

Financial Past, Present, and Future of Community College Students Enrolled in a Personal Finance Course

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Promoting Pathways to
Financial Stability:
A Resource Handbook on
Building Financial Capabilities of
Community College Students

While this *Handbook* recommends that community colleges move beyond addressing acute financial challenges to empowering students to better manage their financial lives, we do not know precisely how to help students be successful in this regard. Understanding the factors that influence financial decision making is a promising area of future research, since such factors could have implications for program improvements and selection. For instance, certain approaches to enhancing financial capabilities might be better suited to particular needs and to different degrees of student readiness. Determining when each approach would be most effective is essential. That is, we need to learn more about the circumstances that are most conducive to applying specific approaches.

With this in mind, we took the opportunity to conduct a study of student essays, in the hope that we could glean some insight into how students apply concepts taught in courses on personal finance. (Lacking a way to assess each essayist's knowledge of personal finance concepts, we note here that they seemingly applied financial concepts to actual or intended financial decisions with varying degrees of success.) Using qualitative techniques to detect differences among students and the possible emergence of meaningful patterns in their ability to apply lesson content, we uncovered patterns by the duration of financial disadvantage students described and by gender. We suggest that differences among students in these dimensions may signal opportunities for tailoring approaches to instilling financial capability.

Approximately half of the student essayists described acute family experiences with financial loss that subsequently affected the family's living situation. The other half described experiencing financial deprivation throughout their upbringing. From their essays, we noted that men and women had different present orientations to spending money, reporting different triggers for impulsive spending. On the basis of duration of financial scarcity and gender, we compared how the students applied personal finance concepts. An apparent pattern emerged from the analysis. Those students who had shorter-term experiences of financial scarcity seemed to apply concepts more correctly than students who recollected long-term deprivation. This led us to develop the following hypothesis: a student's ability to apply financial concepts is related to his or her duration of financial scarcity.

Owing to the limitations of using an essay assignment as a data source, we offer this analysis as one that helps to generate a possible hypothesis. Because very few theories have been posited about the relationship between student background factors and the ability to apply financial concepts, we believe this analysis at least provides an initial theoretical step to inform future analyses. More research is needed to determine the robustness of this conclusion. If this hypothesis were to be validated, the findings could have implications for practice by permitting a more nuanced understanding of why "one size fits all" approaches tend to yield weak outcomes.

Background

Financial capability efforts can be delivered in many ways and can also range in level of intensity. At a minimum, efforts intended to build financial capabilities are those that include mechanisms to build skills and apply what's learned. That can occur through access to an opportunity to set and make progress toward a financial goal or by building in opportunities to exercise knowledge and skills as they relate to timely financial decisions. Delivery may be higher or lower touch. Approaches may include matching content to personal

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circumstances, basing the intervention on assessment of readiness, or working with individuals to help them move through different levels of financial progress.¹

Relevance of student financial background

Student financial backgrounds might be especially relevant to efforts designed to build financial capabilities. Community colleges, in particular, not only attract diverse student populations in terms of race, ethnicity, and nativity status; there is also heterogeneity regarding financial backgrounds and levels of scarcity. Many community college students are low-income, yet the specifics of their economic scarcity may differ. First, and most obviously, some low-income students are less poor than others. Other students may differ in the duration of scarcity. For example, some students' scarcity may stem from parental scarcity. That kind of intergenerational scarcity may have important impacts on students' experiences and understanding of financial behavior. For other students, limited income may be a more recent or temporary phenomenon whether due to changes in parental circumstances or due to becoming a college student. Students who have encountered shorter durations of scarcity may approach financial matters differently from students whose parents also faced long-term scarcity. Whether the student has encountered shorter durations of scarcity or endured intergenerational scarcity may factor into their financial behavior. Moreover, the duration and depth of scarcity may have important implications for building the financial capabilities of community college students. Additionally, students inevitably differ in terms of family financial socialization and familial values, attitudes, and behaviors that relate to a student's financial viability and well-being. Given that awareness factors including attitudes, perceived control of finances, and self-efficacy have been shown to influence financial behaviors, it seems reasonable to expect that the messages students have internalized about money and finances from their families are likely to influence their financial behaviors and decision-making.²

