Debt and Graduate Students

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Introduction

Recent data from a longitudinal study shows that the number of college students acquiring debt while in college rose over the five years the study was conducted (Friedline et al., 2017). Several consequences result from debt: students are often worried about their debt, which could potentially lead to a deterioration in their general health (Tran et al., 2018). Some students delayed or decided not to pursue their education or accepted a job they would not otherwise have accepted because of their debt (Lusardi et al., 2010). In order to ensure that they do not engage in risky behavior leading to debt, it is important to study the factors influencing the adoption of risky consumer credit behaviors.

Many researchers have studied credit use among university students, but so far, it appears that graduate and (post)graduate students have not been targeted (Cloutier, 2018). Although they are as likely as undergraduate students to be subject to the consequences mentioned above. To contribute to empirical knowledge about (post)graduate students and to ensure that interventions to help them are adapted, it is important to study them. To our knowledge, there are no data on credit and (post)graduate students, making this project exploratory. The aim is therefore to find the factors influencing the adoption of risky consumer credit behavior among (post)graduate students.

Method

All students (all programs, all degrees) received emails through their university's email address inviting them to participate in the study (response rate: Université Laval = 1.1%; UQTR = 6.3%). They were asked to click on an Internet link to fill out an online questionnaire. Most respondents were enrolled in administration, education, social sciences and health sciences. Respondents were not given any incentives and the study was submitted to an appropriate ethical review by both universities. It took about 17 minutes to complete the questionnaire. Each respondent reported different sociodemographic variables and their opinion on different scales: perceived pressure from parents and from friends, perception of credit behaviors adopted by parents and friends, consumer credit self-efficacy and risky consumer credit behaviors. All scales were composed of multiple items and all items had a 5-point (1 = strongly disagree; 5 = strongly agree) or 7-point (1 = strongly disagree; 7 = strongly agree) Likert-type response format. Psychometric properties were calculated for all scales.

The dependent variable is the adoption of risky consumer credit behavior. Respondents were asked to answer 5 items on how often they had experienced credit behavior in the past 12 months. The following is an example of an item: "In the last 12 months, regarding only my personal loans and credit cards, I've been late in making payments". A high score indicates that the person has often adopted risky credit behaviors. The internal consistency was 0.74.

The pressure to use credit responsibly and the perception of credit use are two dimensions of a construct known as Social Norms. Subjective norms represent a person's perception of the social pressure to behave in a particular way and the motivation to comply with that pressure (Ajzen, 1988). Injunctive norms represent the perceived pressure exerted by referents to adopt a particular behavior (Fishbein & Ajzen, 2010). The respondents were asked to answer 4 items on the extent to which they agreed or disagreed with statements on perceived pressure regarding the appropriate use of credit. One of the items in this scale was: "My parents/friends think it is important to use credit responsibly". A high score

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indicates that the respondent perceives pressure from the reference person. The internal consistency was 0.65 for parents and 0.68 for friends.

Descriptive norms represent the perceived behaviors of others (Fishbein & Ajzen, 2010). Respondents were asked to answer 5 items on the extent to which they agreed or disagreed with statements regarding the perception that the reference person uses credit appropriately. The following item was in this section: "I think my parents/friends do not have credit problems". A high score indicates that the respondent perceives that his/her parents/friends use consumer credit responsibly. Satisfactory Cronbach's alphas of 0.92 for parents and 0.91 for friends were obtained.

Bandura's (1993) concept of self-efficacy: a person's perceived ability to succeed in performing a behavior. Respondents were asked to answer 11 items on the extent to which they agreed or disagreed with statements about how they perceived their own ability to use the credit appropriately. The scale contained items such as: "For the moment, I think I can pay my loans each month". A high score indicates that the respondent believes that he or she is capable of using consumer credit responsibly. The Cronbach's alpha value was 0.87.

Consumer credit products include amounts due to different creditors and for different purposes (vehicles, furniture and household appliances, credit card balances, money borrowed from banks, parents and relatives) and do not include student loans and mortgage loans. This variable is coded 0 for students with no debt and 1 for students with debt.

Finally, respondents were asked to indicate their status on several socio-demographic variables such as gender, age, educational status (full-time or part-time), residence status and employment status (full-time or part-time). They were also asked to mention the number of personal credit cards owned and their prediction of their income for the following year. Thus, they were asked if their income would increase, decrease, not change or if they did not know.

Table 1. *Descriptive statistics of the sample*

Variables	Graduates and postgraduates (*n* = 317)	
	Mean	S.D
Age	29.2	7.3
Number of credit cards	1.5	0.8
	n	%
Gender		
Female	206	65.0
Male	105	33.1
No answer	6	1.9
Current living situation		
Living alone	72	22.7
Living with parents	32	10.1
Living with roommate(s)	36	11.5
Living with partner	173	54.6
No answer	4	1.3
Student status		
Full-time student	231	72.9
Part-time student	69	21.8
No answer	17	5.3
Debt		
No	115	36.3
Yes	202	63.7
Employment status		
Full-time	55	17.4
Part-time	135	42.6
Unemployed	72	22.7
No answer	58	17.3
Change in income		
Increase	126	39.7
Decrease	61	19.2
None	111	35.0
Do not know	19	6.0

Results

Table 2 presents the results of a multiple linear regression analysis showing the factors influencing the adoption of risky consumer credit behaviors. Results indicate that (post)graduate students are less likely to engage in risky credit behaviors: if they have observed their friends engage in risky credit behavior, if they have a high level of self-efficacy, if they have no consumer debt and if they have an idea of their future income.

