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FINDING SUCCESS IN SCHOOL: THE EDUCATIONAL BATTLEFIELD

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FINDING SUCCESS IN SCHOOL: THE EDUCATIONAL BATTLEFIELD

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The authors use a social capital model involving social class as the basis of their theoretical model. This perspective allows the researchers to include both personal as well as structural data in the model. The research has three broad goals. (1) to develop a model of the major forces shaping a students' scholastic achievement, (2) T examine the degree of association among different variables that predict scholarly achievement and (3) to chart the multiple pathways of student scholastic achievement (direct and indirect) produced by the combination of structural and individual factors.

The results confirm that some variables are clearly more important in predicting current scholastic achievement than others and that they operate both directly and indirectly. The data show that past achievement of the student is the most important indicator of current achievement. The results also reveal that self-esteem is an important mediating factor for immigrant youth that impacts their overall achievement. Finally, educational aspirations of the student are linked to their scholastic achievement. Factors such as parental education, sex and social class impact on students achievement but only in an indirect fashion.

Keywords:Student success, scholastic achievement, social class, networks, youth education.

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INTRODUCTION

There is mounting evidence to suggest that a broad range of child, family, school and sociocultural factors contribute to the growth of intellectual functioning and scholastic achievement. For a long time, research focused almost exclusively on the individual student and his/her social attributes. Later this position was abandoned and the focus switched to schools and the schooling process. Today, evidence has accumulated that reveals a more complicated picture of the nature of this issue (Morrison and Cooney, 2002; NICHD, 2004). At the same time, the social, economic and demographic changes in Canadian society have placed pressure on the primary and secondary schools to respond to the diversity of student demands. Today, more than ever, schools in Canada are comprised of students from a wide range of social classes, ethnic backgrounds, and scholastic ability. Contributing to this mix, over 200,000 immigrants come to Canada each year. Many of these immigrants arrive with school-aged children who enter the educational system as soon as they arrive. Unfortunately, the level of familial and community support for these students varies and, therefore inequities in the educational attainment of students from different social locations continues to be a persistent challenge for educators (Salili and Hoosain, 2001). School policies, attitudes of teachers and the organizational structure of schools are all important factors (Cambell, et al, 1999; Anisef and Kilbride, 2003) in student scholastic achievement and yet few studies have tried to assess the independent and interactive role of human capital, school organization, and familial and community support.

The Canadian Youth Foundation has reported that youth in Canada are generally losing confidence in the public school system and that many young people have doubts about the value of their education.

At the same time, most adult Canadians are convinced that education is the main avenue of success for their children (Wotherspoon, 1998, 2004). The question remains, however, as to how important these social and structural factors are to student academic achievement and how, exactly, they relate to each other. Thus, it is important that educators as well as researchers unravel the factors that contribute to these inequities. The present study examines important structural and human capital factors in order to assess their direct, mediating and relative impact and importance on student scholastic achievement. Although much has been learned about the predicting of scholastic achievement by young students, there is a need for a clear descriptive framework and an analytic strategy that captures the interactions among variables acting on students (Dickinson and Tabors, 2001; Hanushck et al, 2001). Specifically, this research has three broad goals.

1. To develop a model of the major forces shaping a students scholastic achievement.
2. To examine the degree of association among different variables that predict scholarly achievement, and
3. To chart the multiple pathways of student scholastic achievement (direct and indirect) produced by the combination of the social and individual factors.

THEORETICAL PERSPECTIVES

A number of models have been posited with regard to student academic performance (Chubb and Loveless, 2002; Marjoribanks, 2002). For purposes of this paper, we will review three theoretical perspectives that have had an impact on current thinking about why some students succeed and others don't. Blau (1990) proposes that social and cultural contexts, including support from the school, impact a youths life-chances, including school performance. Crul and Vermeulen (2003) note other contextual issues such as age at which education begins, the number of face-to-face contact hours with teachers, and the selection mechanism that channels students into various streams, are important

contributing factors. These contextual theorists propose that the structure in which the student operates determines his or her academic performance, restricting achievement in some instances while enhancing achievement in others. Furlong, Biggart and Cartmel (1996) build upon this model by pointing out that human capital such as sex, ethnicity, and social class, intersect with the social structure in which youth are embedded. As a result, both human capital and social structure need to be investigated in order to assess their impact on school achievement (Blau, 1996; Harvey, 1999).

