

BAB V

PENUTUP

Pada Bab 5 ini, peneliti ini akan menyajikan kesimpulan yang diambil dari pembahasan pada bab-bab sebelumnya. Selain itu, implikasi manajerial dari penelitian ini akan dibahas, diikuti dengan penjelasan mengenai keterbatasan penelitian dan saran yang dapat dijadikan acuan bagi peneliti selanjutnya.

5.1 Kesimpulan

Berdasarkan hasil pengolahan data yang telah dilakukan dalam penelitian ini, serta penjelasan mengenai hasil yang disampaikan di Bab IV, maka kesimpulan dari penelitian ini dapat dirumuskan sebagai berikut:

1. Kelangkaan memiliki pengaruh positif dan signifikan terhadap perasaan *fear of missing out* pada konsumen generasi z yang melakukan pembelian secara online dalam *flash sale live-streaming TikTok*. Hal ini menunjukkan bahwa efek kelangkaan pada produk yang tersedia selama *flash sale live-streaming TikTok* menstimulus konsumen generasi z merasa FoMO. Misalnya, ketika seorang pencinta k-pop sedang menonton *flash sale live-streaming TikTok* dari suatu toko yang menjual cinderamata idolanya secara terbatas, hal itu dapat memicu perasaan takut ketinggalan bagi konsumen tersebut.
2. *Discount on live-streaming selling* memiliki pengaruh positif dan signifikan terhadap perasaan *fear of missing out* pada konsumen generasi z yang melakukan pembelian secara online dalam *flash sale live-streaming TikTok*. Hal ini menunjukkan bahwa pemberian diskon dalam waktu terentu berhasil memicu konsumen generasi z merasa FoMO. Misalnya, ketika konsumen yang menyukai fashion sedang menonton *flash sale live-streaming TikTok* dan melihat adanya penawaran diskon khusus yang waktu durasinya terbatas, situasi tersebut tentunya dapat memicu munculnya perasaan FoMO bagi konsumen tersebut.

3. *Fear of missing out* memiliki pengaruh positif dan signifikan terhadap perilaku pembelian impulsif pada konsumen generasi z yang melakukan pembelian secara online dalam *flash sale live-streaming TikTok*. Hal ini menunjukkan ketika generasi z merasakan FoMO, mereka berkecenderungan muncul perilaku pembelian impulsif. Misalnya, suatu waktu sedang booming sepatu aerostreet yang berkolaborasi dengan merk lain, karena konsumen gen-z ini merasa sepatu itu keren dan tidak mau merasa ketinggalan, akinya dapat memunculkan respon konsumen berupa perilaku pembelian impulsif.
4. Kelangkaan memiliki pengaruh secara langsung terhadap perilaku pembelian impulsif. Hal ini menunjukkan bahwa generasi z dapat terpengaruh secara langsung terhadap kelangkaan apabila situasi produk yang langka tepat menyentuh perasaan mereka sehingga kelangkaan berpengaruh pada konsumen kenerasi z. Misalnya, ketika seseorang sedang ingin membeli sepatu dalam *flash sale live-streaming TikTok*, tiba-tiba muncul informasi bahwa barang lain yang ia cari ketersediaannya terbatas, hal tersebut tentunya dapat memicu secara langsung berpengaruh pada konsumen tersebut.
5. *Discount on live-streaming selling* tidak memiliki pengaruh secara langsung terhadap perilaku pembelian impulsif. Hal ini menunjukkan bahwa generasi z tidak terpengaruh secara langsung terhadap *Discount on live-streaming selling* apabila stimulus tersebut tidak masuk dalam konsumen generasi z tersebut. Misalnya, ketika konsumen generasi z sedang ingin membeli sepatu melalui *flash sale live-streaming TikTok*, namun muncul informasi diskon untuk produk baju, tentunya konsumen gen-z ini tidak secara langsung berubah keinginan untuk membeli baju karena barang yang ingin ia beli adalah sepatu.
6. Kesimpulan yang dapat diambil dari hasil uji mediasi penelitian ini adalah perasaan *fear of missing out* mampu memediasi pengaruh kelangkaan terhadap perilaku pembelian impulsif. Hal ini menunjukkan bahwa ketika konsumen sedang merasa FoMO akan suatu produk yang dijual dalam *flash sale live-streaming TikTok*, dan mengetahui bahwa produk tersebut

memiliki ketersediaan yang terbatas, maka dapat muncul perilaku pembelian impulsif dari konsumen tersebut. Misalnya, ketika seseorang ingin membeli baju yang sedang trend dan konsumen tersebut mengetahui bahwa ketersediaan baju tersebut semakin menipis, tentunya akan mendorong respon perilaku pembelian impulsif dari konsumen gen-z tersebut.

7. Kesimpulan yang dapat diambil dari hasil uji mediasi penelitian ini adalah perasaan *fear of missing out* mampu memediasi pengaruh *discount on live-streaming selling* terhadap perilaku pembelian impulsif. Hal ini menunjukkan bahwa ketika konsumen sedang merasa FoMO akan suatu produk yang dijual dalam *flash sale live-streaming TikTok*, dan mengetahui bahwa produk tersebut sedang diskon, maka dapat muncul perilaku pembelian impulsif dari konsumen tersebut. Contohnya adalah ketika seseorang ingin membeli jam digital yang sedang viral yang membuat konsumen tersebut merasa FoMO, ditambah konsumen tersebut memperoleh informasi bahwa penjual sedang memberikan diskon terbatas untuk produk tersebut, tentunya kondisi tersebut akan memunculkan potensi perilaku pembelian impulsif oleh konsumen gen-z tersebut.

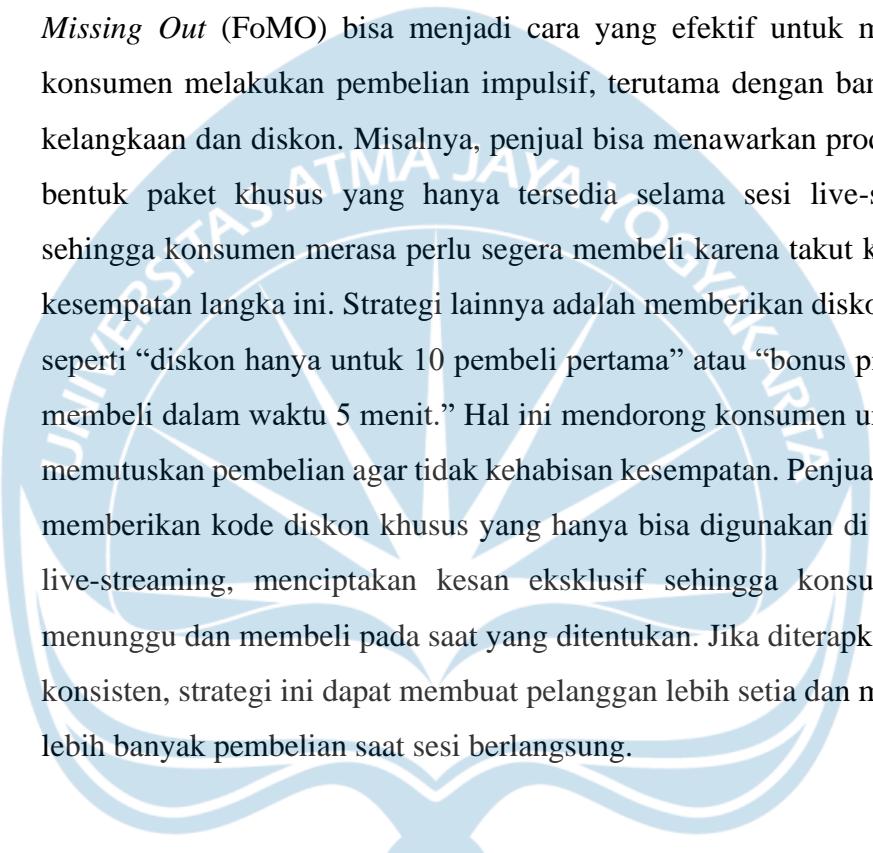
5.2 Implikasi Manajerial

Hasil pengujian dalam penelitian ini memberikan sejumlah implikasi manajerial yang perlu diperhatikan. Beberapa aspek utama harus dicermati untuk mendukung penerapan hasil penelitian ini secara lebih efektif adalah sebagai berikut:

1. Penggunaan strategi pemasaran berupa pemberian efek kelangkaan dapat memicu perilaku pembelian secara tidak langsung. Strategi pemasaran dengan memanfaatkan efek kelangkaan dapat dimaksimalkan untuk mendorong pembelian impulsif di platform flash sale live-streaming seperti TikTok. Salah satu langkah konkret adalah dengan menampilkan stok produk secara real-time agar calon pembeli dapat melihat jumlah barang yang terus berkurang, menciptakan urgensi untuk segera membeli. Selain

itu, penjual dapat menggunakan countdown timer yang menunjukkan sisa waktu untuk mendapatkan penawaran, memperkuat kesan terbatasnya kesempatan. Streamer juga berperan penting dalam meningkatkan rasa kelangkaan dengan menyampaikan kata-kata seperti “stok hampir habis” atau “segera beli sebelum kehabisan,” yang secara langsung menstimulasi keputusan pembelian. Menyertakan ulasan atau testimoni dari pembeli sebelumnya juga dapat memperkuat daya tarik produk secara langsung, mendorong lebih banyak pembelian spontan dalam waktu singkat. Dengan strategi kelangkaan yang dioptimalkan ini, penjual dapat memaksimalkan potensi penjualan pada platform live-streaming, menarik lebih banyak pembeli dalam waktu singkat, dan membangun loyalitas pelanggan untuk jangka panjang.

2. Penggunaan strategi pemasaran berupa pemberian *discount on live-streaming selling* dapat memicu perilaku pembelian impulsif konsumen secara tidak langsung. Penerapan strategi diskon dalam penjualan melalui live-streaming bisa menjadi alat yang sangat efektif untuk merangsang pembelian impulsif konsumen. Dengan menghadirkan diskon secara eksklusif selama sesi live-streaming, penjual dapat menciptakan suasana terburu-buru yang mendorong konsumen untuk segera mengambil keputusan. Misalnya, penjual dapat menawarkan potongan harga tambahan yang hanya berlaku selama live berlangsung, atau menerapkan "flash discount" untuk rentang waktu terbatas, seperti diskon tambahan selama 10 menit pertama live-streaming. Penjual juga bisa memperkuat daya tarik diskon ini dengan mengumumkan secara verbal, misalnya dengan mengatakan "hanya untuk sekarang, diskon 20%!" sehingga konsumen merasa ter dorong untuk segera membeli. Selain itu, teknik diskon berjenjang juga bisa diterapkan, seperti memberikan tambahan potongan harga untuk pembelian kedua atau ketiga, yang bertujuan meningkatkan nilai total pembelian. Strategi-strategi ini tidak hanya menarik perhatian konsumen tetapi juga dapat meningkatkan engagement selama sesi live-streaming, yang pada akhirnya berpotensi meningkatkan volume penjualan secara keseluruhan.

- 
3. Strategi memunculkan perasaan *fear of missing out* pada konsumen dapat secara langsung berpengaruh pada respon perilaku pembelian impulsif oleh konsumen. Penjual dapat memanfaatkan faktor-faktor yang dapat memunculkan perasaan FoMO, seperti efek kelangkaan dan pemberian diskon agar semakin mendorong perilaku pembelian impulsif oleh pelanggan. Menggunakan strategi yang memunculkan perasaan *Fear of Missing Out* (FoMO) bisa menjadi cara yang efektif untuk mendorong konsumen melakukan pembelian impulsif, terutama dengan bantuan efek kelangkaan dan diskon. Misalnya, penjual bisa menawarkan produk dalam bentuk paket khusus yang hanya tersedia selama sesi live-streaming, sehingga konsumen merasa perlu segera membeli karena takut kehilangan kesempatan langka ini. Strategi lainnya adalah memberikan diskon terbatas seperti “diskon hanya untuk 10 pembeli pertama” atau “bonus produk jika membeli dalam waktu 5 menit.” Hal ini mendorong konsumen untuk cepat memutuskan pembelian agar tidak kehabisan kesempatan. Penjual juga bisa memberikan kode diskon khusus yang hanya bisa digunakan di akhir sesi live-streaming, menciptakan kesan eksklusif sehingga konsumen mau menunggu dan membeli pada saat yang ditentukan. Jika diterapkan dengan konsisten, strategi ini dapat membuat pelanggan lebih setia dan mendorong lebih banyak pembelian saat sesi berlangsung.

