Choice and Circumstance: Social Capital and Planful Competence in the Attainments of Immigrant Youth*

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Abstract: Although research finds that foreign-born youth often enjoy greater educational attainments than domestic-born youth, we do not have a coherent theoretical explanation of why this happens. We operationalize individual and structural factors with measures of planful competence and social capital; both of these independently predict educational attainment, and measures of occupational attainment further indicate that these educational histories may have lifetime effects. Although the data do not provide blanket evidence for a positive effect of youthful immigration on educational attainment, bilingual foreign born students do enjoy a greater likelihood of university attendance than other students, while age at immigration is related to attachment to school and planful competence, which are key variables in understanding educational and occupational attainment. This paper suggests these students do well because they can draw on the resources of both ethnic and non-ethnic communities; these foreign-born youth may be well-positioned to make competent choices, leading to successful personal outcomes.

Résumé : Les recherches indiquent que les jeunes nés à l'étranger connaissent souvent de plus grandes réussites scolaires que ceux nés au pays, mais il n'existe pas d'explication théorique cohérente des causes du phénomène. Nous opérationnalisons les facteurs individuels et structurels avec une mesure de la compétence à planifier et du capital social; pris individuellement, ces deux éléments prédisent la réussite scolaire; qui plus est, une mesure de la réussite professionnelle semble indiquer une répercussion de cet actif scolaire tout au long de la vie. Bien que les données n'apportent pas la preuve généralisée d'un effet positif de l'immigration pendant la jeunesse sur la réussite scolaire, on constate deux choses : que les élèves bilingues nés à l'étranger sont plus susceptibles que les autres d'aller à l'université; et que l'âge au moment de l'immigration influe sur l'attachement à l'école et sur la compétence à planifier, deux variables clés quand il s'agit de comprendre la réussite scolaire et professionnelle. Le présent article suggère que, si les élèves en question réussissent, c'est parce qu'ils ont la possibilité d'exploiter les ressources de la collectivité générale et celles de la communauté ethnique; il se peut que ces jeunes nés à l'étranger soient ainsi bien placés pour faire des choix compétents, dont découlent des résultats personnels positifs.

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The study of educational attainment has been characterized by two modes of inquiry: the first tends to focus on structural determinants, while the second is a more individual-level examination of the factors differentiating successful students from their less successful counterparts. Much of the research in this area, however, has not integrated these two modes of inquiry, providing a limited perspective on an adolescent's journey through the educational system. This article seeks to integrate individual choices and structural determinants in assessing the educational attainment of immigrant youth, thereby recognizing the structures of opportunity in which educational decisions are made (Shanahan, Elder and Miech, 1997).

In focussing on agency and structure in determining educational attainment, this study examines the educational histories of immigrant youth in a Canadian suburb. These foreign-born youth are distinct from second generation, Canadian-born children of immigrants. Having immigrated to Canada before reaching adulthood, these youth lie in between "first" and "second generation" immigrants (Rumbaut, 1991; Zhou, 1997). However, despite increased evidence suggesting that immigrant-born youth in Canada and the US enjoy high levels of educational attainment (similar to, and often higher than, domestic-born youth), the separation of agency and structure in these analyses has limited the explanatory power of this research. The result is that we do not yet have a coherent theoretical explanation for the educational attainment of immigrant youth (c.f. Portes, 1997).

The Educational Attainment of Immigrant Youth

There has generally been a paucity of literature dealing with the educational attainment of immigrant children (Kao and Tienda, 1995; White and Glick, 2000; Zhou, 1997), leading Zhou (1997:64) to conclude that there is "a profound gap between the strategic importance of these children and the knowledge about their conditions." When seeking to study foreign-born youth, this difficulty is compounded, since the literature tends not to differentiate between foreign-born children and the domestic-born children of immigrants.[1]

Rumbaut, however, cautions against "lumping foreign-born and native-born children as a 'de facto' second generation," arguing that we ought to conceive of these foreign-born youth by relying on decimal generations — ranging from

1. Researchers interested in the effect of ethnicity on educational attainment have also noted the importance of ensuring that immigration status is not confused with ethnicity. As Geschwender and Guppy note in the Canadian context, studies must differentiate the achievements of foreign-born and domestic-born ethnics. Otherwise, the selective recruitment of immigrants may "mask inequalities in attainment if foreign-born ethnics have high attainments while native-born ethnics are less successful" (Geschwender and Guppy, 1995:69).

the "1.25 generation" for older youth, the "1.5 generation," and the "1.75 generation" for those children who immigrate at a very young age (Rumbaut, 1997:336). As Zhou (1997:65) explains, this in-between generation — foreign-born youth who immigrate prior to reaching adulthood — must straddle two worlds. With a growing research interest in this area, studies suggest that these foreign-born youth may enjoy similar or greater attainments than similarly situated domestic-born counterparts (Rumbaut, 1997; Zhou, 1997). However, these studies tend not to coherently explain why this may be the case.[2]

Evidence indicates that compared to domestic-born youth with a similar socioeconomic status and attending public school in the same neighbourhoods, immigrant youth do comparatively well in school (Zhou, 1997), are more likely to persevere in high school (White and Glick, 2000), and are most likely to enroll in post-secondary education and to attend college continuously for four years (Vernez and Abrahamse, 1996). Factors found to determine these educational attainments include ethnicity (Rumberger, 1995), parental education and socioeconomic status (Kao and Tienda, 1995; Vernez and Abrahamse, 1996:52; White and Glick, 2000), number of siblings (Vernez and Abrahamse: 52), the amount of time spent in the US (Vernez and Abrahamse: 51), the social context these students encounter (White and Glick, 2000:675–676), and parental expectations, involvement, supervision, support, and values (Kao and Tienda, 1995; Vernez and Abrahamse, 1996; White and Glick, 2000; Zhou, 1997:80).[3] Immigrant students may not only have more positive attitudes toward schooling and higher aspirations for college education than domestic-born students (Kao and Tienda, 1995:2–3), but are also more likely to "make choices consistent with eventual college going" (Vernez and Abrahamse, 1996:32), earning higher grades and math scores (Kao and Tienda, 1995; Rumbaut, 1995), and enjoying higher educational aspirations (Kao and Tienda, 1995), even after controlling for the effects of race, ethnicity, and parental socioeconomic status (Kao and Tienda, 1995:9).

