Maintaining Financial Well-being: Differences in Response to Acute Versus Chronic Scarcity

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Background

Research on financial scarcity has been focused mainly on individuals or families contending with chronic scarcity (Mani et al., 2013, 2020; Shah et al., 2015; Zwane, 2012). Living in a state of chronic scarcity draws consumers' attention to focus on the task at hand rather than their long-term needs, a phenomenon described as attentional neglect (Shah et al., 2015). Individuals experiencing chronic scarcity are less likely to set financial goals or to seek help to achieve those goals (Mani et al., 2013, 2020; Zwane, 2012). Whereas much is known about the state of chronic scarcity, less is known about an individual's descent into chronic scarcity, and what stages of that journey might represent an opportunity to avoid the associated negative well-being outcomes.

In this paper, we suggest that scarcity, much like stress, can be more broadly viewed as a continuum ranging from no scarcity to chronic scarcity. All individuals experiencing scarcity at any point on the continuum had a first scarcity experience. We label this first experience "acute scarcity" (i.e., a momentary lack of financial resources followed by recovery) as it represents a moment in time or initial experience that might lead back to no scarcity or might continue down the continuum to chronic scarcity. Although acute scarcity has received relatively little attention, numerous studies have investigated acute stress and its outcomes in the psychological domain. The literature on stress suggests that individuals experiencing acute versus chronic stress will adopt different coping strategies and, in turn, produce different outcomes (Kearney et al., 2015). For example, research has shown that acute stress is associated with more active adaptive responses than chronic stress (Jamieson et al., 2013). Individuals who exhibit more adaptive responses (e.g., reappraising) to acute stress have been shown to have better abilities to cope with their future stressors (Dienstbier, 1989; Jamieson et al., 2012).

Borrowing from the literature on acute stress, we examine the role that scarcity plays in well-being and how acute scarcity might offer a pivotal point at which an individual either descends into a more chronic state of scarcity or moves back to a state without scarcity. First, we examine differences in financial well-being outcomes for individuals experiencing acute scarcity versus chronic scarcity and whether financial self-efficacy offers an explanation for the observed relationship. Prior research shows that financial self-efficacy positively correlates with an individual's intention to address difficulties when facing unpleasant present circumstances (Kammeyer-Mueller et al., 2009) and has been found to influence financial well-being (Gutter & Copur, 2011; Sahu & Rath, 2003). Given that self-efficacy has been negatively associated with failure, especially when that failure was chronic (Coffee et al., 2009), we hypothesize that people with acute scarcity will have higher levels of self-efficacy than those with chronic scarcity, which, in turn, will promote higher levels of financial well-being.

Then, we examine whether differences in the actions taken by individuals in response to scarcity mediate the relationship between the type of scarcity (i.e., acute versus chronic) and financial well-being. The specific action we consider in this current study is consulting a financial professional. We argue that acute scarcity, like acute stress, predisposes individuals to respond more actively than those who live in chronic scarcity. Given that seeking help from financial professionals is an active coping strategy for personal finance issues (Grable & Joo, 2001), we hypothesize that people with acute scarcity will be more likely to consult financial professionals than those with chronic scarcity, leading to higher levels of financial well-being.

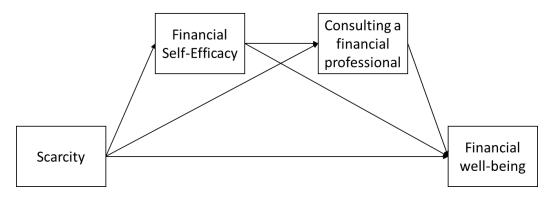
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Significance

While there is certainly an important subset of people with persistently scarce resources and few options, most people do not suddenly find themselves in a state of chronic scarcity. Instead, there tends to be a first experience of not having enough or going without. For some, scarcity then tends to occur more frequently until they find themselves in a state of chronic scarcity (i.e., happens all the time). For others, there is only a single experience of scarcity followed by recovery. Understanding more about this downward spiral would allow us to develop more targeted and effective programs to address the early stages of scarcity and, perhaps, restore a state of non-scarcity for a greater percentage of people. Differences between people experiencing their first episode of scarcity and those experiencing scarcity all the time can inform policy and program interventions. In addition, our study can inspire further research related to conditions of scarcity beyond (or, perhaps, before) chronic. This study demonstrates that promoting higher levels of financial self-efficacy as well as adaptive responses (e.g., consulting a professional advisor) during an acute experience may be efficacious approaches to improving well-being.