Table 2. Multiple linear regression analysis of the adoption of risky consumer credit behaviours (n = 317)

	Unstandardized coefficients		Standardized coefficients
	B	Std. Error	Beta
(constant)	3.92	0.48	
Parents			
Perceived pressure	.02	.03	.03
Credit behaviors adopted	-.06	.03	-.09

Friends			
Perceived pressure	.01	.03	.02
Credit behaviors adopted	-.11	.04	-.13**
Consumer credit self-efficacy	-.36	.05	-.43***
	-.01	.07	-.01
Gender[1]			
Age	.01	.01	.09
Current living situation[2]			
Living alone	.04	.13	.03
Living with roommate(s)	-.03	.14	-.02
Living with partner	-.08	.11	-.06
Student status[3]	-.07	.09	-.04
Employment status[4]			
Full-time	.24	.17	.07
Part-time	-.03	.17	-.01
Change in income[5]			
Decrease	-.13	.09	-.08
None	.05	.08	.04
Do not know	.33	.14	.12**
Debt[6]	.18	.07	.13**
Number of personal credit cards	-.03	.04	-.04

Adjusted $R^2 = 0.59$; $F(18, 316)=8.70$***

[1] 1 = male; 0 = female

[2] Living with parents =reference variable ; 1 = yes; 0 = other living situation

[3] 1 = Full-time student; 0 = Part-time student

[4] Unemployed = reference variable; 1 = yes; 0 = other employment status

[5] Increase = reference variable; 1 = yes; 0 = other prediction about their income

[6] 1 = in debt; 0 = no debt

*** p≤.001

** p≤.05

Conclusions

The aim of this research was to study the factors influencing the adoption of risky consumer credit behaviors among (post)graduate students. Unlike undergraduate students (Sotiropoulos & D'Astous, 2012), the more (post)graduate students perceived that their friends used credit responsibly, the less likely they were to adopt risky consumer credit behaviors. Whereas in the study by Sotiropoulos and D'Astous (2012), undergrads were more likely to imitate their friends who overspent on the credit card. It can be observed that friends still have an influence on these students, but by having a reaction that could be described as more mature. Being in school rather than just in the workforce may increase the influence of friends. The university atmosphere may cause people to be more sensitive to friends' behavior. It is not known whether people responded having in mind their close friends or their peers. This should be further explored.

(Post)graduate students no longer seem to be influenced by their parents. This is not very surprising since only 10% of them still live with their parents. However, the importance of the role that parents have in their children's financial education should not be underestimated. By comparing undergraduate students to (post)graduate students, it appears that the former are still influenced by their parents (Cloutier, 2018). Moreover, when the parents directly stimulated or instructed their children to learn about money, saving and other financial matters, it seems that their level of financial literacy increases (Grohmann, Kouwenberg & Menkhoff, 2015).

It is interesting to note that a high level of consumer credit self-efficacy contributes to reducing the probability of engaging in risky consumer credit behavior. More than just having knowledge, it seems that having self-confidence is an effective way to improve financial health. Similar results were obtained for undergraduate students (Cloutier, 2018; Shim et al., 2018) and adults (Achtziger, Hubert, Kenning, Raab, & Reisch, 2015; Gathergood, 2012). Educational programs should include activities that simulate financial situations that could help improve self-efficacy. Indeed, an effective way to improve self-efficacy is to accumulate experience (Bandura, 2007). It would therefore be important to find a way to include activities that combine action and education.

Compared to (post)graduate students who believe that their income will increase over the next year, students who have no idea regarding their income changes are more likely to adopt risky consumer credit behavior. This suggests that people who are not concerned by their future financial situation may be less cautious about their overall financial behavior, making them more likely to engage in risky behavior. There is a need to raise awareness about the importance of being concerned about personal finances.

Finally, we must acknowledge as a limitation of our study the low response rate (6.3% and 1.1%). In surveys conducted over the Internet, there is often a lower response rate than telephone or paper surveys (Fricker, Galesic, Tourangeau and Yan, 2005; Healey, Macpherson and Kuijten, 2005; Ilieva, Baron and Healey, 2002). However, there was a high number of respondents and many of the sample's characteristics were similar to those of the Quebec student population. Consequently, it is reasonable to assume that the findings obtained in this study would be generalizable to the student population. It has been pointed out by some researchers that it is more important to have a representative sample of the population than a high response rate (Asch, Jedrziewski and Christakis, 1997; Cook, Heath and Thompson, 2000; Fincham, 2008). However, to do so, additional studies must be conducted on this particular population.

As a way of comparing the results of this study with the previous ones, the Likert scale with five or seven points was used. Following this decision, the mid-point was used by many respondents to answer the questions. This problem occurred in scales measuring subjective norms (family and friends). This resulted in a decrease in the statistical variance so that parameter estimates could be affected. For further studies, the Likert scale with no mid-point (four or six points) would be recommended with an additional option: don't know or doesn't apply.

Nevertheless, the analyses carried out make it possible to have new insight on a population that has not been studied, the (post)graduate students. This population, which has different socio-demographic characteristics from undergraduate students, but whose university education can contribute to increasing their debt levels, merits further study.

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