Beyond this work on educational attainment, research on the adaptation of immigrant youth has mostly focussed on English-language acquisition, or on bilingualism as a determinant of educational outcomes (Kao and Tienda, 1995:2). Although Vernez and Abrahamse (1996:51) find that speaking English at home is not positively related to immigrant students' educational outcomes

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2. In the US, for instance, many studies that focus on the attainments of immigrant children are primarily ethnographic, and are thereby "rich in textured descriptions in specific school settings but do not permit generalizations to all immigrant youths either within a state or nationally" (Vernez and Abrahamse, 1996:3). See also Kao and Tienda, 1995:2. This does appear to be changing, as the literature review in this paper suggests.
3. Interestingly, students' motivation to work hard in school was negatively associated with college attendance among foreign-born students (Vernez and Abrahamse, 1996, table 6.4: 55).

(Vernez and Abrahamse: 51), there is extensive evidence that bilingualism has a positive effect on educational outcomes (White and Glick, 2000; Rumberger and Larson, 1998; Zhou, 1997; Stanton-Salazar and Dornbusch, 1995; Sung, 1987; Portes and Schauffler, 1994; Peal and Lambert, 1962; but see Mouw and Xie, 1999), regardless of immigration status, and that such bilingualism may buffer the effect of coming from a lower socioeconomic background (Rumberger and Larson, 1998). There is, however, no general consensus as to why this is so: the positive effect of bilingualism on educational achievement may be a result of enhanced cognitive development, enhanced social and cultural resources upon which the student can draw, or a transitional effect that enhances academic performance by allowing students to communicate effectively with their parents in their native language (Bankston and Zhou, 1995; Mouw and Xie, 1999; Zhou, 1997).

In the Canadian context, little data exist on the educational attainments of immigrant youth (Li, 1996). Although immigrant groups in Canada enjoy higher educational attainments than the national average (Hou and Balakrishnan, 1996:311) and immigrants of non US/UK origin enjoy "considerable upward mobility" (Richmond, 1986:87), these findings have not parcelled out the attainments of immigrant youth.[4] The specific research that does exist suggests that foreign-born students spend more time on education and related activities, expect to continue their education and attain graduate degrees in higher proportions than their Canadian-born counterparts, are less satisfied with their education than Canadian-born students (Anisef and Johnson, 1993: 27, table 12:123, table 20:131), and have higher grades in high school (Anisef, 1975).[5]

The factors that predict educational attainment in Canada appear to be the same for both domestic-born and immigrant-born youth, including parental education level, income and occupation (Richmond, 1986; Richmond and Kalbach, 1980), with higher educational attainments also being linked with higher occupational ambitions, parental encouragement, and number of siblings (Richmond, 1986:83–5). In and of itself, being foreign-born does not appear to have a significant association with the achievement of students in Canada (based on number of course credits earned and math and English grades) (Yau et al. 1993: 27).

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4. This is also the case for studies that focus on the educational attainment of the children of immigrants (eg. Do Nascimento and Lefebvre, 1999), and for those focussing on the role of ethnicity in educational attainment (Geschwender and Guppy, 1995; Herberg, 1990; Hebert, 1992; Shamai, 1992).
5. The findings in Anisef (1975) are for students who are either foreign-born or whose father is foreign-born. As a result, caution must be had in interpreting these results for the "one-and-a-half generation" that is the focus of this paper.

When isolating those Canadian students who are foreign-born, there does appear to be variation in educational achievement based on the student's country of origin and their age at immigration. Much of this research has been conducted by the Toronto Board of Education, which since the 1970s has produced periodic survey reports on the educational achievements of its students (see eg. Cheng et al., 1993 and Yau et al., 1993).[6] For instance, studies in Ontario and Quebec have found that Asian foreign born students experience higher attainments than Black foreign born students (Yau et al., 1993:27; Tchoryk-Pelletier, 1989).[7] The importance of country of origin is also noted when disaggregating the achievements of students within the same ethnic group, highlighting the importance of carefully disentangling immigration status and ethnicity. For example, the Toronto surveys find that Asians born in China and Korea have higher program placement, and that a higher percentage of African-born Black students are in Advanced Placement programs compared with Caribbean-born Blacks (Cheng et al., 1993). Age at immigration is similarly found to be an important determinant of educational attainment (Kalbach and Kalbach, 1995, 1985; Yau, 1993; Hou and Balakrishnan, 1996; Jones, 1987; Boyd, 1985; Inbar, 1977),[8] with Kalbach and Kalbach (1995:31) concluding that students who immigrate to Canada at a younger age may be more acculturated in Canadian society, and enjoying higher educational achievements as a result.

Finally, as in the US, Canadian research on the adaptation of immigrant youth often focusses on language acquisition. However, much of this work focusses on students whose mother tongue is neither English nor French (Canada's two official languages), rather than on immigrant youth specifically (Helly, 1997). Results that are available indicate that some cohorts of immigrant youth are more likely to be bilingual than Canadian-born youth (Samuel and Verma, 1992), but that those immigrant youth learning English as a second language demonstrate lower cognitive and academic test scores (Cummins, 1981, 1984)[9] that is remedied over time (Li, 1996).

This paper seeks to add to this growing literature on the educational attainment of immigrant-born youth. Although studies in the US and Canada

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6. These reports, however, mostly focus on ethnicity rather than immigrant status.
7. In Quebec, college students from France and East Asia enjoy greater educational achievements than Canadian-born youth, with those born in Haiti facing the most difficulties (Tchoryk-Pelletier, 1989).
8. Age at immigration may, in fact, serve as a proxy for whether the immigrant was educated within Canada or abroad, with those educated abroad (and thereby older at immigration) enjoying lower returns (Wanner, 1998).
9. This effect, though, may result from pedagogical choices rather than weaker abilities (Cummins, 1984).

demonstrate that these students often enjoy higher educational attainments than domestic-born youth, this paper seeks to contribute to the explanation of why this might be the case. In so doing, we begin with an introduction of recent work on social capital and educational attainment.