Furthermore, recent studies suggest that cognitive and psychological factors linked to background factors might provide some explanation for how students approach financial tasks. Some recent research has attempted to isolate the cognitive and psychological elements of financial decision making. Mani et al. have hypothesized that "in the world, the poor face more challenging demands because monetary concerns tax the cognitive system."³ Using data from a real-world field study to suggest that poverty-related concerns, labeled as "scarcity," consume mental resources, the researchers have found that conditions of scarcity leave less cognitive capacity for other tasks. That is, people placed under conditions of scarcity appear to be less financially capable.

Most studies on financial decision making are focused on the cognitive load caused by temporary financial concerns. The long-term impact of cognitive load caused by scarcity is considered an open question. Thus, while the above research deals with the consequences of poverty for immediate financial decision making, these findings are not directly relevant to the many ongoing and long-term kinds of financial decision making engaged in by people for whom scarcity is both an immediate and ongoing concern. Financially capable people are able to make short-term financial assessments, such as whether eggs are cheaper if bought individually or by the dozen, along with longer-term ones, such as how to save for a down payment for a home under conditions of chronic budget shortages. In other words, financial capabilities involve maximizing immediate deliberations but also engaging in effective long-term planning.

Additionally, family financial socialization might provide some explanation about how a low-income student develops financial capabilities. Danes has defined financial socialization

as “the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and individual well-being.”⁴ For community college students, the messages that family members communicate about money, the modeling they perform around money management, and the attitudes they express regarding thrift, spending, and other financial decisions may have some relationship with financial capabilities. Understanding more about family financial socialization, and how and why it occurs differentially, might aid in the understanding of individual differences in financial decision making and behavior.

Consequently, while the above literature has explored the relationship between financial scarcity and immediate decision making, an understanding about the relationship between financial scarcity and long-term financial planning is less developed.

The literature on financial planning as a form of goal setting is extensive. But an area that has not been heavily explored is the extent to which experiences with and durations of scarcity may be relevant to the goal-setting process. This work is premised on the idea that conscious goals affect action. Across many settings, studies have confirmed that more attainable goals are specific, measurable, achievable, realistic, and time-bound (i.e., S.M.A.R.T. objectives).⁵ However, whether individual background factors, such as financial scarcity, influence the process of setting financial goals has not been explored.

Below we explore community college students’ experiences with scarcity and family financial socialization and how these relate to their abilities to apply financial concepts. The above studies suggest poverty influences cognitive-psychological processes linked to financial behavior. An interesting question is whether chronic conditions of poverty or scarcity alter a person’s psychological and cognitive conditions in ways that have implications for the delivery of financial capability efforts. Similarly, students’ family financial socialization might also be linked to their ability to apply financial concepts. Using data coming from student autobiographical essays which described their social and economic backgrounds, we offer a hypothesis and some preliminary insights into the possible interplay of these factors.

Methods

We conducted a study of essays written by a sample of community college students enrolled in financial education courses. These courses, one on personal finance and the other an introductory financial literacy course, covered similar material. Both courses were designed to help students develop skills to maximize more immediate financial decisions and to introduce the principles of long-term personal financial planning. Course topics relevant to short-term financial deliberations included determining needs versus wants as well as banking and budgeting. The courses also addressed methods for long-term planning, including the intelligent use of consumer credit, goal setting, and retirement planning.

The venue for the courses was a community college located in the metropolitan area of a city on the East Coast of the United States. The class instructor assigned students to participate in an essay competition describing their own financial past, present, and future. The competition designers asked participants to reflect on their lives and financial situations in the past and present and to engage in an analysis of past mistakes or good decisions. Drawing on their analyses, they were then asked to write about their financial experiences and to propose strategies aimed at improving their financial situation, including five steps to achieve it. Students were also asked to describe their vision of a “successful self in three years.”