5.3 Keterbatasan Penelitian

Penelitian ini berfokus pada pengaruh kelangkaan dan *discount on live-streaming selling* terhadap perilaku pembelian impulsif dengan variabel mediasi *fear of missing out* dalam *flash sale live-streaming TikTok*. Namun, tentunya terdapat beberapa kekurangan ataupun batasan yang ada dalam penelitian ini, antara lain:

1. Dalam penelitian ini, diperoleh nilai r-square untuk variabel fear of missing out sebesar 0,244 atau 24,4%. Hal ini menunjukkan bahwa variabel-variabel independen yang diteliti, yaitu kelangkaan dan diskon dalam penjualan live-streaming, tidak dapat sepenuhnya memprediksi model *fear of missing out*.

Oleh karena itu, diperlukan penelitian lebih lanjut untuk mengeksplorasi variabel lain yang dapat meningkatkan akurasi prediksi terhadap model *fear of missing out*. Dengan demikian, pengembangan penelitian selanjutnya perlu mempertimbangkan faktor-faktor tambahan yang mungkin berkontribusi dalam mempengaruhi perasaan tersebut.

2. Dalam penelitian ini, terdapat tiga indikator atau pertanyaan dalam variabel *discount on live-streaming selling* yang harus dihapus karena nilai outer loading-nya kurang dari 0,7. Jumlah indikator yang sedikit pada variabel ini dapat menimbulkan masalah, karena dapat mengurangi keakuratan dan validitas hasil penelitian. Oleh karena itu, untuk penelitian selanjutnya, sangat penting untuk mencari indikator atau pertanyaan tambahan yang relevan dan memadai, sehingga jumlah indikator yang digunakan dalam variabel diskon pada penjualan live-streaming dapat mencerminkan konstruk yang ingin diukur dengan lebih baik. Dengan menambah jumlah indikator yang memenuhi kriteria, penelitian berikutnya diharapkan dapat memberikan hasil yang lebih akurat dan dapat diandalkan.

5.4 Saran Penelitian Kedepan

Mengacu pada kelemahan yang ditemukan dalam penelitian ini, penelitian ini memberikan beberapa rekomendasi untuk penelitian selanjutnya sebagai berikut:

1. Saran untuk penelitian mendatang adalah agar peneliti selanjutnya dapat mempertimbangkan untuk menambahkan variabel-variabel lain yang dapat mempengaruhi perasaan Fear of Missing Out (FoMO), seperti perbandingan sosial, ketersediaan informasi, atau interaksi sosial yang berhubungan dengan keputusan pembelian. Penelitian berikutnya juga disarankan untuk mengumpulkan data dari berbagai platform selain TikTok guna mendapatkan perspektif yang lebih luas dan representatif terhadap fenomena ini. Dengan pendekatan yang lebih mendalam dan luas, diharapkan penelitian selanjutnya dapat memberikan gambaran yang lebih jelas dan akurat mengenai faktor-faktor yang memengaruhi FoMO.

2. Berdasarkan keterbatasan penelitian yang ditemukan terkait dengan indikator pada variabel *discount on live-streaming selling* dalam penjualan live-streaming, disarankan agar penelitian selanjutnya melakukan eksplorasi lebih mendalam untuk menemukan indikator yang lebih sesuai dan relevan. Penelitian selanjutnya juga disarankan untuk melakukan uji validitas dan reliabilitas yang lebih ketat terhadap indikator yang baru sebelum digunakan, guna memastikan bahwa indikator tersebut benar-benar dapat merefleksikan konstruk *discount on live-streaming selling* secara akurat. Selain itu, perlu adanya penyesuaian indikator berdasarkan target yang dituju, misalnya dilakukan penyesuaian berdasarkan generasi responden karena hasil dari setiap generasi mungkin saja akan berbeda. Dengan pendekatan ini, penelitian di masa mendatang diharapkan dapat menghasilkan temuan yang lebih komprehensif dan aplikatif dalam konteks penjualan live-streaming.

DAFTAR PUSTAKA

- Abdelsalam, S., Salim, N., Alias, R. A., & Husain, O. (2020). Understanding Online Impulse Buying Behavior in Social Commerce: A Systematic Literature Review. *IEEE Access*, 8, 89041–89058. <https://doi.org/10.1109/ACCESS.2020.2993671>
- Abel, J. P., Buff, C. L., & Burr, S. A. (2016). Social Media and the Fear of Missing Out: Scale Development and Assessment. *Journal of Business & Economics Research (JBER)*, 14(1), 33–44. <https://doi.org/10.19030/jber.v14i1.9554>
- Ada 185 Juta Pengguna Internet di Indonesia pada Januari 2024 / Databoks.* (t.t.). Diambil 3 Juni 2024, dari <https://databoks.katadata.co.id/datapublish/2024/02/27/ada-185-juta-pengguna-internet-di-indonesia-pada-januari-2024>
- Agustianti, R., Nussifera, L., Meliana, I., Sidik, E. A., Simarmata, N., Himawan, I. S., Ichram, F., Andriani, A. D., Rai, I., Gatriyani, N. P., & Mayasari, N. (2022). Metode Penelitian Kuantitatif Dan Kualitatif. *Tohar Media*.
- Ahmed, R. R., Streimikiene, D., Rolle, J.-A., & Duc, P. A. (2020). The COVID-19 Pandemic and the Antecedants for the Impulse Buying Behavior of US Citizens. *Journal of Competitiveness*, 12(3), 5–27. <https://doi.org/10.7441/joc.2020.03.01>
- Azhari, M. I., Fanani, D., & Mawardi, M. K. (2015). Pengaruh Customer Experience Terhadap Kepuasan Pelanggan Dan Loyalitas Pelanggan (Survei Pada Pelanggan Kfc Kawi Malang). *Jurnal Administrasi Bisnis (JAB)*, 28(1).
- Bandyopadhyay, N., Sivakumaran, B., Patro, S., & Kumar, R. S. (2021). Immediate or delayed! Whether various types of consumer sales promotions drive impulse buying?: An empirical investigation. *Journal of Retailing and Consumer Services*, 61. <https://www.sciencedirect.com/science/article/pii/S0969698921000989>
- Battista, I. D., Curmi, F., & Said, E. (2020). RETARGETED ADVERTISING AND FEAR OF MISSING OUT IN YOUNG PEOPLE: TOWARDS THE DEVELOPMENT OF A SCALE. *Journal of Economics, Business, and Organization Research*.
- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons. [https://books.google.co.id/books?hl=id&lr=&id=ikI6EAAAQBAJ&oi=fnd&pg=PA21&dq=+Bougie+%26+Sekaran+\(2019\)&ots=tgIXs7FCyi&sig=9o6Uf6INzgEl_mNy2TpQSrqIy90&redir_esc=y#v=onepage&q=Bougie%20%26%20Sekaran%20\(2019\)&f=false](https://books.google.co.id/books?hl=id&lr=&id=ikI6EAAAQBAJ&oi=fnd&pg=PA21&dq=+Bougie+%26+Sekaran+(2019)&ots=tgIXs7FCyi&sig=9o6Uf6INzgEl_mNy2TpQSrqIy90&redir_esc=y#v=onepage&q=Bougie%20%26%20Sekaran%20(2019)&f=false)
- Casale, S., & Flett, G. L. (2020). Interpersonally-Based Fears During The Covid-19 Pandemic: Reflections On The Fear Of Missing Out And The Fear Of Not Mattering Constructs. *Clinical Neuropsychiatry*, 17(2), 88–93.
- Çavuşoğlu, S., Demirağ, B., & Durmaz, Y. (2021). Investigation of the effect of hedonic shopping value on discounted product purchasing. *Review of International Business and Strategy*, 31(3), 317–338. <https://doi.org/10.1108/RIBS-04-2020-0034>
- Çelik, I. K., Eru, O., & Cop, R. (2019). The effects of consumers' FoMo tendencies on impulse buying and the effects of impulse buying on post-purchase

- regret: An investigation on retail stores. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 10(3), 124–138.
- Chen, C.-C., & Lin, Y.-C. (2018). What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. *Telematics and Informatics*, 35(1), 293–303.
- Cheng, H.-H. (2020). The effects of product stimuli and social stimuli on online impulse buying in live streams. In *Proceedings of the 7th International Conference on Management of e-Commerce and e-Government*, 31–35.
- Chevalier, S. (2024). *Topic: Gen Z online shopping behavior*. Statista. <https://www.statista.com/topics/11087/gen-z-online-shopping-behavior/>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications, Inc.
- Dahmiri, D., Bhayangkari, S. K. W., & Patricia, R. S. (2023). Scarcity cues, fear of missing out, and impulse buying behavior in fashion product: The role of Islamic religiosity. *SERAMBI: Jurnal Ekonomi Manajemen Dan Bisnis Islam*, 5(2), 67–82. <https://doi.org/10.36407/serambi.v5i2.863>
- Dedi Andriansah. (2023). Peningkatan Impulsive Buying Pada Event Harbolnas Shopee Melalui Fomo Dan Hedonic Shopping. *Ekonomi dan Bisnis: Berkala Publikasi Gagasan Konseptual, Hasil Penelitian, Kajian, dan Terapan Teori*, 27(2), 83–90. <https://doi.org/10.24123/jeb.v27i2.5810>
- Deliana, S. R., Afifah, N., Listiana, E., Shalahuddin, A., & Hasanudin, H. (2024). The influence of fear of missing out (FoMO) and hedonism on online impulse buying in Generation Z Shopee users with subjective norm and attitude as mediation variables. *Journal of Management Science (JMAS)*, 7(1), 206–216.
- Doan, T. N. Q., & Lee, H. T. (2023). Relationships between FoMO, Flow, and Impulse Purchase: Focusing on TikTok Social-commerce Platform. *Journal of Distribution Science*, 21(11), 91–101. <https://doi.org/10.15722/JDS.21.11.202311.91>
- Föbker, N. (2018). The influence of limited-time scarcity and limited-supply scarcity on females and males in hotel booking apps. *Master's Thesis In Marketing Communication University of Twente*.
- Fu, J.-R., & Hsu, C.-W. (2023). Live-streaming shopping: The impacts of para-social interaction and local presence on impulse buying through shopping value. *Industrial Management & Data Systems*, 123(7).
- Fumar, M., Setiadi, A., Harijanto, S., & Tan, C. (2023). *The Influence of Fear of Missing Out (FOMO), Sales Promotion, and Emotional Motive Mediated Self-Control on Impulsive Buying for Hypebeast Products*.
- Gao, W., Liu, Y., Liu, Z., & Li, J. (2018). How does presence influence purchase intention in online shopping markets? An explanation based on self-determination theory. *Behaviour & Information Technology*, 37(8).
- Guo, J., Li, Y., Xu, Y., & Zeng, K. (2021). How Live Streaming Features Impact Consumers' Purchase Intention in the Context of Cross-Border E-Commerce? A Research Based on SOR Theory. *Frontiers in Psychology*, 12, 767876. <https://doi.org/10.3389/fpsyg.2021.767876>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (Eighth)*. Cengage Learning EMEA.