Social Capital and Educational Attainment

Social capital is conceived of as an intangible social resource, inhering in social relations, that individuals can draw upon to facilitate action and to achieve their ends (Coleman, 1990:302). As Portes (1998:6) explains, "social capital stands for the ability of actors to secure benefits by virtue of membership in social networks or other social structures." The link between status attainment and the availability of social capital resources on which to draw has proven to be one of the more robust findings of this research — as Nan Lin states, there is "consistent support to the proposition that social capital, in the form of social resources, makes a significant contribution to status attainment beyond personal resources" (1999:481). Although there has been an explosion of work on social capital in recent years, in this section we provide a brief review of research that has relied on social capital in the context of educational attainment.

In the educational context, researchers have drawn on the concept of social capital to understand the ways in which students benefit by membership in certain communities or networks which allow them to draw on positive role models, encouragement, support and advice (White and Glick, 2000; but see Portes, 2000). For immigrant communities, being able to draw on social capital may be particularly important (Portes, 1997; Stepick, 1996; Zhou and Bankston, 1994; Portes and Sensenbrenner, 1993), especially given the "cultural capital" deficit that these youth may face (Bourdieu and Passeron, [1964] 1979:8).[10]

That some ethnic communities have very high educational success, then, may be related to the extent and form of social capital that they can draw upon within their own networks (Stanton-Salazar and Dornbusch, 1995). Recent studies indicate that in spite of their lack of attachment to outside networks, immigrant families draw on social capital that stems from familial or ethnic networks (Portes, 1998; Zhou, 1997). In this vein, Portes and MacLeod (1996) hypothesize that ethnic groups that were well received in the US have been able to build stronger communities and networks, facilitating the development of social capital with subsequent positive effects for these children's outcomes.

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10. Kalmijn and Kraaykamp (1996) focus on "cultural capital," and find that it is associated with higher levels of schooling, controlling for background characteristics.

Such well-received immigrant groups are found to have superior academic outcomes regardless of SES, suggesting that "the internal character of the community plays a key role in encouraging students to achieve" (Portes and MacLeod, 1996:264). Stanton-Salazar and Dornbusch (1995) conclude that the Mexican-origin high school students with higher grades and status expectations in their sample generally had "greater social capital than their counterparts with lower grades and expectations" (p.130); these students are those with the most ties to institutional agents who could provide them with informational support (p.122). Similarly, White and Kaufman (1997) find that social capital is a significant predictor of high school completion among immigrants and domestic-born ethnic groups, controlling for factors such as grades, educational expectations and familial socioeconomic status. Significantly, they find that social capital "can buffer the risks associated with foreign birth and lower socioeconomic origins" (p.397). As Zhou and Bankston (1994) conclude based on a study of Vietnamese youth, ethnicity can itself be conceived of as a resource that can be integral to understanding the outcomes of immigrant youth:

> ... ethnic social integration creates a form of social capital that enables an immigrant family to receive ongoing support and direction from other families and from the religious and social associations of the ethnic group. Consequently, community standards are established and reinforced among group members, especially among younger members .... We thus conclude that social capital is crucial and, under certain conditions, more important than traditional human capital for the successful adaptation of younger-generation immigrants (p.842).

Most recently, however, Portes (2000) has cautioned against rashly attributing effects to "social capital," demonstrating that findings of immigrant success, though initially appearing to be a result of social capital's positive effects may in fact be attributable to other factors, such as the cultural capital that some individuals derive from ethnicity, or the treatment of certain immigrant groups by the broader society (2000:9–10). Heeding Portes' caution, this paper relies on an expansive range of variables in order to help disentangle the effects of social capital from other structural and agentic factors that may determine educational attainment.

The Relationship Between Social Capital and Planful Competence

Bourdieu and Passeron ([1964] 1979) remind us that despite having fewer resources on which to draw, students from disadvantaged groups can succeed educationally, and that their educational attainment should not be conceived as 'mechanically determined' (p.25). Similarly, the availability of potential sources of social capital does not ensure success: as Bellamy (1993:140) cautions, this capital must "be actively invested."

In operationalizing this process of investment that Bellamy (1993) articulates, we rely on Clausen's (1991) concept of "planful competence." In articulating the ways in which individuals negotiate institutional structures and circumstances, Clausen hypothesizes that goal setting and individual preparation can themselves provide individuals with advantages over the life course. In developing this point, Clausen emphasizes the sociological aspect of this competence — aware that planful competence will not ensure success, Clausen's (1991:836–837) point is that structures operate according to rules and that those "who know how to use the rules to achieve their objectives," such as the rules for academic performance, "are favoured." Clausen's longitudinal analyses reveal that this competence, characterized by self-confidence, dependability, and intellectual investment, is essential in understanding educational attainment and life course outcomes. Students who succeed, according to Clausen, make the right choices, or at least refrain from making unwise choices, throughout their adolescence. In their own work, McCarthy and Hagan (2001:1040–1041) go on to conceive of this competence as possibly a "key dimension of personal capital" that may contribute to the ability of individuals to achieve their goals.

Drawing on Clausen's work, Shanahan, Elder and Miech (1997:55–56) extend the concept of planful competence by contextualizing such agency within historical time and opportunity structures. Developing their account within a life course perspective, Shanahan, Elder and Miech demonstrate the close link between planful competence and historical events. Comparing two different birth cohorts, they find that while planful competence is significantly related to educational attainment for some, this link is itself disrupted by historical events in the life course, such as the Great Depression, World War II, and the postwar economy. As they emphasize, "[p]eople make choices among options that construct the life course, but they are also constrained and enabled by opportunity structures ..." (1997:54).

Linking this research with Bourdieu and Passeron's ([1964] 1979) work, we develop an analysis that integrates "planful competence," as operationalized by Clausen, with the structural contexts in which these choices are made, relying in this case on the availability of social capital. Drawing on Shanahan, Elder, and Miech, we thereby conceive of social capital as a potential mediator of individual choices, since the availability of social capital can lead to differing opportunities for students to reach informed decisions.