Figure 1.
Conceptual Model



Hypotheses

- Hypothesis 1: Individuals experiencing acute scarcity will have higher levels of self-efficacy than individuals experiencing chronic scarcity.
- Hypothesis 2: Individuals experiencing acute scarcity will be more likely to consult a financial professional in response to their experience than individuals experiencing chronic scarcity.
- Hypothesis 3: Individuals with higher levels of financial self-efficacy will be more likely to consult a financial professional in response to their experience than individuals.
- Hypothesis 4: Individuals with acute (versus chronic) scarcity, higher levels of financial selfefficacy, and contact with a professional will have a higher level of financial well-being (i.e., lower current money management stress and higher expected future financial security).

Methodology

Data was collected between July and September 2021 from 1,195 US adults recruited from the Precision Sample panel using a Qualtrics survey.

The dependent variable for this study was financial well-being measured as current money management stress (e.g., *My finances control my life; Whenever I feel in control of my finances, something happens that sets me back)* and expected future financial security (e.g., *I am becoming financially secure; I will achieve the financial goals I have set for myself*). These questions were assessed on a five-point scale anchored by Strongly Agree (5) and Strongly Disagree (1). Responses were summed to produce scores ranging from 5 to 25 for each variable.

The primary independent variable for this study was scarcity measured by the combination of two questions: In the past 6 months, did you ever have a situation where you ran out of money (meaning that you had no money in your wallet or your accounts) and had to go more than a day before you got money

again? (response options were Yes or No) and How often does this happen to you? (response options were "This was the first time," "It happens occasionally," and "It happens all the time"). No scarcity was identified as a response of "No" to the first question. Acute scarcity was a response of "Yes" to the first question and "This was the first time" to the second question. Occasional scarcity was identified as a response of "Yes" to the first question and "It happens occasionally" to the second question. Chronic scarcity was identified as a response of "Yes" to the first question and "It happens all the time" to the second question. The primary comparison for this study was between acute (coded as 1) and chronic scarcity (coded as 0).

Two mediators were used in this study. Financial self-efficacy was assessed using the eight-item scale from the Australian Securities and Investment Commission's study of consumer decision-making. Items included When I make plans for my money, I can make them work; When it comes to my finances, I do not give up easily; and When I set important financial goals for myself, I will achieve them. A five-point scale was offered for responses anchored by Completely true (5) and Not true at all (1). The items were summed to create the financial self-efficacy measure, with scores ranging from 8 to 40. Consulting a financial professional was assessed by a single item: Which of the following did you do when this happened? with a response option of Consulted a financial professional. If the individual indicated that they consulted a financial professional, their response was coded as 1. Otherwise, it was coded as 0.

We controlled for gender (Female with Male as the comparison category), age (in years), income (as midpoints of eight ranges with the lowest range [Less than \$25,000] being coded as \$12,500 and the highest range [\$150,000 or more] as \$199,999), and race/ethnicity (Hispanic, non-Hispanic Black, non-Hispanic Asian, and non-Hispanic Other Race with non-Hispanic White as the comparison category).

We conducted our descriptive and bivariate analyses in SPSS Version 26.0. We estimated our model using ordinary least squares (OLS) regression for self-efficacy and financial well-being and binary logistic regression for consulting a professional in SPSS Version 28.0.

Results

Sample characteristics. Participants' ages ranged from 18 to 94, with a mean age of 45.6 (standard deviation of 16.8). Mean household income was \$82,930, and the median income was \$60,000. Participants were 54.0% female. In terms of race/ethnicity, 50.8 % identified as non-Hispanic White, 21.3% as Hispanic, 12.9% non-Hispanic Black, and 15.0% other race(s). For educational attainment, 23.0% had high school or less, 39.1% had some college or an Associate's degree, and 37.9% had a Bachelor's degree or higher.

Acute Scarcity and Variables of Interest. The descriptive statistics indicate that 58.7% of participants had never encountered scarcity, whereas 8.3% of them encountered financial scarcity for the first time (i.e., acute scarcity), 25.8% claimed that scarcity happened to them occasionally, and 7.3% lived in scarcity all the time (i.e., chronic scarcity). The correlations for our variables of interest are presented in Table 1.

