A COMPARISON OF DROPOUT STUDENTS, AT RISK STUDENTS AND REGULAR HIGH SCHOOL STUDENTS

Pierre Potvin[1], Diane Marcotte[4], Laurier Fortin[2], Égide Royer[3], Danielle Leclerc[1], Denyse Blondin[1]

[1] Université du Québec à Trois-Rivières, Trois-Rivières, Canada
[2] Université de Sherbrooke, Sherbrooke, Canada
[3] Université Laval, Québec, Canada
[4] Université du Québec à Montréal, Montréal, Canada

1

ABSTRACT

The present study explores the differences between students identified as presenting a high risk of dropping out of school and students who have already dropped out of school. Using a multidimensional design, dependent measures include a number of personal, family and school characteristics considered in the literature as potential risk or protective factors. A sample of participants ($n = 275$), drawn from a larger cohort, has been distributed into 3 groups (regular, at risk, dropout). Data analysed were collected during Grades 8, 10 and 12 as part of a 5-year longitudinal research. Significant differences between the 3 groups have been found on personal, family and school variables. Results also show a number of linear changes on Time effect. Preventive intervention should focus on variables that yield significant changes on Time effect.

INTRODUCTION

- According to the Ministère de l'Éducation du Québec (1999), 33,8% of students dropped out of school in 1997-1998. These youths suffer from serious adverse consequences of dropping out of school.

- School dropout should be conceptualized as the result of a long interactive process between the student and his/her environment (Fortin et *al.*, 1998; Royer et *al.*, 1995)

RESEARCH PROBLEM

- School dropout seems to depend on a large number of individual risk and protective factors, as well as the interaction of these factors.

- Such factors are drawn from socioeconomic, personal, educational, peer and family characteristics (Fortin & *al.*, 1995; LeBlanc & *al.*, 1993; Potvin & Papillon, 1993; Rumberger, 1995).

- A student at risk of dropping out is described as one who exhibits several of the characteristics associated with dropout students and who is unlikely to complete high school.

RESEARCH PROBLEM …/2

- Few studies have taken a long-term perspective in comparing students who present a risk of dropping out with student who actually dropped out.

- In the present study, a multidimensional and longitudinal design was used, including numerous variables from personal, school and family contexts in order to explore these differences between students identified as presenting a high risk of dropping out and students who have already dropped out of school.

QUESTIONS

1. Did students who never demonstrated a potential risk of dropping out (group 1) differ from students who presented a risk but never dropped out (group 2) or from students who have dropped out of school (group 3) on personal, school and family characteristics?

2. Did these characteristics remain stable over a period of five years, as measured in Grade 8, 10 and 12?

3. Did specific characteristics predict the variance between at risk (Group 2) and dropout students (Group 3) ?

Sample :

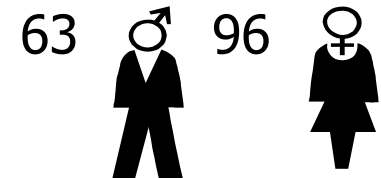*n* **= 275 secondary school students drawn from a larger cohort (***n* **= 808) were distributed into three groups according to specified criterions.**
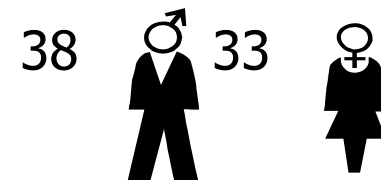
❑ **Group 1 : REGULAR**   n = 159   63 ♂ 96 ♀

Actually attends a postsecondary establishment
Has never been identified at risk of dropping out

❑ **Group 2 : AT RISK**   n = 71   38 ♂ 33 ♀
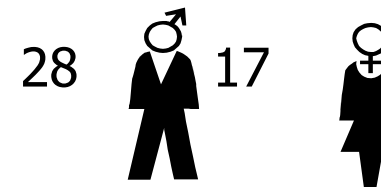
Actually attends a postsecondary establishment
Has been identified at risk of dropping out
on 2 moments out of 3

❑ **Group 3 : DROPOUT**   n = 45   28 ♂ 17 ♀

Has not graduated from high school
Has been identified or not as at risk of dropping out

METHOD

Instruments :

❑ Potential risk of school drop out : *Décisions.* (Quirouette, 1988)

Personal variables :

❑ Depression : *Beck depression inventory* (BDI). (Beck, 1978)

❑ Coping : *Ways of coping Questionnaire* (WCQ). (Folkman & Lazarus, 1988)

❑ Behavioral disorders : *Social skills rating system* (SSRS). (Gresham & Elliot, 1990)

❑ Delinquency : *Délinquance auto-révélée* (MASPAQ). (Leblanc, 1994)

❑ School performance: *Marks in Mathematics and in French language Arts.*

Family variables :

❑ Parenting style : *Parenting style and involvement Questionnaires.*
(Steinberg et al., 1992; Deslandes, 1996)

❑ Family Climate : *Family environment scale.* (Moos & Moos, 1986)

School variables :

❑ Classroom Climate : *The classroom environment scale.* (Moos & Tricket, 1987)

❑ Teacher-student relationship **:** *Teachers' attitude toward their students scale* (TATS). (Potvin & Rousseau, 1991)