In pursuing our analyses, we further rely on Clausen and Shanahan, Elder and Miech to investigate both educational and occupational attainment. One of the most important findings of Clausen's work is that, for males, adolescent competence is the largest contributor to explained variance in occupational attainment (1991:822). Of course, the literature on immigrants' occupational attainment is extensive (see, for example, Portes and Rumbaut, 1996; Hou and Balakrishnan, 1996; Geschwender and Guppy, 1995; Borjas, 1994; Boyd,

1985; Porter, 1965). Yet, in studying the educational attainment of immigrant youth, we rely on Clausen (1991) as a guide to explore the effects of this educational attainment itself on occupational attainment, as the outcome in the trajectories established by immigrants' educational histories.

Data and Methods

This study explores the educational paths of immigrant students through a 19-year multiwave panel study undertaken from 1976 to 1995 in suburban Toronto (Canada). The first of the three waves of the Toronto panel study began in 1976 when the respondents were adolescents attending four high schools in a community of about a half million people. This suburban community has grown dramatically in population over the past 30 years, with population increases centered around the intersection of the two major highways that access the city. As indicated in Table 1, the ethnic composition of the sample closely mirrors that of the Toronto's Census Metropolitan Area at the time, with 81% of the present sample being Western European, compared with the 76% found in the Toronto CMA in 1981. By the 1990s, however, Toronto's ethnic population had become significantly more diverse. This provides the present study with an important advantage: closely mirroring the ethnic distribution of Toronto at the time of the study, our study provides a necessary baseline for future research on the role of ethnicity, against which researchers can then compare the educational achievements of more recent immigrants to Toronto. As such, while the ethnic distribution in the present sample (and indeed, in the population) does not allow us to address the effects of ethnicity on educational and occupational outcomes, this study instead provides a baseline at a point in Toronto's history when its immigrant population was significantly less diverse:

Table 1. Ethnic Origins for Toronto CMA and Toronto Panel Study

	Toronto Panel Study		***Census Microdata (Toronto CMA)***			
	1976		**1981**		**1996**	
		%		**%**		**%**
Western European/						
W European and Other	603	81.2	45,510	75.9	52,137	45.4
Eastern European	47	6.3	4,692	7.8	9,401	8.2
African/Caribbean/Haitian	46	6.2	1,474	2.5	6,589	5.7
Asian	30	4.0	1,716	2.9	22,796	19.8
Other	17	2.3	6,118	10.2	23,922	20.8
N/A	0	0.0	468	0.8	5	0.0
Total	743	100.0	59,978	100.0	114,850	100.0

* In the 1996 census, "Jewish" was reported as an Ethnic Origin. Since no geographic information was provided, this category was omitted (N=2733)

The sampling frame for the first wave of the study in 1976 was the enrollment lists of all students in grades 8 through 12 from all four secondary schools, including a vocational school, that served the central area of this community. The original sample was disproportionately stratified by housing type to increase class variation; we used addresses to sample respondents in equal numbers from single- and multiple-family dwelling units. Sampled students were personally invited and paid five dollars each to participate after school in the survey. The response rate was 83.5%, providing 835 secondary school students for the first wave of the panel.

Thirteen and nineteen years later, telephone interviews were completed with 570 and 544 of the first wave respondents, representing response rates, uncorrected for death or other sources of attrition, of 68% and 65% respectively. Analyses of attrition across waves of the panel have revealed no patterns that bias multivariate findings based on these data (see Hagan, 1991; Hagan &Wheaton, 1993; Hagan et al., 1996). Taking into account the attrition of both immigrant and non-immigrant groups, the proportion of immigrant respondents varies little in each of the three waves, composing between 23% and 26% of the sample in each wave.

Our analysis considers a number of variables that are expected to influence educational and occupational attainment. Educational attainment is measured as a continuous variable, with values ranging from 1 (representing a respondent who has not completed high school) to 4 (if the respondent has attended university). We consider occupational attainment in 1989, when respondents were young adults, using Treiman's (1977) Standard International Occupational Prestige Scale.

As discussed above, both immigration status and age at immigration may play important roles in the educational attainment of these youth. As such, the immigration status of the respondents was categorised into three possible options: those who immigrated to Canada with English as their first language, immigrants to Canada for whom English was a second language, and domestic-born Canadians. Closely mirroring Rumbaut's (1997) schema of the "1.25," "1.5," and "1.75" generations, age at immigration is classified into three categories: secondary school immigration, primary school immigration, and preschool immigration. Furthermore, we include measures of mother's and father's occupational status, measured in 1976, when the respondent was an adolescent.

In assessing the educational outcomes of immigrant students, this study integrates structural and individual approaches by relying on theories of social capital and planful competence. We employ familial- and school-based measures of social relations to assess the social capital of immigrant students. As Hagan et al. (1996) point out, "socially structured relations between individuals (e.g. parents, teachers, neighbors and children) in social groups (e.g. families, schools and neighborhoods) are sources of social capital that

increase the capabilities of children" (p.370). We rely on measures of a student's relational ties to parents and the degree of parental supervision as indicators of students' social capital (see Table 2).

The extent of a student's relational ties to parents is measured by asking, "Do you talk about your thoughts and feelings with your mother/father?" Parental supervision is measured with a four-item scale that asks respondents whether their mother/father know where they are and who they are with when they are away from home. Finally, we also include a measures of attachment to school and delinquency. Adolescent attachment to school is measured by responses, on a scale of 1 to 5, to the question, "Generally speaking, do you like school?" Self-reported delinquency is measured in 1976 during the first wave of our panel when the subjects responded as adolescents to six items asking how often in the last year they had engaged in several forms of theft, vandalism, and violence.

