Resilience and Financial Well-Being:
Money Attitudes as Mediator

Mei-Chung Lin

National Changhua University of Education, Changhua, Taiwan

Personal financial stability is generally unbalanced during the high alert period of the epidemic, and financial pressure makes life difficult. This study explores the relationship among resilience, money attitudes, and financial well-being from the perspectives of being with difficulty in the present moment and worrying about the future. The research method adopted a quasi-experimental design. In an online teaching environment supported by digital technology, 18 secondary school teachers participated in a six-week online "teaching practice and research" course of graduate program. The research results show that mindfulness has the effect of dematerialization. The relationships of resilience-money attitudes-financial well-being models, both in the present moment and about the future, have explanatory power and can be used as a reference for online mindfulness in financial literacy education.

Keywords: resilience, money attitudes, financial well-being

Introduction

During the high alert period of the epidemic, personal financial stability truly tests personal financial well-being. How to stabilize income and overcome difficulties has become a real and common phenomenon. In recent years, mindfulness courses are widely popular, and are regarded as self-care and self-growth in order to learn with difficulties, reduce anxiety and stress, and improve psychological resilience. The mindfulness based stress reduction (MBSR) course was founded by Jon Kabat-Zinn in 1979 at the University of Massachusetts School of Medicine (Kabat-Zinn, 2013a). Since then, Zindel Segal, Mark Williams and John Teasdale (2002) had applied MBSR to train people's mental operation to improve their mental health by "An idea is just an idea, not a fact" to expand vision, reduce rumination of distractions, and design mindfulness based cognitive therapy (MBCT) (Lao, Kissane, & Meadows, 2016). Mindfulness, which Kabat-Zinn (2003b) defined as "Mindfulness is paying attention in a particular way: on purpose, in the present moment, and non-judgmentally". When individuals focus their attention on objects, thoughts, body awareness, feelings, and emotions by observing the current psychological experience, and take self-awareness as the meta-cognition mechanism to practice the non-self-reference process of mindfulness meditation in present experience. Developing self-awareness is relevant to meta-cognitive insight (Segal, Williams, & Teasdale, 2002), re-perception (Shapiro, Carlson, Astin, & Freedman, 2006), and de-reification (Dunne, 2012). In addition, de-materialization can avoid taking one's own thoughts and subjective experience as necessarily reflecting reality. In other words, it treats ideas as they

Mei-Chung Lin, Ph.D., associate professor, Finance Department, National Changhua University of Education.

are. Mindfulness practice, such as concentration and open monitoring as a non-self-reference process. Individuals who accept mindfulness intervention develop de-materialization in the present moment of self-awareness, linking meditation and neurocognition Tie up, expand and change over time without falling into specific emotions or thoughts (Lutz, Jha, Dunne, & Saron, 2015; Xiao, Yue, He, & Yu, 2017; Ash, Harrison, Pinto, DiClemente, & Negi, 2021). Sinha, Kumar, and Priyadarshi (2021) conducted a survey of 311 working people in India to test the relationship between mindfulness and financial well-being, materialism as the mediator. The results show that mindfulness mediated by materialism can effectively predict the three factors of financial well-being "financial anxiety, financial control and financial security". The purpose of this study is to explore the relationship between resilience and financial well-being, money attitudes as materialism and as the mediator when people being with self in the present moment and being worrying about the future.

Literature Review

This section mainly reviews related literatures of resilience, money attitudes, and financial well-being as the theoretical basis for measurement, structural model, and interpretation and discussion of research results.

Resilience in this study refers to the ability and recovery speed of an individual in adversity and encounter difficulties. Resilience is also used interchangeably in the literature with terms such as tolerance and flexibility. For example, Hemrajani and Sharma (2020) pointed out that age, gender, education level, and marital status have significant differences in money attitudes and financial tolerance. However, Hemrajani and Sharma did not test the relationship between the money attitudes and financial tolerance. The literature still lacks. This study explores the correlation among resilience, money attitudes, and financial well-being by measurement indicators: (1) distinguish financial control as money attitudes in the present moment, and financial security as money attitudes when worry about the future of money; (2) money attitudes could be regarded as an indicator of materialism. Money attitudes toward greed and materialization and toward dematerialization should be distinguished; (3) linking money attitudes in the present moment to correspond to the sense of financial wellbeing in the present moment; and (4) money attitudes that worry about the future should correspond to financial wellbeing toward the future, so as to improve the applicability of the model. The research cases are described as follows.