Table 1.Descriptive statistics and correlations for variables of interest

Variables	Mean	SD	1	2	3	4	5
1. Scarcity	0.817	1.051	-				
2. Financial self-efficacy	30.671	5.380	271**	-			
3. Consulting a financial professional	0.046	0.210	0.016	0.048	-		
4. Current money management stress	14.658	5.215	.514**	342**	.072**	-	
5. Expected future financial security Note. * p-value < 0.05; ** p-value < 0.01	16.714 I; *** <i>p</i> -valւ	4.986 ue < 0.001	340**	.552**	.117**	394**	-

Financial self-efficacy model results (Model 1)

The results of the OLS regression examining financial self-efficacy are presented in the first panel of Table 2. Controlling for the demographic variables listed above, acute scarcity was significantly and positively associated with financial self-efficacy (β = .091, p < .001). Thus, individuals experiencing acute

scarcity had higher levels of financial self-efficacy than individuals experiencing chronic scarcity. This result supports Hypothesis 1.

Consult professional model results (Model 2). The results of the binary logistic regression examining whether the individual consulted a professional as a result of their experience are presented in the second panel of Table 2. Controlling for the demographic variables listed above, acute scarcity was significantly and positively associated with consulting a professional ($\exp(B) = 1.860$, p < .05). Thus, individuals experiencing acute scarcity were more likely to consult a financial professional than individuals experiencing chronic scarcity. However, individuals with higher levels of financial self-efficacy had no significant difference in terms of consulting a professional ($\exp(B) = 1.025$, p = .249). These results support Hypothesis 2 but not Hypothesis 3.

Financial well-being model. The results of the OLS regressions examining current money management stress and expected future financial security are presented in the third and fourth panels of Table 2. For with current money management stress, acute scarcity (β = .184, p < .001) and consulting a professional (β = .065, p = .002) were both positively and significantly associated with current money management stress, whereas financial self-efficacy (β = -.286, p < .001) was negatively and significantly associated with current money management stress.

For expected future financial security, acute scarcity (β = .047, p < .05), financial self-efficacy (β = .494, p < .001), and consulting a professional (β = .065, p < .001) were all positively and significantly associated with expected future financial security.

Table 2. *Model results*

	Financial self-efficacy	Consulting financial professional	Current money management stress	Expected future financial security	
	β	exp(B)	β	β	
Acute scarcity	.091***	1.860*	0.184***	0.047*	
Financial self-efficacy		1.025	-0.286***	0.494***	
Consulting a professional			0.065**	0.065***	
Covariates:					
Female	007	0.542**	-0.055*	-0.046*	
Hispanic	.042	2.273**	.002	.036	
Non-Hispanic Black	0.092***	1.857	.024	.031	
Non-Hispanic Asian	016	.871	019	012	
Non-Hispanic Multi-race	002	.755	.032	033	
Non-Hispanic Other race	.011	2.194	022	029	
Living with partner	052	.803	001	-0.056*	
Divorced or separated	-0.057*	.942	0.054*	-0.052*	
Widowed	.033	.594	.006	030	
Single, never married	-0.095**	.823	-0.063*	019	
Bachelor's or higher	0.075**	1.241	.013	0.081***	
Age (in years)	0.086**	0.978*	-0.294***	-0.072**	
Household income	0.148***	1.000*	-0.201***	0.197***	
R-Square	0.083	0.070	0.298	0.378	

Note. * *p*-value < 0.05; ** *p*-value < 0.01; *** *p*-value < 0.001.

Conclusions/Implications

In this paper, we examined two points along the scarcity continuum, acute scarcity (identified as the first experience of scarcity) and chronic scarcity (identified as having insufficient resources all the time). At a given point in time, most people find themselves either in a state of no scarcity or occasional scarcity. Roughly 8% of people are experiencing a state of insufficient resources for the first time, while another 7% experience insufficient resources all the time. Two differences between these groups were their level of self-efficacy and likelihood to consult a professional as a result of their scarcity experience. As expected, individuals experiencing acute scarcity tended to have higher levels of self-efficacy and to be more likely to consult a professional. An experience of acute scarcity tended to have less of an effect on the individual's sense of financial well-being. This was at least partly due to the higher level of self-efficacy and professional consultation.

Our findings are consistent with expectations derived from the literature on acute stress. Individuals experiencing acute scarcity exhibited more adaptive responses (Jamieson et al., 2013) and more favorable outcomes (Kearney et al., 2015). Given the non-significant relationship between self-efficacy and consulting a professional, our findings suggest that the adaptive responses might be more likely to be due to the experience of acute scarcity rather than the individual's sense of self-efficacy. Regarding favorable outcomes, acute scarcity was associated with lower levels of current money management stress and higher levels of expected future financial security directly and indirectly through self-efficacy and consulting a professional.

