnic involvement (EI) construct (Chaganti & Greene, 2002). We examine, with a large sample of Canadian ethnic entrepreneurs, research questions that will advance our knowledge of how personal and business characteristics are related to level of EI. In our study, we conceptualize the degree of ethnic community involvement in a wider (yet complementary) context than Chaganti & Greene (2002) who utilized only personal ethnic involvement to separate their sample into two groups representing high and low ethnic involvement. Our measure utilized personal characteristics, and a self-identification measure of ethnic identity, but also business characteristics that have been shown in the literature to be associated with social capital theory in relation to ethnic entrepreneurs. Thus, we view the business operated by the entrepreneur as an integral part of the social context of the entrepreneur (Aldrich & Waldinger, 1990). Our large sample size which includes a considerable number of female entrepreneurs, allows us to examine EI relating to gender. Moreover, our study will be particularly relevant for policy makers as we also analyze the effect of EI and immigrant status.

The importance of this research is that it allows us to conceptualize the term “ethnic entrepreneur” in a context that facilitates the examination of policy and practice issues across a wide range of ethnic groups. Traditionally, ethnicity refers to ‘self-identification with a particular ethnic group, or a label applied by outsiders’ (Aldrich and Waldinger, 1990, 131) and ethnic “social structures” as ‘networks of kinship and friendship around which ethnic communities are arranged, and the interlacing of these networks with positions in the economy (jobs), in space (housing), and in society (institutions).’ (p. 127). Using a measure of ethnic community involvement does not replace the study of different ethnic groups, however, it enhances our ability to view “ethnicity” through a complementary lens.

**Objectives**

We aim in this paper to develop an Index of Ethnic Community Involvement. Following this we investigate which personal variables are related to the Index. We attempt to form a model to predict EI from the personal variables? Furthermore, we investigate which business characteristics of ethnic minority entrepreneurs are related to the index.

**LIMITATIONS OF THE STUDY**

The authors developed a theoretical framework for the longitudinal study of five ethnic groups, based on human capital theory, social capital theory and financial capital theory. We did not specifically design our survey to facilitate the development of an index of ethnic community involvement and ethnic identity. However, development and utilization of this preliminary EI Index is intended as a starting point for future investigation.
METHOD

Sample
The participants in this study are Chinese, Italian, Jewish, Sikh and Vietnamese ethnic entrepreneurs (owner-managers). We take a broader classification of ethnicity than Chaganti & Greene (2002) and include both visible minorities (Chinese, Sikh and Vietnamese) and non-visible minorities (Jewish and Italian) within our sample. We selected the immigrant groups according to the size of the ethnic group that was present in the three major cities in Canada, to make it possible to do comparisons by city (Toronto, Montreal, Vancouver), for a related research project. We ignored the dominant population of whites of British or French descent and focused on other major ethnic groups. Although Toronto and Montreal have large populations of most of the ethnic groups present in Canada, accommodating the ethnic population levels in Vancouver proved a severe restraint on ethnic group selection and this largely explains our choice of ethnic groups.

Participants were interviewed by a member of their own ethnic group who spoke the relevant dialects and languages (We hired, and carefully trained, ethnic-specific graduate students in each city to conduct the interviews.). Thus many interviews were conducted in a language other than English or French. We used a convenience sample of ethnic business owner-managers, starting with the personal contacts of the graduate interviewers and those supplied by members of ethnic business organizations and the personal contacts of the authors in this study. We augmented this with a Snowball Technique for identifying additional participants. Interviews included closed, semi and open-ended questions (for a copy of the questionnaire, please contact one of the authors). Interviews took from one to two hours to complete. Although a convenience sample, we attempted to identify profitable businesses and business owners who would represent their ethnic group well in terms of business success.

Index of Ethnic Involvement: Development
Questions on our survey measuring both personal and business characteristics were selected for possible inclusion in an index of ethnic involvement. A decision was made to include only dichotomous variables in the index since some were dichotomous from the beginning and we wanted all variables to contribute equally to the composite. Some variables had to be recoded prior to inclusion as described below. The variables and distributions of responses are shown in Table 1.