We operationalize a student's planful competence by relying on Clausen (1991), who has developed three indicators of this concept: intellectual investment, self-confidence and dependability. We draw on all three of these indicators in the present study, measuring each one separately in order to draw out the different facets of competence that Clausen has identified. As Table 2 indicates, intellectual investment is measured by the question, "On the average, how much time do you spend doing homework outside school?"; answers ranged from 1 ("we are not given any homework") to 7 (" 3 or more hours a day"). This measure should reflect the extent to which the students are investing in educational choices by putting effort into their schooling. Self confidence is based on the question "Compared to other students in your school, how do you rate yourself in the school work you do?"; answers ranged from 1 ("Among the worst") to 5 ("Among the best"). Finally, the measure of dependability is based on the question "During the last year, did you ever stay away from school just because you had other things to do?"; answers ranged from 1 ("Often") to 4 ("Never").

Results

Table 2 presents definitions and summary statistics for variables used in the analysis and reveals that 26% of the sample is comprised of immigrant children, with 7% having immigrated to Canada as pre-school children, 12% as primary school children and 7% as secondary school youth. Of these immigrant students, 46% speak English as their first language (comprising 12% of respondents), while another 46% of these immigrant students speak English as their second language (ESL). The average educational attainment in the sample is 2.86, indicating that the average respondent had completed high school and attained some post-secondary education.

Table 2. Descriptive Statistics for Variables in Toronto Panel Study, 1976-1995 (n=334)

Variable	*Measure & Values*	$\bar{x}$	*S.D.*
Age (1976)	Reported Years of Age	15.48	1.54
Gender (1976)	Reported Sex (Male=1)	1.34	0.48
English First Language Immigrant (1976)	English First Language=1	0.12	0.32
English Second Language Immigrant (1976)	English Second Language=1	0.11	0.31
Pre-School Immigrant (1976)	Pre-School=1	0.07	0.25
Primary School Immigrant (1976)	Primary School=1	0.12	0.33
Secondary School Immigrant (1976)	Secondary School=1	0.07	0.25
Father's Occupational Status (1976)	Treiman Scale	45.98	11.65
Mother's Occupational Status (1976)	Treiman Scale	42.04	8.84
Relational Ties to Parents (1976)	"Do you talk about your thoughts and feelings with your mother/father?"	4.03	1.19
Parental Supervision (1976)	"Does your mother/father know where/ who you are with when you are away from home?"	10.16	2.42
Attachment to School (1976)	"Generally speaking, do you like school?"	3.13	1.03
Intellectual Investment (1976) 1-7	""On the average, how much time do you spend doing homework outside school?""	3.76	1.69
Self Confidence (1976) 1-5	"Compared to other students in your school, how do you rate yourself in the school work you do?"	3.36	0.74
Dependability (1976) 1-4	"During the last year, did you ever stay away from school just because you had other things to do?"	3.03	0.93
Math Grades (1976)		62.32	12.19
English Grades (1976)		66.98	15.26
Self Reported Delinquency (1976)	"How often in the last year have you: • Taken little things (worth less than $2) that did not belong to you? • Taken things of some value (between $2 and $50) that did not belong to you? • Taken things of large value (worth over $50) that did not belong to you? • Taken a ride in a car without the owner's permission? • Banged up something that did not belong to you on purpose? • Beaten up anyone or hurt anyone on purpose?"	9.14	3.55
Educational Attainment	High School Dropout=1 High School Graduate=2 Community College/Technical School=3 University=4	2.86	1.00
Occupational Attainment	Treiman Scale	47.03	10.99

The mean differences presented in Table 3 indicate that while ESL students' mothers have a lower occupational status than the mothers of other immigrants and of Canadian-born students, the ESL students have the highest amount of parental supervision, attachment to school, effort at school and English grades. These ESL immigrant students also have the highest educational and occupational attainments of all respondents. The ESL students also reported the lowest levels of delinquency, though this difference was not statistically significant.

Table 4 reports the findings from four separate models. The first and last models predict educational and occupational attainment using ordinary least squares (OLS) regression, and the remaining two models use logistic regression to predict the likelihood of students dropping out of high school and the probability of university attendance. We first examined the relationship between immigration status and educational attainment using controls for age, gender, language status, pre-school or primary school immigration and parental occupational status. As indicated in the first column of Table 4, English second language status is a significant and positive predictor of educational attainment, as is father's occupational status, while pre-school immigration tends to lower educational attainment. The elaborated model, in the second column of the educational attainment model, indicates that while being an ESL immigrant

Table 3. Mean differences Between Immigrants with English as First and Second Language and Canadian Born Panel Respondents on Adolescent Background and Adult Outcome Variables

Variables	*English as First Language*	*English as Second Language*	*Canadian Born*	*t-value (ESL/Others)*
Age	15.54	15.73	15.43	1.06
Gender	1.36	1.35	1.34	0.10
Pre-School Immigrant	0.26	0.14	–	–
Primary School Immigrant	0.41	0.46	–	–
Secondary School Immigrant	0.28	0.27	–	–
Father's Occupational Status	47.03	44.49	46.04	-0.83
Mother's Occupational Status	41.69	39.04	42.52	-1.72*
Relational Ties to Parents	4.00	4.11	4.02	0.35
Parental Supervision	10.46	10.57	10.05	1.10
Self Reported Delinquency	9.49	8.73	9.15	-0.75
Attachment to School	3.05	3.32	3.12	1.19
Intellectual Investment	3.74	4.41	3.67	2.48**
Self Confidence	3.31	3.54	3.34	1.58*
Dependability	3.00	3.11	3.02	0.54
Math Grades	64.39	62.32	62.01	0.00
English Grades	63.28	71.32	66.91	2.45*
Educational Attainment	2.77	3.32	2.80	3.05***
Occupational Attainment	45.44	51.38	46.64	2.58

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

Table 4. OLS and Logistic Regressions for Educational and Occupational Attainment

