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SMARTPHONE ADDICTION AND COMPULSIVE ONLINE SHOPPING AMONG GENERATION Z

ABSTRACT

Technological advancement and increased internet usage have deeply infiltrated all spheres of human life, leading to significant changes in daily behavioral patterns, particularly among Generation Z. This generation, surrounded by technology from a young age, has developed smartphone usage patterns that often lead to excessive reliance on such devices for daily functioning and mood regulation, which can result in compulsive buying behaviors. The COVID-19 pandemic further intensified reliance on technology, highlighting smartphone usage as a means of escaping reality. This paper aimed to investigate the connection between smartphone addiction and compulsive online shopping directly and through the concept of mood regulation. An empirical study using a survey method was conducted in Bosnia and Herzegovina at the beginning of 2025, with a sample of 178 members of Generation Z. The assumed relationships between the variables were analyzed using correlation and regression analysis. The results showed a positive correlation between all investigated variables and that smartphone addiction has a direct effect on compulsive online shopping, as well as an indirect impact through mood regulation via smartphones (partial mediation). Higher smartphone addiction may indirectly intensify compulsive online shopping through mood regulation with smartphones; however, there is also a direct effect of smartphone addiction on compulsive online shopping that is not fully explained by the mediating variable. The obtained results enrich existing knowledge of the considered variables and represent an additional guideline for developing new marketing strategies, both in general and specifically in the context of Generation Z.

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1. INTRODUCTION

The rapid development of technology and the Internet has significantly impacted all spheres of human life. Smartphones, as essential tools in everyday activities, often monopolize users' time, leading to excessive use of mobile devices and potential addiction. The consequences of smartphone addiction include various physical and mental health issues, such as neck and shoulder pain, vision and hearing disturbances, and sleep disorders (Otsuka et al., 2022). Reflecting on appropriate and responsible smartphone usage has become imperative. In addition to negatively affecting physical health, smartphone addiction is linked to poor interpersonal relationships (Lee and Shin, 2016). During the isolation caused by the COVID-19 pandemic, people increasingly relied on internet technologies to connect with the outside world. During this period, the emotional consequences of isolation became evident, prompting increased smartphone usage as a means of escapism (Di Blasi et al., 2019).

Generation Z encompasses individuals born between 1997 and 2012. This generation grows up in a digital world, where technology has been present since their birth and is always available, almost at their fingertips. Research shows that 95% of Generation Z members own or have access to a smartphone, and nearly all (97%) use the Internet daily (Vogels et al., 2022). Increasing technology dependency encourages them to rely on the Internet and smartphones for communication, news, education, and social interactions (Curtis et al., 2019) and their behavior is shaped mainly by the content they consume online, particularly through blogs and social media. This generation has grown up with mobile devices, tablets, and social networks, setting high expectations for information accessibility and technological literacy. It is pretty common for them to instantly search the Internet for almost any information of interest, making them key creators of online content through popular platforms such as Instagram, TikTok, Twitter, and Snapchat. Conversely, Facebook is becoming less relevant to them. General characteristics of Generation Z include their technological connectedness, environmental awareness, and skepticism towards large corporations. Due to changes in social dynamics and awareness, many from this generation are more open to diversity, displaying fewer biases against different races, sexual orientations, and religions.

Additionally, having grown up in complex global circumstances such as recessions and climate challenges, they are committed to promoting social and economic change (Matušić et al., 2024). Financial awareness is also a significant characteristic shaped by the economic insecurity of their parents. Generation Z is pragmatic, emphasizing stable jobs and smart investments. They are savvy consumers who use technology and social media to make informed purchasing decisions, preferring

sustainable products and brands that share their political values. Despite being highly connected through digital channels, many members of Generation Z feel isolated, which impacts their mental health. Their pronounced engagement in political issues such as gun control, police brutality, and climate change adds to their stress. However, their multitasking ability and successful balancing of multiple tasks at once reflect their potential to transform the job market and create new specific occupations in the future (Popa et al., 2023).