Personal variables
There were four personal variables initially included. Language spoken in the home was originally coded English, French or Other. The responses of those who indicated ‘Other’ were examined and a new variable LANGHOME created which was coded 1 if the language of ethnicity was spoken in the home and 0 otherwise. Residence in a neighbourhood where the ethnic group is dominant was already dichotomous and RESIDENCE was coded 1 for those who responded positively. Self-identification was developed from the following question: “How would you describe yourself (e.g. Canadian, Quebecer, Chinese-Canadian, Italian-Canadian, etc.)?” Responses which identified only the ethnic group to which they belonged or that ethnic group in combination with another or others were coded 1 in the variable SELF-ID. For example a response of ‘Vietnamese’ or ‘Vietnamese-Quebecer’ or ‘Vietnamese-Chinese-Canadian’ would all have been coded 1 from a respondent of Vietnamese origin. Lastly membership in a social club (SOCIAL) with membership predominantly from that ethnicity was coded 1 if the response was positive.

Business Variables
Nine variables were initially examined for inclusion in the index. The language most used at work (LANGWORK) was coded in the same way as LANGHOME. Again
location of the business in an ethnic area (LOCATION) was already dichotomous. A question was asked about sources of initial funding for the business; one possible response was from members of the ethnic community. This variable (FUNDS) was coded 1 if the respondent indicated that any funds were derived from that source. Another question considered current financing (FINANCE) and was coded in the same fashion. From the questions concerning the number of full and part-time employees who were members of the ethnic group, the percentage of employees who were ethnic was calculated. Part-time workers were weighted .5 in this calculation. The resulting dichotomous variable EMPLOYEES was coded 1 if 50% or more of the employees were members of the ethnic group. The variable SALES was coded 1 if 40% or more of the enterprise’s sales were to members of the ethnic group. (40% was chosen to fit the distribution). The variable CANPURCHASE was coded 1 if 40% or more of the purchases were from members of the ethnic group currently in Canada. The variable ORIGPURCHASE was coded 1 if 40% or more of the purchases were made in the country of origin. Lastly there were two dichotomous variables: BUSGROUP and PROFGROUP which were responses to questions concerning belonging to business and professional associations with membership from the ethnic group.

Table 1. Dichotomous ethnic indicators: Distribution

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percentage of valid cases identifying as ethnic</th>
<th>Percentage missing</th>
<th>Valid N</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANGHOME</td>
<td>54</td>
<td>1</td>
<td>688</td>
</tr>
<tr>
<td>RESIDENCE</td>
<td>40</td>
<td>2</td>
<td>685</td>
</tr>
<tr>
<td>SELF-ID</td>
<td>76</td>
<td>0</td>
<td>698</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>21</td>
<td>3</td>
<td>679</td>
</tr>
<tr>
<td>LANGWORK</td>
<td>80</td>
<td>2</td>
<td>687</td>
</tr>
<tr>
<td>LOCATION</td>
<td>47</td>
<td>3</td>
<td>680</td>
</tr>
<tr>
<td>FUNDS</td>
<td>7</td>
<td>28</td>
<td>505</td>
</tr>
<tr>
<td>FINANCE</td>
<td>2</td>
<td>8</td>
<td>643</td>
</tr>
<tr>
<td>EMPLOYEES</td>
<td>63</td>
<td>0</td>
<td>696</td>
</tr>
<tr>
<td>SALES</td>
<td>43</td>
<td>1</td>
<td>689</td>
</tr>
<tr>
<td>CANPURCHASE</td>
<td>26</td>
<td>8</td>
<td>643</td>
</tr>
<tr>
<td>ORIGPURCHASE</td>
<td>13</td>
<td>7</td>
<td>650</td>
</tr>
<tr>
<td>BUSGROUP</td>
<td>10</td>
<td>3</td>
<td>679</td>
</tr>
<tr>
<td>PROFGROUP</td>
<td>6</td>
<td>3</td>
<td>679</td>
</tr>
</tbody>
</table>

Finalizing the Index

Two variables were dropped immediately, FUNDS because of the large percentage of missing data and FINANCE because of the low level of endorsement. A Cronbach’s alpha coefficient was computed for the remaining variables, with disappointing results. To further explore the relationships among the indicators, an exploratory factor analysis was conducted using the Principal Axis method followed by an oblique rotation. A two-factor solution was extracted. The strongest factor seemed to be our objective: a diverse measure of ethnicity. The second, much
weaker factor consisted of the three variables concerning membership in ethnic business and social clubs. The variable ORIGPURCHASE loaded on neither factor, and the loading of location of the home in an ethnic area loaded weakly on the first factor. Both factors together explained 22% of the variance. The three variables involving clubs seemed tangential to our purpose and were dropped from further consideration.

