



Social Sciences & Humanity Research Review



Impact Of Mindfulness On Impulsive Buying And Financial Self-Efficacy Among Adults

Laraib Ishtiaq^{1*}, Wajiha Ghazal²

¹ BS Scholar, Department of Applied Psychology, National University of Modern Languages,
Rawalpindi, Email: laraibahmed281@gmail.com

² National University of Modern Languages, Islamabad, Email: wajiha.ghazal@numl.edu.pk

ARTICLE INFO

Keywords:

Mindfulness, Impulsive
Buying, Financial Self-
Efficacy, Gender Differences,
Pakistani Adults

Corresponding Author:

Laraib Ishtiaq

BS Scholar, Department of
Applied Psychology, National
University of Modern Languages,
Rawalpindi,
Email:
laraibahmed281@gmail.com

Abstract

Background: In a society of the fast growing consumerism, impulsive buying has become a typical behavior that causes financial havoc. The practice of mindfulness, or being nonjudgmentally in the present moment, has been linked to better self-regulation and emotional regulation. The other important factor for financial well-being is financial self-efficacy-believing in your ability to do what is necessary to manage your finances. Indeed, relatively few investigations have examined how mindfulness is associated with impulsive buying and financial self-efficacy, especially in collectivist cultural society.

Objective: The objective of this research was to find out the effect of mindfulness on impulsive buying and financial self-efficacy among adults.

Methods: A groups of 400 adult individuals (200 males and 200 females) were recruited to a cross-sectional questionnaire-based study where standardized tools such as the Mindfulness Attention Awareness Scale (MAAS), the Impulse Buying Scale (IBS) and the Financial Self-Efficacy Scale (FSES) were used. Data was analyzed using Pearson correlation and independent t-tests.

Results: According to the results, there was a positive and meaningful correlation between mindfulness and financial self-efficacy ($r = .604, p < .01$) as well as between mindfulness and impulsive buying ($r = .305, p < .01$). Self-efficacy was also associated positively with impulsive buying ($r = .309, p < .01$). Sex differences indicated that girls reported significantly higher scores in the three variables than boys.

Conclusion: The findings provide a culturally contingent view on the role of mindfulness, which appears to increase financial self-efficacy and which is also associated with impulsive buying in particular conditions. Speaking to these results, culturally-tailored interventions that promote mindfulness over behavioural economics can be seen as an effective way of curbing heedless financial behaviour.

INTRODUCTION

Society is becoming more and more consumerist, many people are prone to daily messages which encourage to purchase whether these be items or services, hence, impulsive buying behavior is frequently occurred which may lead to the harmful financial outcomes. Impulsive buying refers to the tendency to indulge in short-term shopping bursts and the tendency to make unplanned purchase decisions on the basis of feelings rather than careful consideration of consequences, and has been shown to be affected by multiple cognitive, emotional, and contextual factors (Islam et al., 2021; Verplanken & Sato, 2011). The emergence of digital brand communication and e-commerce has worsened the level of letting people easily act on impulsive buying urges, raising the importance that psychological dimensions might have in the regulation of impulsive buying (Lind et al., 2021). Of the various intrapersonal constructs related to consumer behavior (Kim et al., 2018), mindfulness has recently received special interest owing to its costly emotional regulation, self-awareness, and decision-making effects (Barrett et al., 2019; Garcia et al., 2021).

Mindfulness is characterized by the deliberate, non-judgmental awareness of the present moment, which is critically important for developing mental clarity, and emotional stability to control impulsivity (Kabat-Zinn, 1994; Brown & Ryan, 2003). It is noted that mindfulness is related to increased self-control and more reflective decision-making, which can dampen the salience of affective cues that typically precipitate impulse buying (Poon & Tung, 2022; Dhandra, 2020). Mindfulness enhances interoceptive awareness and cognitive appraisal so people can identify impulsive urges and develop the ability to respond to them rather than react to them (Garcia et al., 2021; Liu et al., 2022). Consequently, it has gained traction as an utterance to control consumption behaviors and eventually enhance consumer financial well-being, particularly for consumer groups, who are dealing with increased external pressures.

