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Exploring the Predictors of Educational Experience and Academic Performance among University Students in Regina

Introduction

Pursuing studies at an institution of higher learning is a major undertaking by many young Canadians. Indeed, the possession of a university degree has often been conceived as one of the crucial determinants of later-life economic success and status attainment (Anisef, Ashbury, & Turriffin, 1992; Hunter & Leiper, 1993). According to Statistics Canada (2001a), Canadian universities enrolled a total of 719,900 full-time and part-time undergraduate students in 1999-2000, of whom 487,400 were aged between 18 and 24. Drawing on nationwide surveys of young people in Canada, Bibby (2001) notes that more than one in six teenagers today expect to graduate from university and another one in 10 anticipate at least attending university. Students' decisions to enter university, as pointed out by Stoecker (1991), may be influenced by factors that are intrinsic (i.e., students' aspirations and background characteristics of race, sex, ability, and socioeconomic status) and extrinsic (i.e., institutional characteristics, financial aid, and career field characteristics).

Undoubtedly the pursuit of a university education entails not merely a strong commitment of time and effort, but also the investment of an enormous amount of financial resources.¹ Students' grades and satisfaction with the various aspects of academic life, which are considered as important educational outcomes (Bean & Bradley, 1986; Kaufman & Creamer, 1991; Pike, 1991), certainly deserve serious research attention. This article attempts to explore the determinants of the educational experiences and academic performance among university students in Regina.

Methodology

This analysis is based on data collected as part of a larger investigation into the general well-being of university students in Regina (Chow, 2002). Using a convenient sample,² a questionnaire was administered to a total of 318 undergraduate students attending the University of Regina during the academic year 2001-2002. The sample comprised 115 (36.2%) male and 202 (63.7%) female students with a mean age of 20.6 ($SD=4.29$). Caucasian students ($N=273$, 86.1%) and Canadian citizens ($N=308$, 96.9%) constituted an overwhelming majority of the sample. A sizable proportion of the respondents were registered with the Faculties of Arts ($N=149$, 47.2%), Administration ($N=49$, 15.5%), and Science ($N=43$, 13.6%). In terms of marital status, most were never married or single

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($N=279$, 89.1%). As well, slightly more than half of the sample ($N=157$, 52.2%) indicated an annual family income of over \$60,000.

Data Analysis

Educational experience was a 5-item measure based on respondents' degree of satisfaction with courses they were currently taking (mean=3.73, $SD=.80$), instructors' quality of teaching (mean=3.70, $SD=.79$), scholastic achievement (mean=3.42, $SD=.97$), school facilities (mean=3.75, $SD=.71$), and school life (mean=3.73, $SD=.73$) on a Likert scale (1=very dissatisfied to 5=very satisfied), with an alpha reliability coefficient of .604. Academic performance, on the other hand, was measured by current grade point average (GPA). Specifically, almost half of the sample ($N=146$, 47.2%) reported an average grade of 70-79%. Slightly fewer than a quarter ($N=75$, 24.3%) had an average of 60-69%, and another quarter ($N=77$, 25.0%) obtained 80-100%. It is also worth noting that about half of the respondents ($N=163$, 52.8%) intended only to obtain a bachelor's degree and nearly two fifths expressed an interest in pursuing further studies at either the master's ($N=87$, 28.2%) or doctoral ($N=35$, 11.3%) level.

In order to disentangle the significant factors affecting students' educational experience and academic performance, two ordinary least-squares regression (OLS) models were constructed (see Table 1). A total of 11 predictor variables were included in each of these models.³

Educational experience. The overall OLS regression model was found to be significant ($F=6.67$, $p<.001$), and 19.4% of the variance in educational experience was accounted for. Grade point average ($\beta=.224$, $p<.001$), attitude toward school ($\beta=.243$, $p<.001$), socioeconomic status ($\beta=.138$, $p<.05$), and self-assessed academic ability ($\beta=.132$, $p<.05$) were found to be positively and significantly related to educational experience. More specifically, students with a higher GPA, who considered education and learning to be important, rated their academic ability higher, indicated a higher socioeconomic status, and expressed a more positive educational experience.

Academic performance. The overall OLS regression model for academic performance was also found to be significant ($F=11.896$, $p<.001$) and explained 31.6% of its variation. Academic ability ($\beta=.293$, $p<.001$), educational experience ($\beta=.169$, $p<.001$), educational aspirations ($\beta=.160$, $p<.01$), and class attendance ($\beta=.117$, $p<.05$) were found to be positively and significantly related to academic performance. Particularly students who assessed their academic ability to be higher and those with a more positive educational experience, higher educational aspiration, and more regular class attendance performed better academically. On the other hand, employment status ($\beta=-.122$, $p<.05$) was the only variable associated with academic performance significantly and negatively. Employed students were found to demonstrate a lower GPA.