Taking the study of Pereira and Coelho (2019) as an example, Pereira and Coelho used Yamauchi and Templer (1982) to develop the Money Attitudes Scale (MAS) to test the relationship between mindfulness and the four factors of power prestige, retention time, distrust, and anxiety. It shows that mindfulness strengthens the attitude of retaining time for money. In other words, retention time means "the preparation of the plan" that mindfulness has a significant positive relationship with financial control in the present moment and financial security for the future.

Another study, Gentina, Daniel, and Tang (2020) used Brown and Ryan (2003)'s Mindful Attention Awareness Scale (MAAS) and Tang (1992)'s Affective, Behavior, Cognitive, and Monetary Scale (ABCMS) to develop the Avaricious Monetary Attitudes Scale (AMAS) as a measuring tool to verify the influence of mindfulness on the money attitudes. The results show that mindfulness and greedy money attitudes are significant negative relationship. From the above two studies on the relationship between mindfulness and the money attitudes, it was shown that the positive and negative relationship between mindfulness and the money attitudes is determined by the items design questions of money attitudes scale. When the money

attitudes is the concept of retention time, then money attitudes and mindfulness have a positive relationship; and when the money attitudes is a greedy attitudes toward money, the money attitudes has a negative relationship with mindfulness. This study uses Lay and Furnham's (2019) four-factor money attitudes scale "achievement and success, power status, worry about saving, and financial literacy worry" tends to have a negative relationship.

The abovementioned materialized money attitudes is based on the resource theory of Zhou and Gao (2008), which is the most widely accepted theory. Zhou and Gao (2008) believe that social exclusion and loss of money will bring suffering to people. In order to reduce suffering, people turn to society support and money, and regard social support and money as personal resources, and then attach to the extended material to become the extended self. When social support decreases and social exclusion increases, people will pay more attention to money. Therefore, money attitudes can be used to explain materialism, that is, material possession and extension of oneself will bring people a sense of physical and psychological well-being. At the same time, money and well-being may have a positive and negative relationship. That is, mindfulness research literature (such as Lao et al., 2016) and money attitudes research literature (such as Twenge & Kasser, 2013) both suggest using pathway to analyze antecedents and the consequences in order to explore the influence paths of related factors, understand the reasons why people turn to money for power, and understand the impact of excessive emphasis on money and material on well-being. This study takes the epidemic alert and high social isolation as social context, and constructs the structural relationship between resilience, money attitudes, and financial well-being.

Financial Well-being, defined in this study as an individual perceived degree of financial control and financial security in life experience, based on current maintenance of the current standard of living in the present moment, or the expectation of future participation, to make a positive value judgments and emotional responses. Brüggen, Hogreve, Holmlund, Kabadayi, and Löfgren (2017) claimed that the third generation of financial well-being uses the maintenance of the status quo, the expected standard of living and financial freedom as indicators of developmental financial well-being. The relationship between financial well-being and money attitudes is also affected by the measurement method of money attitudes. For example, Utkarsh, Pandey, Ashta, Spiegelman, and Sutan (2020) modified Yamauchi and Templer's (1982) money attitudes scale from the perspectives of current financial control and future financial security preparations, and adopted Netemeyer Warmath, Fernandes, and Lynch (2017) to use the two factors of "future financial security and current capital management pressure". The financial well-being scale for each of five questions shows that the money attitudes are significantly positively correlated with financial well-being, that is, when individuals hold retention time attitude toward money, it will help ensure future "financial security" regarding the positive and negative relationship between money attitudes and financial well-being in this study. Duh (2019) confirmed that generation Y who hold the money attitude of achievement and status have a significant positive relationship between money attitude and compulsive shopping and compulsive spending. And the money attitude towards achievement is negatively correlated with cognitive well-being, and money attitude towards status is negatively correlated with emotional well-being. Therefore, it is inferred that "achievement and power status" in this study are related to maintaining the current status quo and affecting "financial control". "Deposit worry, financial literacy worry" are related to the expected standard of living for future participation and affects "financial security".

Hypothesis 1: Being in the present moment, the current money attitudes have a completely mediating effect, which is negatively related to resilience and current financial well-being.

Hypothesis 2: Worrying about the future, the future money attitudes have a completely mediating effect, which is negatively related to resilience and future financial well-being.