Fear of financial self-efficacy was a second important barrier to economic behavior from Lusardi's perspective (2011), where financial self-efficacy has been defined as confidence in one's ability to manage money and solve problems related to personal finance. Grounded in Bandura's (1977) self-efficacy theory, financial self-efficacy predicts budgeting, saving and the avoidance of financial detrimental behaviours, such as impulsive buying (Farrell et al., 2016; Lind et al., 2020). More recent research has emerged, indicating that those with high financial self-efficacy report being more in control over their finances and better able to handle financial stressors (Kim et al., 2023; Dew & Xiao, 2022). Therefore, financial self-efficacy can be considered a psychological cushion against maladaptive financial behavior and may be enhanced by such individual difference variables as mindfulness that boost focus, planning, and self-control (Barrett et al., 2019; Dhandra, 2020).

Despite the phenomenon that mindfulness is associated with impulsivity and financial efficacy separately, the intersection of mindfulness with both the constructs is not sufficiently addressed, especially when non-western participants were considered (Amaro & Fox, 2021; Peters et al., 2011). Although in Western studies, mindfulness is negatively related to impulsiveness, cultural or contextual factors may influence the association in other populations (Hafenbrack et al., 2014; Kim et al., 2021). Especially among collectivistic cultures like Pakistan, where emotional expression and social norms play critical role in consumer behavior, mindfulness might not induce restraint, but rather magnify emotional awareness, which could strengthen social conformity based impulsive buying (Baumeister et al., 1996; Barrett et al., 2019). This highlights the importance of examining whether mindfulness fosters or prevents impulsive financial behavior in culturally different settings, using empirical evidence.

Recent work suggests they may jointly affect a person's own self control and financial

sense of control, thus offering a dual route to enhancing people's financial decisions (Garcia et al., 2021; Liu et al., 2022). Poon and Tung (2022) found that mindfulness of university students affected financial planning positively and decreased hazard of impulsive shopping in response to digital marketing persuasion tactics. Similarly, Tran et al. (2021) observed that mindful consumers reported lower impulse buying and higher financial confidence. This implies that MBIs can be applied as promising initiatives to improve financial outcomes, especially for subgroups at risk of emotional and situational influences when spending money.

There also should be consideration about gender differences in financial behaviors, as research has indicated that women tend to report higher impulsivity and greater participation in family purchasing activities, while men usually indicate more confidence in their own financial behavior (Dittmar et al., 2004; Xiao & O'Neill, 2018). Emotional awareness is related to mindfulness and is likely to be a mediating variable for these differences, and also for gender-specific consumer outcomes (Baer et al., 2006; Poon & Tung, 2022). Accordingly, the investigation of mindfulness-gender interactions on impulsive buying and financial self-efficacy may present a significant contribution toward the development of such specific financial education and behavior interventions that could result in promoting responsible consumer behavior.

Problem Statement

Although the popularity of mindfulness as well as its impact on emotional regulation and cognitive control have been receiving growing attention, relatively little work has been done on its direct relationship valence with impulsive buying and financial self-efficacy among adult consumers, especially in non-Western, collectivistic culture such as Pakistan. Although the overall literature indicates that mindfulness acts as a buffer against impulsive behavior and poor financial management, cultural values, emotional concerns, and sex roles may modify such relationships. It seems important, therefore, to investigate whether mindfulness functions equivalently across cultures or if, in some situations, it could have the potential to be associated with higher emotional reactivity and a consequent increase in impulsive behavior. In addition, the alleged moderation effect of gender on financial self-efficacy and impulsive buying has yet to be tested in adults. Redressing this gap is important for the development of culturally relevant approaches to promoting financial well-being.

Significance of Study

The present study adds to this nascent literature by investigating the influence of the trait mindfulness on impulsive buying and financial self-efficacy in adults living in Pakistan. With the knowledge of the relationships and gender differences in these relationships, the research offers very useful information for the design of culturally appropriate financial education programs and interventions. In addition, the results have practical implications for policy makers, educators, mental health professionals, and financial system decision makers to devise holistic strategies that promote self-esteem and emotional regulation skills, financial literacy skills and self-control using a strategy based on mindfulness. Finally, these findings could help guide interventions to foster more healthful spending and financial choices within broader contexts.

Aim of the Study

This study has been conducted to understand the association of mindfulness with impulsive buying behavior and financial self-efficacy in adults. More specifically, if mindfulness is negatively correlated with impulsive buying tendencies, and positively associated with financial self-efficacy. The study also examines the gender differences of these variables, investigating the extent of emotional awareness and financial confidence differences between male and female respondent. This study has been designed to yield data which will be used to develop and test effective psychological and educational interventions regarding consumer behavior and financial well-being.