- Hajar, S. S., & Musadik, A. (2021). A review: Scarcity and impulse buying behavior amid covid-19 pandemic. *International Journal of Business and Economy*, 3(4), 180–189.
- Harahap, M. I., Soemitra, A., & Nawawi, Z. M. (2023). Analysis of the effect of Fear of Missing Out (FOMO) and the use of paylater application on impulse buying behavior (review of Maqashid Syariah). *Manajemen Dan Bisnis*, 22(2), 67. <https://doi.org/10.24123/jmb.v22i2.682>
- Hodkinson, C. (2019). ‘Fear of Missing Out’ (FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications*, 25. <https://doi.org/10.1080/13527266.2016.1234504>
- Hou, J., Shen, H., & Xu, F. (2021). A Model of Livestream Selling with Online Influencers. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3896924>
- Hua, Q., & Chiu, C. L. (2022). Analysis of Young Chinese Purchase Intention on TikTok Live Streaming. *Kinforms*, 17 (1), 65–99. *Kinforms*, 17 (1), 65–99.
- Indonesia: E-commerce number of users 2020-2029 / Statista*. (t.t.). Diambil 3 Juni 2024, dari <https://www.statista.com/forecasts/251635/e-commerce-users-in-indonesia>
- Kristofferson, K., McFerran, B., Morales, A. C., & Dahl, D. W. (2016). The Dark Side of Scarcity Promotions: How Exposure to Limited-Quantity Promotions Can Induce Aggression. *Journal of Consumer Research*, ucw056. <https://doi.org/10.1093/jcr/ucw056>
- Kurniawati, D., & Restuti, S. (2014). Pengaruh Sales Promotion Dan Store Atmosphere Terhadap Shopping Emotion Dan Impulse Buying Pada Giant Pekanbaru. *Jurnal Tepak Manajemen Bisnis*, 6(3).
- Kusnawan, A., Diana, S., Andy, A., & Tjong, S. (2019). Pengaruh Diskon pada Aplikasi e-Wallet terhadap Pertumbuhan Minat Pembelian Impulsif Konsumen Milenial di Wilayah Tangerang. *Sains Manajemen*, 5(2). <https://doi.org/10.30656/sm.v5i2.1861>
- 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>
- Li, C., Wang, Y., Lv, X., & Li, H. (2021). To buy or not to buy? The effect of time scarcity and travel experience on tourists’ impulse buying. *Annals of Tourism Research*, 86. <https://doi.org/10.1016/j.annals.2020.103083>
- Lo, P.-S., Dwivedi, Y. K., Wei-Han Tan, G., Ooi, K.-B., Cheng-Xi Aw, E., & Metri, B. (2022). Why do consumers buy impulsively during live streaming? A deep learning-based dual-stage SEM-ANN analysis. *Journal of Business Research*, 147, 325–337. <https://doi.org/10.1016/j.jbusres.2022.04.013>
- Lu, Z., Xia, H., Heo, S., & Wigdor, D. (2018). You Watch, You Give, and You Engage: A Study of Live Streaming Practices in China. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–13. <https://doi.org/10.1145/3173574.3174040>
- Mehrabian, A., & Russell, James A. (1974). *An approach to environmental psychology*. the MIT Press.

- Nurjanah, S., Sadiah, A., & Gumilar, R. (2023). *Pengaruh Literasi Ekonomi, Kontrol Diri, dan "FOMO", terhadap Pembelian Impulsif pada Generasi Milenial.*
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in human behavior*, 29(4), 1841–1848. <https://doi.org/10.1016/j.chb.2013.02.014>
- Redine, A., Deshpande, S., Jebarajakirthy, C., & Surachartkumtonkun, J. (2023). Impulse buying: A systematic literature review and future research directions. *International Journal of Consumer Studies*, 47(1), 3–41. <https://doi.org/10.1111/ijcs.12862>
- Refasa, G. S. A., Heriyadi, Bintoro Bagus Purmono, Barkah, & Helma Malini. (2023). Do TikTok Discounts Livestream Triggers Gen Z Impulse Buying Behavior. *International Journal of Scientific Research and Management*, 11(01), 4439–4449. <https://doi.org/10.18535/ijsrn/v11i01.em04>
- Santika, E. (2022). *Kelompok Anak Muda Jadi Pengguna Terbesar TikTok, Usia Berapa Mereka?* / Databoks. <https://databoks.katadata.co.id/datapublish/2023/09/27/kelompok-anak-muda-jadi-pengguna-terbesar-tiktok-usia-berapa-mereka>
- Santoso, J. B. (2019). Pengaruh Kualitas Produk, Kualitas Pelayanan, Dan Harga Terhadap Kepuasan Dan Loyalitas Konsumen (Studi Pada Konsumen Geprek Bensu Rawamangun). *Jurnal Akuntansi dan Manajemen*, 16(01).
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. Dalam C. Homburg, M. Klarmann, & A. E. Vomberg (Ed.), *Handbook of Market Research* (hlm. 1–47). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8_15-2
- Shah, A. M., Yan, X., Shah, S. A. A., & Ali, M. (2020). Customers' perceived value and dining choice through mobile apps in Indonesia. *Asia Pacific Journal of Marketing and Logistics*, 33(1), 1–28. <https://doi.org/10.1108/APJML-03-2019-0167>
- Sherman, E., Mathur, A., & Smith, R. B. (1997). Store environment and consumer purchase behavior: Mediating role of consumer emotions. *Psychology and Marketing*, 14(4), 361–378. [https://doi.org/10.1002/\(SICI\)1520-6793\(199707\)14:4<361::AID-MAR4>3.0.CO;2-7](https://doi.org/10.1002/(SICI)1520-6793(199707)14:4<361::AID-MAR4>3.0.CO;2-7)
- Shi, X., Li, F., & Chumnumpan, P. (2020). The Use of Product Kelangkaan in Marketing. *European Journal of Marketing*, 54(2), 380-418., 54(2), 380–418.
- Sidiq, U., & Choiri, M. M. (2019). *Metode Penelitian Kualitatif di Bidang Pendidikan*. Nata Karya.
- Song, S., Yao, X., & Wen, N. (2021). What motivates Chinese consumers to avoid information about the COVID-19 pandemic?: The perspective of the stimulus-organism-response model. *Information Processing & Management*, 58(1), 102407. <https://doi.org/10.1016/j.ipm.2020.102407>
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534–540. <https://doi.org/10.1016/j.chb.2017.08.016>
- Stern, H. (1962). The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), 59–62.

- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. ALFABETA, CV.
- Sun, H., & Zhang, P. (2019). The Role Of Affect In Information Systems Research. *Advances In Management Information Systems*.
- Sun, Y., & Bao, Z. (2023). Live streaming commerce: A compulsive buying perspective. *Management Decision*, 61, 3278–3294. <https://doi.org/10.1108/MD-10-2022-1461>
- Tiemessen, J., Schraffenberger, H., & Acar, G. (2023). The Time is Ticking: The Effect of Limited Time Discounts on Consumers' Buying Behavior and Experience. *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–11. <https://doi.org/10.1145/3544549.3585735>
- TikTok Shop Gabung Tokopedia, Ini Jumlah Penggunanya / Databoks*. (t.t.). Diambil 3 Juni 2024, dari <https://databoks.katadata.co.id/datapublish/2024/03/19/tiktok-shop-gabung-tokopedia-ini-jumlah-pengguna>
- Widodo, M. S. (2024). Exploring Consumers' Impulse Buying Behavior on Social Commerce Platforms: The Role of Fear of Missing Out (A Study on Tiktok Livestream-Selling). Dalam W. R. Murhadi, D. Anandya, N. K. Darmasetiawan, J. Dyah Trisnawati, P. A. Mahadwartha, & E. Tandelilin (Ed.), *Proceedings of the 20th International Symposium on Management (INSYMA 2023)* (Vol. 256, hlm. 377–384). Atlantis Press International BV. https://doi.org/10.2991/978-94-6463-244-6_56
- Wohn, D. Y., Freeman, G., & McLaughlin, C. (2018). Explaining Viewers' Emotional, Instrumental, and Financial Support Provision for Live Streamers. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–13. <https://doi.org/10.1145/3173574.3174048>
- Wu, Y.-L., & Li, E. Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: A stimulus-organism-response perspective. *Internet Research*, 28(1), 74–104. <https://doi.org/10.1108/IntR-08-2016-0250>
- Xu, X., Wu, J.-H., & Li, Q. (2020). What Drives Consumer Shopping Behavior In Live Streaming Commerce? *Journal of Electronic Commerce Research*, 21(3).
- Xu, Y., & Huang, J.-S. (2014). Effects of price discounts and bonus packs on online impulse buying. *ocial Behavior and Personality: an international journal*, 42, 1293–1302. <https://doi.org/10.2224/sbp.2014.42.8.1293>
- Zhang, J., Jiang, N., Turner, J. J., & Pahlevan-Sharif, S. (2022). The Impact of Scarcity on Consumers' Impulse Buying Based on the S-O-R Theory. *Frontiers in Psychology*, 13, 792419. <https://doi.org/10.3389/fpsyg.2022.792419>
- Zhang, M., Qin, F., Wang, G. A., & Luo, C. (2020). The impact of live video streaming on online purchase intention. *The Service Industries Journal*, 40(9–10), 656–681. <https://doi.org/10.1080/02642069.2019.1576642>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), 197–206. <https://doi.org/10.1086/651257>

Zuo, R., & Xiao, J. (2021). Exploring consumers' impulse buying behavior in live streaming shopping. In *Proceedings of the Fifteenth International Conference on Management Science and Engineering Management*, 1(15), 610–622.



LAMPIRAN

LAMPIRAN KUESIONER

Dear Gen Z,

Selamat datang di penelitian ini yang bertujuan untuk mengeksplorasi dampak *Fear of Missing Out* (FoMO) terhadap perilaku pembelian impulsif. Melalui kuesioner ini, penelitian ini ingin memperoleh pemahaman yang lebih mendalam mengenai bagaimana FoMO memengaruhi perilaku pembelian impulsif di kalangan konsumen muda Indonesia.

Apabila anda termasuk dalam kriteria berikut, maka anda dapat mengisi kuesioner ini:

1. Generasi Z (Pada tahun ini berusia 12-27 tahun).
2. Pernah melakukan pembelian dalam *flash sale live-streaming* TikTok dalam 6 bulan terakhir.

Seluruh informasi yang anda isi dalam kuesioner ini terjaga **kerahasiaannya** dan hanya akan digunakan untuk **kepentingan penelitian**. Apabila terdapat pertanyaan atau kebingungan, silakan hubungi kami melalui email anastasiusdida@gmail.com.

Terima kasih atas kesediaan waktunya, Tuhan memberkati.

Bagian I: Pertanyaan Filter

1. Apakah anda merupakan generasi Z (berusia 12-27 tahun)?
 - a. Ya
 - b. Tidak
2. Apakah anda pernah melakukan pembelian dalam *flash sale live-streaming* TikTok dalam 6 bulan terakhir ?
 - a. Ya
 - b. Tidak

Bagian II: Butir Pertanyaan

Pertanyaan	Alternatif Jawaban						
	STS	TS	CTS	N	CS	S	SS
Scarcity / Kelangkaan (SCR)							
Saya rasa barang yang dijual dalam <i>flash sale live-streaming</i> TikTok akan segera terjual habis.							
Saya pikir banyak orang akan membeli barang yang dijual dalam <i>flash sale live-streaming</i> TikTok.							
Saya pikir terbatasnya jumlah barang yang dijual dalam <i>flash sale live-streaming</i> TikTok menyebabkan banyak orang membeli.							
Saya rasa barang yang dijual dalam <i>flash sale live-streaming</i> TikTok jumlah ketersediaanya terbatas.							
Pertanyaan	Alternatif Jawaban						
	STS	TS	CTS	N	CS	S	SS
Discount on Livestreaming Selling / DOLS (DOL)							
Saya rasa durasi diskon dalam <i>flash sale live-streaming</i> TikTok relatif singkat.							
Saya rasa hanya ada sedikit waktu untuk memutuskan mengambil diskon dalam <i>flash sale live-streaming</i> TikTok.							
Menurut saya, diskon dalam <i>flash sale live-streaming</i> Tiktok memiliki waktu yang terbatas (misalnya 1 jam, 2 jam, 3 jam, atau 1 hari).							
Saya rasa saya akan menerima kupon diskon tambahan apabila terus							

menonton <i>flash sale live-streaming</i> TikTok.								
Saya rasa jumlah diskon yang ditawarkan dalam <i>flash sale live-streaming</i> Tiktok banyak.								
Saya rasa diskon yang menarik akan ditawarkan dalam masa <i>flash sale live-streaming</i> Tiktok.								
Pertanyaan		Alternatif Jawaban						
	STS	TS	CTS	N	CS	S	SS	
Fear of Missing Out / FOMO (FOM)								
Saya takut jika melewatkkan <i>flash sale live-streaming</i> TikTok.								
Saya merasa gelisah kalau melewatkkan <i>flash sale live-streaming</i> TikTok.								
Saya khawatir kalau melewatkkan <i>flash sale live-streaming</i> TikTok.								
Ketika saya melewatkkan <i>flash sale live-streaming</i> TikTok, saya merasa kesal.								
Saya merasa sedih saat saya melewatkkan <i>flash sale live-streaming</i> TikTok.								
Saya merasa kecewa saat melewatkkan <i>flash sale live-streaming</i> TikTok. Apalagi setelah tahu bahwa produk yang ditawarkan habis.								
Pertanyaan		Alternatif Jawaban						
	STS	TS	CTS	N	CS	S	SS	
Perilaku Impulsive Buying / Pembelian Impulsif (IMP)								

Saya suka berbelanja tanpa berpikir ulang dalam <i>flash sale live-streaming</i> TikTok.							
Saya suka berbelanja secara spontan dalam <i>flash sale live-streaming</i> TikTok.							
Dalam <i>flash sale live-streaming</i> TikTok, Saya lebih sering langsung membeli produk tanpa melakukan pertimbangan.							
"I see it, i buy it" menggambarkan cara saya berbelanja dalam <i>flash sale live-streaming</i> TikTok.							
"Buy now, think about it later" menggambarkan cara saya berbelanja dalam <i>flash sale live-streaming</i> TikTok.							

