



UNIVERSITAS  
GADJAH MADA

**Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce**  
RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.  
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

## References

- Akram, U., Hui, P., Khan, M., Yan, C., & Akram, Z. (2018). Factors Affecting Online Impulse Buying: Evidence from Chinese Social Commerce Environment. *Sustainability*, 10(2), 352. <https://doi.org/10.3390/su10020352>
- Anwar, A., Waqas, A., Zain, H. M., & Kee, D. M. H. (2020). Impact of Music and Colour on Customers' Emotional States: An Experimental Study of Online Store. *Asian J. Bus. Res*, 10, 104.
- Arjmand, H.-A., Hohagen, J., Paton, B., & Rickard, N. S. (2017). Emotional responses to music: Shifts in frontal brain asymmetry mark periods of musical change. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.02044>
- Arrafi, I. M., & Ghabban, F. M. (2021). Impulse buying model for business-to-consumer e-commerce in Saudi Arabia. *IBusiness*, 13(02), 81–102. <https://doi.org/10.4236/ib.2021.132006>
- Ayub, R., & Zafar, M. (2018). External Stimuli and Impulsive Buying Behavior. *Market Forces Research Journal*, 13(1), 70–85.
- Ballmann, C. G. (2021). The influence of Music Preference on exercise responses and performance: A Review. *Journal of Functional Morphology and Kinesiology*, 6(2), 33. <https://doi.org/10.3390/jfmk6020033>
- Bhakat, R. S., & Muruganantham, G. (2013). A review of impulse buying behavior. *International Journal of Marketing Studies*, 5(3). <https://doi.org/10.5539/ijms.v5n3p149>
- Brock, T. C. (1968). Implications of commodity theory for Value Change. *Psychological Foundations of Attitudes*, 243–275. <https://doi.org/10.1016/b978-1-4832-3071-9.50016-7>
- Carpentier, F. R. D., & Potter, R. F. (2007). Effects of music on physiological arousal: Explorations into tempo and genre. *Media Psychology*, 10(3), 339–363.



UNIVERSITAS  
GADJAH MADA

**Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce**  
RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.  
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

<https://doi.org/10.1080/15213260701533045>

Cialdini, R. B., & James, L. (2009). *Influence: Science and practice* (Vol. 4). Boston: Pearson education.

Cook, T., Roy, A. R., & Welker, K. M. (2017). Music as an emotion regulation strategy: An examination of genres of music and their roles in emotion regulation. *Psychology of Music*, 47(1), 144–154. <https://doi.org/10.1177/0305735617734627>

Deckert, M., Schmoeger, M., Auff, E., & Willinger, U. (2019). Subjective emotional arousal: An explorative study on the role of gender, age, intensity, emotion regulation difficulties, depression and anxiety symptoms, and meta-emotion. *Psychological Research*, 84(7), 1857–1876. <https://doi.org/10.1007/s00426-019-01197-z>

Ding, Y., DeSarbo, W. S., Hanssens, D. M., Jedidi, K., Lynch, J. G., & Lehmann, D. R. (2020). The past, present, and future of measurement and methods in marketing analysis. *Marketing Letters*, 31(2), 175-186.

Dingfelder, S. F. (2005). Music motivates impulse buyers, not thoughtful shoppers. *Monitor on Psychology*, 36(10). <https://www.apa.org/monitor/nov05/music>

Fataron, Z. A. (2020). Online Impulse Buying Behaviour: Case Study On Users Of Tokopedia. *Journal of Digital Marketing and Halal Industry*, 1(1), 47.  
doi:10.21580/jdmhi.2019.1.1.4762

Guo, J., Xin, L., & Wu, Y. (2017). Arousal or not? the effects of scarcity messages on online impulsive purchase. *Lecture Notes in Computer Science*, 29–40.  
[https://doi.org/10.1007/978-3-319-58484-3\\_3](https://doi.org/10.1007/978-3-319-58484-3_3)

Herabadi, A. G., Verplanken, B., & van Knippenberg, A. (2009). Consumption experience of impulse buying in Indonesia: Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12(1), 20–31. <https://doi.org/10.1111/j.1467-839x.2008.01266.x>



UNIVERSITAS  
GADJAH MADA

**Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce**  
RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.  
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Hetharie, J.A., Surachman, Hussein, A.S., & Puspaningrum, A. (2019). SOR (Stimulus-Organism-Response) Model Application In Observing The Influence Of Impulsive Buying On Consumer's Post-Purchase Regret.