Smartphones can be perceived as an appealing set of stimuli that can activate internal processes such as mood regulation, resulting in certain behaviors, such as compulsive online shopping. Smartphones serve as communication tools and platforms for entertainment, social networking, and online shopping. This complexity allows users to experience various emotional states and cognitive processes that can influence their purchasing behavior. Smartphones are sources of complex psychological and emotional dynamics. Primarily tools for social interaction, they can also trigger compulsive behaviors, especially when users seek ways to regulate their moods or escape reality through online activities (Mason et al., 2022). Mobile shopping, which allows anonymity and avoidance of social stigma, can further encourage tendencies toward compulsive purchasing (Proske et al., 2020). Contextual stimuli, such as features of smartphones and the online environment, affect users' internal cognitive and emotional processes. As a result, user behavior can include an increased frequency of compulsive online purchases, making this an important area for further research (Mason et al., 2022; Mehrabian and Russell, 1974; Chopdar and Balakrishnan, 2020; Chakraborty et al., 2017).

2. LITERATURE REVIEW

Research indicates that dysfunctional and repetitive use of technology may be related to attempts to cope with negative emotions (Caplan, 2010; Caplan et al., 2009). In this context, Turel et al. (2011) emphasize that "technology offers excitement and relief, leading to mood changes", which implies that individuals frequently use technology as a form of escape from feelings of loneliness, anxiety, stress, and depression. Chen et al. (2017; 2019) suggest that mobile devices play a significant role in mood regulation, while Fu et al. (2020) highlight that mobile virtual worlds enable users to regulate their emotional experiences. These studies support various theoretical frameworks, including Self-Determination Theory (Deci and Ryan, 1985), which posits that motives for behavior are closely related to the needs for autonomy, competence, and relatedness. This theory can explain the motives behind mood regulation via smartphones, as individuals utilize technology to fulfill their emotional needs and reduce feelings of loneliness.

According to Dittmar et al. (2007), the act of purchasing can serve as a response to negative emotional states, providing short-term mood improvement. Billieux (2012) clarifies that individuals inclined to escape often rely on pleasurable activities to cope with unpleasant emotions. Yu et al. (2021) also highlight the importance of emotional states in shaping consumer behavior, underscoring that individuals with low self-esteem and high anxiety are more likely to engage in compulsive online shopping as a form of self-regulation. The theory of emotional regulation also plays a significant role in explaining the motivation for compulsive purchasing. According to Gross (1998), emotion regulation involves strategies that individuals use to manage their emotional states, which may also encompass actively seeking relief through purchasing. This is particularly observable in individuals struggling with high levels of anxiety or depression, which aligns with findings from Billieux et al. (2012) indicating that negative emotional states may trigger compulsive buying as a means of escape.

Hoffner and Lee (2015) emphasize that users often select content, such as items for purchase, to regulate their affective states, reduce negative moods, and achieve optimal excitement. This interconnected dynamic illustrates that mood regulation based on smartphone use may serve as a mediating mechanism between smartphone addiction and compulsive purchasing behavior. In the context of the COVID-19 pandemic, Cheng et al. (2021) show that increased smartphone and internet usage has led to a rise in compulsive behaviors among youth. Similarly, mood regulation via smartphones as a mediator can be related to the theory of reality escape (Davis, 2001), suggesting that individuals unsuccessfully seek escape in digital interactions when faced with uncomfortable realities. This was prominently observed during stressful or anxious moments, such as those experienced during the COVID-19 pandemic, where students, for example, frequently used smartphones to cope with emotional distress (Cheng et al., 2021).

In light of the previous literature review, the following research questions were asked:

1. Is smartphone addiction correlated with smartphone-based mood regulation in Generation Z?
2. Is smartphone-based mood regulation correlated with compulsive online shopping in Generation Z?
3. Does smartphone-based mood regulation mediate the relationship between smartphone addiction and compulsive online shopping in Generation Z?

3. METHODOLOGY

An empirical study was conducted to obtain answers to the research questions. Research was conducted among members of Generation Z in the area of Mostar, Bosnia and Herzegovina, at the beginning of 2025. Sampling was based on the snowball principle. An online survey was conducted, and the link to access the survey was shared through instant messaging applications (Viber, Whatsapp, …), Google Classroom, and via e-mail. The questionnaire was prepared using Google Forms and took 5-6 minutes to complete. The research lasted 10 days, during which 189 responses were collected. After checking the collected responses, 11 questionnaires were excluded from the analysis, leaving a sample of 178 respondents.