Bagian III: Profil Responden

1. Jenis Kelamin
 - a. Laki-laki
 - b. Perempuan
2. Pendidikan Terakhir
 - a. SMP
 - b. SMA/SMK
 - c. Diploma
 - d. Sarjana (S1)
 - e. Magister (S2)
3. Pekerjaan
 - a. Pelajara/Mahasiswa
 - b. Pegawai Swasta
 - c. PNS/ASN
 - d. Wirausaha
 - e. Belum Bekerja

- f. Lainnya
4. Durasi Penggunaan Tiktok dalam Sehari
- a. < 1 Jam
 - b. 1 – 3 Jam
 - c. 3 – 6 Jam
 - d. > 6 Jam



DATA PROFIL RESPONDEN

Apakah anda merupakan generasi Z (berusia 12-27 tahun)?	Apakah anda pernah melakukan pembelian dalam <i>flash sale live-streaming</i> TikTok dalam 6 bulan terakhir ?	Jenis Kelamin	Pendidikan Terakhir	Pekerjaan	Durasi penggunaan Tiktok dalam sehari
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Magister (S2)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam

Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Lainnya	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Lainnya	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Wirausaha	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Belum Bekerja	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Lainnya	>6 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Wirausaha	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Lainnya	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Belum Bekerja	3 - 6 Jam

Ya	Tidak				
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	>6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Wirausaha	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Lainnya	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	>6 Jam

Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam

Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Diploma	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	>6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Diploma	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam

Ya	Tidak				
Ya	Ya	Laki-laki	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Lainnya	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Tidak				
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Lainnya	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	Diploma	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Tidak				

Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Lainnya	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Magister (S2)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Diploma	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Diploma	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam

Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Magister (S2)	Belum Bekerja	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	Diploma	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam

Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Tidak				
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Wirausaha	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	>6 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Tidak				
Ya	Ya	Laki-laki	Sarjana (S1)	Pelajar/Mahasiswa	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	1 - 3 Jam

Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	Sarjana (S1)	Belum Bekerja	>6 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Laki-laki	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Belum Bekerja	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Laki-laki	Diploma	Lainnya	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	<1 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pegawai Swasta	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Tidak				
Ya	Tidak				
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	>6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	Sarjana (S1)	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	3 - 6 Jam
Ya	Ya	Perempuan	SMA/SMK	Pelajar/Mahasiswa	1 - 3 Jam

HASIL PENGISIAN KUESIONER

SCR 1	SCR 2	SCR 3	SCR 4	DOL 1	DOL 2	DOL 3	DOL 4	DOL 5	DOL 6	FOM 1	FOM 2	FOM 3	FOM 4	FOM 5	FOM 6	IMP 1	IMP 2	IMP 3	IMP 4	IMP 5
6	6	6	6	5	5	6	5	5	6	5	5	5	5	4	5	5	5	4	5	
6	7	7	7	6	7	7	6	7	7	6	7	7	7	7	6	7	7	7	6	
5	6	6	7	6	6	5	5	5	7	4	5	5	4	5	5	7	6	6	5	
7	7	7	7	5	5	7	5	5	6	5	5	5	5	5	5	5	5	5	5	
6	5	6	5	6	5	6	5	6	5	6	7	5	6	5	6	6	5	6	5	
7	7	6	5	5	6	3	4	5	6	6	5	2	1	3	2	5	6	6	5	
7	7	4	4	4	4	5	5	5	2	1	1	1	1	1	3	3	2	2	2	
7	7	7	7	6	6	6	6	6	6	7	7	7	7	7	5	6	6	6	6	
5	6	6	6	5	5	7	6	6	6	5	4	4	5	5	5	3	3	3	3	
7	7	7	6	6	5	6	5	7	6	5	4	4	5	5	5	3	3	3	4	
5	6	5	7	6	5	5	6	5	5	3	3	2	3	3	2	3	2	3	2	
6	6	7	6	7	5	7	5	7	7	3	3	3	3	3	2	3	5	3	4	
6	6	6	6	6	6	6	6	7	7	4	4	5	5	5	6	5	5	5	5	
4	4	6	6	5	5	6	4	6	5	2	2	2	2	2	2	1	1	1	1	
3	6	7	2	5	6	6	2	6	6	2	2	2	3	2	2	4	4	3	4	
5	7	5	4	6	6	7	1	7	7	1	1	1	1	1	1	2	1	1	1	
7	6	6	7	4	5	7	5	7	7	6	5	5	7	6	7	7	7	7	6	
4	7	4	4	5	6	7	6	7	6	1	1	1	3	1	1	5	6	2	1	
5	7	2	2	6	7	7	7	7	6	5	3	7	2	7	1	1	1	2	1	
6	7	7	6	6	7	6	3	7	7	5	5	6	5	5	6	5	6	5	5	
5	6	5	5	6	6	5	6	6	6	4	4	4	4	4	3	3	3	3	4	
6	6	6	6	4	4	6	4	5	5	4	3	3	5	4	5	3	5	3	3	
6	7	4	5	5	5	6	3	4	6	3	2	1	1	1	2	1	1	1	1	

7	7	7	7	7	6	5	5	7	7	5	3	5	3	3	5	5	6	7	7	6
4	7	7	4	7	7	4	7	7	7	1	7	2	5	6	7	4	4	4	4	5
5	6	6	6	6	5	6	5	5	6	3	3	3	4	3	4	3	4	3	3	3
7	7	7	7	7	7	7	7	7	7	5	5	5	5	4	5	1	1	1	1	1
5	6	6	6	6	6	6	5	6	6	6	5	5	6	5	6	6	6	6	6	6
5	5	5	5	6	6	6	5	6	6	5	5	5	5	5	6	5	6	6	6	6
5	5	5	5	5	5	5	3	6	6	3	3	3	3	3	6	6	6	6	6	6
6	5	5	5	5	7	5	7	6	5	6	6	6	6	6	6	6	5	6	6	7
6	6	5	7	6	7	5	7	4	6	6	7	5	7	5	7	5	7	5	6	6
5	6	6	6	5	5	5	7	6	7	4	4	4	5	4	5	4	5	4	6	5
7	7	5	6	5	7	7	5	5	7	4	3	4	4	3	6	1	1	1	1	2
5	6	3	5	3	5	5	5	6	6	3	3	3	4	3	5	4	5	5	4	3
5	7	7	4	2	5	7	1	7	7	5	5	5	2	5	7	7	7	5	7	2
6	6	6	6	4	4	4	5	6	5	4	2	2	2	2	2	4	4	3	3	3
7	7	7	7	7	7	7	7	7	7	1	1	1	1	1	1	1	1	1	1	1
4	5	6	4	3	3	6	3	5	6	2	1	1	1	1	1	4	3	3	3	3
6	6	6	6	6	6	6	6	6	6	1	1	2	2	2	3	2	2	4	4	3
5	3	6	6	6	6	7	7	5	5	3	3	3	2	2	2	2	1	1	1	1
6	7	5	6	5	5	6	3	6	6	1	1	1	4	1	1	1	1	1	1	1
5	5	4	3	5	5	2	5	5	5	2	2	2	1	1	1	4	3	2	2	2
6	6	6	6	7	7	6	6	6	6	4	4	4	3	3	4	5	5	3	3	3
7	7	7	7	7	7	7	5	7	7	5	5	5	5	6	6	3	3	3	3	2
7	7	7	7	7	2	7	2	7	7	2	1	1	1	1	1	1	1	1	1	1
5	6	1	6	1	5	7	6	3	7	1	1	1	1	1	1	1	1	1	1	1
5	5	5	5	6	6	4	4	5	4	2	2	2	2	2	2	4	4	4	3	5
5	6	6	6	7	6	6	6	7	7	6	6	6	6	6	6	7	6	6	6	6

7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	
6	7	5	5	6	6	6	6	5	6	4	3	4	3	4	4	6	4	3	4	3
7	7	6	5	7	7	3	4	6	3	3	3	3	3	3	4	2	3	2	2	2
6	7	7	7	6	7	5	7	6	7	5	4	3	3	4	4	5	6	7	6	7
6	7	4	5	7	6	7	5	6	5	7	6	4	6	7	6	5	6	7	6	7
6	7	7	4	5	6	6	4	6	6	1	1	1	1	1	1	1	1	1	1	1
5	6	6	6	5	7	6	3	7	7	3	3	3	3	3	3	3	3	3	3	5
7	7	4	7	7	7	7	7	7	7	6	6	6	6	6	6	2	2	2	2	2
6	6	7	7	6	5	7	3	6	6	5	5	5	6	5	7	6	6	6	4	6
7	6	7	7	7	6	7	6	7	7	5	5	5	5	5	5	7	7	7	7	6
6	6	7	6	6	6	6	5	7	6	6	5	7	6	7	7	5	6	6	5	5
7	5	7	6	7	7	5	7	7	3	3	3	1	1	1	1	3	2	2	3	3
5	6	5	6	6	6	6	5	3	5	5	5	5	5	5	6	1	1	1	1	1
5	6	6	6	6	7	6	5	6	1	1	2	1	1	1	1	4	3	2	1	1
6	6	7	6	4	3	6	2	5	5	3	1	1	3	2	3	3	5	4	2	3
6	6	6	7	6	7	7	6	6	6	4	4	4	4	4	4	4	4	1	1	1
5	7	5	5	6	5	7	6	7	7	2	1	2	2	2	1	2	1	1	1	2
4	6	6	6	6	6	6	2	3	6	2	2	2	1	2	2	2	5	6	2	3
7	7	7	7	7	7	4	4	7	4	3	3	2	1	1	5	5	5	4	4	
7	7	6	2	6	7	7	6	7	7	1	1	1	1	1	1	1	1	1	1	1
6	6	4	6	5	6	7	5	6	6	7	7	7	6	5	7	6	6	7	7	5
5	6	6	4	3	5	4	4	5	5	1	1	1	1	1	2	2	3	2	1	1
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
6	6	5	5	6	6	5	5	5	5	5	5	5	5	5	6	5	5	5	5	6
5	5	5	5	5	5	5	5	5	5	4	4	4	3	3	5	5	5	5	5	5
3	3	3	2	3	3	3	2	2	2	2	3	3	2	3	3	2	3	3	2	3