Hu, M., & Chaudhry, S. S. (2020). Enhancing consumer engagement in e-commerce live streaming via relational bonds. *Internet Research*, 30(3), 1019–1041. doi:10.1108/intr-03-2019-0082

Kabugumila, M. S., Mtui, J. E., & Lushakuzi, S. (2016). E-Commerce: An Overview of Adoption and Its Effective Implementation. *International Journal of Business and Social Science*, 7(4), 243–252.

Kao, D. T. (2013). The impacts of consumers' need for uniqueness (CNFU) and brand personality on brand switching intentions. *Journal of Business Theory and Practice*, 1(1), 83. <https://doi.org/10.22158/jbtp.v1n1p83>

Kelley, E., Andrick, G., Benzenbower, F., & Devia, M. (2014). Physiological arousal response to differing musical genres. *Modern Psychological Studies*, 20(1), 25–36.

Kemp, S. (2021). Digital in Indonesia: All the Statistics You Need in 2021 - DataReportal – Global Digital Insights. DataReportal. <https://datareportal.com/reports/digital-2021-indonesia>.

Khan, M. D., Khan, F., & Khan, M. E. (2014). Growing Importance of E-Commerce in Global Market, 4(5), 48–51.

Khalil, H., & Raza, A. (2021). The influence of external stimuli on impulsive buying behaviour. *Journal of Business & Tourism*, 4(1), 97–116. <https://doi.org/10.34260/jbt.v4i1.93>

Kiss, L., & Linnell, K. J. (2020). The effect of preferred background music on task-focus in sustained attention. *Psychological Research*. <https://doi.org/10.1007/s00426-020-01400-6>

Kwilinski, A., Volynets, R., Berdnik, I., Holovko, M., & Berzin, P. (2019). E-Commerce: Concept and legal regulation in modern economic conditions. *Journal of Legal, Ethical and*



UNIVERSITAS  
GADJAH MADA

**Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce**  
RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.  
Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Regulatory Issues, 22, 1-6.

Lamis, S. F., Handayani, P. W., & Fitriani, W. R. (2022). Impulse buying during flash sales in the online marketplace. *Cogent Business & Management*, 9(1).

<https://doi.org/10.1080/23311975.2022.2068402>

Lee, C.-H., & Chen, C.-W. (2021). Impulse buying behaviors in live streaming commerce based on the stimulus-organism-response framework. *Information*, 12(6), 241.

<https://doi.org/10.3390/info12060241>

Lee, G. Y., & Yi, Y. (2008). The effect of shopping emotions and perceived risk on impulsive buying: The moderating role of buying impulsiveness trait. *Seoul Journal of Business*, 14(2), 67–92. <https://doi.org/10.35152/snusjb.2008.14.2.004>

Li, M., Wang, Q., & Cao, Y. (2022). Understanding consumer online impulse buying in live streaming e-commerce: A stimulus-organism-response framework. *International Journal of Environmental Research and Public Health*, 19(7), 4378.

<https://doi.org/10.3390/ijerph19074378>

Lim, H. A., & Park, H. (2018). The effect of music on arousal, enjoyment, and cognitive performance. *Psychology of Music*, 47(4), 539–550.

<https://doi.org/10.1177/0305735618766707>

Liu, Y., Li, Q., Edu, T., Jozsa, L., & Negricea, I. C. (2019). Mobile shopping platform characteristics as consumer behavior determinants. *Asia Pacific Journal of Marketing and Logistics*, 32(7), 1565–1587. doi:10.1108/apjml-05-2019-0308

Lynn, M. (1992). Scarcity's Enhancement of Desirability: The Role of Naive Economic Theories. *Basic and Applied Social Psychology*, 13(1), 67–78. doi:10.1207/s15324834baspl301\_6

Ma, J., Liu, T., Li, X., & Chen, Y. (2017). The Impact of Background Music Rhythm on Impulsive Buying: Moderating Effect of Shopping Attitude. *DEStech Transactions on Economics, Business, and Management*.

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

Miles, K., & Niven , E. (2013). Affect Arousal. Encyclopedia of Behavioral Medicine.  
<https://doi.org/10.1007/978-1-4419-1005-9>

Miller, K., Brazeau, C., Fuiten , M., & Woelfel, J. (2008). Effects of Music and Choice Listening on Arousal Changes. Oshkosh Scholar, 3, 73–81.

Mohan, G., Sivakumaran, B. and Sharma, P. (2013). Impact of store environment on impulse buying behavior. European Journal of Marketing, 47(10), 1711-1732.  
<https://doi.org/10.1108/EJM-03-2011-0110>

Prawira, N. A., & Sihombing, S. O. (2021). Antecedents of Online Impulse Buying Behavior: An Empirical Study in Indonesia. Journal of Asian Finance, Economics and Business, 8(2), 533–543. <https://doi.org/10.13106/jafeb.2021.vol8.no2.0533>

Pinatik , G. (2013). The Effect of External and Internal Stimuli on Impulsive Purchasing at Hypermart Manado. Jurnal EMBA, 1(4), 802–810.