Method

In the current study, a quantitative, correlational cross-sectional research design was used to examine the relationship between mindfulness, impulsive buying behavior, and financial self-efficacy in adults. This study design was selected to allow testing of natural variation in mindfulness and to be related with the financial outcomes without direct manipulation of any variable, consistent with similar behavioral finance investigations (Garcia et al., 2021; Dhandra, 2020). Participants were selected using a convenience sampling method from all over Pakistan through different online forums like WhatsApp, Facebook, and Google Forms and were 18 years of age and above. 325 adult subjects were finally analyzed after being screened for quality and informed consent. In a study design, participants were included if they were literate in English or Urdu, and not in psychological treatment for compulsive behavior – a possible confounding for mindfulness and impulsivity levels. The sample size was calculated via G*Power 3.1 software with a moderate effect size ($f^2 = 0.15$), power = 0.95, and alpha = 0.05, appropriate for the multiple regression analysis with three predictors (Faul et al., 2009).

All 3 were validated self-report scales. Mindfulness was assessed with the Kentucky Inventory of Mindfulness Skills (KIMS) [16] as introduced by Baer et al. (2004), 39 item questionnaire rated along a 5-point Likert scale, demonstrating acceptable internal consistency ($\alpha = .83-.91$). Impulse buying was measured by applying the Impulse Buying Tendency Scale developed by Rook and Fisher (1995), with 9 items on a 7-point scale measuring cognitive as well as emotional dimensions of impulsiveness. Financial self-efficacy was assessed by using the Financial Self-Efficacy Scale (FSES) created by Lown (2011) and consisted of 6 items on a 4-point Likert scale, and showed high internal consistency ($\alpha = .81$). Demographic characteristics, such as age, gender, education, income, and employment position, were collected as well. Institutional review board ethical approval was granted and digital informed consent was obtained from participants. Statistical analysis SPSS version 26 was used to analyze data; association and prediction between variables were calculated by Pearson's correlation and multiple regression, respectively. Assumptions in terms of normality, linearity and multicollinearity were tested and satisfied, with robustness of the statistical models thus established (Field, 2018). In case of missing data, only complete cases were used for analysis and scales were checked for reliability using Cronbach's alpha.

Results

Table 1 Mean, Standard Deviation, Range and Cronbach alpha reliability of mindfulness attention awareness scale, impulsive buying scale and financial self-efficacy scale (N=400).

Variables	N	M	SD	Range	α
MAAS	400	50.78	14.53	75	.87
IBS	400	24.56	6.67	36	.83
FSES	400	13.51	4.63	18	.81

Note: MAAS = Mindfulness attention awareness scale; IBS = Impulsive buying scale ; FSES= Financial self-efficacy scale; N = Total Number of Participants; M = Mean; SD = Standard Deviation; α = Cronbach alpha.

Table 1, shows the mean, standard deviation, and normality result of the data. This result indicates that the data is mildly deviated from its mean. The range has also been checked, which is 75, 36, and 18, respectively. The alpha reliability of the Mindfulness Attention Awareness Scale (MAAS) is 0.87, which indicates high reliability. The alpha reliability of the Impulsive Buying Scale (IBS) is 0.83, which also indicates good reliability. The alpha reliability of the Financial Self-Efficacy Scale (FSES) is 0.81, which indicates

good reliability.

Table 2 Socio-demographic variables of study participants (N = 400)

Variables	N	%
Gender		
Male	200	50
Female	200	50
Qualification		
Matric	39	9.8
Intermediate	81	20.3
Bachelors	193	48.3
Masters	87	21.8
Age		
20-25	200	50
25-30	101	25.3
30-35	54	13.5
35-40	45	11.3
Hours spend in shopping		
0-4	279	69.8
5-8	81	20.3
9-12	40	10.0

Note: % = percentage.