Research Design

This research adopts a single experimental group quasi-experimental research design. 18 secondary education teachers take "teaching practice and research" course for a master's degree, which lasts for six weeks and 54 hours, 18 hours for mindfulness exercises, 27 hours for teaching strategies, and nine hours for selected research paper readings and evaluation. Distance instruction online using the Teams software:

1. to conduct mindfulness-guided practicing in the beginning three hours before each week, including awareness of breathing, adjusting concentration, and deliberately being in the present, paying attention to in the present moment without judgment, unfolding and emergence of awareness of the current power, such as body scanning, meditation, and blessings of kindness, open awareness of the way of listening and seeing, mindfulness standing and stretching, etc.;

2. The learning strategy of mindfulness practice adopts the inquiry method. After each mindfulness practice, the pre-planned questions are discussed in groups, and the students' practice experience is directly asked in the group discussion. The experience is transformed into an experiencing through the interpretation and understanding of practicing each other by linking toward the learning goal of the experiencing;

3. Learning content includes introduction to social, emotional, and ethical learning (SEE learning), and introduction to the teaching model of cognitively-based compassion training (CBCT);

4. Assessment adopts formative evaluation and summative evaluation. Formative evaluation uses Google docs to write unpleasant events to describe and conducts "context, body feelings, thoughts, and reasons" analysis; summative evaluation is based on selected readings of journal articles. The group conducts oral reports for selected journal articles, such as "examining the relationship among cognitive strategies, calmness, classroom concentration, and academic achievement: taking a vocational school in Taiwan as an example", "The influences of well-being instruction on college students' positive thinking";

5. The research tool has three scales: the simplified version of resilience scale, money attitude scale and the financial well-being scale for pre-tested, post-tested, and retained. The reliability of the research tools are all greater than 0.50, and the factor loading of each potential variable measurement model of PLS-SEM is greater than 0.68 (as shown in Figure 1 and Figure 2), which are described in detail below:

(1) The Taiwan Brief Resilience Scale (T-BRS) has six questions, derived from the short version of the Resilience Scale compiled by Smith et al. (2008). Selected three questions consist of "I can quickly recover from a sad moment (InnerS1)", "When something bad happens, it is difficult for me to recover from it (InnerS4R)", and "I usually take a long time to overcome life. Frustration (InnerS6R)" (Cronbach's $\alpha = 0.703$, CR = 0.836, AVE = 0.631).

(2) The Money Attitude Scale adopts Lay and Furnham's scale. The indicators of money attitude in the present moment using "success, power, and status" have 11 questions (Cronbach's $\alpha = 0.504$, CR = 0.783, AVE=0.650); and the money attitude indicators for future worry about using "deposit worry, financial literacy worries" have 11 questions (Cronbach's $\alpha = 0.824$, CR = 0.917, AVE = 0.848).

Achievement and Success (AchSuc) is derived from the total scores of the following six original measurement questions: Money is a good indicator of a person's life achievement and success. One of the best measures of success in life is how much money you make. Making a lot of money is one of the best achievements in life. Being rich is a sign of great achievement. Money really talks: "It talks about your place in life. You need money to buy the good things in life".

Power and Status (PowerSta) is derived from the total score of the following five original measurement questions: (a) "I like to buy expensive products to impress others"; (b) "I am happy to let people know how much money I have"; (c) "I show off to people the branded products I buy"; (d) "I am happy to use money to persuade people to help me"; and (e) "I am proud of my financial 'victory' and tell people about these victories".

Saving Concern (SavingCon) is derived from the following six original measurement questions and the total score: (a) "I never seem to have enough money"; (b) "I'm really afraid of running out of money"; (c) "The money I save is always not enough"; (d) "I always worry that my savings are too small"; (e) "I seem to be more worried about money than most people"; and (f) "I am really worried about whether I have saved enough money".

Financial Literacy Worry (FinLiterWor) is derived from the total scores of the following five original measurement questions: (a) I feel stupid and embarrassed when I talk about many money issues; (b) "I hope I can understand finance better"; (c) "When I talk about my personal finances, I feel anxious and defensive"; (d) "I really don't know financial terminology and jargon"; and (e) "Even thinking about my money makes me anxious".