Questionnaire

The questionnaire consisted of two parts: the first part with a set of statements and the second part with the following questions: gender, age, education, daily use of the boarding school in hours, experience of online shopping, and frequency of online shopping.

The statements above referred to the three variables investigated in the paper: SA - smartphone addiction (adapted from Caplan (2010), Olivencia-Carrión et al. (2018), Mason et al. (2022)), SMR - smartphone-based mood regulation (adapted from Caplan (2010), Olivencia- Carrión et al. (2018), Mason et al. (2022) and COB - compulsive online buying (adapted from Edwards (1993), Valence et al. (1988), Mason et al. (2022).

Respondents agreed with the statements on a five-point Likert scale (1 – completely disagree, 2 – disagree, 3 – neither agree nor disagree, 4 – agree, 5 – completely agree).

Characteristics of the respondents

There are more female responders than male respondents (Table 1). According to the target group, the respondents' ages range from 14 to 28 years old, with a mean age of 20.9 years (SD = 3.25). Half of the respondents are between 18 and 23 years old, while 25% are younger than 18, and 25% are older than 23. Daily Internet use varies from one hour to 20 hours. Mean daily internet usage is 5.2 hours per day (SD = 2.57). Half of the respondents spend between 4 and 6 hours on the Internet daily, and a quarter spend more than 6 hours. Most respondents either attend high school or are in the first cycle of studies (Table 1). Only six (3.4%) respondents stated that they have no experience with online shopping, i.e., they have not yet shopped online. Among the others, most shop monthly or several times yearly (Table 1).

Table 1: Characteristics of respondents

		n	%
Gender	Male	34	19.1
	Female	144	80.9
Education	Students in high school	47	26.4
	Completed high school	7	3.9
	Undergraduate student	85	47.8
	Completed 1st cycle – bachelor	9	5.1
	Graduate student	26	14.6
	Completed 2nd cycle – master	4	2.2
Frequency of online shopping	Two-three times a year	86	50.0
	Once a month	74	43.0
	Once a week	12	7.0

Source: author's preparation

Statistical analysis

The statistical analysis results are presented as numbers and percentages, as well as the mean (M) and standard deviation (SD). The reliability of the dimensions was checked by Cronbach's Alpha coefficient (CA). The correlation of variables was analyzed using Pearson's correlation coefficient (r). The direct and indirect effect of the variables was investigated by mediator regression analysis. The limit of statistical significance was set at $p = 0.05$. The statistical data analysis was performed in the program IBM SPSS Statistics 25 (IBM SPSS Statistics for Windows, version 25.0.).

4. RESULTS

Descriptive statistics and correlation analysis

Descriptive indicators of individual dimensions shown in Table 2 suggest that the mean scores of all dimensions are around the mean score on the measurement scale used (Likert, 1-5), i.e., between the middle and the first level of more substantial agreement.

From the perspective of the smartphone addiction (SA) dimension, the above suggests that the respondents show a moderate level of smartphone addiction with a tendency towards high addiction (Table 2). 68% of respondents have a score of 3 or higher on this dimension, and 42.1% have a score higher than 4. Among the results, there are also some lower scores, which suggest that there are still those who are not addicted to smartphones, but in a significantly smaller proportion (16.3% of

respondents have a score of 2 or lower). The results obtained for the dimension of mood regulation through smartphones (SMR) show that most respondents regulate their mood with smartphones, i.e., they tend to use their smartphones in moments of upset, depression, and preoccupation with problems to feel better (Table 2). 68.0% of respondents scored three or higher on this dimension, and 39.9% scored four or higher. The last dimension, compulsive online shopping (COB), is the only one with a mean score slightly lower than 3, which suggests a moderate intensity of the compulsive desire to shop online among respondents (Table 2). This is confirmed by 52.2% of respondents having a score between 2 and 4, 24.7% higher than 4, and 23.0% lower than 2.