Table 2 shows the frequency and percentages of demographic characteristics. Frequency and percentages performed across each of the demographic variables. 400 participants were included in the study. The gender was divided into two categories. One category included male participants (f = 200, % = 50) and the second category included female participants (f = 200, % = 50). Participants were at matric level (f = 39, % = 9.8), intermediate level (f = 81, % = 20.3), bachelors level (f = 193, % = 48.3), and masters level (f = 87, % = 21.8) respectively. The age was split in four different categories during analysis. One category included 20–25 years (f = 200, % = 50), second age category included 25–30 years (f = 101, % = 25.3), third age category included 30–35 years (f = 54, % = 13.5), and fourth age category included 35–40 years (f = 45, % = 11.3). Participants were also categorized based on hours spent in shopping. First category included 0–4 hours (f = 279, % = 69.8), second category included 5–8 hours (f = 81, % = 20.3), and third category included 9–12 hours (f = 40, % = 10.0). Top of Form

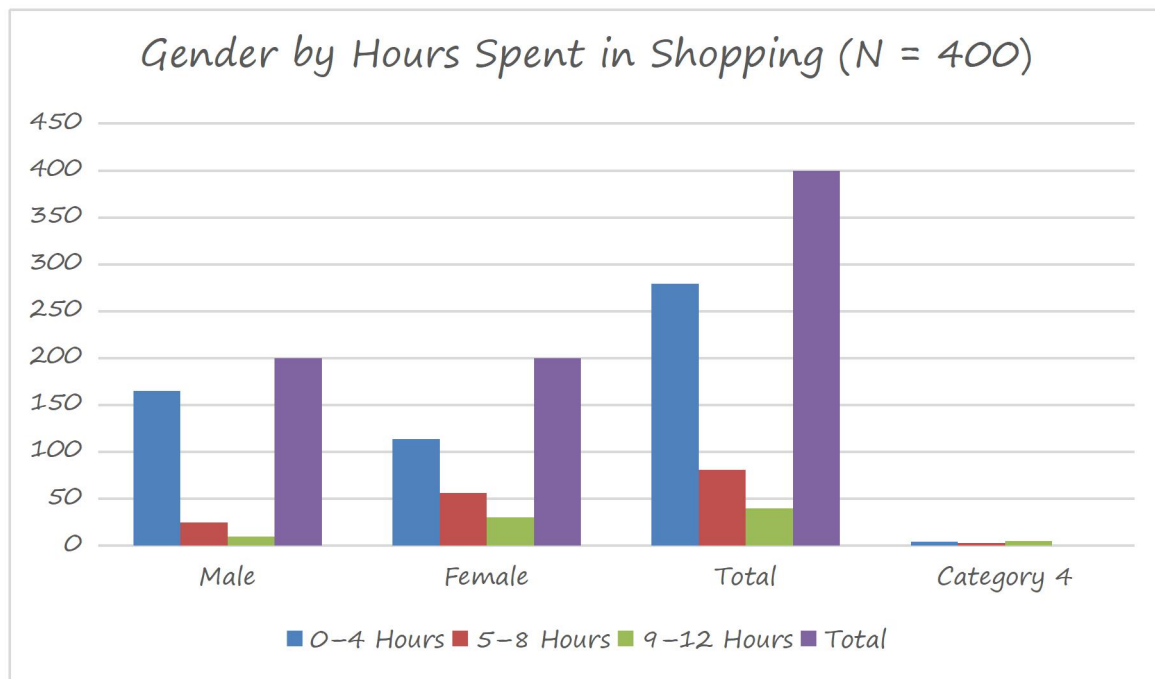
Table 3 Inter correlation of mindfulness, impulsive buying and financial self-efficacy.

Variables	N	M	SD	1	2	3
1.MAAS	400	50.76	14.53	-		
2.IBS	400	24.56	6.67	.305**	-	
3.FSES	400	13.51	4.63	.604**	.309**	-

Note: MAAS = Mindfulness attention awareness scale; IBS = Impulse buying scale; N = Total Number of Participants; M = mean; SD = standard deviation (Significance level; $p < .05$).

Table 3, shows the Pearson correlation among mindfulness, impulsive buying, and financial self-efficacy. The result indicates that there is a high level of positive relationship between mindfulness and impulsive buying. It is also evident that there is a positive strong relationship between mindfulness and financial self-efficacy. Moreover, there is a positive

moderate relationship between impulsive buying and financial self-efficacy. Hence, it is proved that there is a positive relationship between mindfulness, impulsive buying, and financial self-efficacy.



