



Self-Regulation Strategies of Students Enrolled in a Distance and Online University Education Program ICWL 2019

Louise Sauvé

**Professor, Education Department, TELUQ University
Director of Centre of Research in LifeLong Learning (SAVIE)**

Associated Presenters

Nicole Racette, Professor, University TÉLUQ

Cathia Papi, Professor, University TÉLUQ

Serge Gérin-Lajoie, professor, University TÉLUQ

Guillaume Desjardins, research and coordination assistant

Sophie Marineau, research assistant



Team

Other members of the research team

Séverine Parent, professor, UQAR

Didier Paquelin, professor, UL

Martin Houde, professor, University TÉLUQ

Sandrine Marineau, research assistant



Overview

1. Context of research
2. Methodology
3. Results and discussion

Context



- ▶ The lack of learning strategies, especially self-regulation strategies for students in the context of Distance and Online Learning (DOL)
- ▶ DOL = an education (synchronous and asynchronous) where the teaching and learning activities are overall carried out using Web technologies

Objective of communication



- Identify the learning strategies that have the greatest impact on dropping out of an online course and a distance and online program
- **Phase 1 - Identify self-regulation strategies with regard to certain sociodemographic and academic variables**

Sociodemographic Variables

- The **gender variable** does not seem to have a significant impact on the drop-out rate.



- **Students grow older**, participation in postsecondary studies and drop-out rates tend to increase

- The university drop-out rate is lower among students with a **parent who has a post-secondary diploma** (12%) than those whose parents have no post-secondary education (20%)



Academic Variables



- In Quebec, **33% of students abandon their university studies** when they are in a bachelor's program
- Nearly half of **these drop-outs occur during the first year** of enrolment in a bachelor's program

Academic Variables



- ▶ The reported studies do not link the drop-out rate to the type of university program in which the student enrolls: short program, certificate and bachelor's degree.

Self-regulation strategies

Self-regulating mental operations based on metacognitive knowledge, consisting mainly of planning, mobilizing and managing the external and internal resources required for the intended learning



- ▶ For external resources, we find management strategies for the workspace and tasks as well as time.

- ▶ For internal resources : emotional strategies that affect the maintenance of motivation, concentration, confidence in ability to succeed in school, management of stress and asking for help.



Problem



Students do not seem to have clear ideas about the learning strategies they use.



Since learning strategies can be innate as well as learned, learning and gaining knowledge about these strategies can lead students to better understand their behaviour toward studying.

Overview

1. Context of research
2. Methodology
3. Results and discussion





Sample



LES COURS

Three elements were taken into account for the choice of courses.

- The selected courses came from **at least three different departments** (language department, social sciences and administrative sciences).
- The number of students per course, **between 300 at 900** registrations per year.
- The variability of the courses in terms of the rates of failure, drop-outs and success : **17 selected courses** have failure variations ranging from 5.95% to 23.64% and drop-outs between 8.86% and 17.34%.

Methodology – Sample (n= 1060)

Characteristics	Demographic Variables	Respondents
Gender	Female	75.8%
	Male	24.2%
Age	25-34 years old	44.7%
	35-44 years old	14.9%
	Over 45 years old	11.1%
Family Life	Live with a spouse and children	67.1%
	Live alone with or without children	32.9%
Marital Status	Live with partner (married or common law)	63.6%
	Single	32.9%
	Divorced	3.4%

Methodology - **Sample (n= 1060)**

Characteristics	Academic Variables	Respondents
Semester	1th to 3th semester	67.6%
	4th to the 6th semester	16.9%
	7th to 9th semester	10.8%
	10 semesters or more.	4.7%
Program	Certificate program (30 credits)	54.6%
	Bachelor's degree (90 credits)	32.8%
	Short program (between 9 and 15 credits)	6.6%
	Independant students (credit transfer)	6.0%

Data collection Instrument

Online questionnaire complete during three sessions (Summer and Fall 2018, Winter 2019).

- ▶ In the first part, 21 statements to identify socio-demographic and academic variables
- ▶ In the second part, **37 statements** deal with self-regulation strategies grouped into 7 categories:
 - ▶ task management (6 statements)
 - ▶ time management (4 statements)
 - ▶ concentration (3 statements)
 - ▶ confidence in ability to succeed (7 statements)
 - ▶ motivation (8 statements)
 - ▶ stress (5 statements)
 - ▶ asking for help (4 statements)



Statistical analysis

1. Reliability analysis of the statements according to their respective category
2. Analysis of the **Cronbach alpha (α) coefficient** was performed (between 0.584 and 0.72)
3. **Variances between the categories** mentioned were analyzed with respect to the various socio-demographic factors observed among students: **age group, civil status, number of semesters of study in DOL, type of program, parents' schooling**
4. Post-hoc test (**Tukey**)