Table 2: Descriptive statistics of dimensions

Dimension	M	SD	CV (%)	Skew	Kurt	CA
Smartphone Addiction (SA)	3.49	1.17	33.5	-.380	-.978	0.911
Smartphone-based mood regulation (SMR)	3.37	1.27	37.7	-.369	-.994	0.905
Compulsive Online Buying (COB)	2.96	1.21	35.8	.031	-1.166	0.919
M-mean; SD-standard deviation; CV-coefficient of variation; Skew-Skewness; Kurt- Kurtosis; CA-Cronbach's Alpha						

Source: author's preparation

Correlation analysis

A correlation analysis was conducted to get answers to the first two research questions, i.e., to check whether there is a significant correlation between smartphone addiction and smartphone-based mood regulation (RQ1) and between smartphone-based mood regulation and compulsive online shopping (RQ2). Analysis showed a significant, positive correlation between compulsive online shopping and smartphone addiction ($r_{COB,SA} = 0.632$; $p < 0.001$) and smartphone-based mood regulation ($r_{COB,SMR} = 0.636$; $p < 0.001$). A significant, positive correlation was also found between smartphone addiction and smartphone-based mood regulation ($r_{SA,SMR} = 0.718$; $p < 0.001$).

A serial mediation modeling

To get answers to the third research question (RQ3), i.e., to check the mediating effects of smartphone-based mood regulation in the association of smartphone addiction and compulsive online buying in Generation Z, a mediation model was constructed. Three regression models were created, and all were statistically significant (Table 3). The percentage of explained variance in these models varied between 39.9% and 51.6%.

Table 3: Model characteristics in the mediation analysis

Outcome measure	Predictor	R	R2	F
SMR	SA	0.718	0.516	187.399**
COB	SA, SMR	0.684	0.468	76.950**
COB	SA	0.632	0.399	117.152**
**p<0.001; *p<0.05				

Source: author's preparation

The results showed that the path from smartphone addiction to smartphone-based mood regulation was significant, as well as the path to compulsive online buying. Also, smartphone-based mood regulation was positively associated with compulsive online buying. The mediation path model is shown in Figure 1.

Figure 1: A mediation model of the association of smartphone addiction and compulsive online buying through smartphone-based mood regulation
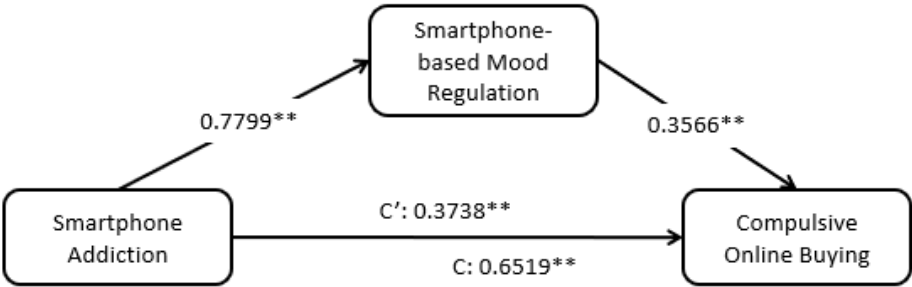
Source: author's preparation

The analysis found a significant indirect effect of smartphone addiction on compulsive online buying via smartphone-based mood regulation (0.2781). The total effect of smartphone addiction on compulsive online buying is 0.6519 and is statistically significant. The direct effect, i.e., the effect of smartphone addiction on compulsive online buying without the mediation of smartphone-based mood regulation, amounts to 0.3738. The above clearly shows that smartphone addiction has a direct effect on compulsive online buying but also an indirect effect via smartphone-based mood regulation, which implies partial mediation. Increasing smartphone addiction level may indirectly increase compulsive online buying intensity through smartphone-based mood regulation. Still, there is also a direct effect of smartphone addiction on compulsive online buying that is not fully explained by the mediating variable.

5. DISCUSSION

The first research question (RQ1) focused on the relationship between smartphone addiction and smartphone-based mood regulation. It was investigated whether these two variables were significantly related. The results prepared for the aforementioned research question showed a significant positive correlation between smartphone addiction and smartphone-based mood regulation. Furthermore, the regression analysis showed that smartphone addiction significantly and positively affects smartphone-based mood regulation. A higher level of smartphone-based mood regulation follows a higher level of smartphone addiction. Thus, the results align with previous research that identified similar outcomes, including findings from Turel et al. (2011), which suggested that technology can provide excitement and relief, leading to changes in mood. Additionally, Caplan (2010) and Caplan et al. (2009) indicated that dysfunctional and repetitive use of technology could be associated with attempts to cope with negative emotions. Dittmar et al. (2007) showed that purchasing can serve as a response to negative emotional states, providing short-term mood enhancement.