Coleman (1991, 1997) argues that social capital is the most important factor influencing student achievement. However, he goes on to claim that if strong and positive social relations in the family do not complement the human capital of parents, the impact of a positive social structure on a child's educational achievement will be minimal. Portes (1998) accepts this notion and argues that individuals can increase their cultural capital via social capital and together, cultural and social capital can positively impact a students' academic achievement. Erickson (1996) further argues that if a student is to achieve academic excellence, he/she not only needs to have access to cultural resources but must also learn when and how to use them. Beiser's (1999) work with youth and families in Toronto found support for this position.

In an earlier seminal piece of work, Coleman et al, 1966 (The Coleman Report) found that family influences, including parental involvement and achievement expectations, were much more important than structural conditions in explaining the differences in children's scholastic achievements. Others, such as Aronowitz and Giroux (1988) and Fordham (1996), added empirical support for the results of Coleman et al. As a result of this prior empirical work, Stanton-Salazar (1997) developed a network theoretical model to explain student scholastic achievement. He concludes that students from different social locations have different opportunities to form relationships with people who control institutional resources. Those students who are embedded in networks of institutional support will achieve higher academic achievements than those who are not. Thus, unless students are linked to support

networks, they will not excel in their scholastic pursuits even if they have accumulated human social capital.

Independent of the above research, a "social class" model was advocated by Deosaran, et al (1976), Brown (1993), Rumberger (1995) and later by Goldthorpe (1996), Anisef and Lanphier, (2003) and James and Burnaby (2003). They found that social class is the key factor in predicting academic achievement of young school aged children. They argue that low-income households often cannot provide a supportive environment conducive to learning. Zhou (1997) takes this issue one step forward by suggesting that it is necessary to consider the interaction between factors that are both external and internal to the ethnic groups being studied. He concludes that members of minority groups react to their disadvantaged status with different strategies and thus you will find some minority ethnic groups performing better than other ethnic groups. Simon (2003) and Vallet and Caille (1996) present data from France showing that socioeconomic conditions of families significantly impacts student performance. Confirming the importance of class, Ogbu (1999), Ainsworth-Darnell and Downey (1998) and Vargas-Reighley (2004) found that children from families of the dominant group in society differ in their academic outcomes compared to minority groups. As a result, these researchers have argued that social class is an overriding factor in student scholastic achievement.

However, given the nature of the issue under discussion and the complexity of the process, we suggest there is an interaction effect between social class of minority youth and the social capital developed within the community and family. Thus, the model we will be testing reflects dimensions from all previous theoretical models identified.

Models

On the basis of prior research, it is clear that educators and researchers must take into account the family background of students, the social capital and networks available to them, and the social and cultural context of the educational setting if they are to fully understand scholastic achievement. The above theoretical approaches

to understanding scholastic achievement point out the impact and importance of human capital as well as the structural conditions within which students must perform. Westin (2003) and Virta and Westin (1999) note that issues such as command of the language, parents educational achievements, and the nature of the educational system plan a central role as an arena where scholastic achievement is determined. Accordingly, we carried out our research with these theoretical models in mind. We begin by testing a basic model representing the influence of structure and background (sex, past achievement, foreign-born status, and parent's education) on current academic achievement. Then, measures capturing the students support network (peer, parental, and teacher support), parental influence (parental influence on academic goals, parental grade expectations), and "child factors" (self-esteem, educational aspirations, and scholastic self-assessment) are introduced in turn, into the analysis of current academic achievement (see Figure 1). We then utilize path analysis to determine the mediating influence of social support, parental influence and "child factors" (see Figure 2 and Figure 3).