Taken together, the findings from this study indicate that acute scarcity is a different experience than chronic scarcity and should provoke a different response from policy and programs. It is the repeated insufficiency of resources as the individual falls from acute scarcity toward chronic scarcity that the individual loses their sense of self-efficacy and adaptive responses to the experience. Acute scarcity seems to represent a rescue moment in which the individual has the best opportunity to return to a state of no scarcity. The opportunity is to offer lifelines at or near the first experience to ensure their recovery. The challenge might be the willingness of individuals who are experiencing acute scarcity to disclose that experience. One party with some visibility into this experience consists of those who lend money or extend credit to others. While lenders and creditors currently offer generic language related to help available to make payments, the current requirements do not differentiate between first and subsequent experiences. Perhaps policies could require lenders/creditors to identify the initial struggle and make offers of assistance that respect the unique nature and objectives of this first experience. Programs built around the experience of acute scarcity would provide resources to these lenders/creditors as well as directly to individuals experiencing the scarcity. The key is recognizing that the mindset and behaviors of those experiencing acute scarcity are different from those experiencing chronic scarcity. How might we address these differences in effective ways?

There are some limitations to this study. First, the correlational nature of this dataset limits our ability to draw causal conclusions. To examine the causal relationship between acute scarcity and adaptive responses as well as well-being, the direction of our future study will be an experimental study in which we randomly assigned participants to groups with manipulation of different scarcity experiences. Second, this study does not investigate the underlying reasons and different levels of preparation for the first-time experience of scarcity. People who had anticipated the occurrence of the acute scarcity may have different responses from those who encounter the shock without knowing in advance. In the future study, we plan to use other questions such as "When did you realize that this was going to happen?" in the dataset to further distinguish differences in the first-time experience of scarcity and examine the effects on the outcomes.

Despite these limitations, it appears that acute scarcity is a potentially important moment in assisting individuals in maintaining or restoring their financial well-being.

References

- Coffee, P., Rees, T., & Haslam, S. A. (2009). Bouncing back from failure: The interactive impact of perceived controllability and stability on self-efficacy beliefs and future task performance. *Journal of Sports Sciences*, 27(11), 1117-1124. https://doi.org/10.1080/02640410903030297
- Dienstbier, R. A. (1989). Arousal and physiological toughness: implications for mental and physical health. *Psychological Review*, *96*(1), 84-100. https://doi.org/10.1037/0033-295x.96.1.84
- Grable, J. E., & Joo, S. H. (2001). A further examination of financial help-seeking behavior. *Journal of Financial Counseling and Planning*, 12(1), 55-74.
- Gutter, M., & Copur, Z. (2011). Financial behaviors and financial well-being of college students: Evidence from a national survey. *Journal of Family and Economic Issues*, *32*(4), 699-714. https://doi.org/10.1007/s10834-011-9255-2
- Jamieson, J. P., Mendes, W. B., & Nock, M. K. (2013). Improving acute stress responses: The power of reappraisal. *Current Directions in Psychological Science*, *22*(1), 51-56. https://doi.org/10.1177/0963721412461500
- Jamieson, J. P., Nock, M. K., & Mendes, W. B. (2012). Mind over matter: reappraising arousal improves cardiovascular and cognitive responses to stress. *Journal of Experimental Psychology: General*, 141(3), 417-422. https://doi.org/10.1037/a0025719
- Kammeyer-Mueller, J. D., Judge, T. A., & Scott, B. A. (2009). The role of core self-evaluations in the coping process. *Journal of Applied Psychology*, *94*(1), 177-195. https://doi.org/10.1037/a0013214
- Kearney, J. A., Salley, C. G., & Muriel, A. C. (2015). Standards of psychosocial care for parents of children with cancer. *Pediatric Blood & Cancer*, *62*(S5), S632-S683. https://doi.org/10.1002/pbc.25761
- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341(6149), 976-980. https://doi.org/10.1126/science.1238041
- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2020). Scarcity and cognitive function around payday: A conceptual and empirical analysis. *Journal of the Association for Consumer Research*, 5(4), 365-376.
- Sahu, F. M., & Rath, S. (2003). Self-efficacy and wellbeing in working and non-working women: The moderating role of involvement. *Psychology and Developing Societies*, *15*(2), 187-200. https://doi.org/10.1177/097133360301500205
- Shah, A. K., Shafir, E., & Mullainathan, S. (2015). Scarcity frames value. *Psychological Science*, *26*(4), 402-412. https://doi.org/10.1177/0956797614563958
- Zwane, A. P. (2012). Implications of scarcity. *Science*, *338*(6107), 617-618. https://doi.org/10.1126/science.1230292