4	5	4	5	5	5	5	4	5	4	4	4	4	4	4	4	2	2	3	2	2
6	7	6	7	6	7	5	6	6	7	4	4	4	6	4	6	6	7	7	7	7
7	7	6	7	6	7	6	5	7	7	6	7	7	7	7	7	7	7	7	7	7
6	7	7	6	7	5	6	5	6	4	3	1	1	2	1	5	2	2	1	1	2
5	5	5	5	6	5	6	4	4	5	5	5	6	7	7	6	6	6	5	7	7
6	6	6	6	5	5	5	2	5	5	4	4	4	4	4	4	2	4	2	2	2
5	5	6	4	7	6	6	3	4	4	3	2	3	4	2	5	2	2	2	2	2
6	7	6	5	5	7	6	6	7	6	4	3	4	4	4	5	6	6	5	6	5
7	7	5	6	3	2	4	6	6	5	3	4	4	5	4	6	3	6	6	5	5
1	7	7	4	2	6	6	1	4	7	1	1	1	1	1	1	4	4	1	4	4
5	6	5	5	4	3	5	3	4	5	3	2	2	1	2	2	4	4	3	2	2
6	4	4	4	6	7	7	4	4	6	1	1	1	1	1	1	1	1	4	1	1
2	7	6	7	7	7	7	2	7	7	1	1	2	1	2	5	2	6	2	3	6
4	4	5	3	7	7	5	3	3	5	1	1	1	1	1	1	1	1	1	1	1
5	5	6	5	4	6	7	5	5	5	2	2	2	3	3	3	4	5	4	5	4
6	5	6	5	3	3	5	5	6	6	3	3	5	5	5	5	2	2	3	3	3
6	5	6	5	5	6	5	5	6	5	5	6	6	5	6	5	5	6	5	5	6
6	7	6	3	5	3	7	2	6	5	5	3	2	6	3	7	7	7	4	6	3
3	5	4	4	5	5	5	4	4	4	1	1	1	1	1	1	1	1	1	1	1
6	6	7	7	5	6	6	4	5	6	3	3	3	3	3	3	4	3	3	3	3
2	6	5	2	2	5	6	6	6	6	2	2	2	1	1	1	1	1	2	2	2
7	7	7	7	7	7	7	2	2	4	2	2	2	2	5	6	7	7	7	7	7
6	7	4	2	5	6	5	5	5	6	4	2	3	4	4	6	5	4	3	3	3
3	6	6	2	7	7	7	6	6	6	2	2	2	2	2	5	1	1	1	1	2
5	5	4	4	5	5	4	4	3	4	4	3	4	2	2	2	5	3	4	3	4
4	6	5	6	6	7	5	3	5	4	3	3	2	2	2	3	5	3	5	6	5

4	3	6	3	4	4	4	4	7	6	1	1	1	1	1	1	6	6	6	6	6
3	3	4	4	6	5	5	4	4	4	2	2	2	2	1	1	2	3	2	2	2
7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
5	6	3	1	4	5	4	3	4	4	1	1	2	3	2	3	1	1	1	1	2
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
7	7	2	3	7	7	3	3	7	5	1	1	1	1	1	1	2	2	1	1	1
7	7	7	7	7	7	7	1	4	7	6	6	6	6	6	7	4	7	7	7	7
5	6	6	6	6	7	6	3	6	6	3	3	3	2	3	5	5	5	5	5	5
6	6	6	5	7	6	7	5	5	6	6	6	5	5	6	5	5	5	6	5	6
3	5	1	2	6	6	6	7	6	6	1	1	1	1	1	1	2	1	1	1	1
5	5	3	4	5	5	6	4	5	6	4	3	3	3	3	4	3	5	4	2	3
7	7	7	7	7	7	6	7	6	7	5	5	5	5	5	5	7	7	7	6	5
7	7	7	4	6	4	7	1	6	6	1	1	1	1	1	2	3	3	3	3	5
2	4	2	2	5	2	6	1	3	4	1	1	1	1	1	1	2	1	1	1	1
2	7	7	7	4	7	4	2	4	7	1	1	1	1	1	1	1	1	1	1	1
4	6	6	7	6	7	4	1	3	2	1	1	1	1	1	1	1	1	1	1	1
7	7	7	7	7	7	7	7	6	6	1	1	1	1	1	1	1	1	1	1	1
6	6	7	7	4	6	5	6	4	5	2	2	2	2	1	3	4	5	3	3	4
6	6	4	5	5	6	6	4	6	6	3	2	2	2	2	2	2	2	2	2	2
6	6	6	6	7	7	7	7	7	7	6	6	6	6	4	6	3	3	3	3	3
5	7	7	7	7	7	7	7	3	7	5	3	3	5	3	6	1	1	1	1	1
5	5	6	4	4	5	4	5	6	5	2	3	3	2	3	2	4	4	3	5	4
5	6	5	5	5	5	3	4	4	2	3	3	4	4	5	3	4	3	3	2	2
6	6	6	6	6	6	6	6	6	5	5	6	6	7	6	3	2	2	4	6	3
6	6	6	4	6	6	5	5	6	6	1	1	1	1	1	1	1	1	1	1	1
6	7	6	6	5	2	5	3	7	7	3	2	2	2	6	7	6	6	7	3	3

6	7	7	6	6	7	7	4	5	5	4	3	3	3	2	2	3	4	3	3	2
6	7	7	4	7	6	5	7	4	6	3	1	2	1	2	2	2	4	2	1	3
7	7	7	7	7	7	7	7	7	1	1	1	1	1	1	1	1	1	1	1	1
5	4	5	5	5	6	4	5	5	6	6	6	5	6	5	5	5	6	5	5	6
6	7	5	4	5	5	5	7	7	7	5	5	4	5	5	5	4	5	5	3	5
5	4	2	2	3	3	5	5	5	5	3	3	3	3	3	3	7	4	3	3	7
2	4	6	5	2	6	4	3	5	5	2	1	1	1	1	2	2	2	2	1	1
3	5	6	3	6	6	6	4	5	6	3	4	4	3	2	4	3	3	2	2	2
6	7	2	2	7	6	7	7	3	7	4	4	4	2	3	3	3	5	1	2	2
6	7	6	6	5	6	7	1	6	5	1	1	1	1	1	1	1	2	2	1	1
6	6	4	4	5	4	4	3	6	6	1	1	1	1	1	1	3	3	1	1	1
6	6	6	6	6	6	6	6	6	7	2	2	2	2	2	2	1	1	1	1	1
3	1	2	4	3	3	3	6	4	3	6	6	6	5	5	5	4	5	5	6	6
3	7	7	3	7	7	7	7	7	4	4	4	6	5	6	3	7	7	5	2	
2	6	7	6	4	4	7	6	6	6	1	1	1	1	1	1	1	2	1	1	1
6	7	6	6	6	6	6	6	6	6	4	4	4	2	2	2	2	2	1	1	1
5	6	4	7	7	7	6	6	5	6	2	2	2	2	2	5	1	1	1	1	1
4	4	3	4	4	4	3	4	4	4	2	2	2	2	2	2	2	2	2	1	2
6	7	6	7	7	7	5	6	7	4	2	3	3	3	3	3	7	6	6	6	6
7	5	4	5	7	4	6	7	7	5	4	4	4	5	4	4	3	1	1	2	2
6	7	7	6	7	7	7	7	7	3	2	3	5	2	2	7	7	7	7	5	
5	6	5	5	6	6	7	4	5	6	5	5	5	5	5	5	6	6	5	5	5
6	7	6	7	6	7	7	4	6	6	5	4	5	5	5	5	3	3	3	3	3
5	6	7	6	5	6	6	3	4	5	3	2	2	1	2	2	2	2	2	2	2
4	5	4	4	7	7	6	3	5	5	3	3	3	3	5	5	2	3	3	3	3
4	6	6	6	5	5	4	3	5	6	2	2	2	1	2	2	4	3	3	3	3

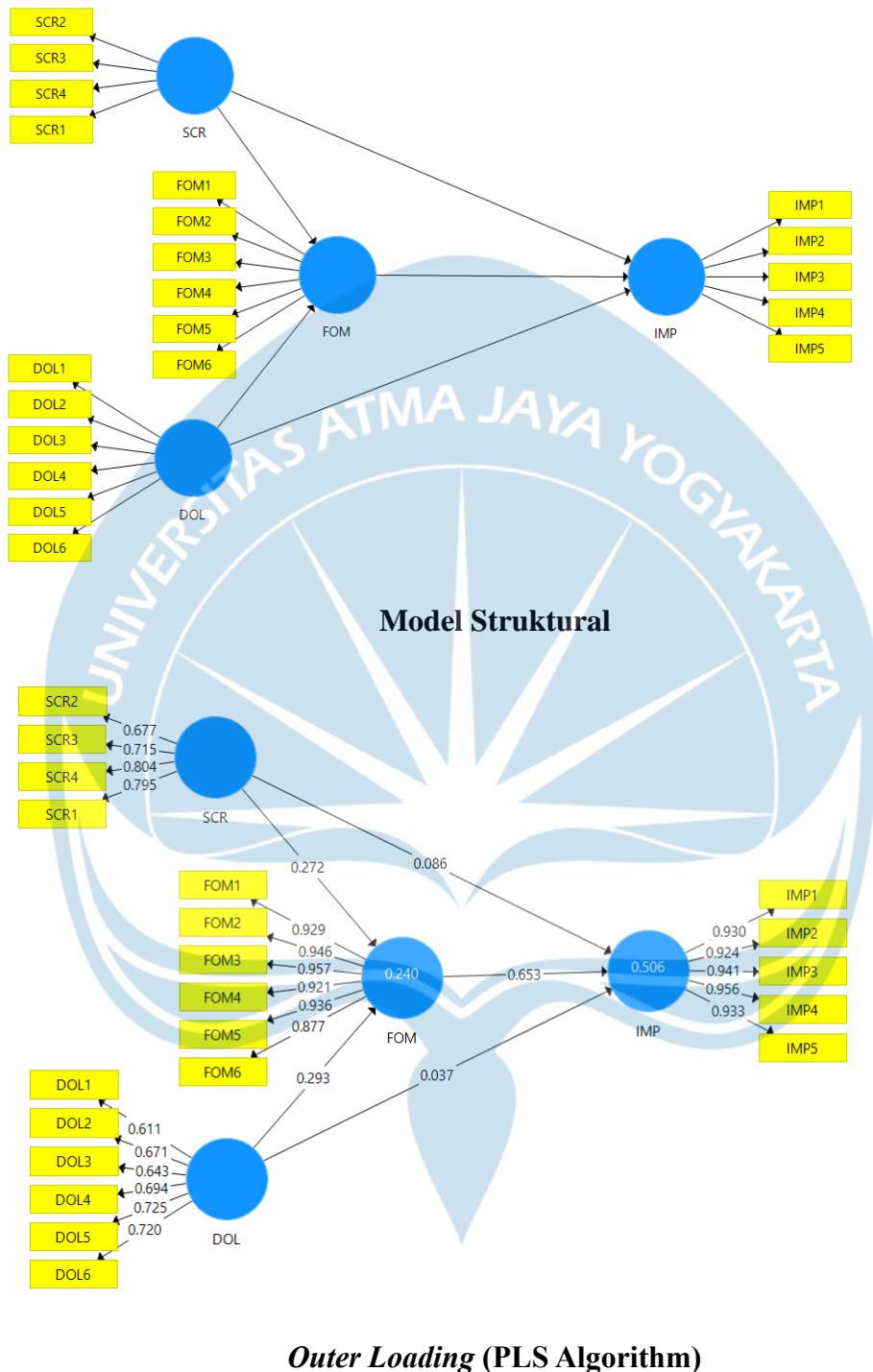
5	6	6	6	4	6	6	6	4	6	5	5	5	6	4	7	7	7	7	7	7
6	6	6	3	6	5	6	3	4	3	3	2	2	4	3	7	5	6	5	5	7
6	6	5	5	6	6	6	3	6	5	5	5	4	6	3	5	5	5	4	6	4
2	6	2	4	7	6	6	2	2	6	1	1	1	1	4	4	1	1	1	1	1
6	6	7	5	7	5	3	3	5	7	3	1	3	2	2	5	3	6	2	2	3
5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	5	5	5	5	5	5
7	7	6	6	6	6	5	7	7	5	5	6	5	5	5	4	5	4	4	4	4
3	6	6	6	3	6	6	4	6	6	2	2	2	2	2	2	2	4	2	4	6
5	6	6	6	7	6	6	6	7	5	6	4	5	2	2	4	5	4	6	4	3
6	6	7	7	5	5	4	1	3	5	2	2	2	2	2	2	3	4	4	4	3
3	5	3	3	4	4	4	5	4	5	2	1	1	1	1	2	2	1	2	2	2
6	6	7	4	6	6	6	4	6	6	5	5	5	5	5	7	3	4	3	3	3
6	7	4	4	7	6	6	7	4	4	7	7	6	5	5	7	7	6	5	6	7
7	7	6	5	4	6	7	5	5	7	4	3	3	2	2	2	4	3	2	2	2
5	6	6	6	2	4	3	5	6	6	3	1	1	1	1	1	2	1	2	2	2
6	6	6	7	5	7	6	7	6	6	6	5	5	6	6	7	6	6	7	6	7
5	6	6	5	3	3	3	2	3	4	4	2	2	2	2	3	2	2	1	1	1
4	3	5	7	7	7	6	5	5	5	1	1	1	1	1	1	1	1	1	1	1
6	7	7	7	2	6	7	7	7	7	7	5	2	2	6	6	6	6	7	5	5
6	5	4	6	7	5	6	4	5	4	1	1	1	1	1	1	1	1	1	1	1
5	6	7	7	5	4	5	6	5	6	2	2	2	3	2	2	4	3	3	4	3
4	7	5	1	5	7	7	5	5	6	1	1	1	1	1	1	1	1	1	1	1
4	6	4	3	5	7	7	5	6	7	4	1	2	1	1	5	2	4	3	2	2
4	6	5	5	5	4	6	5	4	6	2	2	2	2	2	3	2	4	2	2	2
5	5	5	5	4	3	4	3	6	6	2	2	2	3	4	1	1	1	1	1	1
5	5	4	5	5	4	5	4	5	6	1	1	1	1	1	2	3	1	1	1	1