8

PERSONAL VARIABLES
MANOVA – REPEATED MEASURES

	Time X group effect	Time			Time effect	Groups			Between Groups effect
		G-8	G-10	G-12		Regular (1)	At Risk (2)	Dropout (3)	
Depression	*	7,05	6,26	5,06	*** LINEAR	4,06	9,61	8,60	1<2,3 ***
Coping									
Seek support		1,67	1,65	1,63		1,77	1,42	1,44	1>2,3 ***
Pos. Reappraisal	**	1,62	1,59	1,57		1,69	1,41	1,51	1>2,3 ***
Avoidance		1,37	1,48	1,34	*** QUADRATIC	1,31	1,60	1,38	1<2 ***
Behavior disorders									
Externalization		0,81	0,88	0,90		0,56	1,18	1,72	1<2,3 ***
Internalization		2,82	3,32	2,97		2,74	3,42	3,72	1<2,3 ***
Delinquency		3,44	4,33	4,45	*** LINEAR	3,08	5,68	5,80	1<2,3 ***
School Performances									
French (LA)	***	77,58	76,25	72,47	*** LINEAR	78,00	74,02	61,25	1>2,3 2>3 ***
Mathematics		81,86	78,00	71,52	*** LINEAR	79,55	76,29	62,08	1,2>3***

* $p < 0,05$, ** $p < 0,01$, *** $p < 0,001$

FAMILY VARIABLES
MANOVA – REPEATED MEASURES

	Time X group effect	Time			Time effect	Groups			Between Groups effect
		G-8	G-10	G-12		Regular (1)	At Risk (2)	Dropout (3)	
Parental style and involvement									
Warmth	**	3,39	3,21	3,18	*** LINEAR	3,39	3,02	3,08	1>2,3 ***
Parent-teen communication		2,26	2,24	2,40	** LINEAR	2,42	2,10	2,09	1>2,3 ***
Affective support		2,96	2,78	2,75	*** LINEAR	3,02	2,55	2,42	1>2,3 ***
Family climate									
Cohesion		7,47	7,01	7,06	** LINEAR	7,87	5,94	6,45	1>2,3 ***
Conflict		2,12	2,52	2,46	* LINEAR	1,77	3,47	2,95	1<2,3 ***
Order & organization		6,52	6,12	6,32	** QUADRATIC	6,70	5,70	5,89	1>2,3 ***

*$p < 0,05$, ** $p < 0,01$, *** $p < 0,001$

SCHOOL VARIABLES
MANOVA – REPEATED MEASURES

	Time X group effect	Time			Time effect	Groups			Between Groups effect
		G-8	G-10	G-12		Regular (1)	At Risk (2)	Dropout (3)	
Classrom climate									
Involvement	***	2,14	2,18	2,01		2,39	1,61	1,60	1>2,3 ***
Affiliation		3,13	3,22	3,28		3,37	2,89	3,00	1>2,3 ***
Teacher support		2,32	2,87	2,51	*** QUADRATIC	2,77	2,21	2,22	1>2,3 ***
Order & organization		2,09	2,26	2,09		2,31	1,91	1,76	1>2,3 ***
Rule clarity		3,14	3,38	3,32	* LINEAR	3,42	3,09	2,96	1>2,3 ***
Teachers' attitude									
Teacher-student relationship	**	37,52	34,59	32,20	*** LINEAR	40,05	31,38	15,44	1>2>3 1>3 ***

* *p* < 0,05, ** *p* < 0,01, *** *p* < 0,001

Comparison of
Dropout and At risk students

Logistic regression has been computed between variables
that predict group membership. 0 = dropout students and 1 =
At risk students

	Grade 8		Grade 10	
	p	exp(B)	p	exp(B)
Marks in Maths	,107 ***	1,11	,104 ***	1,11
Marks in French(LA)	,098 **	1,10	,158 ***	1,17
Teachers' attitude	,005	1,00	-,003	0,99
Externalization	-,198	0,82	-,026	0,97
Correct classification	79,6 %		82,4 %	

Results : Compared to dropout students, at risk students have a
better opportunity to obtain good marks in Maths and French
in Grade 8 (Sec.1) and Grade 10 (Sec. 3).

RESULTS – personal variables

- Regular students differ from at risk and dropout students on depression – seeking support, positive reappraisal, avoidance – behavioral disorder (externalization, internalization) - delinquency.

- At risk students perform better in Mathematics and French than dropout students.

- Depression, avoidance, marks in French and Mathematics decreased, while delinquency increased over the grades 8, 10 and 12

RESULTS- family variables

- Parental style for regular students differs from at risk and dropout students on warmth/acceptance – parent/teen communication – affective support.

- Family climate for regular students differs from at risk and dropout on cohesion – conflict – order and organization.

- Family conflict scores are higher for at risk and dropout students than for regular students.

- Parental warmth, affective support and communication with their teen, family's cohesion, conflit and order/organization changed over the period.

RESULTS – School variables

- Regular students show higher scores for involvement – affiliation- teacher support – order and organization and rule clarity than at risk and dropout students.

- Teacher-student relationship presents the highest scores for regular students, with moderate but significative scores for at risk students and particularly low scores for dropout students.

- Perception of teacher support, rule clarity changed over the high school period, while teachers' attitude becomes increasingly negative (particularly for dropout students).

CONCLUSION

- Globally, the group composed of regular students (group 1) distinguishes itself clearly from the other two groups, at risk (group 2) and dropout students (group 3), on the three sets of variables (personal, family and school).

- However, it is more difficult to establish the same kind of distinction between at risk (group 2) and dropout students (group 3).

- Variables that seem to best predict membership to groups (2) et (3) are :
  - Achievement in Mathematics
  - Achievement in French language Arts

- Noticeably, two other variables correlate significantly between groups (2) and (3) without yielding predictive results :
  - Teachers' attitude
  - Behavioral disorder - externalization

- Time factor (G-8, G10, G-12) in considered to play an important role in the results observed for specific variables. Consequently, preventive intervention aiming for better efficiency should focus on variables that indicate the most significant results on Time effect.

16