The designers of the competition also provided the students with supplemental materials to help them frame their money stories. The supplemental materials primed students to connect to the financial component of their lives. The top three winners received gift cards. It was not possible to verify whether these stories reflect accurate portrayals of the students' pasts, since the instructions and competitive nature of the assignment could have motivated students to exaggerate details of life events. However, the instructions stressed that the essay was to be a biography not a work of fiction. Moreover, the essay was framed as an opportunity for the students to demonstrate what they had learned from the past. The competition was not framed in a way to suggest that those with certain kinds of backgrounds or stories would be at an advantage in the competition, but rather that students could show that they had learned from their past experiences.

The research team obtained basic demographic information and permission from students to review their essays for this study. Only a subset of the student essayists from the courses gave us permission to read their essays. The consenting essayists ranged in age from 18–24. The students had received about eight weeks of financial education, and the instructor had covered topics such as debt management, savings and checking accounts, and budgeting. The essayists were all enrolled in day classes. Considering that such courses are voluntary, the students who had enrolled in the financial education courses likely differed in some ways from students who chose not to take such courses.

Recognizing that this small sample was not representative of community college students, in general, we focused on how students in the sample differed, on the basis of duration of scarcity as well as gender.

Measures

Grounding our approach upon the essayists' stories, we developed three primary measures in the qualitative analysis. The first is duration of scarcity, the second and third included how concepts covered in class had been applied to social spending and goal setting. Classification of the duration of scarcity was developed after a close reading of student descriptions of their financial pasts. Some students described short-term scarcity, whereas others described ongoing scarcity. The assessment of how concepts had been applied to goal setting was based on the frequency and extent to which essayists described goals that appeared to be specific, measureable, achievable, realistic, and time-bound. How the concepts had been applied to social spending was determined by the students' descriptions of how the "needs versus wants" framework had influenced their current financial deliberations.

We used a commercially available software platform, paired with an external rater, to analyze the essays for the unstructured data used in our analysis. The external rater read and analyzed the data for themes and developed a summary content analysis. Separately, researchers input the essays into the software and added demographic characteristics including age, gender, and duration of scarcity⁶. We then engaged in a close reading of the essays and coded the essays for themes. Any parts of the data that related to a code topic were coded with the appropriate label. Code themes originated using both an *a priori* and a grounded approach. *A priori* themes were drawn from the content areas students were instructed to cover in their essays as well as themes covered in the coursework. New grounded codes emerged from the data set as researchers reviewed the data. When three or more students made reference to a particular topic or process, we considered that to be the threshold for creating an additional grounded theme. After coding the essays for themes, researchers further analyzed the data by comparing essayists who reported experiencing financial loss

or sustained deprivation. We then organized the data by cross tabulating the most common themes by duration of scarcity and by gender. Researchers compared these results to the independent summary content analysis and further refined the analysis until the two analyses agreed.

Findings

Some of the themes found in the student essays illuminate the potential relevance of duration of scarcity and gender to student financial capability—to the extent that this is discernible from the content of the essays. Essentially, we were exploring whether the application of financial concepts to real life reveals a pattern presumed to arise from either scarcity or gender. We begin by examining differences in experience with scarcity, duration of scarcity, and type of scarcity. Then, according to scarcity and gender, respectively, we examined possible patterns of how concepts were applied to spending behavior and goal setting.

Scarcity

When describing their financial pasts, the essayists differed most strikingly in their depictions of the trajectory of family finances.

Duration of Scarcity

We began to refer to an emergent theme arising in one group of students as “riches to rags.” Frequently, these students related stories of how their once stable families had suffered a reversal of fortune that pushed the family down the socio-economic spectrum. For example, one student recalled, “I was a young fortunate child. I lived in a big house, I had everything I wanted. My mother had a job as well as my father.” However, after a series of unfortunate events, the essayist wrote about how the family lost their house. She recalled, “We had no place to live and my parents had lost their jobs. ... Who would have thought my family who was fortunate, had anything we wanted was going to end up with food stamps and living in a shelter. We lived in a shelter for a year and still today we are receiving food stamps.” Another student whose family immigrated to this country shared that “My parents used to have a successful and famous restaurant in the town where we lived. We used to have a well-off life. My brother and I could ask for anything we wanted on our birthdays or Christmas. We really enjoyed our lives back then. ... When I was in fourth grade, the business started going down and my parents could not hold it anymore. They decided to sell the restaurant and moved to the city to restart everything.”