The second research question (RQ2) concerns smartphone-based mood regulation and compulsive online shopping. It was assumed that these two variables were significantly related, which was confirmed by the results. The correlation analysis confirmed the correlation, and additionally, the regression analysis showed that smartphone-based mood regulation significantly and positively influences compulsive online shopping. These findings strongly suggest that Generation Z behavior includes utilizing online shopping to escape negative emotional states. This connection is further supported by research from Billieux (2012), which indicates that individuals predisposed to escapism often rely on pleasurable activities, and by Yu et al. (2021), who noted that individuals with low self-esteem and high anxiety often resort to this form of self-regulation.

The third research question (RQ3) asked whether smartphone-based mood regulation mediates the relationship between smartphone addiction and compulsive online shopping in Generation Z. According to the findings, smartphone addiction affects compulsive online shopping directly and indirectly through mood control on smartphones, suggesting partial mediation. Smartphone addiction has a direct impact on compulsive online buying that the mediating variable cannot fully explain, but it can also indirectly increase compulsive online buying intensity through smartphone-based mood regulation. Nyrhinen et al. (2023) noted that smartphone addiction encourages compulsive purchasing patterns. Research by Hoffner and Lee (2015) suggests that users often select digital content, such as product reviews, to regulate their affective states. This interconnected dynamic demonstrates that mood regulation based on smartphone usage may act as a mediating mechanism between addiction and compulsive purchasing. Contextually, during the COVID-19

pandemic, Cheng et al. (2021) highlighted that increased smartphone and internet usage led to a surge in compulsive behaviors among the youth.

6. CONCLUSION AND RECOMMENDATIONS

The research has shown that higher levels of smartphone addiction lead to more intense mood regulation. Additionally, mood regulation through smartphones positively affects compulsive online shopping. Furthermore, according to the research findings, smartphone addiction influences compulsive online shopping both directly and indirectly through mood regulation.

Future marketing strategies should empower young people rather than exploit their emotional vulnerabilities. Ultimately, there is a need to strive to develop educational and marketing programs and policies that promote responsible technology use, thereby reducing the risks associated with digital addiction among youth. Aware of their potential addiction to smartphones and the ongoing conflict between smartphone use and abstinence, it is expected that members of Generation Z will favor companies that implement the described ethical and socially responsible practices.

Marketing strategies should avoid manipulative techniques that exploit Generation Z's emotional vulnerabilities. On the contrary, they should focus on creating and implementing educational campaigns that raise awareness among the target audience about the risks and consequences of excessive smartphone use. Promoting socially responsible initiatives can positively impact the emotional well-being of young people, while incorporating social support and community participation in marketing campaigns may help reduce feelings of loneliness among users. Additionally, marketing professionals should develop creative strategies that positively regulate moods, encouraging users to engage in activities that enhance their emotional state instead of relying on compulsive purchasing. Hence, this holistic approach can contribute to a healthier relationship between youth and digital technologies while simultaneously reducing the risks associated with digital addiction. Healthy and constructive behavioral patterns should be promoted instead of fostering addiction or compulsive buying. Campaigns aimed at Generation Z should emphasize moderation and responsible consumption, especially concerning online behavior related to smartphone use. Social responsibility in marketing is imperative. Businesses should consider the impact of their marketing strategies on the community and environment, promoting sustainability and ethical business practices. Marketing professionals are responsible for educating consumers about their products and encouraging rational decision-making. This includes providing information about product characteristics, purposes, and benefits, which can help consumers make informed rather than impulsive purchasing decisions. Ultimately, marketing messages should be sensitive to current social and economic challenges.

The research has certain limitations that should be acknowledged. The sampling was conducted exclusively within a specific population from the city of Mostar, which may limit the generalizability of the results to the broader population. Additionally, data were collected through various social platforms, which may result in biases as respondents may not be completely honest or aware of their actual behaviors and emotional states compared to those that would be captured through in-person interviews.