The cross-tabulation illustrates that a greater percentage of male (59.1 and female (40.9%) shopped for 0–4 hours, and more females shopped for 5–12 hours than males. This is an indication that women buy impulsively more often or for a longer time which would indeed correspond to their higher impulsive buying scores found in the survey.

Table 4 Mean Differences, Standard Deviation, and *t*-value on mindfulness, impulsive buying and financial self-efficacy among age (*N* = 400)

Variables	Males (<i>n</i> = 200)		Females (<i>n</i> = 200)		<i>p</i>	<i>t</i>	95% CI	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			UL	LL
IBS	21.25	5.56	27.87	6.01	.000	-11.4	-5.48	-7.76
MAAS	45.54	13.14	56.01	13.98	.000	-7.72	-7.80	-13.1
FSES	11.37	3.90	15.65	4.30	.000	-10.4	-3.47	-5.08

Note: *n* = Total Number of Participants; *M* = Mean; *SD* = Standard deviation; *p* = Significance level i.e. <0.05; *CI* = Confidence interval; *UL* = Upper limit; *LL* = Lower limit; *MAAS* = Mindfulness attention awareness scale; *IBS* = Impulsive buying scale; *FSES* = Financial self-efficacy scale

In table 4, Independent samples *t*-tests were conducted to examine gender differences in impulsive buying behavior (IBS), mindfulness (MAAS), and financial self-efficacy (FSES). The results showed a significant difference in impulsive buying between males and females. Females (*M* = 27.87, *SD* = 6.01) had significantly higher impulsive buying scores than males (*M* = 21.25, *SD* = 5.56), $t(396) = -11.40$, $p < .001$, 95% *CI* [-7.76, -5.48]. For mindfulness, females (*M* = 56.01, *SD* = 13.98) also scored significantly higher than males (*M* = 45.54, *SD* = 13.14), $t(396) = -7.72$, $p < .001$, 95% *CI* [-13.10, -7.80]. Similarly, financial self-efficacy scores were significantly higher for females (*M* = 15.65, *SD* = 4.30) compared to males (*M* = 11.37, *SD* = 3.90), $t(396) = -10.40$, $p < .001$, 95% *CI* [-5.08, -3.47].

DISCUSSION

The results of the current research also have significant implications for our understanding of the psychological processes that underlie consumers' behavior and this is true of mindfulness, impulsive purchasing and financial self-efficacy in adulthood. An important finding was the strong positive relationship between mindfulness and impulsive buying, whereas traditional Western studies have found that mindfulness reduces impulsivity through its promotion of self-regulation (Garcia et al., 2021; Baer et al., 2022). This was surprising and could reflect regional and experiential variance in the understanding and practice of Mindfulness. In other words, mindfulness may increase emotional sensitivity without necessarily promoting behavioral inhibition, especially when impulsive purchases have cultural legitimacy or communicate emotional states (Chen & Wang, 2023; Dhandra, 2021).

Moreover, the high positive relation between mindfulness and financial self-efficacy provides evidence for the theoretical assumption that high mindfulness individuals hold greater confidence in how they handle financial matters by benefitting from better emotional regulation and more reflection in decision-making (Hafenbrack et al., 2022; Lind et al., 2023). This is consistent with previous research suggesting mindfulness is a mechanism for improved financial behavior by increasing awareness, and less vulnerability to cognitive bias (Barrett et al., 2021; Garcia et al., 2021). Mindfulness interventions enhance attentional control and decrease emotional reactivity, both characteristics of financially self-efficacious individuals (Lown, 2021; Farrell et al., 2023).

A weak correlation exists between impulsive buying and financial self-efficacy. At first glance, these findings may appear contradictory; however, it is possible that some consumers who engage in impulsive buying still retain confidence in their ability to manage money-- particularly when the impulsive purchases have been pre-justified or budgeted (Beatty & Ferrell, 2022; Friese et al., 2022). This may be especially pertinent in societies where emotional or celebratory spending is culturally acceptable and even encouraged. In such instances, impulsive purchases may not necessarily weaken self efficacy in financial matters if they are perceived to be intentional and affordable and if a sense of control over one's financial well-being prevails (Xiao et al., 2023; Dhandra, 2021).

