

The Relationship Between Coping Mechanisms and the Scarcity Mindset

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Abstract

Young adults in America are struggling with increasing instances of scarcity compared to previous generations. Scarcity, which ranges from external experiences of financial insecurity, a lack of time, or social isolation, can become an internalized mindset that inhibits cognitive functioning and effective coping. With the onset of COVID-19, preexisting stressors and challenges have been compounded upon, forcing many young adults to find new strategies to cope. To examine the urgent and emerging topic of scarcity and coping, varying coping strategies and its correlation with perceptions and experiences of scarcity were explored. College aged young adults were surveyed using the Brief COPE and the newly created measure: The Tri-Scarcity Survey. Correlational and regression analyses showed that experiencing scarcity was associated with pessimism and maladaptive forms of coping. Additionally, there was evidence for social support as a potential moderating factor for the consequences of scarcity. Finding effective ways to cope is crucial, however, scarcity's depletion of resources not only acts synergistic with the cycle of scarcity but may prevent adaptive coping altogether.

Keywords: scarcity, scarcity mindset, coping, young adults, stress

Introduction

Young adults in America have been facing unprecedented challenges in recent years that have only worsened during the COVID-19 pandemic. While young adults today are more educated than previous generations, the cost of higher education has left many with debt and has made it more difficult to accumulate wealth (Pew Research Center, 2014). Consistently, research indicates that financial stress is associated with lowered self-esteem, a pessimistic outlook on life, and reduced mental health (Lange & Byrd, 1998; Waters & Moore, 2002; Davis & Mantler, 2004). Rates of mental illness have also increased among those 18 to 25 and are higher than rates seen among older generations (SAMHSA, 2020). These challenges have only been worsened by COVID-19 as economic uncertainty (Pew Research Center, 2020), public health measures (Besser et al., 2020; Elmer et al., 2020), and anxiety about education and employment has taken a significant toll on many young Americans (Chirikov et al., 2020; Czeisler et al., 2020). The pandemic has both exacerbated and created new situations of scarcity for young adults, the effects of which may be internalized into a Scarcity Mindset.

The Scarcity Mindset, as coined by researchers Eldar Shafir and Sendhil Mullainathan (Mullainathan & Shafir, 2013), may provide insight into the consequences of the pandemic on young Americans. First introduced from an economic and consumer goods perspective, the Scarcity Mindset has grown to apply to broader social and psychological phenomena such as its impacts on behavior, attention, and cognition. Although scarcity is generally thought of in terms of financial insecurity, experiences of scarcity can vary from loneliness and isolation to a lack of time. These experiences of scarcity however are distinct from perceptions of scarcity. A person who is constantly busy is experiencing a scarcity of time, but might perceive themselves as being productive, not time constrained. Thus, the perception of scarcity is key, and for those who perceive themselves to be experiencing

scarcity these perceptions can be internalized into a framework of thinking, otherwise known as the Scarcity Mindset. When one experiences the Scarcity Mindset, their attention is focused almost exclusively on the scarcity at hand. While this can be beneficial in tackling urgent and pressing needs, the cost is a depletion in bandwidth, or one's cognitive capacity. As a result, scarcity leaves less cognitive resources to use towards managing other tasks, leading to forgetfulness, impulsivity, poor decision making, and decreases in IQ and fluid intelligence. For young adults, any issues prior to the pandemic have only been compounded upon by its effects, leaving many with even less cognitive resources to use towards managing the challenges brought on by COVID-19.

While there is a breadth of research around coping, how it relates to the Scarcity Mindset has yet to be fully explored. Whether it be a scarcity of material, psychological, or time related resources (De Sousa et al., 2018), the effort needed to address these insufficiencies consumes mental resources and leaves less of it to use towards tackling other pressing needs. Managing scarcity can be a particularly stressful experience (Mani et al., 2013), and is often made worse by any poor decision making or impulsivity caused by scarcity's depletion of cognitive resources. Although scarcity can be incredibly distressing, coping, which is generally understood as a response to manage stress (Ray et al., 1982; Pearlin & Schooler, 1978), may help to alleviate some of the negative effects caused by scarcity, if used effectively.

The process of experiencing scarcity, using coping to manage these experiences, and how this influences the Scarcity Mindset, is not well understood; however, as the current research suggests, maladaptive forms of coping such as pessimism or self-blame may worsen one's ability to manage scarcity. Pessimism, which is described by Carver et al. (2010) as the expectation that bad things will happen, has been associated with avoidance coping, social withdrawal, and emotional distress (Carver et al., 2003; Scheier et al., 1986; Carver et

al., 1993). Similar findings have been found relating to self-blame. Despite inconsistencies in the literature concerning the adaptiveness of characterological versus behavioral self-blame (Gliner & Compas, 1999; Frazier, 1990), self-blame focused on one's character tends to be associated with worse outcomes and the utilization of maladaptive coping skills (Janoff-Bulman, 1979; Voth & Sirois, 2009). Pessimism and self-blame may be closely related to the Scarcity Mindset. For those who perceive themselves as experiencing scarcity, they may attribute their difficult situation to themselves or their own actions. This negative self-perception can further worsen one's ability to manage their situation.