(3) The financial well-being scale adopts the scale developed by Botha, New, and Nicastro (2020). The index of financial well-being in the present moment is "financial control" (Cronbach's $\alpha = 0.688$, CR = 0.829, AVE = 0.620), three questions are respectively: (a) "I can enjoy life because of the way I manage my money (FWB2)"; (b) "I think my daily financial situation is good (FWB8)"; and (c) "I am satisfied with my current level of expenditure compared with the funds I invested (FWB9)". The index of future financial well-being is "financial security" (Cronbach's $\alpha = 0.770$, CR = 0.863, AVE = 0.680). Three questions are: (a) "I can handle major unexpected expenses (FWB3)"; (b) "at weddings and birthdays or giving gifts on other occasions will give me financial pressure for the month (FWB7R)", and (c) "I have enough money to meet my future financial needs (FWB10)".

The sample size of this study is 18, and the statistical analysis tool uses smart PLS-SEM. According to Kock and Hadaya (2018), the minimum sample size of the existing PLS-SEM literature is 17; if the number of models is measured by potential variables five to 10 times, the standard also meets this requirement.

Research Results and Discussion

Participants demographic description (as shown in Table 1), females are the majority, more than half are substitute teachers, and more than half are the main source of household income. Half of the participants said that they did not have a clear future financial plan, which may be related to the uncertainty of the substitute teacher's work. Those who have no habit of keeping accounts will adopt more than three different financial accounts as an alternative method. The correlation coefficients (see Table 2) of the Latent variables of the PLS-SEM model of resilience, money attitude, and financial well-being (RMF) are all greater than 0.45, indicating a high correlation. The square root of the AVE value of each Latent variable is also close to or

greater than the correlation coefficient of each Latent variable, indicating that the Latent variable has discriminative validity.

Table 1

Participants Demographic Description

Variable		Number	Variable		Number
Gender	Female	14	Substitute seniority	non	3
	Male	4		1-5y	11
Mortgage	No	17		6-10y	2
	Yes	1		11-15y	2
Real estate	No	17	Full-time teachers seniority	non	10
	Yes	1		1-5y	6
Financial planning	No	9		6-10y	1
	Yes	9		11-15y	1
Financial chaos	No	16	Other seniority	non	14
	Yes	2		1-5y	3
Monthly income	50 thousand below	7		6-10y	1
	50-70 thousand	11	Household income	50 thousand below	3
Finance account	below 3	6		50-70 thousand	7
	above 3	12		90-110 thousand	1
Child in school	non	16		110-130 thousand	3
	one	1		130 thousand above	4
	two	1	Household income population	one	11
Residence population	one	6		two	2
	two	2		three	3
	three	1		Above five	2
	four	3	Bookkeeping	no	12
	five above	6		yes	6

Table 2

Latent Variable Correlation Coefficient

Variable	Resilience	Present Money Attitudes	Present Financial Well-being	Variable	Resilience	Future Money Attitudes	Future Financial Well-being
Resilience	0.794			Resilience	0.794		
Present Money Attitudes	-0.817[**]	0.806		Future Money Attitudes	-0.772[**]	0.921	
Present Financial Well-Being	0.590[*]	-0.544[*]	0.787	Future Financial Well-being	0.532	-0.571[*]	0.824

Notes. [**]$p < 0.01$, [*]$p < 0.05$.

The test results of empirical model 1 (see Figure 1) show that the path of "resilience-present money attitudes" is negatively correlated ($t = 13.466$, $\beta = -0.817$, $\mathcal{R}^2 = 0.667$, $p < 0.001$). The path of "present money attitudes—present financial well-being" is negatively correlated ($t = 2.851$, $\beta = -0.544$, $\mathcal{R}^2 = 0.296$, $p < 0.01$). The total effect was 0.444, and the GoF value （$\sqrt{\overline{AVE} \times \overline{\mathcal{R}^2}} = 0.552$）was tested. The determined value 0.1 GoF small $\leq$ 0.25 GoF medium $\leq$ 0.36 GoF large (Hoffmann & Birnbrich, 2012) indicates that the PLS-SEM overall model is highly suitable.