Guided by the factor analysis results, a second alpha coefficient was computed using all the variables loading strongly on factor one and a satisfactory alpha of .69 was obtained. Accordingly, the following variables were retained in the index: LANGHOME, SELF-ID, LANGWORK, LOCATION, EMPLOYEES, SALES, and CANPURCHASE which thus had a range from 0 to 7. As can be seen in Figure 1, the index, subsequently referred to as EI, had an approximately normal distribution. The sample mean was 3.29, the median 3.00 and the standard deviation 1.92. There were 634 valid cases; we were not able to compute the index for 9% of the sample due to missing data. Relationships of EI with other personal and business variables are discussed in the Results section below.

**Figure 1. Histogram of the Index of Ethnic Involvement**

![Histogram of the Index of Ethnic Involvement](image)

**Analysis**
We used t-tests or one-way ANOVA to explore relationships of EI with categorical variables and correlation for relationships with continuous variables. Summary analysis was carried out using multiple regression, in order to identify the most important and independent predictors of EI among the personal characteristics. Relatively few of the business characteristics were related to EI, and so a summary model was not developed. Because of missing data, totals differ among analyses. An alpha level of .05 was used in all analyses and SPSS version 11.0 was used in all statistical calculations.
RESULTS

Our sample includes a total of 698 ethnic business owners. Excluding the 9 non-responses, 75% were male and 25% female. The average age (N=658) was 44.7. Of the group, 76% (N=686) had been born outside Canada.

Personal Attributes and Ethnic Involvement

A significant difference was found between men and women on scores on the index ($t(632)=2.36, p<.05$). As shown in Table 2, women scored higher than men. The correlation with age was not significant.

Table 2. Index of Ethnic Involvement: Means

<table>
<thead>
<tr>
<th>Grouping Variable</th>
<th>Subgroups</th>
<th>$M$</th>
<th>$SD$</th>
<th>$N$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender *</td>
<td>Male</td>
<td>3.19</td>
<td>1.90</td>
<td>478</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.61</td>
<td>1.95</td>
<td>156</td>
</tr>
<tr>
<td>Education</td>
<td>Up to secondary</td>
<td>3.55</td>
<td>1.93</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>College/university</td>
<td>3.36</td>
<td>1.92</td>
<td>269</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>2.54</td>
<td>1.73</td>
<td>112</td>
</tr>
<tr>
<td>Birthplace ***</td>
<td>In Canada</td>
<td>2.01</td>
<td>1.48</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>Outside Canada</td>
<td>3.69</td>
<td>1.87</td>
<td>484</td>
</tr>
<tr>
<td>Family Business***</td>
<td>No</td>
<td>3.56</td>
<td>1.86</td>
<td>460</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2.59</td>
<td>1.89</td>
<td>174</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

Education completed by respondents was categorized in 3 levels: up to secondary, college or university, and post-graduate. A oneway ANOVA showed significance ($F(2,582)=10.91, p<.001$). Polynomial contrasts were carried out and both the linear ($F(1,582)=20.67, p<.001$) and quadratic ($F(1,582)=3.88, p<.05$) trends were significant. EI declines with increasing education, with the drop becoming sharper between college/university and postgraduate. Means are in Table 2.

Years of work experience prior to coming to Canada and since coming to Canada were correlated to EI. Only the work experience before coming to Canada (i.e. abroad), was significant, ($t(611)= .18, p<.001$). The correlation of work experience after coming to Canada was not significant. In a related way, it was found that place of birth had a significant effect on EI ($t(303)=11.28, p<.001$). Table 2 shows that birth in Canada is associated with lower EI while immigrants had higher EI.