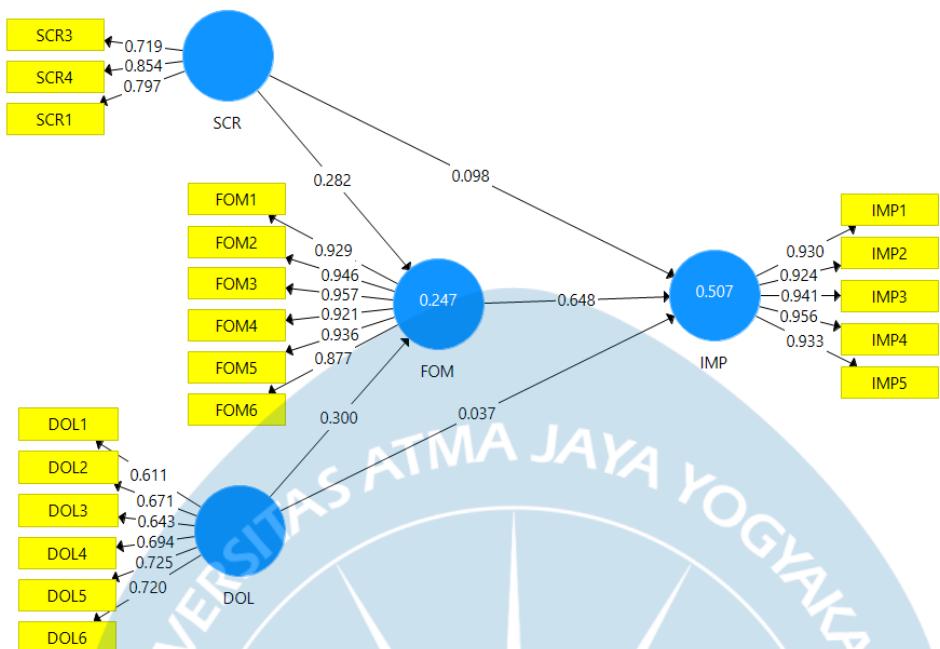
2	6	6	2	6	6	6	6	6	2	2	2	2	2	4	2	2	2	2	2
7	7	7	7	7	7	7	7	7	5	3	3	3	3	5	6	6	6	6	6
5	5	5	5	2	2	6	2	2	2	2	2	2	2	1	1	1	2	1	1
4	5	5	5	2	6	7	6	5	6	4	2	2	2	6	2	7	1	1	1
7	7	4	5	6	5	5	3	5	2	1	4	4	4	5	2	1	1	2	1
6	7	6	7	6	6	7	3	4	6	6	2	2	2	2	5	1	2	2	1
6	7	6	7	6	5	7	6	6	7	5	4	4	4	3	5	5	4	4	5
5	5	5	5	4	3	6	5	4	5	5	4	4	5	5	5	4	2	2	1
6	6	6	7	6	7	7	5	6	6	5	4	5	3	3	3	3	4	5	5
5	6	7	7	6	7	7	5	6	7	5	4	4	5	5	4	5	5	5	4
5	5	3	3	4	4	4	2	5	5	1	1	1	1	1	1	2	1	1	1
7	7	7	7	2	2	4	7	4	6	7	7	7	7	7	7	4	4	1	1
5	6	7	6	7	7	7	4	4	7	4	4	4	4	7	1	4	1	1	1
7	7	5	5	6	6	6	3	6	7	1	1	1	1	4	2	3	3	2	2
5	5	6	6	5	5	7	5	6	6	2	2	1	1	1	5	2	6	2	2
5	5	3	4	3	5	5	5	5	5	2	2	3	5	5	4	1	1	2	2
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
6	7	6	6	6	6	6	4	5	5	1	1	1	5	2	2	2	2	2	2
6	7	6	7	7	6	7	7	7	6	5	5	5	5	6	6	5	5	6	7
4	5	3	3	5	4	4	3	4	4	3	4	3	3	4	4	3	4	3	3
2	6	5	5	7	7	6	2	3	7	1	1	1	1	3	4	2	3	1	1
6	7	7	4	4	5	2	3	5	4	1	1	1	2	1	2	2	2	1	1
6	6	6	6	4	3	5	4	3	6	3	3	3	3	4	3	3	3	3	3
5	4	5	6	4	5	3	5	3	5	2	2	2	2	1	2	2	2	1	1
5	5	6	5	5	5	5	5	6	7	4	2	2	3	2	2	4	4	4	4
6	7	7	6	5	6	6	6	6	5	4	5	6	5	6	7	7	7	6	5

6	6	6	6	5	6	7	2	7	7	2	2	2	2	1	6	4	4	5	5	3
6	7	7	5	2	2	2	5	5	2	2	2	2	2	2	2	2	2	2	2	2
6	6	6	6	6	6	7	6	6	6	4	4	4	4	5	4	6	6	4	4	5
5	5	7	7	4	3	5	5	5	7	1	1	1	1	1	1	2	1	1	1	1
3	3	5	3	6	6	6	2	3	5	2	1	1	1	1	1	1	1	1	1	1
4	6	7	5	3	7	7	4	5	7	1	1	1	1	1	1	6	6	6	5	4
6	6	5	7	6	6	6	7	6	6	6	7	6	6	5	6	6	7	6	6	6
5	5	2	2	5	5	5	1	5	5	1	1	1	1	1	1	5	5	2	5	5
3	6	6	3	4	5	5	4	5	5	2	1	1	2	2	1	3	3	2	3	2
5	6	6	5	5	6	5	5	6	5	1	1	1	2	1	5	2	2	1	1	2
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
5	5	3	3	4	4	4	4	5	5	3	3	3	3	3	3	3	3	3	3	3
7	7	5	7	7	6	7	7	6	7	4	3	4	7	5	5	6	5	5	5	6
5	7	7	4	6	6	6	5	6	7	7	7	6	5	6	6	5	7	3	5	5
6	4	4	4	5	4	3	3	6	5	1	1	1	1	1	1	2	2	4	2	2
3	6	6	3	6	6	3	5	6	5	3	2	2	2	2	2	2	2	5	5	5
5	6	7	5	3	5	5	3	5	6	3	3	3	2	2	2	2	2	3	2	2
3	6	4	4	7	7	4	3	6	5	6	5	5	6	6	5	6	5	7	7	5
6	6	6	6	6	6	6	6	7	6	3	3	3	3	3	3	3	3	3	3	3
2	5	6	2	6	6	6	5	6	6	1	1	1	1	1	1	1	1	1	1	1
5	5	6	5	6	6	6	4	4	5	2	2	2	2	2	2	3	6	3	2	2
5	6	6	4	4	5	5	4	6	7	6	5	5	6	7	7	5	5	6	7	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
6	6	7	7	5	6	6	7	6	6	6	6	7	7	6	6	5	5	4	4	5
7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7
7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6	7	7	7	7	7

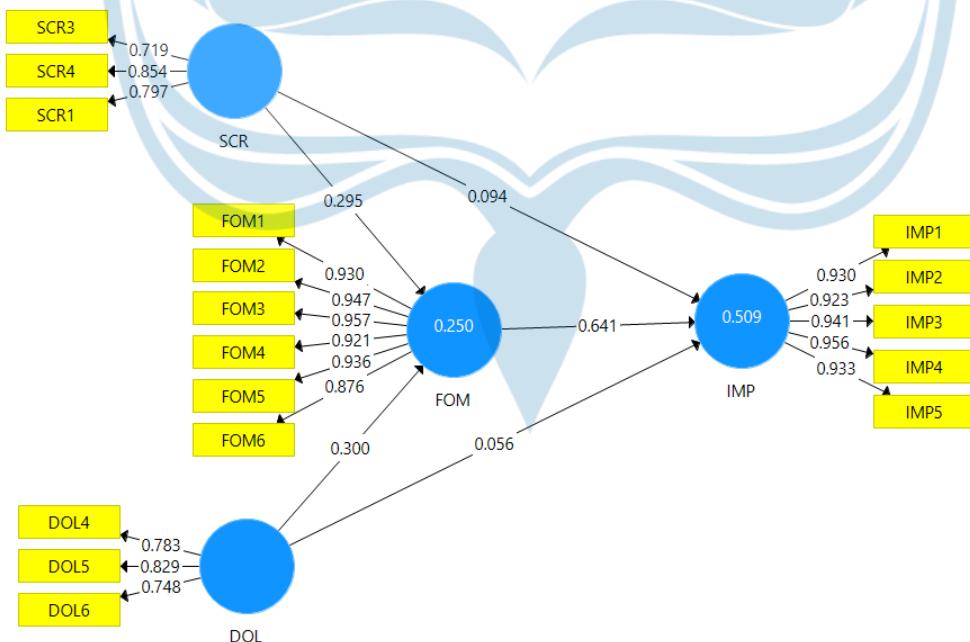
6	5	5	7	6	5	7	6	5	7	3	2	1	2	2	1	5	3	3	2	2
5	5	5	4	3	6	5	7	7	6	3	1	1	2	2	2	5	6	6	4	6
6	6	6	7	6	7	7	4	5	4	1	2	2	1	1	3	4	4	1	2	2
7	7	7	5	6	6	7	6	6	7	6	6	5	5	6	6	5	6	5	5	5
5	6	6	5	7	6	6	6	6	6	5	5	5	5	5	5	6	5	4	4	4
5	6	5	3	7	5	7	4	6	6	1	1	1	1	1	1	1	1	1	1	1
6	5	5	4	7	5	5	7	5	5	3	3	3	6	6	5	5	4	3	4	3
5	6	6	2	6	6	7	5	5	7	2	2	2	3	2	4	2	2	2	2	2
7	6	6	5	4	4	3	2	3	5	2	2	2	2	2	5	2	5	2	2	1
5	5	7	7	7	7	7	5	7	7	3	1	1	2	1	1	5	5	2	6	7
5	4	5	4	2	5	5	6	6	6	4	4	4	3	3	4	3	3	3	3	3
5	6	6	6	7	7	7	3	3	5	3	2	2	3	3	3	4	4	2	1	2
6	5	5	6	6	7	7	5	5	5	6	4	4	3	3	4	6	7	4	4	5
6	6	7	7	6	5	7	7	7	7	3	2	3	3	3	3	5	6	7	5	5
6	7	7	4	5	7	6	7	5	5	5	5	4	5	5	5	5	5	3	3	5
3	6	3	3	4	3	3	5	6	6	3	2	2	2	2	2	3	3	2	2	3
6	6	6	6	6	6	6	6	6	6	1	1	1	2	1	2	1	2	2	1	1
6	6	6	6	6	6	6	6	6	6	6	4	5	6	4	6	4	4	4	4	4

HASIL OLAH DATA SmartPLS 3





Outer Loadings (PLS Algorithm) Seletah Indikator SCR2 dikeluarkan



Outer Loadings (PLS Algorithm) Seletah Indikator DOL1, DOL2, dan DOL3 dikeluarkan

Outer Loading 1

	DOL	FOM	IMP	SCR
DOL1	0,611			
DOL2	0,671			
DOL3	0,643			
DOL4	0,694			
DOL5	0,725			
DOL6	0,720			
FOM1		0,929		
FOM2		0,946		
FOM3		0,957		
FOM4		0,921		
FOM5		0,936		
FOM6		0,877		
IMP1			0,930	
IMP2			0,924	
IMP3			0,941	
IMP4			0,956	
IMP5			0,933	
SCR2				0,677
SCR3				0,715
SCR4				0,804
SCR1				0,795