	Educational Attainment Scale (OLS Regression)		*High School Drop-Out (Logistic Regression)*			
	Model 1	*Model 2*	*Model 1*		*Model 2*	
	B	**B**	**B**	**Exp(B)**	**B**	**Exp(B)**
Age	−0.01 (0.03)	0.02 (0.03)	−0.05 (0.08)	0.95	−0.17 (0.10)*	0.84
Gender	−0.01 (0.09)	−0.23 (0.09)**	−0.01 (0.25)	0.99	0.29 (0.30)	1.33
English Second Language	0.39 (0.17)**	0.17 (0.15)	−0.43 (0.55)	0.65	−0.02 (0.58)	0.98
Pre-School Immigration	−0.32 (0.18)*	−0.22 (0.17)	0.26 (0.49)	1.30	0.20 (0.53)	1.22
Primary School Immigration	0.11 (0.16)	0.08 (0.14)	−0.53 (0.52)	0.59	−0.48 (0.54)	0.62
Secondary School Immigration	0.10 (0.20)	−0.06 (0.18)	−0.37 (0.65)	0.69	−0.01 (0.70)	0.99
Father's Status	0.02 (0.00)***	0.01 (0.00)***	−0.03 (0.01)**	0.97	−0.02 (0.01)	0.98
Mother's Status	−0.01 (0.01)	−0.01 (0.01)	0.02 (0.01)	1.02	0.02 (0.02)	1.02
Relational Ties to Parents		0.06 (0.03)*			−0.07 (0.11)	0.93
Parental Supervision		0.01 (0.02)			0.01 (0.06)	1.01
Self-Reported Delinquency		0.00 (0.01)			−0.05 (0.05)	0.95
Attachment to School		0.09 (0.04)*			−0.15 (0.14)	0.86
Planful Competence						
Intellectual Investment		0.16 (0.03)***			−0.39 (0.10)***	0.68
Self Confidence		0.10 (0.06)*			−0.08 (0.20)	0.93
Dependability		0.03 (0.05)			−0.12 (0.16)	0.89
Math Grades		0.01 (0.00)***			−0.04 (0.01)**	0.96
English Grades		0.00 (0.00)			0.00 (0.01)	1.00
University Attendance						
(Constant)	2.41 (0.56)***	−0.13 (0.76)	−0.23 (1.58)	0.79	6.20 (2.59)**	494.21
R squared/-2 log likelihood	0.052	0.24	443.4		398.5	

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

Note: Numbers in parentheses are standard errors

Table 4 continued

	University Attendance (Logistic Regression)				*Occupational Attainment (OLS Regression) (n= 334)*	
	Model 1		*Model 2*		*Model 1*	*Model 2*
	B	**Exp(B)**	**B**	**Exp(B)**	**B**	**B**
Age	−0.02 (0.07)	0.98	0.05 (0.08)	1.06	0.10 (0.39)	0.51 (0.36)
Gender	0.07 (0.20)	1.07	−0.62 (0.27)*	0.54	1.02 (1.25)	−0.02 (1.19)
English Second Language	1.08 (0.36)***	2.96	0.88 (0.41)*	2.42	5.31 (2.20)**	1.01 (1.88)
Pre-School Immigration	−0.90 (0.48)*	0.41	−0.77 (0.54)	0.46	−4.91 (2.44)*	−3.28 (2.08)
Primary School Immigration	0.09 (0.34)	1.09	−0.02 (0.40)	0.98	−0.73 (2.04)	−0.64 (1.71)
Secondary School Immigration	0.13 (0.43)	1.14	−0.07 (0.48)	0.93	2.08 (2.52)	2.09 (2.13)
Father's Status	0.03 (0.01)***	1.03	0.03 (0.01)**	1.03	0.17 (0.05)***	0.09 (0.04)*
Mother's Status	0.00 (0.01)	1.00	0.00 (0.01)	1.00	−0.01 (0.07)	−0.01 (0.06)
Relational Ties to Parents			0.17 (0.10)*	1.19		0.46 (0.43)
Parental Supervision			0.05 (0.05)	1.05		−0.17 (0.23)
Self-Reported Delinquency			−0.04 (0.05)	0.96		0.14 (0.17)
Attachment to School			0.26 (0.13)*	1.29		0.39 (0.56)
Planful Competence						
Intellectual Investment			0.24 (0.07)***	1.27		0.77 (0.33)**
Self Confidence			0.51 (0.17)***	1.66		0.79 (0.78)
Dependability			−0.03 (0.15)	0.97		−0.16 (0.67)
Math Grades			0.04 (0.01)***	1.04		0.14 (0.05)**
English Grades			0.02 (0.01)**	1.02		0.03 (0.04)
University Attendance						9.89 (1.22)***
(Constant)	−2.31 (1.29)*	0.10	−10.16 (2.31)***	0.00	36.29 (7.28)***	14.33 (9.64)
R squared/-2 log likelihood	619.38		500.13		0.066	0.377

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

Note: Numbers in parentheses are standard errors

student is positively related to educational outcomes, these students no longer perform significantly better than their counterparts when the social capital and planful competence variables are introduced. Rather, the effects of gender, father's occupational status, a student's ties to his/her parents, attachment to school, intellectual investment, self-confidence, and math grades all significantly increase students' educational outcomes. This elaborated model, then, suggests that ESL students achieve higher educational attainment because of their increased social capital, attachment to school and planful competence. This full model also explains 24% of the variance in educational attainment, compared to only 5% in the previous model.

The second model of Table 4 indicates that the odds of dropping out of high school decrease with age. In this elaborated model, one aspect of planful competence plays a critical role in lowering respondents' odds of dropping out of high school, with intellectual investment exerting a negative and significant effect. The significant effect of math grades in this model also highlights the importance of academic success for adolescents' persistence in education.

The third model predicts the likelihood of university attendance. The initial equation indicates that significant predictors of university attendance are whether a student speaks English as a second language and a student's father's occupational status. Perhaps surprisingly, it is pre-school immigration that lowers the odds of university attendance, rather than immigration at a later age. The elaborated model introduces the social capital and competence variables and indicates that students with stronger ties to their parents, higher attachment to school, greater intellectual investment, self confidence, and higher math and English grades are all more likely to attend university; on the other hand male students have significantly lower outcomes. In this elaborated model, the effects of age at immigration are no longer significantly related to university attendance, however father's status does remain a significant and positive predictor. Interestingly, in this final model, ESL students are almost 2.5 (exponential .88=2.4) times more likely than domestic-born students to attend university, net of all other factors.