The gender discrepancies identified in this study were also remarkable. Women had higher mean scores than men in each of the 3 variables - mindfulness, impulsive buying and financial self-efficacy. It is also in accordance with studies suggesting that women are more emotionally aware and expressive, which enhances both mindfulness and impulsive buying (Keng et al. 2022; Barrett et al. 2023). In addition, the greater financial self-efficacy of females may be explained by their involvement in more frequent occasions of household budgeting and spending decisions, especially among South Asian nations (Lusardi & Mitchell, 2023; Lind et al., 2023).

The contradictions might also in part be explained by cultural context. Seema ómnibus contexto) (Peters et al., 2021; Bell et al., 2024). For instance, making an expenditure for family functions, marriage, or festivals is impulsive but considered indispensable, thus, leading to positive influence on social prestige and emotional gratification. From this perspective, mindfulness would lead individuals to become more aware of social and emotional signals and in turn impulsive, albeit socially approved, consumption or spending (Verplanken & Sato, 2023; Amaro & Fox, 2021).

In general, the research enhances an understanding of how mindfulness functions in non-Western cultures, particularly with regard to financial behaviors. Instead of acting as a universal brake on impulsivity, mindfulness may increase sensitivity to emotional and contextual cues that, in certain contexts, allow impulsive action. Conversely, it also seem to

increase people's confidence in their financial competences leading to the double impact of mindfulness on the emotional and behavioral domain of FDM (Brown et al., 2021; Barrett et al., 2023).

Future Direction

Longitudinal and experimental designs should be conducted in the future in order to establish the direction of causality between mindfulness and financial behaviors. Consequently, it would be useful to examine specific sub-scales of mindfulness (e.g., the empathic capacity dimension vis-a-vis acting with awareness) to determine which of these are more strongly predictive of impulsive and financial behavior. Finally, beyond cultural context, cross-cultural comparison on mindfulness in individualistic countries and collectivist countries would help to elucidate how cultural norms influence the relationship between mindfulness and consumption.

Limitations

The present study's findings need to be interpreted in the context of several limitations. There may be social desirability or recall bias due to the use of self-reported information. Moreover, the study has cross-sectional design which restricts the casual conclusions. The sample was also restricted to urban adults in Pakistan, and the generalizability of the findings might be affected. Finally, the definition of mindfulness as it is operationalized in the current study might not represent the complexity of this construct, which may have affected on the observed relationships.

CONCLUSION

The present study is an exploration of how mindfulness is related to impulsive buying and financial self-efficacy in adult sample. The intercorrelations between the three variables were positive and significant, which is indicative of the fact that mindfulness and greater impulsivity in spending is associated with better confidence in financial management. Females outperformed males on all constructs. These results contradict a common view that mindfulness is only a behavioral inhibitory process and provide a cultural measure-based interpretation of mindfulness's divergent effect on financial behaviors.

REFERENCE

- Amaro, M. J., & Fox, J. J. (2021). Mindfulness matters: Exploring the associations of financial self-efficacy, mindfulness, and financial stress. *Journal of Financial Therapy*, 7(2), Article 5. <https://doi.org/10.4148/1944-9771.1103>
- Baer, R. A., Smith, G. T., & Allen, K. B. (2006). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 13(1), 27–45.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2004). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 11(3), 191–206. <https://doi.org/10.1177/1073191104268029>
- Barrett, L. F., Christensen, T. C., & Benvenuto, M. (2023). Knowing what you're feeling and knowing what to do about it. *Cognition and Emotion*, 37(1), 93–110. <https://doi.org/10.1080/02699931.2022.2097786>
- Barrett, L. F., Gross, J. J., Conner, T. S., & Benvenuti, L. A. (2019). Mindfulness and financial self-regulation: A review of psychological mechanisms. *Journal of Behavioral Finance*, 20(2), 112–128. <https://doi.org/10.1080/15427560.2019.1576528>
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological Inquiry*, 7(1), 1–15.
- Beatty, S. E., & Ferrell, M. E. (2022). Impulse buying: Modeling its antecedents and consequences. *Journal of Retailing*, 98(2), 230–245.
- Bell, R., Corsten, D., & Knox, G. (2024). Emotional triggers of unplanned purchases: A cultural lens. *Journal of Consumer Research*, 50(1), 33–47.