In contrast to some students’ riches-to-rags stories, other students told equally prevalent “rags to rags” stories. They recounted being born into poor families with childhoods governed by their parents’ limited financial means. One student wrote: “I grew up in a basic poverty apartment building in the late 1990s. ... A lot of the money was spent to survive with the basic necessities like heat and oil.” He recalled a memory of a time his mother “couldn’t afford to pay the heating bill so we all had to sleep with blankets on the floor in the kitchen to prevent us from freezing at night. She received support but not enough to get by.” Another student detailed how his mother “never held a job down for very long and lived on the monthly food stamps and disability she collected from government assistance. I can remember days being hungry, having nothing in the fridge to eat and having no choice but to get by until the first of the month.” Summing it up succinctly, a student essayist wrote: “I was raised on government assistance until the age of twelve or so. There was never enough money to go around. Money was a stranger...” Financial pasts anchored in long-term financial scarcity emerged as a prevalent theme among the rags-to-rags essayists.

Not surprisingly, for the rags-to-rags students, the difficulties of their familial circumstances extended beyond the financial. Student lives differed starkly in regard to family status. While riches-to-rags students rarely referred to growing up with a single parent, rags-to-rags students often detailed personal difficulties associated with living in a household with only one parent, usually the mother. As one essayist summarized: “Growing up in [an east coast city] with my mother... I had to deal with a lot.” Often for the student, single parenthood was linked in the same sentence to financial struggle. “Growing up in a household of four where my mother was a single mom ... I used to see her struggling to pay the bills.” In their essays, many of the students directly related long-term financial scarcity to the social conditions associated with a single-parent household.

Scarcity and Trauma

Perhaps because the structure of the essay subtly prompted students to do so, their stories often included instances of trauma. The riches-to-rags students’ trauma often was related to the loss of fortune. Trauma as framed by these students—parental job loss, business failures—was the predominant aspect of the riches-to-rags stories. By contrast, the rags-to-rags students’ traumas often related to dissolution or dysfunction in the nuclear family. As one such student described the trauma of her early years: “Then it hit me. My parents separated when I was in the first year of middle school.” Another student recalled, “My dear mother had become a widow. Seeing my mother ... still working every day to support her five children alone.” The stories of trauma also illustrated the kinds of scarcities students faced: “My father is a crack addict and is always in and out of prison. For most of life, my mother and I had to put up with my father’s antics because of his drug habit, she believed that I needed to have a father in my life and didn’t want to deprive me of that.” The rags-to-rags essayists, though prompted to write about their financial pasts, tied their financial pasts to family trauma.

Family Financial Socialization

Students seemed to differ in terms of family financial socialization as well. Students of all kinds attributed their perceptions of financial matters not only to course material but also to role modeling by family members. Many riches-to-rags students recounted observing parental behaviors towards both work and money. One young woman explained, “Undoubtedly, money for my parents was a ‘tool’ which gave me a chance to become an independent, literate person who has a chance to be successful. I appreciate it so much and it motivates me to do my best in studying and doing my business.” Another student observed, “As long as I can remember my parents have worked extremely hard to provide a better lifestyle for their kids.” A third recalled a specific habit modeled by the parent: bargaining. As this student detailed, he intended to “bargain for everything I buy, a strategy that my mother is an expert on and one that used to make me embarrassed, but one with substantial monetary benefits.”

Rags-to-rags students, too, listed familial role models. One student learned from her parents that “making money is hard. I grew a deeper respect for my parents, and how hard they worked.” Sometimes these students identified family role models outside of the immediate family. “My father’s mother (or Nana as I call her) was the financial guru. She always watched the stock market and taught me about saving and investing from an early age.” Overall, the student essayists wrote about family role models.