Overview



- 1. Context of research**
- 2. Methodology**
- 3. Results and discussion**

Self-Regulation Strategies Used by Respondents (n = 1,060) – 82.66%

Categories	Self-Regulation Strategies	Used %	Not Used %
Motivation (7/8 statements)	My choice of courses corresponds to my interests or professional requirements	96.0	4
	I really feel like I'm wasting my time in university courses	6.8	93.2
	Having a university degree is very important to me	95.1	4.9
	I am usually satisfied with what I achieve in my courses	92.7	7.3
	I see the link between my courses and the professional practice being exercised or sought	92.0	8.0
	I am pleased with taking my course online	88.2	11.8

Self-Regulation Strategies Used by Respondents (n = 1,060) – 82.66%

Categories	Self-Regulation Strategies	Used %	Not Used %
Task Management (2/6 statements)	I create an atmosphere that can facilitate my educational tasks (music, going to the library, setting up a workplace, etc.).	90.0	10.0
	When I'm dealing with a difficult task, I divide it into several small tasks	85.7	14.3
Confidence in Ability to Succeed (5/7 statements)	I feel able to pass my exams and do well in my assignments	95.1	4.9
	I take initiatives in my studies to make sure I succeed	94.3	5.7
	I feel able to make steady progress	91.7	8.3
	I have confidence in my ability to use effective learning strategies	91.1	8.9
	I call into question my work methods when my results are not up to my expectations	88.1	11.9

Self-Regulation Strategies Not Used by Respondents (n = 1,060) – 26.9%

Categories	Self-Regulation Strategies	Used %	Not Used %
Task Management (1/6 statements)	I plan work periods based on when I'm most productive.	69.7	30.3
Time Management (3/4 statements)	I estimate how much time my work will take in order to avoid being late.	68.6	31.4
	I can fix a study schedule and adhere to it.	70.7	29.3
Concentration (2/3 statements)	I can maintain my attention and concentration adequately.	68.7	29.3
	I can concentrate easily in this course.	68.2	31.8
Confidence in Ability to Succeed (1/7 statements)	I can get down to work without any difficulty to speak of.	68.2	31.8
Stress (2/5 statements)	I can normally manage stress and pressure when studying.	52.6	47.4
	Normally, I can control my fear or worry when I do learning activities.	61.0	39.0
Asking for Help (2/4 statements)	When I need help, I turn to other students.	37.2	62.8
	I communicate with other students when I need support for learning	33.0	67.0

Analysis of the variances between the categories

Category	Variables	F	p
Concentration	Age Grouping	1.864	0.041
	Civil Status	1.816	0.048
Motivation	Age Grouping	1.681	0.026
Asking for Help	Age Grouping	2.394	0.002
	Type of Program	2.122	0.006
	Civil Status	1.976	0.012
	Family Situation	1.8	0.027

N = 965 ¹ The analyses are univariate.

General portrait of the student in relation to their use of self-regulation strategies.

- **For task management**, group 2 on average uses these strategies more than group 3
- **For the category concentration**, group 3 on average uses these strategies less than group 1
- **For the category asking for help**, group 1 on average uses these strategies more than groups 2 and 3

Cluster	N (%)	Family Situation	Civil Status	Age Grouping
1	315 (32.6%)	Lives alone	Single	Less than 25 years old
2	263 (27.3%)	Lives with spouse	Common-law partner	25-34 years old
3	387 (40.1%)	Lives with spouse and child(ren)	Common-law partner/ married	35-44 years old

Discussion



- + 60% of distance and online learning respondents **do not seek help** from other students when they need it or communicate with them to support their learning



Discussion



- + 50% of students typically **feel tense or under pressure** during their distance and online studies, and they experience fear or worry when carrying out learning activities.

Discussion



- + 30% of our respondents do **not plan work periods** based on the times when they are most productive, they do **not evaluate the time** needed to devote to their work and they do not set a work schedule which they follow.

- + 30% of our respondents have difficulty **concentrating and maintaining their attention**





Discussion

- ▶ The academic variable, the number of sessions or academic year, does not seem to have a significant influence on the use or non-use of self-regulation strategies by DOL students.
- ▶ The combination of variables (age, civil status and family situation) revealed **three profiles of students** who use fewer self-regulation strategies (time management, asking for help and concentration) in DOL



Discussion

- Using a **cluster model** to identify three typical student profiles makes for a more encompassing and realistic analysis than a factorial analysis of variance.
- For example, with **strategies for task management** which become statistically significant when analysis of age, civil status and family situation are combined.
- It is therefore possible to argue that certain self-regulation strategies should not be studied according to a single criterion, but rather by **combining various socio-demographic aspects** of a university student's typical situation.

Limitations

- Only 27% of people from our population responded to the survey.
- Our sample is made up of more women than men.

A population analysis is underway to verify if the characteristics of our respondents reflect those of the population



Conclusion

- Various findings have been identified which will be used in the second phase of our study, namely to determine whether these strategies influence dropping out of a distance and online course.



Thanks for your attention

More information about our research
www.savie-crp.ca

SAMI-Persévérance
<http://perseverance.savie.ca>

Contact us
louisesauve25@gmail.com