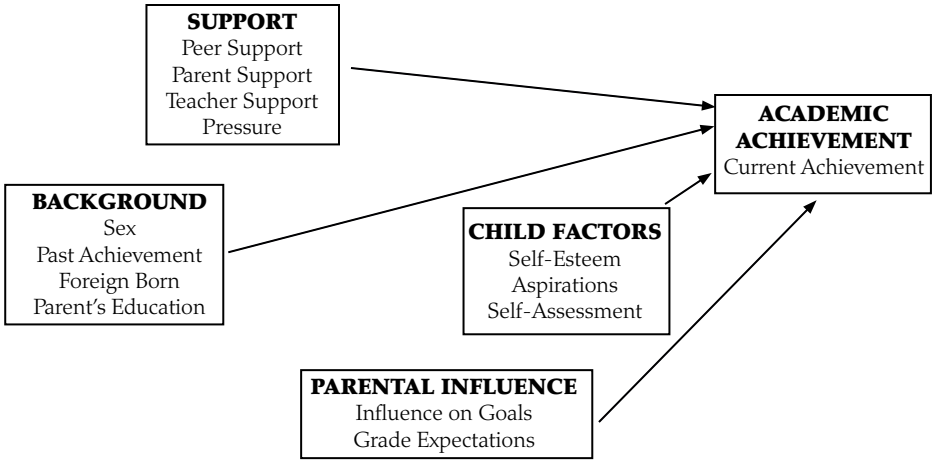

Figure 1: Basic Model Representing the Influence of Background, Support Network, Parental Influence, and Child Factors on Current Academic Achievement.

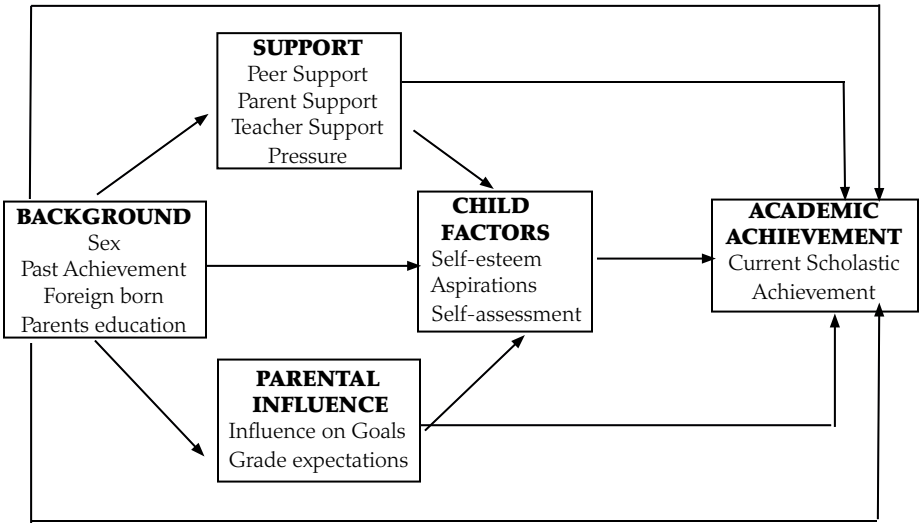

Figure 2: Fully Recursive Model Representing the Influence of Background, Support Network, Parental Influence, and Child Factors on Current Academic Achievement.

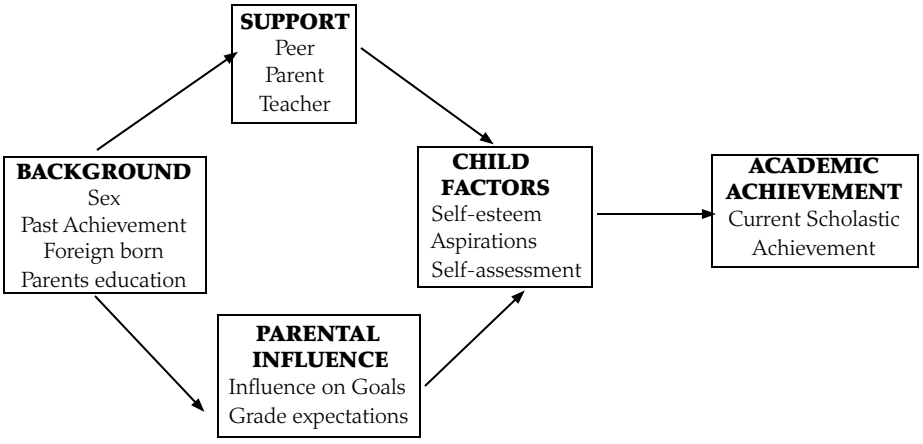

Figure 3: Mediating Model Representing the Influence of Background, Support Network, Parental Influence, and Child Factors on Current Academic Achievement

METHODOLOGY

This research was conducted in a medium sized Western Canadian metropolitan area of just over a population of one million. Calgary is one of the fasted growing cities in Canada and since its creation in the late 19th century, it has doubled in size every fifteen years until 1976.. Over the past quarter century, Calgary has once again doubled in size. Historically, Calgary was not a gateway for immigrants. However, in the past three decades, it has attracted nearly ten percent of the immigrants arriving in Canada. Thus, from a small enclave of European and American immigrants, Calgary, like other western urban areas in Canada, has become an increasingly attractive settlement area for Canadians from across the country as well as immigrants from around the world.