A recommendation for future research is to conduct longitudinal studies that would enable a deeper understanding of the long-term effects of smartphone addiction on mental health and consumption behavior, particularly among Generation Z. This approach could help identify causal relationships between addiction and emotional responses, contributing to the development of more effective interventions. Furthermore, research should analyze individual differences among respondents, such as emotional intelligence and social support, to better understand the mechanisms that influence smartphone addiction and mood regulation. Additionally, it is important to consider how different types of digital content, such as social media and video games, affect users' emotional regulation, which can further enrich the understanding of compulsive consumption.

7. LITERATURE

1. Billieux, J. (2012). Problematic use of the mobile phone: A literature review and a pathways model. Current Psychiatry Reviews, 8(4), 299-307.

2. Caplan, S. E. (2010). Theory and measurement of generalised problematic internet use: A two-step approach. Computers in Human Behavior, 26(5), 1089-1097.

3. Caplan, S., Williams, D., & Yee, N. (2009). Problematic internet use and psychosocial well-being among MMO players. Computers in Human Behavior, 25(6), 1312-1319.

4. Chakraborty, T., & et al. (2017). Exploratory tendencies in consumer behaviour in online buying across Gen X, Gen Y, and baby boomers. *International Journal of Value Chain Management*.

5. Cheng, C., Wang, H.-Y., & Chau, C.-L. (2021). Mental health issues and health disparities amid COVID-19 outbreak in China: Comparison of residents inside and outside the epicenter. *Psychiatry Research*, 303, 114070.

6. Chen, C., Zhang, K. Z., Gong, X., & Lee, M. (2019). The dual mechanisms of reinforcement reward and habit that drive smartphone addiction. Internet Research, 29(6), 1551-1570.

7. Chen, C., Zhang, K. Z., Gong, X., Zhao, S. J., Lee, M. K., & Liang, L. (2017). An empirical test of a flow-based model for understanding compulsive smartphone use. International Journal of Information Management, 37(5), 438-454.

8. Chopdar, P. K., & Balakrishnan, J. (2020). Consumers' response towards mobile commerce applications: S-O-R approach. *International Journal of Information Management*, 53, 102106.

9. Curtis, B. L., Ashford, R. D., Magnuson, K. I., & Ryan-Pettes, S. R. (2019). Comparison of smartphone ownership, social media use, and willingness to use digital interventions between Generation Z and Millennials in the treatment of substance use: Cross-sectional questionnaire study. *BMC Public Health*, 21(4).

10. Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, 17(2), 187-195.

11. Di Blasi, M., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., et al. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions*, 8(1), 25-34.

12. Dittmar, H., Long, K., & Bond, R. (2007). When a better self is only a button click away: Associations between materialistic values, emotional and identity–related buying motives, and compulsive buying tendency online. *Journal of Social and Clinical Psychology*, 26(3), 334-361.

13. Edwards, E. A. (1993). Development of a new scale for measuring compulsive buying behavior. Financial Counseling and Planning, 4(1), 67 – 84.

14. Fu, G., Zhang, M., Ou, J., & Chen, C. (2023). The relationship between self-control and mobile phone addiction in Chinese college students: The mediating roles of fear of missing out and stress. Psychology, 10(5).

15. Fu, L., Wang, P., Zhao, M., Xie, X., Chen, Y., Nie, J., et al. (2020). Can emotion regulation difficulty lead to adolescent problematic smartphone use? A moderated mediation model of depression and perceived social support. Children and Youth Services Review, 108.

16. Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(5), 271-299.

17. Hoffner, C. A., & Lee, S. (2015). Mobile phone use, emotion regulation, and well-being. *Cyberpsychology, Behavior, and Social Networking*, 18(7), 411-416.

18. Lee, W. J., & Shin, S. (2016). A comparative study of smartphone addiction drivers' effect on work performance in the US and Korea. *Journal of Applied Business Research*, 32(2), 507-516.

19. Mason, M. C., Zamparo, G., Marini, A., & Ameen, N. (2022). Glued to your phone? Generation Z's smartphone addiction and online compulsive buying. *Computers in Human Behavior*, 136. 1–13.

20. Matušić, M., Dadic, M., & Grgić, H. (2024). Understanding Generation Z as a new generation of consumers. In *2024 Contemporary Issues in Economy & Technology (CIET)*. Split, Croatia.

21. Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.

22. Nyrhinen, J., Lonka, K., Sirola, A., Ranta, M., & Wilska, T.-A. (2023). Young adults' online shopping addiction: The role of self-regulation and smartphone use. *International Journal of Consumer Studies*.

