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The Effects of Ethnic Capital and Family Background on School Performance: A Case Study of Chinese-Canadian Adolescents in Calgary

Introduction

The vitality of educational values and work orientation as an aspect of Chinese culture is widely recognized. As noted by Stevenson and Lee (1996), the motivation for academic achievement in Chinese societies is multiply determined, including the recognition that education is a crucial channel of upward social and economic mobility and the assumption that education offers an avenue through which one may advance as a moral person. As school performance is generally regarded as an early indicator of success for immigrant students and serves as a preparation for the future in a career, educational researchers and practitioners have long been interested in understanding the link between students' family background and academic performance (Astone & McLanahan, 1991; Chow, 2000; Linnehan, 2001; Valenzuela & Dornbusch, 1994).

Family background, according to Coleman (1988), is analytically separable into at least three distinct components: financial capital, human capital, and social capital. Physical resources that aid achievement, commonly measured by the family's wealth or income, are considered to be financial capital. Human capital, which constitutes the potential for a cognitive environment that is conducive to children's learning, is usually measured by parents' education. Social capital is the least tangible as it exists only in the relationships among persons and is defined by its function.

The study of ethnic minority students must also take ethnic capital into consideration; this can be broadly construed as an individual's degree of ethnic connectedness and internalization of ethnic cultural values that provides the impetus for achieving academic excellence. Noticeably, the educational success among Asian students in the United States has led to their being labeled "model minority"¹ (Kao, 1995; Wong, Lai, Nagasawa, & Lin, 1998; Ying et al., 2001). It has been contended that various characteristics of Asian culture such as docility, industriousness, respect for authority, and emphasis on learning are highly compatible with those required for academic success (Peng & Wright, 1994).

There is no shortage of studies documenting the extraordinary educational attainment of the Asian population, including the Chinese, in the US (Asakawa & Csikszentmihalyi, 2000; Caplan, Choy, & Whitmore, 1992; Chen & Steven-

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son, 1995; Mizokakawa & Ryckman, 1990; Sanchirico, 1991; Stevenson et al., 1985). In view of the paucity of research on the school performance of minorities in Canada and the continual influx of Chinese immigrants to this country,² this analysis fills a gap in the literature by exploring the major factors associated with school performance among Chinese-Canadian adolescents.

Methodology

Data for this research were gathered as part of a larger investigation into ethnic identity maintenance and heritage language learning among Chinese-Canadian adolescents (Chow, 2004). A questionnaire was administered to a total of 515 students attending three Chinese-language schools in Calgary during the academic years 1999-2000 and 2000-2001. The sample comprised 255 male (50%) and 255 female (50%) students with a mean age of 14.24 years ($SD=1.92$). Almost two thirds ($n=323$, 63.7%) were born in Canada and about one third ($n=164$, 32.3%) were born in Hong Kong. The average length of residence in Canada was 11.96 years ($SD=4.06$). An overwhelming majority of the students were Canadian citizens ($n=470$, 93.8%).

Major Findings

School performance in regular school was measured by students' self-reported average mark obtained in the previous school term. Slightly over two thirds of the respondents (67.2%, $n=346$) reported an average of 80-100%. Nearly a quarter (24.7%, $n=127$) received an average of 70-79%. Few students obtained 50-69% (6.7%, $n=34$) or a failing grade ($n=2$, 0.4%). In order to disentangle the determinants of school performance, an ordinary least-squares (OLS) regression model was constructed. A total of 10 predictor variables³ including sex, age, religion, socioeconomic status, country of birth, father's education, parental assistance with homework, ethnic self-identification,⁴ ethnic language proficiency, and ethnic capital were used. The overall OLS regression model as presented in Table 1 was significant ($F=12.56$, $p<0.001$) and accounted for 24% of the variance in academic performance. Sex ($\beta=-.161$, $p<.001$), age ($\beta=-.149$, $p<.001$), country of birth ($\beta=.094$, $p<.05$), religious affiliation ($\beta=.09$, $p<.05$), Chinese language proficiency ($\beta=.106$, $p<.05$), ethnic self-identification ($\beta=.09$, $p<.05$), and ethnic capital ($\beta=.157$, $p<.001$) were found to be significantly related to academic performance. Specifically, students who were female, younger, Christian, born in Canada or the US, and those who identified themselves as Chinese demonstrated a higher level of Chinese-language proficiency, scored higher on the ethnic capital scale performed better academically.

Discussion and Conclusion

This analysis reveals that four sociodemographic variables contributed to the explanation of school performance. In terms of sex, the results of this study in general support research findings that girls significantly outperform boys (Griffin, 2001; Lao, 1980; Lopez, Ehly, & Garcia-Vazquez, 2002; Melkonian, 1997). Younger students' higher academic performance may be linked to their closer parental supervision. Earlier studies have shown that Asian parents had a significant influence and placed considerable pressure on their children to achieve academically (Cheng & Starks, 2002; Crystal et al., 1994; Dandy & Nettelbeck, 2002; Goyette & Xie, 1999; Wong, 1990; Youn, 1993). Consistent

Table 1
Unstandardized and Standardized Regression Coefficients for Effects of
Sociodemographic and Background Variables on School Performance