Sample: A random sample of four senior high schools in the city of Calgary (both Catholic and public) was selected. Once selected, the coordinator of a mandatory course for all high school students, Career and Life Management (CALM) in each school was contacted. The coordinator arranged for the questionnaire to be distributed to the various CALM classes and students who agreed to participate filled out the questionnaire in class. However, some students took the questionnaire away from class and returned it to the coordinator at a later date. A sample size of 811 resulted for the present analysis.

Measurement: A structured questionnaire was group administered in the class. Before students responded to the questionnaire, the researchers explained the purpose of the study as well as answered any questions the students had about the study. The principal researcher then left the room and students returned the questionnaire to the CALM coordinator. All responses were anonymous although students could fill out a second form with their name and address if they wanted to receive a summary of the results.

A majority of the items used in the questionnaire were structured and closed but it also included some "open-ended" questions. Structured items such as the "self-esteem" scale had been pre-tested and reliability scores of .85 (alpha) or better were achieved. In addition, students were

given the opportunity to provide qualitative data at various sections in the questionnaire. The last section of the questionnaire focused on socio-demographic attributes of the student and his/her family.

While some of the concepts were easily operationalized, e.g., sex, place of birth, parents level of education, others required further development. For several variables, we undertook to develop a scale rather than utilize a response to a single question. However, we always were cognizant of the necessary reliability scores before utilizing the scale. Our results found that many questions "nested" appropriately and achieved the more than minimal required alpha values. For example, *current academic achievement* is a scale (α = .72) constructed from three items, unit weighted, measuring the student's current (at time of questionnaire) average grade in science/math, social studies, and "other" courses. This resulted in a measure that ranges from 3 – 18 with 3 indicating "very low" achievement (<50% average in all three subject areas) and 18 indicating "very high" achievement (90% or greater average in all three subject areas). Similarly, we constructed a scale (α = .80) for *past academic achievement* from three items measuring past (grade 9) achievement in math, social studies, and English. This resulted in a measure that ranges from 3 – 15 with 3 indicating "very low" achievement (<60% average in all three subject areas) and 15 indicating "very high" achievement (90% or greater average in all three subject areas).

Three social support/network scales, *parental support*, *teacher support*, and *peer support*, were constructed from the data in order to include these important factors in our models. *Parental support* (α = .79) was constructed from four items examining the nature (negative versus positive) of both the father and mother's support (help and advice). This scale ranges from 4 – 12 with 4 indicating "negative" support from both parents and 12 indicating "very positive" support. *Teacher support* (α = .74) was also constructed from four items examining the nature of both the classroom and guidance teacher's support (help and advice). This scale ranges from 4 – 12 with 4 indicating "negative" support and 12 indicating "very positive" support. *Peer support* (α = .84) was constructed

from two items capturing the nature of help and advice from the student's peer group. Peer support ranges from 2 – 6 with 2 indicating "negative" support and 6 indicating "very positive" support. Closely related to the notion of support was the concept of "pressure to stay in school." The concept of *pressure to stay* (α = .74) was captured using five items measuring the pressure to stay in school felt by the student from his or her parents, teachers, and peers. This scale ranges from 5 – 15 with 5 indicating very negative pressure across all of the sources to 15 indicating very positive pressure across all sources.

Parental influence is a scale (α = .79) constructed from four items measuring the father's and mother's influence on the childs educational and career goals. It ranges from 4 – 12 where 4 indicates very little influence and 12 indicates a great deal of influence. *Grade expectations* (α = .83) is constructed from two items measuring the parents grade expectations. It ranges from 2 – 10 with 2 indicating very low expectations and 10 indicating very high expectations. Finally, the childs *educational aspirations* (α = .72) and academic *self-assessment* (α = .62) were constructed, respectively, from items asking the students what level of education would they like to and expect to attain as well as how "good", i.e., very good, good, average, and not very good) they were in reading, writing, problem solving, and oral communication.