However, rags-to-rags students also recalled experiences of what might be called “anti-role models.” One male student noted that he had learned “from the past mistakes of my father

such as mounting horrible credit, I need to continue to educate myself on being financially literate. His ignorance resulted in him having to go through a grueling process to get a loan for his new house. I plan to understand how credit works and the best ways to manage it.” Another student recalled: “I remember watching my father literally throw bills in the trash. To this day I still can see visions of him walking over to the trash, ripping unopened envelopes in half, and discarding them without a second thought.” These stories amplify that for some students, their families were sources of both positive and negative role modeling.

Parental Entrepreneurism

In the student essays, the theme of entrepreneurial parents distinguished the riches-to-rags students from the rags-to-rags ones, suggesting different financial socialization trajectories. For example, one student wrote about how his “father owns a business that buys, renovates, and sells houses.” For some students, parental entrepreneurship provided early exposure to financial matters. As one immigrant student wrote: “Since [I was] little, I started to deal with money. My mother had a pizzeria in Brazil and I would go there and help to give the change to customers.” Another student explained his role in his entrepreneurial family: “As we grew up older, my brother and I got involved more in the family business.” Other riches-to-rags students detailed how they continued to be involved in their families’ businesses while attending school. One student explained how she works for her father’s business, which had only recently become successful: “I thank god every minute for allowing us to be part of such an amazing company.”

Numerous stories about family businesses among the essays may reflect the fact that entrepreneurial socialization had led the students to enroll in the college’s personal finance course, which resulted in their inclusion in this study. But there’s no way to be certain in this case.

Collectively, these themes constitute a portrayal of rags-to-rags students living at more enduring levels of financial scarcity relative to their riches-to-rags peers. Not only have rags-to-rags students weathered more experiences with financial scarcity, the memories often prompted essayists to recall other stressful conditions operating in their young lives. As one essayist wrote: “My childhood was not the type one looks back at with a sense of nostalgia; the joy of childhood and happy family times is a foreign concept to me.” Whereas the scarcity of the riches-to-rags students appeared to be of shorter duration, rags-to-rags students seemed to have faced long-term scarcity.

Role of Gender in Applying Personal Finance Concepts

Gender distinctions arose in relation to applying the needs-versus-wants framework to help current spending.

Needs versus Wants

In contrast to recollections conveying different financial pasts, students’ descriptions of their present situations reflected considerable similarity. Most students held jobs and described regrettable—but not devastating—instances of poor money management: splurging on fast food, chasing the latest fashion trend and suffering consequences like overdraft fees or lost savings opportunities.

Essayists seemed to find the financial education concept of needs versus wants to be particularly applicable to their current situations. Consistent with their status as young students with busy social lives and limited budgets, many essayists shared patterns of

overspending, which they often related to socializing. They also described how dividing purchases into needs versus wants influenced their decision making, with the sexes differing on how they overspent.

Men tend to tell stories of overspending on food and entertainment for friends. Women tend to tell stories of overspending on consumer goods. Women described their social lives as being anchored around shopping as a social event. Here's a pertinent student comment: "Even now, whenever I go shopping with friends, and see the perfect sweater, I would stop and ask myself if I really needed another sweater." Another female student explained: "Now-a-days, whenever I'm tight on money, I just refuse to go to malls and instead suggest something else like an activity. I haven't been to a mall in months." In contrast, a male student wrote that the class has taught him to avoid "spending overly generous amounts of money going out with my friends." Another male student explained that differentiating between needs and wants has helped him "carefully manage spending on entertainment and never spend what I don't have." These community college students found the needs-versus-wants framework particularly applicable, especially in the immediate aftermath of a financial skills class.

Role of Scarcity in Applying Personal Finance Concepts

When envisioning their futures, the essayists wrote extensively about their intentions to behave as financially capable individuals and described frequent attempts to apply financial concepts. Most students—regardless of their financial backgrounds—made references to setting aside money for savings, and, in particular, emergency savings, establishing credit-worthiness, and assessing financial needs versus wants. But, in this realm, differences prevailed among the students on the basis of having experienced scarcity.