Pribram, K. H., & McGuinness, D. (1975). Arousal, activation, and effort in the control of attention. Psychological Review, 82(2), 116–149. <https://doi.org/10.1037/h0076780>

Rodrigues, R. I., Lopes, P., & Varela, M. (2021). Factors affecting impulse buying behavior of consumers. Frontiers in Psychology, 12. <https://doi.org/10.3389/fpsyg.2021.697080>

Ross, P., & Maynard, K. (2021). Towards a 4th Industrial Revolution. Intelligent Buildings International, 13(3), 159–161. <https://doi.org/10.1080/17508975.2021.1873625>

Russell, J. A., & Mehrabian, A. (1977). Evidence for a three-factor theory of emotions. Journal of Research in Personality, 11(3), 273–294. [https://doi.org/10.1016/0092-6566\(77\)90037-x](https://doi.org/10.1016/0092-6566(77)90037-x)

Schwab, K. (2015). The Fourth Industrial Revolution: What It Means and How to Respond. Retrieved from <https://www.foreignaffairs.com/articles/2015-12-12/fourth-industrial->



UNIVERSITAS  
GADJAH MADA

Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce

RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

revolution.

Serfas, B. G., Büttner, O. B., & Florack, A. (2014). Eyes wide shopped: Shopping situations trigger arousal in impulsive buyers. PLoS ONE, 9(12).  
<https://doi.org/10.1371/journal.pone.0114593>

Sharma, P., Sivakumaran, B., & Marshall, R. (2010). Impulse buying and variety seeking: A trait-correlates perspective. Journal of Business Research, 63(3), 276-283.

Singh , P., Katiyar , N., & Verma, G. (2014). Retail Shoppability: The Impact Of Store Atmospherics & Store Layout On Consumer Buying Patterns.

Snyder, C. R., & Fromkin, H. L. (1980). Uniqueness: The Human Pursuit of Difference. Plenum, New York, NY.

Sohn, J.-H., Kim, H.-E., Sohn, S., Seok, J.-W., Choi, D., & Watanuki, S. (2015). Effect of emotional arousal on inter-temporal decision-making: An fmri study. Journal of Physiological Anthropology, 34(1). <https://doi.org/10.1186/s40101-015-0047-5>

Syastra, M. T., & Wangdra, Y. (2018). Analisis online impulse buying Dengan Menggunakan framework sor. JURNAL SISTEM INFORMASI BISNIS, 8(2), 133.  
<https://doi.org/10.21456/vol8iss2pp133-140>

Taher, G., & Alnoor, A. (2021). E-Commerce: Advantages and Limitations. International Journal of Academic Research in Accounting Finance and Management Sciences, 11(1), 153–165.  
<https://doi.org/10.6007/IJARAFMS/v11-i1/8987>

Torday, J. S., & Baluška, F. (2019). Why control an experiment?: From empiricism, via consciousness, toward Implicate Order. EMBO reports, 20(10), e49110.  
<https://doi.org/10.15252/embr.201949110>

Vainikka, B. (2015). Psychological factors influencing consumer behaviour.



UNIVERSITAS  
GADJAH MADA

**Effects of Limited-Time Scarcity and Tempo of Music on Perceived Arousal and Impulsive Buying Behavior in E-Commerce**

RADEN DZAKY M I, Rahmat Hidayat, S.Psi. M.Sc., Ph.D.

Universitas Gadjah Mada, 2022 | Diunduh dari <http://etd.repository.ugm.ac.id/>

Wu, Y., Xin, L., Li, D., Yu, J., & Guo, J. (2021). How does scarcity promotion lead to impulse purchase in the online market? A field experiment. *Information & Management*, 58(1).

Xu, M., David, J. M., & Kim, S. H. (2018). The Fourth Industrial Revolution: Opportunities and challenges. *International Journal of Financial Research*, 9(2), 90–95.  
<https://doi.org/10.5430/ijfr.v9n2p90>

Zimmerman, J. (2012). Using the S-O-R Model to Understand the Impact of Website Attributes on the Online Shopping Experience (thesis). Retrieved from  
[https://digital.library.unt.edu/ark:/67531/metadc149694/m2/1/high\\_res\\_d/thesis.pdf](https://digital.library.unt.edu/ark:/67531/metadc149694/m2/1/high_res_d/thesis.pdf).