

# Is Financial Education a Moderator between Financial Social Learning Opportunities and Savings Behavior among College Students?

College students are at a fascinating and influential stage in life. For many, leaving for college also means less financial support from their parents. As a result, these young adults are faced with many new financial challenges that require prudent decision making and a high level of responsibility (Lyons, Scherpf, & Roberts, 2006). For example, many college students will have to make their financial aid/student loans cover all of the expected and unexpected expenses that arise until the next aid disbursement (typically next semester). If the money falls short of the amount of expenses expected/incurred, students will either have to supplement their income with a job, take out additional loans, ask their parents for financial support, or apply for a credit card(s). With the average college student having 4.6 credit cards while carrying an average balance of \$3,173 (Sallie Mae's National Study of Usage Rates and Trends, 2009), saving money can be very difficult.

**William Parker<sup>1</sup>**  
**Michael Gutter<sup>2</sup>**

## Background

Different perspectives have been used to frame studies of financial behavior. Recent applications have used economic socialization (Churchill & Moschis, 1979; Moschis & Moor, 1984; Valence, d'Astous, & Fourtier, 1988; Gutter & Garrison, 2008; Gutter, Garrison, & Copur, 2010) and Theory of Planned Behavior to understand financial behavior (Xiao & Wu, 2008). These studies suggest formal education and informal education via social learning have a significant effect on financial knowledge, dispositions, and behavior. However, given the mixed information people may receive from the classroom versus their socialization agents, it is not clear how these forms of education work together to impact behavior. Thus, an important question to ask is whether there is a moderating relationship between financial education and financial social learning opportunities on their relationships with savings behaviors among college students.

## Methods

This study uses a unique dataset described in Gutter, Garrison, and Copur (2010). The sample population for this study is college students above the age of 18 that received their diploma from a high school located within the United States. A total of 15 universities were chosen using stratified sampling technique (Gutter, Garrison, & Copur, 2010). The analysis for this poster will look at whether a significant interaction exists between financial social learning opportunities and formal financial education (defined as having taken a personal finance course in high school).

The dependent variable in this study is saving and the independent variables are listed in the table below. A Binary logistic regression was used to examine the relationship between the potential determinants that may influence whether a student decides to save or not.

Hypothesis #1: Formal financial education acts as a moderator between financial social learning opportunities and savings behavior in college students.

## Results

Table 1  
Variables in the Equation

TPB Constructs/Variables	Reduced Model		Full Model		
	B	Exp(B)	B	Sig.	Exp(B)
Attitude toward behavior					
finrisktoldum0 (no risk tolerance)	**-.0284	0.753	**-.0285	0.003	0.752
finrisktoldum2 (above average risk tol.)	0.035	1.036	0.035	0.704	1.035
compulsive buying	***0.053	1.055	***0.053	0.000	1.055