RESULTS

We now turn to analyzing the relationships identified by the three models presented above. We provide these models so that we can better understand how families and friends as well as other structural and social capital factors impact on the scholastic achievement of students. Table 1 reveals the results of the regressions of achievement on a set of factors beginning with background (model 1) and moving through academic support/pressure (model 2), parents influence on the child's goals and parent's grade expectations (model 3), to self-esteem and self-assessment (model 4). The results displayed in table 1 show that the explained variance across these models is fairly large (50-55%). The explained variation for model 1 (.498) suggests that background is

a significant factor in understanding current scholastic achievement. While it appears that background factors are important to understanding current achievement, only past achievement is statistically significant. The effect of past achievement on current achievement is quite substantial; it essentially accounts for all of the explained variation in achievement in model 1. In other words, past achievement, not surprisingly, is the best predictor of current achievement. On the other hand, sex, foreign-born status, and parents' education all fail to have a statistically significant direct effect on current scholastic achievement in the presence of past achievement.

The increment in explained variation when the support variables are introduced into the model (model 2) is statistically significant ($p < .05$). However, of the four support and pressure to stay in school variables, only peer support appears to influence current achievement. Interestingly, the effect of peer support is negative. Perhaps strong peer networks have a negative influence on scholastic achievement regardless of the nature of those networks. However, it is important to remember that the effect of peer support in the model is weak. In short, the child's support structure or network, including peer support, appears to have little effect on achievement especially when compared to the very strong effect that past achievement has on current achievement.

With the introduction of parents influence on goals and parent's grade expectations, the weak direct effect of peer support disappears, i.e., becomes non-significant. From the results of model 3, it appears that the parent's grade expectations have mediated the negative influence of peers or peer support on achievement. And, the effect of parent's grade expectations appears to have a strong direct effect on achievement.

With the inclusion of self-esteem, educational aspirations and self-assessment, the model (model 4) now explains about 55 percent of the variation in scholastic achievement. While past achievement accounts for much of this explained variation, parent's grade expectations remain statistically significant. Interestingly, foreign-born status has become statistically significant ($p < .05$) in model 4 suggesting the possibility

Table 1: The Regression of Current Academic Achievement on Background, Support Network, Parent's Grade Expectations and Influence on Goals, and Self-Esteem/Self-Assessment

Variable	*Model 1* Background		*Model 2* Support/Pressure		*Model 3* Goals/Grade Exp.		*Model 4* Self Esteem	
	β	***t-ratio***	**β**	***t-ratio***	**β**	***t-ratio***	**β**	***t-ratio***
Sex	-.002	-.075	-.008	-.24	.007	.22	.011	.35
Past Achievement	**.682**	**20.42*****	**.675**	**20.09*****	**.612**	**16.88*****	**.551**	**14.25*****
Foreign Born	.049	1.54	.057	1.77	.051	1.62	**.068**	**2.13***
Parents Education	.054	1.61	.047	1.42	.038	1.16	.007	.22
Parent's Support			.063	1.90	.038	1.03	.015	.41
Teacher Support			-.005	-.14	-.014	-.40	-.011	-.33
Peer Support			**-.068**	**-2.08***	-.060	-1.86	-.062	-1.93
Pressure to Stay			.053	1.48	.045	1.28	.026	.74
Parents Influence					.052	1.45	.062	1.76
Grade Expectation					**.152**	**4.32*****	**.125**	**3.55*****
Self-Esteem							.042	1.29
Educational Asp.							**.098**	**2.65****
Self-Assessment							**.090**	**2.56***
R^2	**.498*****		**.508*****		**.529*****		**.546*****	
ΔR^2	---		**.01017***		**.02109*****		**.01707*****	

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

that its effect on achievement was suppressed by, or interacts with, one or more of the variables of the "self-esteem" group entered in Model 4. However, while the effect of foreign-born is statistically significant, it remains relatively week. Of the "self-esteem" variables, both educational aspirations and self-assessment have statistically significant effects on scholastic achievement.

Surprisingly, the support variables are weak predictors across all of the models presented in Table 1. In the more complete models (models 3 and 4), none of the support variables are statistically significant. It is equally surprising that sex, parent's education, and, for the most part, foreign-born status all have little or no direct effect on current scholastic achievement. However, we should remember that it is possible that support networks, sex, foreign-born status and paren's education may all have significant indirect effects on current scholastic achievement. Table 2 explores this important possibility.