23. Olivencia- Carrión , M. A., Ramírez-Ucl ´ es, I., Holgado-Tello, P., & L ´ opez-Torrecillas, F. (2018). Validation of a Spanish questionnaire on mobile phone abuse. Frontiers in Psychology, 9, 1 – 10.

24. Otsuka, Y., Kaneita, Y., Itani, O., & Matsumoto, Y. (2022). The Japanese youth version of the smartphone addiction scale among the youth in Japan: Reliability and validity assessment. *International Journal of Mental Health and Addiction*, 1-16.

25. Popa, A., Marin, B. C. A., & Cerchia, A. E. (2023). The new paradigm of online marketing: A study of Generation Z consumers' behaviour and their attitude towards brands. In *Proceedings of the 9th BASIQ International Conference on New Trends in Sustainable Business and Consumption*.

26. Proske, M., Poppe, E., & Jaeger-Erben, M. (2020). The smartphone evolution: An analysis of the design evolution and environmental impact of smartphones. In *Proceedings of Electronics Goes Green 2020+*. Berlin, Germany.

27. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 1-11.

28. Turel, O., Serenko, A., & Giles, P. (2011). Integrating technology addiction and use: An empirical investigation of online auction users. *MIS Quarterly*, 35(4), 1043-1061.

29. Valence, G., d ' Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. Journal of Consumer Policy, 11(4), 419 – 433.

30. Vogels, E. A., Anderson, M., Perrin, A., & Rainie, L. (2022). *Connection, creativity and drama: Teen life on social media in 2022*. Pew Research Center.

31. Yu, X. Q., Li, Z. N., Fang, Y., & Dong, Y. (2021). The relationship between anxiety symptoms and problematic smartphone use among teenagers: A cross-lagged regression analysis. *Journal of Psychological Science, 44*(4), 866-872.

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OVISNOST O PAMETNIM TELEFONIMA I KOMPULZIVNA ONLINE KUPNJA MEĐU GENERACIJOM Z

SAŽETAK

Tehnološki napredak i povećano korištenje interneta duboko su se infiltrirali u sve sfere ljudskog života otvarajući put značajnim promjenama u svakodnevnim obrascima ponašanja, posebno među generacijom Z. Ova generacija, od malih nogu okružena tehnologijom, razvila je obrasce korištenja pametnih telefona koji često mogu dovesti do pretjeranog oslanjanja na takve uređaje u svakodnevnom funkcioniranju i s ciljem reguliranja raspoloženja, a što može dovesti do kompulzivnih kupovnih ponašanja. Pandemija COVID-19 dodatno je povećala oslanjanje na tehnologiju naglašavajući upotrebu pametnih telefona kao sredstva za izbjegavanje realnosti. Cilj rada je bio istražiti vezu ovisnosti o pametnim telefonima i kompulzivne online kupnje izravno i preko koncepta regulacije raspoloženja. Empirijsko istraživanje metodom anketiranja provedeno je u BiH, početkom 2025 godine, a uzorak je obuhvatio 178 pripadnika generacije Z. Pretpostavljene veze između varijabli analizirane su korelacijskom i regresijskom analizom. Rezultati su pokazali pozitivnu korelaciju između svih istraživanih varijabli kao i da ovisnost o pametnom telefonu ima izravan učinak na kompulzivnu online kupnju, ali i neizravan učinak kroz regulaciju raspoloženja putem pametnog telefona (djelomičnu medijaciju). Veća ovisnost o pametnim telefonima može neizravno intenzivirati kompulzivnu kupnju putem interneta putem regulacije raspoloženja pametnim telefonima, ali postoji i izravan učinak ovisnosti o pametnom telefonu na kompulzivnu kupnju putem interneta koji nije u potpunosti objašnjen medijatornom varijablom.
Dobiveni rezultati obogaćuju postojeća znanja u kontekstu razmatranih varijabli i predstavljaju dodatni putokaz pri donošenju novih marketinških strategija, općenito i u kontekstu generacije Z.

Ključne riječi: *mobilna trgovina, ovisnost o pametnim telefonima, regulacija raspoloženja, kompulzivna online kupnja, Gen Z.*

JEL: M31