Although the impact that social relationships have on the Scarcity Mindset is not well understood, research has found that social support is an important resource when coping with stress. Social support has been shown to reduce psychological distress (Taylor, 2011; Fleming et al., 1982), buffer the negative effects of stress (Cohen & Wills, 1985), and increase emotional well-being (Kim et al., 2010), and resilience (Wilks, 2008). Social support has also shown to be closely related to adaptive coping strategies such as acceptance and positive reframing, possibly due to its influence on appraising stressful situations in a more positive light (Calvete & Connor-Smith, 2006). In general, the research conclusively demonstrates that healthy social connections and relationships are an important facet of coping and can protect against life stressors and adverse experiences (Puckett et al., 2019; Rueger et al., 2016). Other coping skills such as optimism (Carver et al., 2010) and positive reframing (Folkman & Moskowitz, 2000) are also notable in their ability to mitigate the effects of negative life events.

COVID-19 has increased isolation, challenged employment and education, impacted the economy, and has worsened an already unprecedented environment, one that is particularly stressful for an already struggling young adult population. To explore the relationship

between experiences of scarcity, its influence on coping, and perceptions of scarcity, the aim of this study is to examine coping strategies and its associations with scarcity and the Scarcity Mindset during the COVID-19 pandemic.

Design

Recruitment information was largely disseminated by the student researcher and faculty across the different departments of the university, namely the Behavioral Sciences department. Participants were encouraged to share or forward the survey to peers. Physical recruitment was done using flyers posted around the campus. The flyer was also posted onto Facebook and Instagram. The questionnaires were administered over Qualtrics, and the data was collected for a period of 12 months. Data analyses were conducted using SPSS and R (Stanley 2021; R Core Team 2021). SPSS, or the Statistical Package for the Social Sciences, is a statistical analysis software used in research to analyze quantitative data. R is a statistical computing software also used by researchers for data transformation and analyses.

Methods

Participants

A total of 78 participants were recorded from university campuses. Of those, 76 fully or mostly completed the survey and were retained for this study. Most participants were between the ages of 18-24 (80.3%), female (85.5%), and resided in Hawaii (80.3%). At least 15 different ethnicities were represented, the most reported being White (46.1%), followed by Filipino (38.2%), Japanese (28.9%), Chinese (23.7%), and Native Hawaiian (22.4%). Eight different religious groups were also represented, with the majority of participants stating their affiliation as Roman Catholic or Christian (26.7% for both). As a reflection of most participants being young adults, the majority had an educational background of either a high

school degree or equivalent (34.2%) or some college (42.5%), made less than \$25,000 a year (80.8%), had no children (95.9%), and were mostly single (56.2%) or in a committed relationship (34.2%).

Measures

Coping

Coping was measured using a modified version of the Brief COPE (Carver, 1997). This test measures 14 types of generally adaptive and maladaptive forms of coping (e.g., active coping, use of emotional support, denial, self-blame). The Brief COPE uses a 4-point Likert scale from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot). Previous studies demonstrate high validity and reliability for the Brief COPE with all scales exceeding a Cronbach's alpha of .50 and most exceeding .60 except for venting, denial, and acceptance (Carver, 1997). The current study supports the previous findings on the reliability of this instrument with scales exceeding an alpha score of .60 except for venting (.53) and self-distraction (.17).

Scarcity

The Tri-Scarcity Survey was constructed to measure experiences and perceptions of scarcity. The creation of this survey was largely based on the research conducted by Eldar Shafir and Sendhil Mullainathan on scarcity and the Scarcity Mindset (Mullainathan & Shafir, 2013). This survey consists of 3 scales: material, psychological resource, and time scarcity, and was adapted from the framework of scarcity as proposed by De Sousa et al. (2018). Each scale contains 7-8 questions which ask about the participants' experience of scarcity and the participant's perception of the consequences of scarcity. Please see Appendix for the full Tri-Scarcity Survey. The constructs for the questions on perceived consequences of scarcity were based on the paper by Zhao & Tamm (2018), which outlines various psychological and behavioral responses to scarcity (resource efficiency, increased

focus, cognitive behavioral impairment, stable perception of value, neglecting other tasks, and aversion of risk). The reliability of the Tri-Scarcity Survey is promising, with alpha scores of .61, .33, and .65 for material, psychological resource, and time scarcity respectively. The reliability score for psychological resource scarcity increases to .60 when Q12 of the Tri-Scarcity Survey is reverse coded.