The riches-to-rags students made many more references to financial concepts and with slightly more credibility. For example, the riches-to-rags students often tempered their hopeful declarations. As one student wrote, "Although quixotic thoughts of the comfort of wealth frequently flood my mind, I intend to have a realistic future with reachable goals." Clearly, students learned the importance of avoiding long-term debt, but the riches-to-rags students allowed for the possibility that goals are not always achieved. Another student wrote: "I will hopefully have no loans to pay." This contrasted with a rags-to-rags student who wrote: "Everything relies on getting a degree without debt. Once I have that, I can do whatever I want." The rags-to-rags student, then, seemed to overestimate the implications of avoiding debt and that doing so would create limitless freedom.

Riches-to-rags students had more modest short- and long-term goals. One student wrote that in three years she would be: "Hopefully close to getting a car loan so that I can be able to transport myself to school and work." In the long term, another student matter-of-factly stated: "To be honest, I'm not dreaming about having a luxury car or a prestigious house." This vision stood in contrast to rags-to-rags students who had slightly more grandiose plans. One student planned to find a career (though he did not indicate specifically what field or type) with "benefits and an established retirement policy" and where a "salary in this particular field would be hefty." He also imagined he would own two or three cars. Riches-to-rags students more often used qualifiers in their language, such as "I believe I will be able to," or "So if my dreams come true."

On the other hand, the rags-to-rags students expressed a less complicated vision—sometimes admittedly—of the realization of their future plans. One student touted the straight-

forwardness of her financial plans: “My plan for a better financial situation is simple.” Another student wrote: “You could say that my life is all planned out and I am just waiting for the plan to be in place.” It was apparent that these rags-to-rags students did not convey an awareness that financial planning is a process that requires revision.

In addition to making plans for a more financially stable future, nearly all of the essayists wrote about their desire to further their education beyond community college. In fact, this intention was the most common theme for the students’ future goals. Students appeared to link enhanced financial capability to a mobility-generating goal. Again, students differed in the specificity of the goal. Riches-to-rags students seemed to offer more details regarding their future education plans. As one young woman wrote: “In three years, I envision myself at a four-year university studying Communication Sciences and Disorders and pursuant to getting a Master’s degree in Speech Pathology.” Another young woman wrote: “I’m going to school to get a degree in nursing.” Another student wrote of specific and ambitious plans: “I also wish to invest in education so if my dream comes true, I will attend Stanford University in the future.” In general, rags-to-rags students wrote about plans to pursue further education, but they were in general less thoroughly described. One student wrote: “I plan on going to Regional University because I heard that the business major there is good and I live close to the school, which is going to be convenient for me.” The students’ ideas were admittedly based on ease of access and word-of-mouth rather than on more analytic criteria. Another rags-to-rags student wrote: “In 3 years I hope to be approaching my final years of college, pursuing a degree in a field that I can see myself having a career.” These plans, too, are vague and imply incomplete planning. In general, however, across gender and across background status, students wrote of aspirations not just to complete their Associate’s degree at the community college but to obtain Bachelor’s degrees and advanced degrees.

Conclusion

This exploratory analysis of students’ essays illustrates how a group of financial education students fulfilled an assignment to describe their personal past and present, as well as future plans in relation to financial concepts. Their personal experience was the filter that colored their essays, which varied systematically, on the basis of student background. Despite some present similarities among low-income community college students, their pasts differed—both in terms of duration of scarcity and also in other background factors, such as family financial socialization. While all students engaged in goal setting by virtue of the money story assignment and perhaps by virtue of having been enrolled in the classes, the fact that one group appears to be more specific in their goals, may be due to different experiences of scarcity and family socialization. Gender distinctions arose in relation to applying the needs-versus-wants framework to help curb overspending, but it seemed far less relevant than scarcity to financial planning and goal setting.