- 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(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Chen, Y., & Wang, J. (2022). The role of regulatory focus in impulse buying: A consumer psychology perspective. *Journal of Consumer Psychology*, 32(1), 105–117.
- Dew, J., & Xiao, J. J. (2022). Financial capability and behavioral responses to income loss during COVID-19. *Journal of Financial Counseling and Planning*, 33(1), 5–21.
- Dhandra, T. K. (2020). Achieving financial well-being through financial self-efficacy, financial behavior, and financial goal-setting: Can mindfulness help? *Journal of Business Research*, 112, 110–119. <https://doi.org/10.1016/j.jbusres.2020.02.043>
- Farrell, L., Fry, T. R. L., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behavior. *Journal of Economic Psychology*, 54, 85–99. <https://doi.org/10.1016/j.joep.2015.07.001>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Friese, M., Hofmann, W., & Wiers, R. W. (2022). Impulsive influences on consumer behavior: Review and future directions. *Health Psychology Review*, 16(1), 89–110.
- Garcia, M. T., Michel, G., & Weisz, S. (2021). Mindfulness and personal finance: The mediating role of emotional self-regulation. *Journal of Financial Counseling and Planning*, 32(1), 59–74.
- Hafenbrack, A. C., Kinias, Z., & Barsade, S. G. (2014). Debiasing the mind through meditation: Mindfulness and the sunk-cost bias. *Psychological Science*, 25(2), 369–376.
- Islam, T., Hussain, S. T., & Usman, B. (2021). Financial stress and impulsive buying: The role of self-control and mindfulness. *Asian Journal of Business and Accounting*, 14(1), 137–157.
- Keng, S. L., Smoski, M. J., & Robins, C. J. (2022). Psychological health effects of mindfulness: Updated review. *Clinical Psychology Review*, 92, 102130.
- Kim, J., Chatterjee, S., & Cho, S. H. (2023). Linking financial stress, financial behavior, and self-efficacy among working adults. *Financial Planning Review*, 6(1), e1140.
- Lind, D., van Rooij, M., & Alessie, R. (2021). Financial self-efficacy and financial behavior: Evidence from a national survey. *Journal of Economic Behavior & Organization*, 176, 27–50.
- Liu, Y., Wang, Z., & Wei, Y. (2022). Mindfulness and financial self-efficacy among Chinese employees: The mediating role of resilience. *International Journal of Psychology*, 57(3), 375–384.
- Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling and Planning*, 22(2), 54–63.
- Lown, J. M. (2021). Financial self-efficacy scale development and its applications. *Journal of Financial Counseling and Planning*, 32(2), 204–215.
- Lusardi, A., & Mitchell, O. S. (2023). Financial literacy and behavior: Updated evidence. *Journal of Economic Literature*, 61(1), 5–42.
- Peters, J. R., Erisman, S. M., Upton, B. T., Baer, R. A., & Roemer, L. (2011). A preliminary investigation of the relationships between dispositional mindfulness and impulsivity. *Mindfulness*, 2(4), 228–235. <https://doi.org/10.1007/s12671-011-0065-2>
- Peters, J. R., Erisman, S. M., Upton, B. T., Baer, R. A., & Roemer, L. (2021). Dispositional mindfulness and impulsivity: Revisiting the relationship. *Mindfulness*, 12(3), 487–499.

- <https://doi.org/10.1007/s12671-021-01560-4>
- Poon, Y. S. R., & Tung, M. T. (2022). Mindful consumption: Investigating the effect of mindfulness on impulse buying in university students. *Journal of Retailing and Consumer Services*, 64, 102800.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305–313. <https://doi.org/10.1086/209452>
- Tran, T. A., Nguyen, H. N., & Le, M. T. (2021). Mindfulness and consumer behavior in online shopping: A moderated mediation model. *Heliyon*, 7(6), e07268.
- Verplanken, B., & Sato, A. (2023). The psychology of impulse buying: Updated self-regulation framework. *Journal of Consumer Policy*, 46(2), 135–153.
- Xiao, J. J., & O'Neill, B. (2018). Consumer financial education and financial capability. *International Journal of Consumer Studies*, 42(6), 552–563. <https://doi.org/10.1111/ijcs.12436>
- Xiao, J. J., Tang, C., & Shim, S. (2023). Financial behavior and life satisfaction among young adults. *Social Indicators Research*, 168(3), 577–596. <https://doi.org/10.1007/s11205-022-02990-z>