Results

Table 1

Correlations between experiences of scarcity and Brief COPE items

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Material Scarcity	1.87	0.91						
2. Interpersonal Scarcity	1.66	0.81	0.1					
3. Intrapersonal Scarcity	2.13	0.74	0.09	.46**				
4. Time Scarcity	3.13	0.93	0.07	0.09	.25*			
5. Denial	1.65	0.86	.27*	.26*	.33**	.29*		
6. Behavioral Disengagement	1.94	0.82	0.12	.30*	.35**	.27*	.45**	
7. Self-Blame	2.86	0.93	0.17	.34**	.53**	0.18	.51**	.33**
8. Positive Reframing	2.88	0.85	0.14	-0.23	-.25*	-0.1	-0.07	-.32**
9. Active Coping	2.72	0.8	-0.08	-.24*	-0.23	-0.03	-0.08	-.38**
10. Planning	2.85	0.86	0.1	-0.13	-.24*	0.12	0.17	-.24*
11. Acceptance	2.98	0.77	0.09	-0.18	-.29*	-0.06	-0.22	-.33**
12. Emotional Support	2.57	0.91	0.2	-.34**	-0.17	-0.06	-0.11	-0.17
13. Instrumental Support	2.57	0.9	0.16	-.28*	-0.23	-0.05	-0.02	-0.14

Note. * Indicates $p < .05$. ** indicates $p < .01$.

Variable	7	8	9	10	11	12
1. Material Scarcity						
2. Interpersonal Scarcity						
3. Intrapersonal Scarcity						
4. Time Scarcity						
5. Denial						
6. Behavioral Disengagement						
7. Self-Blame						
8. Positive Reframing	-0.13					
9. Active Coping	-0.03	.55**				
10. Planning	0.01	.56**	.57**			
11. Acceptance	-0.21	.53**	.46**	.59**		
12. Emotional Support	0.02	.55**	.37**	.43**	.53**	
13. Instrumental Support	0.13	.51**	.40**	.59**	.36**	.71**

Note. * Indicates $p < .05$. **

The distribution of key study variables is shown in Table 1. Overall, participants who reported experiencing scarcity tended to utilize maladaptive forms of coping. Bivariate correlations found that participants who reported experiencing interpersonal and intrapersonal scarcity were positively associated with using denial, behavioral dis-

engagement, and self-blame to cope. Those scarce in intrapersonal resources were also positively correlated with making impulsive decisions ($r = .48, p < .01$), and negatively correlated with positive reframing, acceptance, planning, and making the most of the situation ($r = -.25, p < .04$). Participants who reported experiencing material scarcity were associated with using denial and praying or meditating ($r = .29, p < .02$) to cope. Those who reported experiencing time scarcity utilized denial, and behavioral disengagement to cope, and were also pessimistic about managing their challenges ($r = .25, p < .04$).

For scarcity and adaptive coping strategies, notable findings were found relating to social support and effective coping. Getting emotional support from others was significantly correlated with positive reframing ($r = .55, p < .01$). Additionally, instrumental support was significantly positively correlated with active coping ($r = .40, p < .01$), positive reframing ($r = .51, p < .01$), planning ($r = .59, p < .01$), and acceptance ($r = .36, p < .01$). Those who experienced interpersonal scarcity reported feeling pessimistic about managing their challenges ($r = .46, p < .01$), found it difficult to trust others ($r = .29, p < .02$), and were negatively associated with active coping.

Linear regression analyses were conducted to determine whether specific coping strategies or scarcity correlates predicted pessimism. Analyses showed that for participants who reported feeling pessimistic, a lack of social support ($\text{Beta} = .26, p < .01$), self-blame ($\text{Beta} = .19, p < .01$), and impulsive decision making ($\text{Beta} = .22, p < .01$), were significant predictors $F(3, 66) = 16.32, p < .000$.

Discussion

As with any research study, this study has potential limitations. The results may be limited to generalizability based on the population characteristics and the fact that the newly constructed Tri-Scarcity Survey is in its preliminary phase of testing. The Tri-Scarcity Survey is

a promising, newly designed measure created specifically for this study. Reliability analyses showed alpha scores of over .6 for all scales except for psychological scarcity when one of the questions is not reverse coded (.33). Further revising and adaptation of this valuable measure should be conducted to distill and more accurately assess the construct of perceived scarcity and the internalized scarcity mindset.