The test results of empirical model 2 (see Figure 2) show that the path of "resilience-future money attitudes" is negatively correlated ($t = 10.859$, $\beta = -0.772$, $\mathcal{R}^2 = 0.595$, $p < 0.001$). The path of "future money attitudes—future financial well-being" is negatively correlated ($t = 3.348$, $\beta = -0.571$, $\mathcal{R}^2 = 0.326$, $p < 0.001$). The total effect was 0.444, and the GoF value （$\sqrt{\overline{AVE} \times \overline{\mathcal{R}^2}} = 0.624$）was tested. The determined value 0.1 GoF small ≤ 0.25 GoF medium ≤ 0.36 GoF large (Hoffmann & Birnbrich, 2012) indicates that the PLS-SEM overall model is highly suitable.
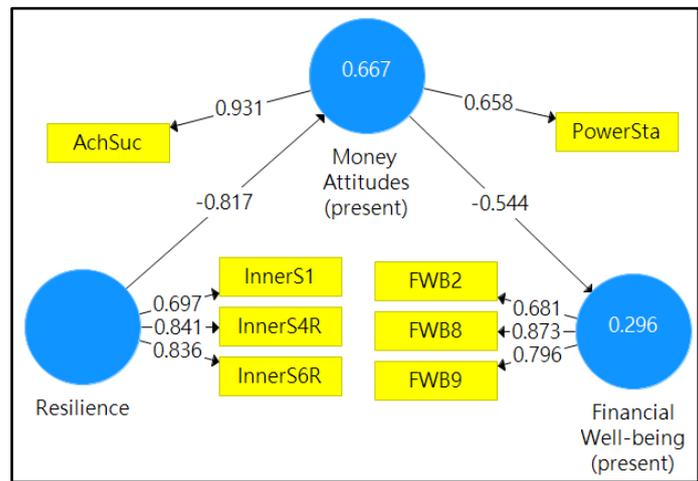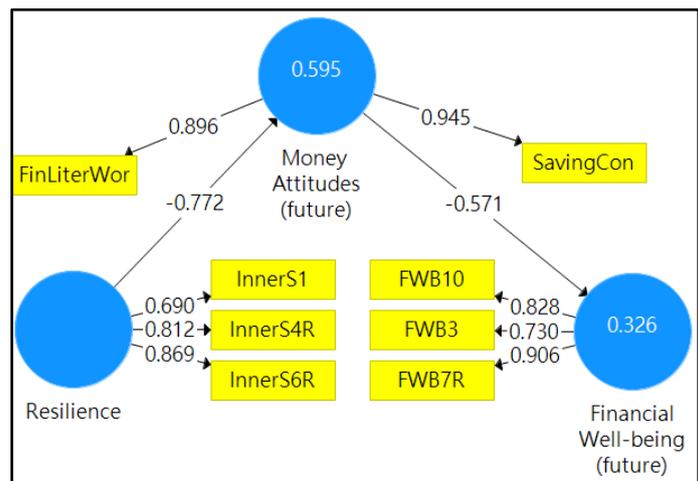

Figure 1. Model 1.

Figure 2. Model 2.

Conclusions and Recommendations

Mindfulness is to "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally". This study develops dematerialization in the self-awareness during mindfulness practicing. In an online teaching environment supported by digital technology, two research models use resilience as a psychological indicator and money as a materialized indicator to examine the current and future money attitudes as full mediator, with mindfulness practicing, resilience have a positive effect on financial well-being.

The theoretical implication of this study shows that Zhou and Gao's (2008) social resource theory can explain the materialist view of money attitudes; Utkarsh et al. (2020) advocated that research tools should

distinguish among measurements that are in present and that are worry about the future. It might improve the validity of the measurement model and the suitability of the structural model; and finally, the practical inspiration is based on the needs of self-care and self-learning growth. Mindfulness financial literacy education should continue to explore the maintenance and expansion of mindfulness practice to help the body and mind integration, and follow-up study of mindfulness practice to track the long-term benefits of mindfulness financial literacy stability.

References

Ash, M., Harrison, T., Pinto, M., DiClemente, R., & Negi, L. T. (2021). A model for cognitively-based compassion training: Theoretical underpinnings and proposed mechanisms. *Social Theory & Health, 19*(1), 43-67. https://doi.org/10.1057/s41285-019-00124-x

Botha, F., New, J., & Nicastro, A. (2020). *Developing a short form version of the Commonwealth Bank—Melbourne Institute reported financial wellbeing scale*. Commonwealth Bank of Australia and Melbourne Institute Financial Well-Being Scales Technical Report No 5. Melbourne, University of Melbourne. Retrieved from https://fbe.unimelb.edu.au/__data/assets/pdf_file/0003/3403722/CBA-MI-Technical-Report-No.-5.pdf

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848. http://dx.doi.org/10.1037/0022-3514.84.4.822

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research, 79*, 228-237. doi:10.1016/j.jbusres. 2017.03.013

Duh, H. (2019). Symbolic money attitudes and compulsive buying: Are they all bad for happiness? *African Journal of Business and Economic Research, 14*(1), 31-48. https://doi.org/10.31920/1750-4562/2019/V14n1a2

Dunne, J. (2012). Mindfulness and cognition from the perspective of Buddhist scholarship. Paper presented at *International Symposia for Contemplative Studies*, Denver, CO.