TPB Constructs/Variables	Reduced Model		Full Model		
	B	Exp(B)	B	Sig.	Exp(B)
materialism	-0.003	0.997	-0.003	0.605	0.997
future orientation	-0.020	0.981	-0.020	0.301	0.980
Subjective Norms					
perceived norms of parent(s)	-0.004	0.996	-0.004	0.634	0.996
perceived norms friend(s)	0.006	1.006	0.006	0.302	1.006
Perceived Behavioral Control					
financial self efficacy	***0.026	1.026	***0.026	0.000	1.026
dependent on parent's tax return	0.026	1.026	0.030	0.735	1.031
Socio-Economic Status					
debt (\$1-999)	*-0.316	0.729	-0.317	0.035	0.729
debt (\$1,000-4,999)	*-0.364	0.695	-0.368	0.032	0.692
debt (\$5,000 or more)	-0.101	0.904	-0.103	0.424	0.903
debt (not sure)	-0.260	0.771	-0.266	0.241	0.767
income (\$1-499) per month	***0.499	1.632	***0.491	0.000	1.633
income (\$500-999) per month	***0.515	1.673	***0.511	0.000	1.667
income (\$1000 or more) per month	***0.926	2.525	***0.930	0.000	2.535
school rank (sophomore)	**-.0170	0.844	**-.0174	0.004	0.840
school rank (junior)	***-0.155	0.857	***-0.159	0.000	0.853
school rank (senior)	***-0.174	0.840	***-0.178	0.000	0.837
school rank (graduate/professional)	***-0.142	0.868	***-0.148	0.000	0.862
school rank (other)	-0.128	0.880	-0.134	0.090	0.874
race (white)	0.083	1.086	0.084	0.415	1.088
sex (male)	-0.133	0.875	-0.128	0.118	0.880
marital status (single)	***-0.158	0.854	-0.162	0.151	0.851
Full time student (vs. part time)	-0.716	0.489	***-0.714	0.000	0.489
Financial Social Learning					
discuss with parent(s)	**0.016	1.016	*0.023	0.003	1.023
discuss with friend(s)	-0.003	0.997	-0.009	0.328	0.991
observe parents	-0.001	0.999	-0.006	0.376	0.994
observe friends	0.007	1.007	0.013	0.131	1.013
Financial Knowledge					
better than peers	0.167	1.182	0.170	0.069	1.185
worst than peers	-0.173	0.841	-0.179	0.172	0.836
financial knowledge level	*0.019	1.020	*0.020	0.011	1.020
financial quiz score	0.020	1.020	0.020	0.295	1.020
Interaction Variables					
personal fin. taught * parents discussion	n/a	n/a	-0.016	0.179	0.985
personal fin. taught * friends discussion	n/a	n/a	0.014	0.316	1.014
personal fin. taught * observe parents	n/a	n/a	0.011	0.247	1.011
personal fin. taught * observe friends	n/a	n/a	-0.014	0.296	0.987
Constant	** -1.73	0.177	* -1.736	0.016	0.176

### Findings

When controlling for other factors, the relationship of social learning on savings behaviors is not influenced by whether or not a student had completed a personal finance course. Although a direct moderating relationship was not found to be significant between financial education and financial social learning opportunities on their relationship with savings and college students, we were able to identify some predictors that might increase the likelihood that a student will save. For example, high levels of financial self-efficacy, the more likely they are to be

a saver, as described in the Theory of Planned Behavior. Students that engaged in compulsive buying as well as students with no risk tolerance were less likely to save.<sup>1</sup>

### **Implications**

The results of this study could play a significant role in the development future state financial education policy and standards. In this study, we found that the more students engaged in conversation with their parents on personal financial matters, the more likely they are to be a saver. In terms of financial education policy and standards, states should find ways to increase the amount of conversations that students are having with their parents on financial matters.

### **References**

- Churchill, G. A., & Moschis, G. P. (1979). Television and Interpersonal Influences on Adolescent Consumer Learning. *Journal of Consumer Research*, 6(1): 23–35.
- Gutter, M. S., & Garrison, S. (2008). Perceived Norms, Financial Education, and College Student Credit Card Behavior. *Journal of Consumer Education*, 24(1): 73-88.
- Gutter, M. S., Garrison, S., & Copur, Z. (2010). Social Learning Opportunities and the Financial Behaviors of College Students. *Family and Consumer Sciences Research Journal*, 38(4): 387-404.
- Lyons, A. C., Scherpf, E., & Roberts, H. (2006). Financial Education and Communication Between Parents and Children. *Journal of Consumer Education*, 23: 64–76.
- Moschis, G. P., & Moore, R. (1984). Anticipatory Consumer Socialization. *Academy of Marketing Science*, 12(4): 109–123.
- Sallie Mae (2009). *How Undergraduate Students Use Credit Cards: Sallie Mae's National Study of Usage Rates and Trends 2009*. Wilkes-Barre, PA: Author.
- Valence, G., d' Astous, A., & Fourtier, L. (1988). Compulsive Buying: Concept and Measurement. *Journal of Consumer Policy*, 11: 419–433.
- Xiao, J., & Wu, J., (2008). Completing Debt Management Plans in Credit Counseling: An Application of Theory of Planned Behavior. *Association for Financial Counseling and Planning Education*, 19(2): 29-45.

### **Endnotes**

---

<sup>1</sup>Masters Candidate; University of Florida

<sup>2</sup>Assistant Professor; Family Financial Management Specialist; University of Florida; msgutter@ufl.edu; 3002 McCarty Hall D; (352) 273-3529

---

<sup>1</sup>Further exploration of topic will be done in my thesis to see if formal financial education acts as a moderator between financial social learning opportunities and savings behavior in college students.