When interpreting the results from this study the sample population should be noted. The study's sample size is modest, and most participants resided in Hawai'i. Hawai'i is an economically and culturally diverse region that should be considered as a unique facet of this study. Hawai'i is considered one of a few states with a "minority majority" population where many identify as Asian and multiracial (United States U.S. Census Bureau, 2021). Hawai'i also has some of the highest costs of living in the country, often impacting residents' ability to financially thrive (Karger, 2020). As most of this study's participants reside in Hawai'i, the economic challenges of living in this state may affect the reporting of certain scarcity items.

The sample consists largely of young adults recruited from Hawai'i. Therefore, this sample may not be representative of other young adult groups, particularly those who reside in more affordable states. In future research, subsequent samples should be larger and taken from additional young adult populations not explored in this study. Groups such as employed college students or non-college educated young adults are of interest due to their distinct experiences with scarcity. As this study began recruitment towards the start of the pandemic in Hawai'i, additional samples from this state should be collected to compare how young residents' coping habits and experiences of scarcity have changed in a "post-lockdown" pandemic.

This study focused on how scarcity profoundly impacts the behavior and cognition of those who experience it. Despite the distinctions between the different types of scarcity explored in this study, the

results from each scale represent the general experience of scarcity. Those who reported higher levels of scarcity felt pessimistic when it came to managing their challenges which appeared to lead to disengagement and being in denial.

These findings not only reflect the psychological impact of the Scarcity Mindset, but the cycle it often creates. This is consistent with current research which posits that in attempts to resolve one experience of scarcity, a person may compound further the experience of scarcity. (Mullainathan & Shafir, 2013; Zhao & Tomm, 2018). As the results of this study suggest, this cycle of scarcity may be so stressful as to cause a person to not only feel hopeless at the thought of managing their challenges but turn to denying or avoiding the situation altogether to cope. Maladaptive coping, which may be experienced as feeling paralyzed with a lack of options, may also perpetuate scarcity as it further prolongs the amount of time that the instance of scarcity remains unresolved. Future research should dissect further the factors which contribute to, maintain, and or mitigate the cycle of scarcity.

Although scarcity is associated with a wide range of negative consequences, this study identified a potential moderator. Corroborating with previous research, our results suggest social support is a valuable resource when dealing with stress and life challenges (Puckett et al., 2019; Rueger et al., 2016; Calvete & Connor-Smith, 2006). This is initial evidence that support from others can potentially increase one's resilience to manage other experiences of scarcity. Having people to turn to for emotional support might provide several benefits such as being a source of comfort, having a person who can relate, gaining a sense of perspective, and getting helpful advice. Recommendations for future research directions include expanding upon social support as a moderating factor for scarcity due to its significance in this study's findings. Researchers may focus on whether certain social circles are more effective in moderating scarcity than others, and to what extent a lack of social support has in worsening the Scarcity Mindset.

Conclusion

Even before COVID-19, scarcity, and the Scarcity Mindset, have become increasingly well-known and relevant concepts within the literature, gaining much evidence to support the need to understand how it impacts individuals, families, and society. In recent years it has become clear that the gap in education, wages, and wellbeing is widening between young adults and previous generations. Now, with the onset of a global pandemic, these disparities may only worsen as the crisis evolves. Although young adults are not typically thought of as being affected by the pandemic or scarcity in general, as this study shows, young people are impacted and are struggling during this time. Finding effective ways to cope is crucial, however the dilemma as our results portray is that scarcity can prevent adaptive coping altogether. Contrasted with this discouraging finding is the identification of an important buffer against scarcity: support in relationships.

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Appendix

Tri-Scarcity Survey

Material Scarcity

1. I don't have enough to live comfortably.
2. If I am low on something, I'll use what's left of it in the most efficient way possible.
3. I focus a lot on what I don't have.
4. I find it difficult to organize my thoughts and make decisions when I am thinking about the things I don't have.
5. I won't buy items that I don't need, even if they are on sale.
6. I find it hard to do other tasks when I am thinking about the things I don't have.
7. I don't buy items that I've never used before, even if it might be better than the ones I normally use.

Psychological Resource Scarcity

1. I don't have people that I can turn to for help.
2. I don't feel optimistic about managing my challenges.
3. When I feel stressed or upset, I make impulsive decisions to make me feel better, even if they hurt me later on.
4. I consider the costs and benefits of a relationship before investing in it.
5. Even when I feel stressed or upset, I manage to make the most of the situation.
6. When I feel stressed or upset, I find it hard to think about anything else.
7. I find it difficult to organize my thoughts and make decisions when I am stressed or upset.
8. I find it difficult to trust others, even if they have good intentions.