The results presented in Table 2 display the regressions of various "intervening" variables. The results of the regression of past achievement on the (remaining) background variables (model 1, table 2) show that parents education, at least, does have a significant and relatively strong effect (B=.173) on current scholastic achievement via past achievement, i.e., a strong indirect effect. Therefore, although parents education did not have a direct effect on achievement, it has an important indirect effect through past achievement.

The results of Model 2 (Table 2) suggest that past achievement not only has a strong direct effect on current achievement but also a significant indirect effect through parent's grade expectations. Importantly, sex has an indirect effect on achievement through parents grade expectations. Interestingly, it has a negative direct effect on parents grade expectations, i.e., lowers parents expectations. This surprising result suggests that parents have lower grade expectations for boys compared to girls.

Table 2: Path Analysis Assessment of Four Models Related to Scholastic Achievement

Variable	*Model 1* ***Dependent:*** Past Achievement		*Model 2* ***Dependent:*** Grade Expectation		*Model 3* ***Dependent:*** Educ. Aspirations		*Model 4* ***Dependent:*** Self-Assessment	
	β	***t-ratio***	**β**	***t-ratio***	**β**	***t-ratio***	**β**	***t-ratio***
Sex	-.060	-1.42	**-.088**	**-2.21***	**-.106**	**-2.78****	-.023	-.60
Past Achievement	NA		**.435**	**10.44*****	**.345**	**7.94*****	**.185**	**3.78*****
Foreign Born	.045	1.07	.019	.49	.038	1.02	**-.196**	**-4.93***
Parents Education	**.314**	**7.44*****	.051	1.22	**.187**	**4.76*****	**.102**	**2.42***
Peer Support					.080	1.82	.042	.90
Teacher Support					.050	1.20	**-.092**	**-2.11***
Parents Support					.011	.27	.026	.63
Pressure to Stay					.080	1.91	.078	1.76
Parents Influence					-.024	-.57	-.089	-1.96
Grade Expectation					**.120**	**2.85****	**.162**	**3.64*****
Self-Esteem							**.181**	**4.40*****
Educational Asp.							.063	1.33
Self-Assessment							NA	
R^2	**.104*****		**.219*****		**.329*****		**.251*****	

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

The results of Model 3 (Table 2) show that sex again has a significant indirect effect on achievement via the child's educational aspirations. It would appear that boys have lower educational aspirations than girls. Past achievement and parents education both have significant indirect effects on achievement via the childs educational aspirations. And parents grade expectations also have a significant indirect effect on achievement.

The results of Model 4, (Table 2), show that sex does not affect the childs self-assessment of scholastic skills and abilities. Therefore, sex does not have an indirect effect on achievement through self-assessment. However, past achievement has a significant indirect effect on achievement via self-assessment along with foreign-born status that has a strong effect on self-assessment. This suggests that foreign-born students tend to rate themselves less capable and skilled scholastically than their native-born counterparts although there is no actual difference in their performance. However it is an indirect effect via scholastic self-assessment. Parents grade expectations and self-esteem both have significant effects on self-assessment and, therefore, significant indirect effects on achievement.

The results from the full model (Table 1, Model 4) show that past achievement and parents grade expectations have strong direct effects on achievement. And, the childs educational aspirations and self-assessment both have moderate direct effects on achievement. Foreign-born status has a weak direct effect on achievement. Surprising. sex, parents education, foreign-born status, and the support variables appear to have little or no direct influence on achievement. However, we discovered that several of these factors do influence achievement indirectly. For example, sex has indirect effects on achievement through parents grade expectations and the childs educational aspirations. Parents education has indirect effects through past achievement, childs educational aspirations, and self-assessment. Interestingly, foreign-born status has a significant indirect effect via self-assessment and self-esteem via self-assessment. Also important to this analysis is

that the support variable has neither a direct nor indirect influence on achievement.