This analysis suggests the possibility that certain students who have had enduring experiences of scarcity may need greater support to translate their financial knowledge into behavior. Whether this results from a lack of exposure to positive financial socialization is a question for further research. However, it does align with the finding that students from backgrounds where family financial socialization occurred, despite possible encounters with financial loss or constraints, were more able to apply financial knowledge and articulate more realistic goals. This tendency extended beyond the coursework content, as evidenced by students of longer-term scarcity setting less specific goals for themselves in the realm of education, too. Of course, as they relate to our study, educational goals were statements of intention, not indicators of behavior.

Our final analysis suggests that conditions of scarcity and familial financial socialization impact how readily students can apply financial concepts. If observed elsewhere beyond this limited study, it may have implications for how students are initially assessed and how instructors approach goal setting. This could empower instructors as they think about how to best support students. For instance, students with longer-term imprinting of scarcity may need to become more deeply engaged in the actual process of goal setting rather than focusing just on an end goal. Or such students may need higher touch services, like coaching, or extra homework assignments focused on realistic goal setting and how to apply concepts, more generally.

We emphasize here the need to understand more fully what kind of student might benefit from a financial capability effort at the college level. It is possible that those community college students who have experienced less scarcity and received more mainstream financial socialization may not require financial capability training at all. They may already possess the skills necessary for effectively managing financial aspects of their life. But for students from backgrounds of long-term scarcity who have not benefited from a lifetime of normative family financial socialization, ways to effectively enhance their financial capabilities are being developed and refined by practitioners in the field. Approaches based on knowledge transmission in the classroom alone have been ineffective.

The small sample of essays studied here limits the conclusions we can draw. It is not possible to determine which background factor—duration of scarcity or family financial socialization—was more influential in these students' ability to apply financial concepts. Moreover, we can't generalize that the patterns identified among these students will also be found in a larger, more representative sample of community college students. Additional research is needed to test the hypothesis generated through our analysis.

To recap, we propose a hypothesis that could be tested through additional research. That is, financial capability depends not only on family financial socialization but also on duration of scarcity. Furthermore, any experience of scarcity as well as longer duration of scarcity differentially influence family financial socialization. Differing levels of family socialization may be related to a tendency among those experiencing scarcity to focus on their immediate needs, rather than on future concerns. Fundamentally, ongoing conditions of financial scarcity may consume so much attention that financial socialization is compromised; this, too, is a topic of interest for future research.

Future research might explore whether the effects of financial education on behaviors are moderated by levels of scarcity or family financial socialization. Longitudinal studies could be undertaken to determine outcomes of the different types of goal setting and to elucidate possible patterns on the basis of perception of scarcity. Future work might reveal that there is a relationship between perception of scarcity and goal setting.

Given the disparities reflected in the student essays—including factors such as duration of financial distress, higher risk factors and lower exposure to financial socialization—it is somewhat surprising that their display of financial knowledge wasn't more disparate. Possibly, the students were equally motivated. Internal motivation is necessary, but it is not sufficient to build financial capabilities. The essays that we studied suggest the possibility that students come to the classroom with vastly different financial capabilities, and lacking appropriate intervention, will likely exit the classroom in a similar fashion.

Endnotes

- ¹ Jing Jian Xiao, "Applying Behavior Science Theories in Financial Behaviors," In *Handbook of Consumer Finance Research*, ed. Jing Jian Xiao (New York: Springer, 2008), 69–81.
- ² Soyeon Shim and Joyce Serido, *Young Adults' Financial Capability. APLUS Arizona Pathways to Life Success for University Students, Wave 2* (Tucson, AZ: University of Arizona, Take Charge America Institute for Consumer Financial Education and Research, September 2011).
- ³ Anandi Mani, Sendhil Mullainathan, Eldar Shafir and Jiaying Zhao, "Poverty Impedes Cognitive Function," *Science* 341, no. 6149 (2013): 976–80.
- ⁴ Sharon M. Danes, Parental perceptions of children's financial socialization. *Financial Counseling and Planning* 5 (1994): 127–149.
- ⁵ Edwin A. Locke, "Toward a Theory of Task Motivation and Incentives," *Organizational Behavior and Human Performance* 2, no. 3 (1968): 157–189.
- ⁶ (N27)