Discussion and Conclusion

Educational experience and academic performance are two inextricably related educational outcomes. The present analysis provides evidence for the positive association between these two variables (Bean & Bradley, 1986; Strauss & Volkwein, 2002; Struthers, Perry, & Menec, 2000). Consistent with findings from earlier studies, self-assessed academic ability (Mboya, 1986), educational

Table 1
Unstandardized and Standardized Ordinary Least-Squares Regression
Coefficients for Effects of Sociodemographic and School-Related Variables
on Educational Experience and Academic Performance

	<i>Educational Experience</i>		<i>Academic Performance</i>	
	β	beta (β)	β	beta (β)
Sex	.002	.004	-.002	-.010
Employment status	-.460	-.089	-.208	-.122*
Level of study	.002	.008	-.007	-.101
Class attendance	-.003	-.054	.002	.117*
Time spent on studying	.000	.000	.0009	.089
Educational aspirations	.197	.065	.161	.160**
Academic ability	.478	.132*	.352	.293***
Attitude toward school	.776	.243***	.003	.032
Grade point average	.674	.224***	-	-
Educational experience	-	-	.006	.169***
Socioeconomic status	.434	.138*	.000	.001
Family income	-.103	-.063	.001	.021
<i>F</i>		6.67***		11.896***
<i>R</i> -square		.228		.345
Adjusted <i>R</i> -square		.194		.316
<i>N</i>		318		318

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

aspirations (Kaufman & Creamer, 1991), attitudes toward school (Dweck, 1986; Eppler & Harju, 1997), and class attendance (Devadoss & Foltz, 1996; Ledman & Kammuche, 2002; Marburger, 2001; Park & Kerr, 1990; Rodgers, 2001; Romer, 1993) have been identified as significant predictors of students' academic performance. As well, socioeconomic status and employment status, which are both measures of the financial capital of the students, have also been consistently found in earlier studies as important determinants of various educational outcomes (Chow, 2000; Conley, 2001; McDonough, 1997; McKenzie & Schweitzer, 2001).

In summary, the present investigation has identified the key factors that affect the educational experience and academic performance of university students in Regina. The results lend support to Franklin's (1995) proposition that educational outcomes are to a large extent dependent on human resources (i.e., student characteristics and experiences). These findings may be used by counselors and educators to aid in design of interventions and support services that might serve to enhance both the quality of life and academic performance for university students. As the present study was conducted on a limited group of undergraduate students at a mid-sized university in a prairie province, additional research is needed with postsecondary student populations in other geographical locations.

Notes

1. In fact, according to Statistics Canada (2001b), undergraduate students in all faculties have to pay an average of 4.1% more in tuition fees in the 2002-2003 academic year than in 2001-2002. Noticeably, from 1990-1991 to 2000-2001, average undergraduate tuition fees rose 135.4%, more than 6 times faster than the 20.6% inflation as measured by the Consumer Price Index. Perhaps this helps to explain the finding from the Survey of Labour and Income (Statistics Canada, 2001a) that young people from high-income families were 2.5 times as likely as those from low-income families to have participated in university education in 1998 or before.
2. This study was based on a sample of undergraduate students enrolled in various sociology classes during the fall session of the academic year 2001-2002. It should be noted that these 318 students were registered with various faculties, schools, or institutes, including Administration, Arts, Education, Fine Arts, Human Justice, Language, Kinesiology, Science, and Social Work.
3. Age (mean=20.6, $SD=4.29$), grade point average (mean=3.96, $SD=.836$), level of study (mean=2.12, $SD=1.16$), class attendance (mean=13.81, $SD=4.88$), and time spent on studying (mean=10.5, $SD=8.23$) were measured as continuous variables. Sex (1=male, 0=female) and employment status (1=employed, 0=not employed) were dummy variables. Educational aspirations (mean=3.41, $SD=.832$) were measured on a scale of 1 (no certificate, diploma, or degree) to 5 (doctoral degree). Attitudes toward school (mean=4.37, $SD=.738$) was measured on a scale of 1 (very unimportant) to 5 (very important). Socioeconomic status (mean=3.43, $SD=.827$) was measured on a scale of 1 (low) to 5 (high). Family income (mean=3.59, $SD=1.54$) had values ranging from 1=\$20,000 or below to 6=\$100,001 or over. Educational experience was a composite score based on respondents' degree of satisfaction (1=very dissatisfied to 5=very satisfied) with courses currently taking, instructors' quality of teaching, scholastic achievement, school facilities, and school life.

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