Outer Loading 2

	DOL	FOM	IMP	SCR
DOL4	0,783			
DOL5	0,829			
DOL6	0,748			
FOM1		0,930		
FOM2		0,947		
FOM3		0,957		
FOM4		0,921		
FOM5		0,936		
FOM6		0,876		
IMP1			0,930	
IMP2			0,923	
IMP3			0,941	
IMP4			0,956	
IMP5			0,933	
SCR3				0,719
SCR4				0,854
SCR1				0,797

AVE

(AVERAGE VARIANCE EXTRACTED)

	Average Variance Extracted (AVE)
DOL	0,620
FOM	0,861
IMP	0,878
SCR	0,627

Cross Loadings

	DOL	FOM	IMP	SCR
DOL4	0,783	0,428	0,263	0,278
DOL5	0,829	0,299	0,345	0,340
DOL6	0,748	0,246	0,253	0,384
FOM1	0,438	0,930	0,680	0,425
FOM2	0,394	0,947	0,668	0,393
FOM3	0,435	0,957	0,671	0,420
FOM4	0,401	0,921	0,621	0,375
FOM5	0,355	0,936	0,676	0,377
FOM6	0,318	0,876	0,602	0,340
IMP1	0,350	0,643	0,930	0,355
IMP2	0,307	0,637	0,923	0,380
IMP3	0,349	0,668	0,941	0,390
IMP4	0,362	0,695	0,956	0,362
IMP5	0,344	0,656	0,933	0,324
SCR3	0,313	0,220	0,287	0,719
SCR4	0,309	0,345	0,319	0,854
SCR1	0,363	0,403	0,313	0,797

Composite Reliability

	Cronbach's Alpha	Composite Reliability
DOL	0,698	0,830
FOM	0,968	0,974
IMP	0,965	0,973
SCR	0,704	0,834

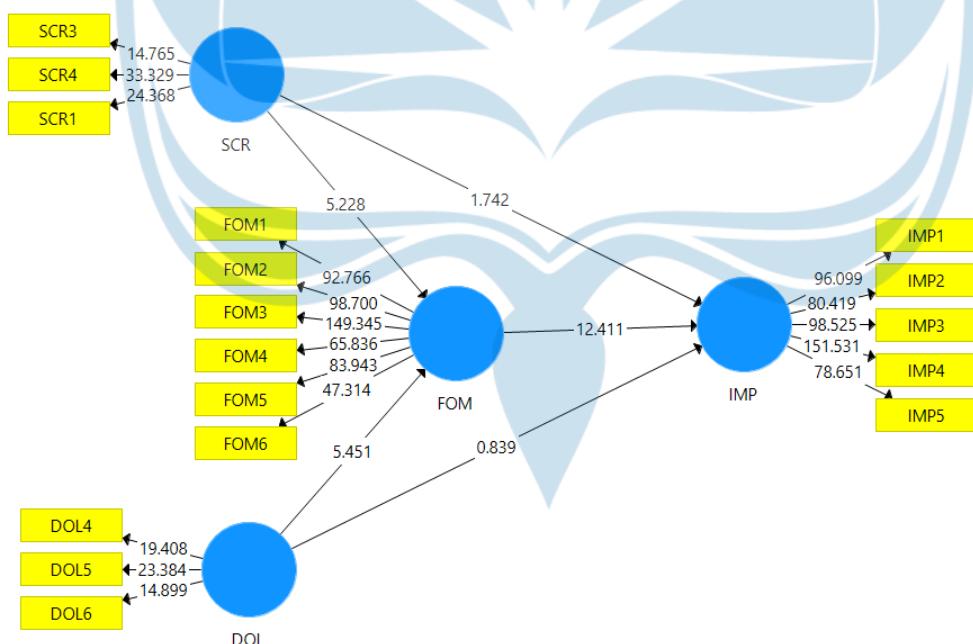
R-Square

	R Square	R Square Adjusted
FOM	0,250	0,244
IMP	0,509	0,503

Q-Square

	Q^2_{predict}
FOM	0,236
IMP	0,186

Model Struktural Bootstrapping



Path Coefficient

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
DOL -> FOM	0,300	0,300	0,052	5,790	0,000
DOL -> IMP	0,056	0,055	0,060	0,923	0,356
FOM -> IMP	0,641	0,640	0,048	13,269	0,000
SCR -> FOM	0,295	0,294	0,054	5,420	0,000
SCR -> IMP	0,094	0,097	0,052	1,814	0,070

Spesific Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
DOL -> FOM -> IMP	0,192	0,192	0,037	5,196	0,000
SCR -> FOM -> IMP	0,189	0,187	0,036	5,323	0,000



The Impact of Scarcity on Consumers' Impulse Buying Based on the S-O-R Theory

Jingjing Zhang^{1*}, Nan Jiang¹, Jason James Turner² and Saeed Pahlevan-Sharif¹

¹Taylor's Business School, Taylor's University, Subang Jaya, Malaysia, ²Business School, Asia Pacific University of Technology and Innovation, Kuala Lumpur, Malaysia

OPEN ACCESS

Edited by:

S. M. Yasir Arafat,
Enam Medical College, Bangladesh

Reviewed by:

Corina Pelau,
Bucharest Academy of Economic
Studies, Romania
Steven Kator Iorfa,
University of Portsmouth,
United Kingdom

*Correspondence:

Jingjing Zhang
zhangjingjing@sd.taylors.edu.my

Specialty section:

This article was submitted to
Organizational Psychology,
a section of the journal
Frontiers in Psychology

Received: 11 October 2021

Accepted: 02 May 2022

Published: 10 June 2022

Citation:

Zhang J, Jiang N, Turner JJ and
Pahlevan-Sharif S (2022) The Impact
of Scarcity on Consumers' Impulse
Buying Based on the S-O-R Theory.
Front. Psychol. 13:792419.
doi: 10.3389/fpsyg.2022.792419

Purpose: The global COVID-19 pandemic impacted the healthcare systems of every nation. The scarcity of medical protective equipment led to impulse buying at the early stages of the COVID-19 outbreak in China which resulted in stockpiling and the increase of prices by retailers and insufficiencies among frontline workers. This situation impacted epidemic control work and market order and is the context from which this paper identifies how the scarcity of medical protective equipment affected Chinese consumers' impulse buying based on the theories of S-O-R model and bandwagon effect. The research provides insight into the mechanism of mediation (fear of missing out) and moderation (bandwagon) in the relationship between scarcity and impulse buying.

Design/Methodology/Approach: This study uses convenience sampling, surveying 488 Chinese consumers through an online questionnaire. Smart-PLS was used to test the hypotheses.

Findings: The empirical findings demonstrate that scarcity makes consumers fear missing the chance of getting protective medical equipment, leading ultimately to impulse buying. Besides, the scarcity effect on consumers' impulse buying was found to depend on other consumers' follow up behaviour in such emergency situations.

Research Limitations/Implications: The findings provide managerial and theoretical insight and a point of reference for businesses in the implementation of a scarcity strategy. The findings will also prove useful to the Chinese Risk Response Department as it continuously improves its responses to the risk of consumers' impulse buying during a pandemic.

Originality/Value: This study consolidates and takes research forward in the areas of impulse buying and consumer behaviour, confirming the mediating effect of fear of missing out and the moderating effect of the bandwagon in the relationship between scarcity and impulse buying.

Keywords: scarcity, impulse buying, fear of missing out, bandwagon effect, COVID-19

INTRODUCTION

In January 2020, the World Health Organization (WHO) declared a global health emergency over a new virus, known as COVID-19. The ongoing spread of COVID-19 with a high risk globally (Du et al., 2020), impacted global healthcare systems and public health (Alves et al., 2020; Abbas, 2021), with citizens across the globe suffering from the symptoms of the virus and/or associated health concerns, such as psychology issues (Arafat et al., 2020). For China, which was the first country to be impacted by COVID-19 (Sun et al., 2021), the rapid spread of COVID-19 led to immediate pressure on the demand and supply of medical protective equipment (Zhang et al., 2021). Medical protective equipment became a scarce product, with no vaccines available for preventing COVID-19 at the early stages of the COVID-19 outbreak in China (Li M. et al., 2020). In short, China faced a significant challenge to source medical protective equipment (such as masks, alcohol, protective suits, disinfectants, medical gloves and goggles) to ensure protection against the virus.

The shortage of medical protective equipment brings a variety of issues which impact on the general public, one of which is the changes to consumer behaviour, such as impulse buying (Zhang et al., 2021) and/or panic buying (Arafat et al., 2020, 2021). Given the research focuses on impulse buying, it is important to provide a distinction between the two concepts to justify the focus and differentiate between impulse and panic buying. Impulse buying is defined as the spontaneous and immediate purchase of a product without any thoughtful and deliberate consideration of alternative or future implications (Pradhan, 2016; Moon et al., 2017; Cai et al., 2021; Rodrigues et al., 2021). Panic buying, in contrast, is defined as an occurrence involving negative feelings like fear, panic and feelings of uncertainty which influence behaviour and leads to people purchasing in higher quantities than they normally would without those negative feelings (Lins and Aquino, 2020), also known as stockpiling (Di Crosta et al., 2021; Taylor, 2021). On occasion, impulse buying has been referred to as unplanned buying or irrational behaviour (Lim and Yazdanifard, 2015; Ho and Lim, 2018; Li X. Y. et al., 2020; Islam et al., 2021) and is different from panic buying in that it can be seen as both rational (e.g., stockpiling essential goods that are in limited supply) and irrational (e.g., stockpiling non-essential products that are not in limited supply; Martin-Neuninger and Ruby, 2020). Panic buying is one of the antecedents of impulse buying behaviour, making impulse buying a more holistic concept and appropriate to use in the context of the COVID-19 pandemic (Ahmed et al., 2020; Primanto and Rahmawati, 2021).

Consumers' impulsive consumption behaviour not only affects economic development (Lee and Yun, 2015; Wu and Li, 2018), it also significantly influences market order, with consumer impulse buying leading to stockpiling and the increase of prices by the seller (Cherian and Tamilarasi, 2020). One effective way to reduce the negative effect of impulse buying is to identify the impact of scarcity on impulse buying and underline the aims of this study, to identify how scarcity affects consumers' impulse buying.

Previous research is comparatively limited in identifying the role of emotion in the relationship between scarcity and impulse

buying during a pandemic and in the context of China which creates a gap for this research to examine. How consumers emotionally respond to an emergency as in this case, a global pandemic, is crucial to a better understanding of how consumers engage with the environment around them (Šrol et al., 2021). During this period, citizens of China were worried and anxious about the scarcity of medical protective equipment (Li X. Y. et al., 2020) which can lead to erratic or unconformist behaviours. Based on the S-O-R (stimulus, organism, response) model, environment stimulus can affect response through the emotion (organism; Mehrabian and Russell, 1974; Lee and Yun, 2015; Wu and Li, 2018; Yang et al., 2021). The scarcity of medical protective (stimulus) equipment may affect consumers' impulse buying (response) through the consumers' emotion (organism; e.g., fear of missing out), as the consumers' fear of missing out is one type of emotion aroused by scarcity (Hodkinson, 2019) and regarded as one factor that can influence a consumers' impulse buying (Casale and Flett, 2020). China had a huge demand for scarce medical protective products, and during the peak of the pandemic, existing supply could not match the daily demands of Chinese families. Consumers had to invest time and effort searching for those scarce medical protective products to avoid any chance of missing out on the chance to purchase products which could protect their family and as a result reduce the associated feelings of remorse (Mertens et al., 2020; Swennen et al., 2020).

Moreover, the bandwagon consumption that happened during the COVID-19 pandemic (Labad et al., 2021) resulted in consumers following each other to purchase masks and other medical protective equipment (Chen and Shi, 2020). This caused a waste of resources, affected the market and reduced the efficiency of resource allocation. The bandwagon effect contributed to impulse and panic buying and often resulted in stock outs during the pandemic (Yuen et al., 2020). Current research has explained that bandwagon consumption is always related to the scarcity of products (Ku et al., 2013; Sharma and Roy, 2016) and that the bandwagon effect has a significant impact on consumers' impulse buying. This research will identify the role of the bandwagon in the relationship between scarcity and impulse buying during the pandemic which goes some way to addressing previously debated relationships in the context of consumer demand.