In seeking to examine the outcome of these students' educational histories, we rely on Clausen to examine the lifelong effects of students' educational choices and achievements. These data are particularly well-suited to this analysis, since they follow a cohort of students over a 19 year period. In this final occupational attainment model, we restricted the sample to those students who are now working in the labour force full-time in Ontario, seeking to determine the factors that predict higher occupational attainment, based on Treiman's scale of occupational status.[11] As this model indicates, ESL and

11. Separate analyses indicate that there is no significant difference in the likelihood of immigrants' compared with non-immigrants' involvement in the labour force.

father's occupational status significantly and positively predict occupational attainment, while once again, pre-school immigration tends to lower students' attainment outcomes. In the elaborated model, we introduce the social capital and competence variables, as well as a variable indicating university attendance. As expected, in this final model, the effects of a student's intellectual investment, university attendance, and math grades significantly predict occupational attainment. These variables now mediate the effects of pre-school immigration and ESL since neither are significant in this final model; the effect of father's status, however, remains significant. In this final model, university attendance now seems to act as a surrogate for social capital, with the other social capital variables no longer significant in this equation. This is perhaps not surprising since the previous measures of social capital relate to the respondent's social capital during adolescence. Once the transition to university is made, it may absorb the earlier effects of social capital and become the credential that continues to carry resulting benefits.

Finally, we estimated a path model of occupational attainment for the 334 respondents working full-time in the labour force in Ontario. This path model includes all variables that were significant at the .05 level with standardized coefficients greater than .1, as presented in Figure 1. In order to make the model more parsimonious, we combine the two planful competence variables that were significant predictors of educational attainment and university attendance — intellectual investment and self confidence — into one index to represent planful competence. That not all components of planful competence exert similar influence is itself predicted by Clausen (1991:820–821), who notes the importance of relying on each measure individually in fully elaborating what competence entails. Having determined their independent effects above, we have here relied on the two significant predictors to create a competence index.

The path model illustrates that students attain higher occupational attainments through two main paths, reflecting the influences of structure and agency. First, we see that students' agency is an important predictor of their success, as reflected in their planful competence and subsequent high math grades. Yet, the positive forms of agency students exhibit are also a function of social capital factors — the model specifies that a student's planful competence results from strong parental supervision. This planful competence is however, also structured by student's attachment to school, their fathers' status, age at immigration and their ESL status. Their attachment to school also directly influences their math grades, which then exerts positive effects on occupational attainment.

Second, although planful competence predicts occupational attainment, occupational attainment is also directly a function of university attendance. From the perspective of the labour market, university attendance is a predictor of occupational attainment — as such, while university attendance may be

achieved by individual choices and structural conditions at the level of individual, once one shifts levels of analysis to that of the labour market, university attendance is a structural determinant in analysing occupational attainment.

In understanding university attendance from each of these perspectives, this study demonstrates that university attendance is predicted by a student's planful competence, math grades, and whether a student speaks English as a second language. Therefore this structural component is conceptualized by both the exogenous factors in student's lives (such as their ESL status) and by their own choices and investments. Within the context of the labour market, the path model highlights university attendance as an endogenous variable that represents the culmination of structural and agentic factors throughout students' educational histories. University attendance, then, becomes a key structural variable that accounts for later occupational success.

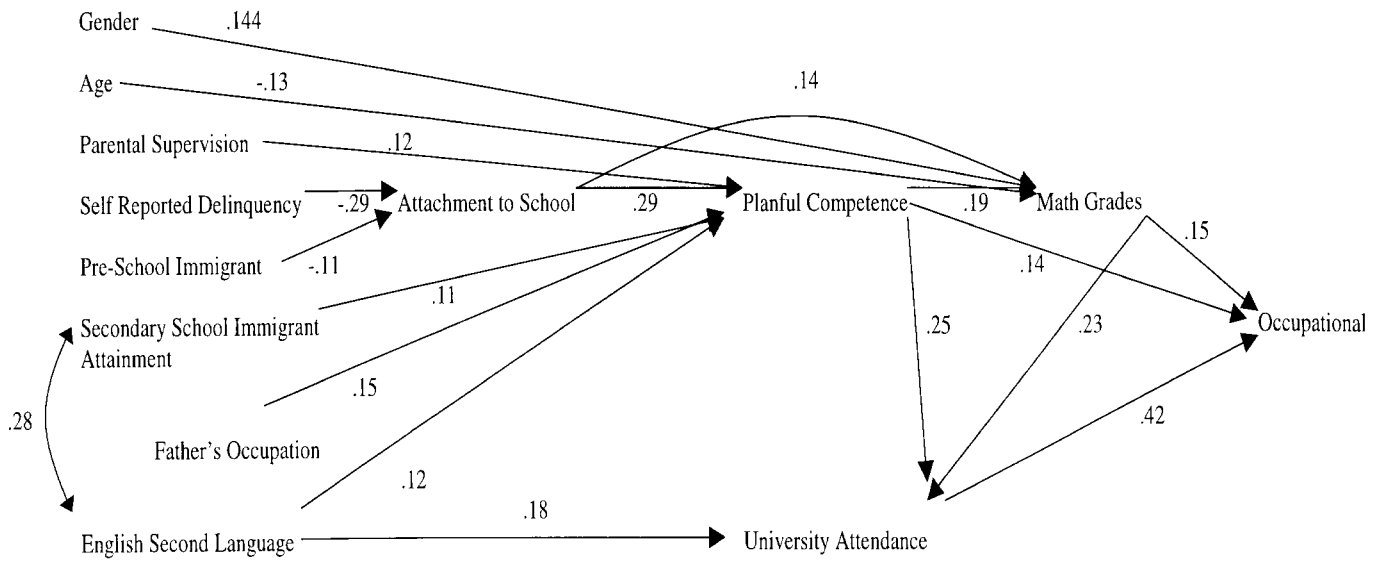
Discussion

Studies find that immigrant-born youth enjoy higher educational attainments, yet few explore why this is so. This study examines social capital and planful competence as determinants of educational attainment. We expected that familial social capital would be an essential component of students' success because it can provide necessary supports and networks that all students, and perhaps especially immigrant students who may lack other sources of social capital, require. As Clausen (1991) points out, "[p]arents or other adults who can provide an orientation to potential options and who can raise thoughtful questions to help the adolescent identify important issues can assist enormously" (p.808). Recognizing that the choices a student makes throughout an educational career are pivotal, we hypothesized that both a student's social context as well as his/her ability to make competent choices would be both complementary and essential components of educational success.