A t-test was performed to test whether the possession of a business by the family of origin had an effect on EI and it was found that it did ($t(632)=5.88, p<.001$). Table 2 shows that those whose family owned a business scored about a point lower on the index indicating lower involvement.

Because so many of the respondent personal variables were significant, a multiple regression was conducted to investigate which were predictors independent of the others. Variables entered were: gender, age, education, years of work experience before coming to Canada, years of work experience in Canada, ownership of a business in the family of origin, and immigrant status; 538 cases were involved in the analysis. Contrast coded variables were created for education. The first contrast compared those with education up to high school complete with those with post-graduate degrees while the second compared those with college and/or university with the post-grads. The resulting model was significant ($F(8,529)=18.09, p<.001$) and explained 22% of the variance in
EI. Table 3 shows detailed results from the regression and Table 4 the correlations of the variables entered. We can see that years of work experience outside Canada and immigrant status are strong positive predictors of EI; whereas, age, graduate education, and ownership of a business in the family of origin are strong negative predictors. It is noteworthy that the partial test for age is now quite significant while the bivariate correlation was not. Step by step results not reported here showed that this seeming anomaly occurs when years of work experience is added to the regression equation. Since the two variables are correlated, the effect on EI of age with work experience is significant.

Table 3

Predicting Ethnic Involvement from personal attributes: A Regression Model

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Gender</td>
<td>.25</td>
<td>.17</td>
</tr>
<tr>
<td>Age</td>
<td>-.03</td>
<td>.01</td>
</tr>
<tr>
<td>Education contrast 1</td>
<td>-.41</td>
<td>.11</td>
</tr>
<tr>
<td>Education contrast 2</td>
<td>-.18</td>
<td>.10</td>
</tr>
<tr>
<td>Years work experience in Canada</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Years work experience before arrival</td>
<td>.04</td>
<td>.01</td>
</tr>
<tr>
<td>Family of origin owned at least one business</td>
<td>-.42</td>
<td>.18</td>
</tr>
<tr>
<td>Born outside Canada</td>
<td>1.45</td>
<td>.19</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001
Note: R²=.22 N=538, p < .001).

Business Characteristics and Ethnic Involvement

The age of the businesses operated by respondents was calculated and it was found that the correlation with the EI was -.22, N=674, p<.001. So the longer established business owners had a tendency to have lower EI.
Table 4

Zero-Order Correlations of variables used in the multiple regression model

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EI</td>
<td>--</td>
<td></td>
<td></td>
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<tr>
<td>2. Gender</td>
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<tr>
<td>3. Age</td>
<td>-.06</td>
<td>-.07</td>
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<td>4. Education contrast 1</td>
<td>.19</td>
<td>-.01</td>
<td>.04</td>
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<td>5. Education contrast 2</td>
<td>.13</td>
<td>.07</td>
<td>-.14</td>
<td>.26</td>
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<td>6. Work exp. in Canada</td>
<td>-.07</td>
<td>.03</td>
<td>.16</td>
<td>.04</td>
<td>.00</td>
<td>--</td>
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<tr>
<td>7. Work exp. abroad</td>
<td>.20</td>
<td>.05</td>
<td>.24</td>
<td>-.06</td>
<td>-.01</td>
<td>-.24</td>
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<td>8. Family business</td>
<td>-.22</td>
<td>.02</td>
<td>-.06</td>
<td>-.07</td>
<td>.01</td>
<td>.00</td>
<td>-.20</td>
<td>--</td>
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<tr>
<td>9. Immigrant status</td>
<td>.37</td>
<td>.02</td>
<td>.18</td>
<td>.08</td>
<td>-.03</td>
<td>-.06</td>
<td>.27</td>
<td>-.30</td>
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</tbody>
</table>

Note: N=538. Correlations greater than .07 are significant at <.05 using a one-tailed test.

Respondents were asked to classify the main type of activity of their business. Responses were categorized into three broad areas: Services (including service, transportation, real estate, restaurant, financial, education, IT), Manufacturing (including manufacturing, construction) and Retail (including wholesale). A one-way ANOVA showed significance ($F(2,629)=11.03, p<.001$). Table 5 shows that respondents in manufacturing had considerably lower EI than the other two areas, which was confirmed by Dunnett C post hoc testing.