Gentina, E., Daniel, C., & Tang, T. L. (2020). Mindfulness reduces avaricious monetary attitudes and enhances ethical consumer beliefs: Mindfulness training, timing, and practicing matter. *Journal of Business Ethics, 173*, 301-323. https://doi.org/10.1007/s10551-020-04559-5

Hemrajani, P., & Sharma, S. (2020). Measuring financial risk tolerance: The role of socio-demographic factors under the influence of attitude towards money. *The IUP Journal of Applied Finance, 26*(1), 31-52, https://ssrn.com/abstract=3796828

Hoffmann, A., & Birnbrich, C. (2012). The impact of fraud prevention on bank-customer relationships: An empirical investigation in retail banking. *International Journal of Bank Marketing, 30*(5), 390-407. DOI:10.1108/02652321211247435

Kabat-Zinn, J. (2013a). *Full catastrophe living (revised edition): Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Bantam Books.

Kabat-Zinn, J. (2003b). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144-156. http://dx.doi.org/10.1093/clipsy.bpg016

Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS‐SEM: The inverse square root and gamma‐exponential methods. *Information Systems Journal, 28*(1), 227–261.

Lao, S. A., Kissane, D., & Meadows, G. (2016). Cognitive effects of MBSR/MBCT: A systematic review of neuropsychological outcomes. *Consciousness and cognition, 45*, 109–123. https://doi.org/10.1016/j.concog. 2016.08.017

Lay, A., & Furnham, A. (2019). A new money attitudes questionnaire. *European Journal of Psychological Assessment, 35*(6), 813-822. https://doi.org/10.1027/1015-5759/a000474

Lutz, A., Jha, A. P., Dunne, J. D., & Saron, C. D. (2015). Investigating the phenomenological matrix of mindfulness-related practices from a neurocognitive perspective. *American Psychologist, 70*(7), 632-658. https://doi.org/10.1037/a0039585

Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch, J. G. Jr (2017). How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being. *Journal of Consumer Research, 45*(1), 68-89.

Pereira, M. C., & Coelho, F. (2019). Mindfulness, money attitudes, and credit. *Journal of Consumer Affairs, 53*(2), 424-454. https://doi.org/10.1111/joca.12197

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. Guilford Press.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62*, 373-386.

Sinha, N. K., Kumar, P. & Priyadarshi, P. (2021). Relating mindfulness to financial well-being through materialism: Evidence from India. *International Journal of Bank Marketing, 39*(5), 834-855. https://doi.org/10.1108/IJBM-07-2020-0375

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The Brief Resilience Scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200. doi:10.1080/10705500802222972

Twenge, J. M., & Kasser, T. (2013). Generational changes in materialism and work centrality, 1976-2007: Associations with temporal changes in societal insecurity and materialistic role modeling. *Personality and Social Psychology Bulletin, 39*(7), 883-897.

Tang, T. L. P. (1992). The meaning of money revisited. *Journal of Organizational Behavior, 13*(2), 197-202. Retrieved September 5, 2021, from http://www.jstor.org/stable/2488183

Utkarsh, Pandey, A., Ashta, A., Spiegelman, E., & Sutan, A. (2020). Catch them young: Impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults. *International Journal of Consumer Studies, 44*, 531-541. DOI: 10.1111/ijcs.12583

Xiao, Q., Yue, C., He, W., & Yu, J. Y. (2017). The mindful self: A mindfulness-enlightened self-view. *Frontiers in Psychology, 8*, 1752. https://doi.org/10.3389/fpsyg.2017.01752

Yamauchi, K., & Templer, D. (1982). The development of a money attitude scale. *Journal of Personality Assessment, 46*, 522-528.

Zhou, X., & Gao, D. (2008). Social support and money as pain management mechanisms. *Psychological Inquiry, 19*(3/4), 127-144. Retrieved September 5, 2021, from http://www.jstor.org/stable/20447425