	<i>b</i>	β
01. Sex	-.221	-.161***
02. Age	-.054	-.149***
03. Country of birth	.134	.094*
04. Religion	.127	.090*
05. Father's education	.083	.057
06. Socioeconomic status	.017	.016
07. Parental assistance with homework	-.040	-.075
08. Chinese language proficiency	.021	.106*
09. Ethnic self-identification	.112	.090*
10. Ethnic capital	.047	.157***
(Constant)		4.26
<i>F</i>		7.303***
<i>R</i> ²		.127
Adjusted <i>R</i> ²		.109
<i>N</i>		504

* $p < .05$; ** $p < .01$; *** $p < .001$.

with the literature on religion and educational outcomes, a strong relationship was found between students' religious affiliation and academic performance (Dijkstra & Peschar, 1996; Regnerus, 2000). To a certain extent, country of birth is indicative of students' official language proficiency. As language is a tool of learning, it is unsurprising that students who were born in Canada or the US performed better academically. This seems to be in line with the literature on language-minority students and academic performance (Rumberger & Larson, 1998).

In addition, Chinese language proficiency, ethnic self-identification, and ethnic capital also exhibited a strong positive effect on school performance. As regards ethnic language proficiency, it is without doubt that in order to participate fully in the economic, political, educational, and social domains of Canadian society, minority students must strive to attain a high level of English proficiency. This study, nevertheless, provides evidence that minority students' literacy in their ethnic language can equally contribute to their academic achievement,⁵ which supports the view that advanced bilingualism promotes academic excellence (Bankston & Zhou, 1995; Lindholm & Aclan, 1991). Concerning ethnic self-identification and ethnic capital, the strong ethnic self-identification and possession of more ethnic capital are indicative of their higher degree of internalization of Chinese cultural values. In fact the traditional Asian family values and practices such as the importance of hard work, respect for education, and high expectations for achievements have been identified as promoting high educational attainments (Chea, 2003; Sue & Okazaki, 1990). The close connection between ethnic socialization and ethnic identity (Demo & Hughes, 1990) and the association between ethnic socialization and

academic achievement (Bowman & Howard, 1985; Verkuyten, Thijs, & Canatan, 2001) have been well documented.

In summary, this study has shed light on the determinants of school performance among Chinese-Canadian adolescents. The findings highlight the importance of ethnic capital and individual characteristics for academic achievement. It is peculiar to note that ethnic capital emerges as the strongest predictor. How respondents' ethnic self-identification and possession of ethnic capital have been shaped by the complex nature of ethnic socialization is an issue that deserves additional research attention. As well, the extent to which religious affiliation affects educational outcome also demands further inquiry. In the light of the growing ethnic diversity in the Canadian school system, it is worthwhile to conduct comparative studies to explore the experiences of other minority students.

Notes

1. It should be noted that studies have demonstrated that educational success does not necessarily imply effective functioning in life. That is, although model minority students may excel academically, many possess limited social skills and ability to meet life's challenges outside the classroom (Ying et al., 2001). As well, the various academic and psychological costs associated with academic excellence such as studying longer hours, taking fewer courses, enduring feeling of loneliness and isolation, restricting one's career, and forgoing a social life have also been identified (Sue & Zane, 1985).
2. According to the 2001 Census of Canada, Chinese was the largest visible minority group. A total of 1,029,400 individuals identified themselves as Chinese, up from 860,100 in 1996. In fact Chinese comprised the largest proportion of the visible minority population in British Columbia (44%), Alberta (30%), and Saskatchewan (29%). Ontario had the highest number of Chinese (481,500), but they comprised the second highest proportion (22%) of the visible minorities in that province (Statistics Canada, 2003).
3. Sex (1=male; 0=female) and religion (1=Christian; 0=other) were dummy coded. Father's education as an indicator of human capital was a dichotomous variable (1=postsecondary; 0=other). Age was measured in years. Parental assistance with homework as a measure of social capital was assessed on a 5-point scale (1=never to 5=frequently). Socioeconomic status as a measure of financial capital was also assessed on a 5-point scale (1=low to 5=high). Self-ethnic identification was measured on a 3-point scale (1=Chinese; 2=Chinese-Canadian; 3=Canadian). Ethnic capital was a composite score based on respondents' degree of agreement with three items on a 5-point scale (1=strongly disagree to 5=strongly agree): (a) I have a lot of pride in my ethnic group and its accomplishment ($M=3.99$, $SD=.92$); (b) I participate in cultural practices of my own group, such as Chinese food, music, or customs ($M=4.03$, $SD=.99$); and (c) People in Canada should take advantage of the multicultural policy and learn about their own culture and language ($M=3.92$, $SD=.98$). The 3-item scale has an alpha reliability coefficient of .846.
4. A distinction should be made between ethnic identity and ethnic self-identification. Ethnic identity refers to the sharing of a cultural heritage, a sense of social relatedness, and symbolic cultural ties by members of a racial or ethnic group (Sodowsky, Kwan, & Pannu, 1995). On the other hand, the variable "ethnic self-identification" used in this study simply refers to the ethnic label (e.g., Chinese, Chinese-Canadian, Canadian) that respondents prefer to use for self-description purposes.
5. Bankston and Zhou (1995) have aptly argued that literacy in an ethnic language connects students to a system of support that can provide both encouragement and direction that lead to accomplishment by promoting effort and attitudes that encourage effort. Plans for future education and the effort that results from these plans leads to present-day achievement that can make future education and consequently upward socioeconomic mobility a reality.

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