Respondents were asked whether they had bought, created, or inherited the business but mode of acquisition was found to be unrelated to level of EI. Also unrelated was whether the business was a sole ownership or a partnership. A significant difference was found between entrepreneurs depending on their response to the satisfaction question: Is Canada a good country for you to be an entrepreneur in?. Respondents who answered negatively could be classified as having a significantly higher level of EI than those who answered this question with a Yes. Thus ethnic minority entrepreneurs with lower levels of EI appear to be more satisfied with doing business in Canada.
Table 5. Ethnic Involvement Means on Business Characteristics and Outcomes

<table>
<thead>
<tr>
<th>Grouping Variable</th>
<th>Subgroups</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Type</td>
<td>Service</td>
<td>3.27</td>
<td>1.92</td>
<td>348</td>
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<td></td>
<td>Manufacturing</td>
<td>2.22</td>
<td>1.57</td>
<td>51</td>
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<tr>
<td></td>
<td>Retail</td>
<td>3.58</td>
<td>1.91</td>
<td>233</td>
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<tr>
<td>Canada good for</td>
<td>No</td>
<td>3.82</td>
<td>2.01</td>
<td>135</td>
</tr>
<tr>
<td>entrepreneurs?</td>
<td>Yes</td>
<td>3.02</td>
<td>1.82</td>
<td>385</td>
</tr>
<tr>
<td></td>
<td>Not Sure</td>
<td>3.71</td>
<td>1.95</td>
<td>101</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01, ***p<.001

CONCLUSION
In this paper we have discussed the various theoretical perspectives that have been utilized in the study of ethnic minority entrepreneurs, most of which have largely been found wanting by scholars in this field. We have focused on social capital and human capital theory. Based on these theoretical constructs we have developed an Index of Ethnic Involvement which is based on a partial replication of the work of Chaganti and Greene (2002). The Index we developed has face validity and is reliable (Cronbach’s .69). Our preliminary results show that EI is best captured as a construct measured by a range of personal (language spoken in the home, self-identification) and business characteristics (language at work, business location, co-ethnic employees, co-ethnic markets and suppliers). Our Index is based on seven variables and strongly utilizes Social Capital Theory (e.g. co-ethnic employees, co-ethnic markets, suppliers). Our preliminary findings show that EI is related to gender, education, years of work experience prior to immigration, immigrant status and parents owning a business. The following factors were related to higher levels of EI: being a woman, having fewer years of formal education, being an immigrant, working for fewer years abroad prior to immigration, and not having parents who owned a business. Conversely, being male, having completed more years of formal education, being a non immigrant, working for fewer years abroad prior to immigration, and having a parent(s) who had owned their own business, were related to lower levels of EI.

The model we pursued to predict EI from the personal variables, showed that only one personal variable was a strong predictor of EI, namely, years of work experience abroad, prior to immigration. However, we found several personal variables that were strong negative predictors of EI, these included: age, graduate education, and parents having owned a business. When investigating the business characteristics, we found that EI was related to business age with the business owners with older businesses scoring lower on the EI Index. Lower EI was also found for owners of businesses in the manufacturing and construction sectors. Other business characteristics were unrelated (form of ownership e.g. sole proprietor, partnership; method of business acquisition of the business). We also found that entrepreneurs who were positive about being a business owner in Canada were those with lower EI, while those that were negative had significantly higher levels of EI.

Future Research and Implications
Further investigation using the EI Index will include developing regression models to predict business outcomes and also to ascertain if EI explains variance independent of the usual predictors. The IEI allows EI to be measured across ethnic groups but also to measure EI across minority versus majority ethnic groups and for separate ethnic groups. More detailed knowledge across and within ethnic groups will assist us to understand more about ethnic business owners.
and their businesses. This will allow for greater assistance, training and facilitation on the part of educators, service providers and governments to enhance the establishment rates, growth and success strategies of ethnic business owners. Depending on the level of EI, there may be different programs, services, and policies that can be provided. Although in the early stages of development, the Index of Ethnic Community Involvement holds promise as a useful research tool.

REFERENCES