Table 3 summarizes the total effect for all of the variables in the "trimmed" model (significant effects). From this table, it is clear that an emphasis on only the direct effects is somewhat misleading. Such a focus would suggest that sex, parents education, and self-esteem have no effect on achievement. Once the key indirect effects are taken into account, however, all of these factors do have an influence on achievement. While the influence of these factors is statistically significant, their individual effects remain relatively small. By examining the indirect effects, the influence of past achievement, parents grade expectations, and the child's educational aspirations on achievement have all substantially increased. The effect of past achievement has increased by 20 percent. The effect of grade expectations has increased by 22 percent whereas the effect of educational aspirations has increased by ten percent. The effect of foreign-born status, however, has decreased by over 25 percent. This means that when we consider the indirect effects of foreign-born status on achievement via self-assessment, the gap between foreign-born and native –born students narrows substantially. This may be because foreign-born students, although they perform better, on average, than native-born students, tend to assess their academic skills lower than the native-born students. In the end, our ability to account for variation in achievement is clearly enhanced by examining not only the direct effects but also by examining the indirect effects.

POLICY IMPLICATIONS

Given that "past achievement" is the single most important factor in predicting current student scholastic success, it is important that when students entre school (at what ever age or grade), they must have access to all the expertise and teaching skills in the school that allow them to achieve some level of success. For immigrant youth, this is especially important when they entre the Canadian school system.

Table 3: The Direct, Indirect, and Total Effects of Factors Related to Scholastic Achievement.

Variable	Direct Effect	Indirect Effects via				Total Effect[a]
		grade exp.	educ. asp.	self-esteem	self-assess	
Sex	---	-.021	-.011	.003	---	-.029
Past Achievement	.551	.060	.034	.002	.017	.664
Foreign Born	.068	---	---	---	-.018	.050
Parent's Educ.	---	---	---	.008	.009	.017
Grade Expectation	.125	---	.013	---	.015	.153
Self-Esteem	---	---	---	---	.016	.016
Educ. Aspirations	.098	---	---	.010	---	.108
Self-Assessment	.090	---	---	---	---	.090

a. All of the total effects reported are statistically significant

Their learning curve must be such that they achieve immediate success in the school or, as pointed out above, they will not have the level of success that is necessary for future levels of scholastic success. This will require special programs for new immigrant youth starting school in the Canadian system. On the other hand, once the student achieves success, there is no need for the school to develop special continuing programs for immigrant youth. Our data shows that once students entre grade 11 and 12, the pattern has been set and there is little that can be accomplished this late in the secondary school process. Students who were not able to achieve scholastic success in the early stages of their education have dropped out of the process. However, getting these students back into the secondary system will require new and innovative programs.

Our data also show that educational aspirations of students are linked to educational achievement. Students wanting to go on to post-secondary programs generally have higher levels of scholastic success than those that do not. Since this is also related to parental involvement, it is important that all secondary schools ensure that parental involvement in the school system remains high. Special programs may be needed to ensure that immigrant parents are involved in the school activities and the educational programs of their children. Finally, our research notes that self-esteem is an important factor (even though it is a mediating factor) in student educational success. This is particularly important for immigrant students. Hence, programs that deal with student self-esteem may need to be available to them early in their educational career.

CONCLUSION

The results obtained address the three objectives identified at the outstart of the paper. First, the data reveal that multiple interacting factors operate to contributes to the student's school performance. Although some variables are clearly more important in predicting current scholastic achievement, there are many other factors involved and they

operate both directly and indirectly. The second goal is to examine the relative strength of the contribution of various variables to youth scholastic achievement. The path coefficients clearly demonstrate that past achievement is a powerful indicator of current student achievement. The data also reveal that self-esteem is an important mediating factor for immigrant youth in that it impacts their overall achievement. Finally, educational aspirations of students are linked to their scholastic achievement.

The last goal of the paper is to present results that elaborate on a number of complex pathways whereby family, peers, and other factors combine in predicting scholastic achievement. The results also demonstrate that peer/family/teacher support did not have an impact on the students scholastic achievement. Thus networks that previously were suggested as important factors in student scholastic success were not evident in this sample, either for immigrant or native born youth. The results show that if only direct effects are taken into consideration, the complexity of the process remains invisible. Clearly such factors as parental education, sex, and social class impact on students achievement but only in an indirect fashion.

While the individual effects of these various factors are small (but significant), what the data shows is that taken together, they have a cumulative impact on the students scholastic achievement and cannot be ignored. Taken together, these results demonstrate that social and individual factors combine in complex ways to shape the scholastic achievement of youth. In summary, the results confirm the importance and complexity of forces that impact on secondary students and influence their scholastic achievement.

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