The findings from this study demonstrate that immigrant youth do not generally have significantly different educational attainments than domestic-born youth, and that age at immigration — whether a student is of the "1.25," "1.5," or "1.75" generation — does not have a significant effect on educational attainment once we account for a wide range of variables. Rather, for immigrant and non-immigrant youth alike, the same elements of agency and structure determine educational attainment. Regardless of immigration status, a student's gender and their father's occupational status each independently predict educational attainment. Social capital variables, however, also exert an independent role — for all students, relational ties to parents also independently predict higher educational attainment, net of background factors such as parental occupational status.

Even these social capital variables, however, do not tell the whole story. Rather, in addition to these structural factors, the data indicate that a student's

Figure 1. Path Model Predicting Occupational Attainment



planful competence is independently and significantly related to educational success, with intellectual investment and math grades also reducing the odds of dropping out of high school. The likelihood of attending university, though also predicted by a student's gender, is independently predicted by a student's social capital and planful competence. As Davies and Guppy (1997) note, this suggests that there may be a relative "liberation" of students from their socioeconomic status, generated through social capital and personal choices, with no statistically significant differences between foreign- and domestic-born students in this regard.

In contrast to many of the findings in the literature review above, then, foreign-born youth do not enjoy, as a general matter, higher educational attainments than domestic-born youth in this sample. However, this is dramatically different for those immigrant youth for whom English is a second language — these foreign-born students are 2.5 times more likely to attend university, even after controlling for parental status, educational performance, and social capital variables. It is important to note that these foreign-born students are actually *bilingual*, with the data in Table 3 indicating that the ESL students' English grades were significantly higher than all other students' English grades.

These findings regarding bilingual immigrant youth, then, provide us with an important clue as to why some immigrant students enjoy higher attainments. As we discuss earlier in this paper, there are three competing theories as to why bilingualism may provide for higher educational attainments, theories that Mouw and Xie (1999) have recently labelled "cognitive," "cultural," and "transitional." The cognitive perspective argues that bilingualism enhances academic achievement by encouraging greater flexibility of thought and exerting a positive influence on childhood cognitive development. The cultural perspective argues that bilingualism enhances academic achievement by allowing immigrant children to "tap into the resources available in their parents' communities as well as participate in school activities conducted in English" (White and Glick, 2000:675). The transitional perspective argues that once an immigrant student's parents become proficient in English, there is no longer a measurable positive outcome of bilingualism on academic achievement; according to this perspective, bilingualism enhances achievement only when it allows children to continue to communicate with their parents in the native language, thereby maintaining the parent-child relationship and allowing continued access to familial-based sources of social capital for the student (Mouw and Xie, 1999).

As with other sociological studies, our data only provide us with limited evidence to support or refute the cognitive hypothesis, given the difficulty in separating the cultural and cognitive effects of language use (see also Bankston and Zhou, 1995). Our evidence in Table 3, however, suggests that there is no

generalizable cognitive advantage from bilingualism for the ESL students in this sample, with these students not enjoying statistically significant higher grades in mathematics, and with these students working harder in school than their fellow classmates to attain the grades that they enjoy.

We argue that the educational attainments of these ESL students are, instead, attributable to their enhanced social capital and planful competence. Our data indicate that, as with past studies of bilingual students, these ESL students have access to greater social capital than the other students in the sample, enjoying higher attachments to school and higher degrees of parental supervision (as indicated in Table 3). Our regression results provide similar support for this proposition: whereas speaking English as a second language initially predicted higher educational attainments, a more elaborated model demonstrates that this is in fact attributable to the effects of their social capital and planful competence.

Our data provide evidence to suggest that the positive effects of this bilingualism are not merely transitory, and as such our data support the cultural, rather than transitional, hypothesis for the achievement of bilingual students. As Table 4 demonstrates, ESL status and relational ties to parents both independently predict university attendance; the positive effect of ESL status, then, is not contingent on the strength of relational ties to parents, as the transitional perspective argues. We conclude, then, that these students' proficiency in a native language "can facilitate access to the social resources of ethnic communities," (Bankston and Zhou, 1995:6) while their proficiency in English positions them to enjoy the resources offered in English through school activities. Although future research must continue to seek to disentangle these cultural, cognitive and transitional perspectives, our data support the hypothesis that these students are uniquely positioned to draw on the resources of both ethnic and non-ethnic communities, enjoying the social capital benefits that each provides, and which positions them to make competent choices.

Finally, the educational attainments of these youth may translate into lifelong outcomes. As Clausen (1991) suggests, the choices made in adolescence can last a lifetime — by extending our analyses of educational attainment to include the outcome of these students' educational histories, we find evidence for this kind of lifetime influence that students' choices can generate. We find that educational choices made by the respondents when they were adolescents have substantial effects on their occupational outcomes twenty years later. Furthermore, those students who attended university — itself independently predicted by ESL status — are also more likely to enjoy higher occupational outcomes. The effects of university attendance, then, represent the culmination of students' social capital and planful competence in adolescence, exerting strong and positive effects on occupational attainment. This is elaborated in the path model at Figure 1.

The experience of immigrant students in the educational system, according to the data from this study, can be very positive. As with other students, their attainments are not necessarily contingent on their socioeconomic background, but on planful choices to work hard while also maintaining close attachments to social and familial networks. And the ESL students — foreign-born and bilingual — are able to enjoy the resources of both their parents' communities and school activities, and are thereby uniquely well positioned to enjoy higher educational attainments. These results highlight the importance of both individual agency and social structure as determinants of educational attainment, attainments that may have lifelong effects.

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