In summary, this study tries to verify the role of fear of missing out and bandwagon in the relationship between scarcity and impulse buying based on the theory of S-O-R and bandwagon effect. The findings may be helpful for identified stakeholders, such as retailers, consumers and the government, in responding to the risk of scarcity of medical protective equipment and consumers' impulse buying.

THEORETICAL DEVELOPMENT AND HYPOTHESES

S-O-R Model

The S-O-R model asserts that stimuli from the environment affects an individuals' affective (emotion) and cognitive (perception) reactions, which in turn influence individual

behaviour (Mehrabian and Russell, 1974; Lee and Yun, 2015; Wu and Li, 2018). The stimulus is a trigger that arouses consumers and refers to marketing stimulus and/or situation stimulus (Chan et al., 2017; Kamboj et al., 2018). The organism is an internal state of an individual, which is represented by affective and cognitive states (Basha et al., 2022). It is also regarded as an intermediary state between the stimulus and response (Zheng et al., 2019). The last factor in the S-O-R model is the response which can also be called behaviour (Kamboj et al., 2018). The S-O-R model has been used to explain the relationship between scarcity and impulse buying (Chen and Yao, 2018; Islam et al., 2021; Zhang et al., 2021) and therefore deemed appropriate for this study to adopt and to guide the path of the environment (scarcity of medical protective equipment) on consumers' impulse purchases. This study assumed that scarcity of medical protective equipment (environment) affects consumers' impulse buying (response) through the mediating mechanism of fear of missing out (organism).

Bandwagon Effect

The bandwagon effect refers to individuals doing certain things because others are doing them (Park et al., 2017; Mainolfi, 2020). In marketing, the bandwagon effect describes the phenomena of consumers following others' behaviour and attitudes to purchase products and services (Tynan et al., 2010; Shayan et al., 2017) and is usually caused by demand-induced scarcity (Fu and Sim, 2011; Maxwell, 2014). This study focuses on the scarcity of medical protective equipment caused by the huge demand during the pandemic, which is also referred to as demand scarcity. In the case of scarce medical protective equipment, the bandwagon effect is an important factor worthy of attention.

As a result, this study constructs a framework which combines the theories of S-O-R and bandwagon, illustrated in **Figure 1**.

Relationship Between Scarcity, Fear of Missing Out and Impulse Buying

Generally, fear of missing out (FOMO) is defined as one type of emotion (Hayran et al., 2020; Zhang Z. et al., 2020), that describe consumer's anxiety about missing the chance or experience that others have (Abel et al., 2016). In this study, FOMO is contextualised as the fear of missing the chance to purchase medical protective equipment. Consumers' fear of missing out will induce impulse buying (Aydin, 2018) which has commonly been defined as the spontaneous, immediate purchase of the product without any thought or deliberate consideration of alternative or future implications (Pradhan, 2016; Cai et al., 2021; Rodrigues et al., 2021). It involves an investment made through a given motivation in which the decision to purchase something does not depend on profound thought processes. Impulse buying can be induced by external stimuli and personal emotions (Addo et al., 2020; Ahmed et al., 2020; Huang and Cai, 2021) with current research indicating that consumers' perceived scarcity of products leads to a fear of 'missing out' and therefore influences a consumers' choices and decisions (Hodkinson, 2019; Zhang Z. et al., 2020). Thus, this study focuses on the scarcity of medical protective equipment and based on the S-O-R model, considers if scarcity influences consumers' impulse buying by the FOMO and therefore proposes hypothesis 1.

H1: Fear of missing out (FOMO) mediates the relationship between scarcity and impulse buying.

Relationship Between Scarcity, Bandwagon and Impulse Buying

The bandwagon effect is usually triggered by scarcity (Van Herpen et al., 2009; Ku et al., 2013), particularly demand scarcity, which is associated with the bandwagon effect (Ku et al., 2013). The bandwagon effect might lead to a demand acceleration phenomenon which would increase the level of product scarcity

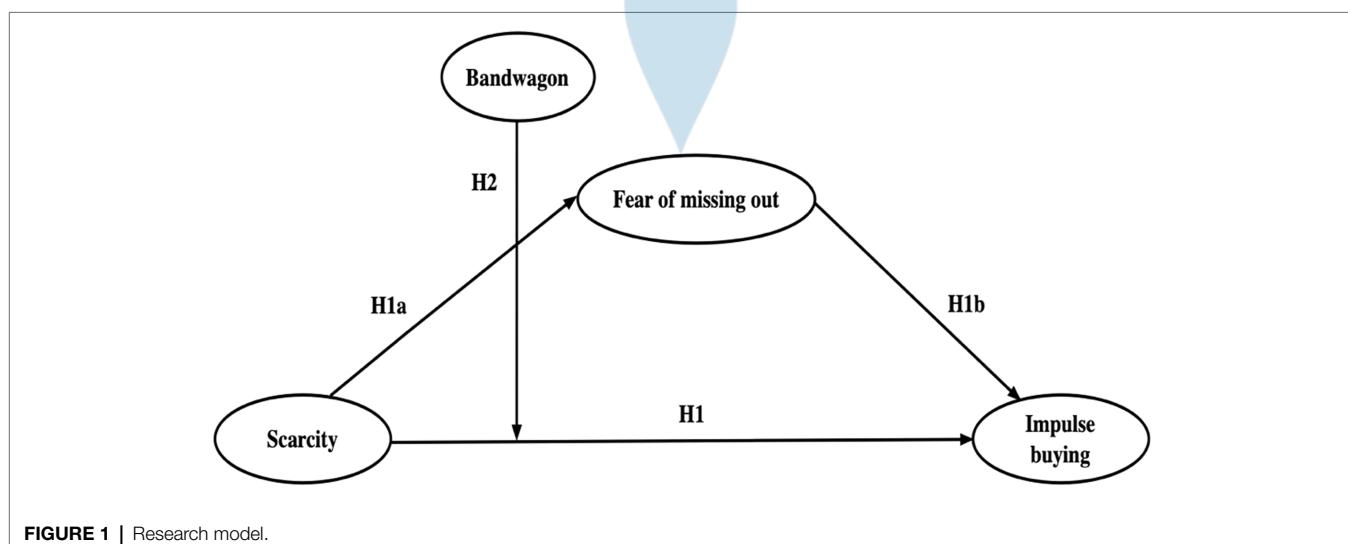


FIGURE 1 | Research model.

(Li et al., 2021). In other words, the bandwagon effect may have an impact on the scarcity effect (Gierl and Huettl, 2010; Sharma and Roy, 2016), while scarcity has an effect on impulse buying (Cook and Yurchisin, 2017; Gupta and Gentry, 2019). In the context of COVID-19 and the purchase of protective medical products, the study will examine the scarcity effect on impulse buying depending on the level of the bandwagon effect. As a result, the following hypothesis is proposed.

H2: Bandwagon moderates the effect of scarcity on impulse buying.

RESEARCH METHODOLOGY

Research Design and Participant

This study used correlational cross-sectional, questionnaire-based research design to investigate the effect of medical protective products scarcity on Chinese consumers' impulse buying. The target sample was Chinese consumers in China using convenience sampling given there was a strict lockdown in the country. The study constructed an electronic questionnaire using a professional online survey platform called SoJump with links to the questionnaire along with explanatory text disseminated across two social media channels, Wechat and QQ, which generated 488 valid responses (see Table 1). The questionnaire was written in Chinese and the respondents were voluntary participants in the study. Prior to carrying out the questionnaire ethical approval was given and a pilot study conducted to test for respondent understanding which revealed no misleading questions or redundancy. According to Hair et al. (2017, p. 24), an appropriate sample size should equal to 'ten times the largest number of structural paths directed at a particular construct in the structural model'. In the context of this research using this justification, 44 responses would represent the smallest sample size, however, such a small sample size would not be representative and therefore, based on previous empirical studies in the area, a sample size around 300 responses was considered more suitable (Schoenherr et al., 2015; Rahi, 2017). Having distributed to Chinese consumers, the study received 488 responses which were deemed acceptable.

Measures

Creswell (2008) states that using existing validated instruments enables constructs to be measured for validity, reliability and accuracy. In this study, all the questions refer to the situation around the COVID-19 outbreak in China. This is context modification to the questions which have been adapted from previous research, with the reliability of the original scale considered good and above 0.7. In addition, 50 samples were pre-tested, in order to know the comprehensibility and effectiveness of the measurement items. All the values of Cronbach alphas (CA) are over 0.7, as seen in Table 2. A seven-point Likert scale was used for

TABLE 1 | Demographic profile of respondents.

Characteristics		Frequency (n)	Percentage (%)
Gender	Male	212	43.4
	Female	276	56.5
Age	25 and under	123	25.2
	26–35	215	44.1
	36–45	92	18.9
	46–55	43	8.8
	56 over	15	3.1
Occupation	Public official	226	46.3
	Unemployed	40	8.2
	Retired	12	2.5
	Student	92	18.9
	Other	118	24.2
Income (RMB)	2500 or less	146	29.9
	2501–3500	110	22.5
	3501–4500	90	18.4
	4501–5500	71	14.5
	5501–6500	31	6.4
Education Level	6501 and above	40	8.2
	High school	96	19.7
	(including Technical secondary school) and lower		
	College degree	164	33.6
	Graduate degree	185	37.9
Medical protective products are scarcity	Postgraduate degree or higher	43	8.8
	Yes	352	72.1
	No	136	27.9
Total		488	100

TABLE 2 | Results of the pilot test.

Constructs	Cronbach's Alpha
Bandwagon	0.887
Fear of missing out	0.897
Impulse buying	0.882
Scarcity	0.885

all items (where 1 = strongly disagree and 7 = strongly agree), as the seven-point scale has been widely used in marketing research (Cacciolatti and Lee, 2016; Joensuu-Salo et al., 2018 and Firman et al., 2020) and compared to the five-point Likert scale, the seven-point Likert scale provides more varieties of options thereby increasing the variability and statistical significance of the results.

Scarcity

To measure scarcity of medical protective products, this study adapted a 5-item scale by Wu et al. (2012). The reliability of the original scale was good as it was above 0.7. Respondents were asked to indicate levels of agreement towards each of the five statements on scarcity of medical protective products (e.g., 'I think that the current supply of this bag is small' modified to 'I think that the current supply of medical protective products is small').

Bandwagon

To measure consumers' bandwagon effect on medical protective products, this study adapted a 4-item scale developed by Mainolfi (2020). The reliability of the original scale was good as it was above 0.7. Respondents were asked to indicate levels of agreement towards each of the four statements on the bandwagon effect associated with the purchase of medical protective products (e.g., 'I only choose luxury brands that others buy' modified to 'I only choose the medical protective products that others buy').

Fear of Missing Out

A 5-item scale was adapted to measure consumers' fear of missing out on medical protective products (Kaur, 2020), the reliability of the original scale was good as it was above 0.7. Respondents were asked to indicate levels of agreement towards each of the five statements on the fear of missing out associated with the purchase of medical protective products (e.g., 'Worried when others buy' modified to 'Worried when others buy the medical protective products').

Impulse Buying

To measure consumers' impulse buying of medical protective products, this study used 3-item scale developed by Darrat et al. (2016). The reliability of the original scale was good as it was above 0.7. Respondents were asked to indicate levels of agreement towards each of the three statements on how impulse buying is associated with the purchase of medical protective products (e.g., 'I often buy things without thinking' modified to 'I often buy medical protective products without thinking').

Data Analysis

This study used structural equation modelling (SEM) to evaluate the fit of the research model and test the validity of the hypotheses, as SEM can assess the significance of moderators and mediators together expressed in a single equation, unlike other multiple regression analysis (Hair et al., 2014). PLS-SEM tends to produce greater statistical power, which means that PLS-SEM is more likely to generate a specific relationship significant when it is, in fact, significant in the population (Hair et al., 2017). Smart-PLS 3.3.2 was employed to examine the quality of the measurement model and test the relationships in the structural model. The bootstrapping method with 5,000 samples was used to test the hypotheses of this study to produce a more compelling and accurate analysis (Rasoolimanesh et al., 2021).

RESULTS

Measurement Model

The measurement model is used to evaluate the relationships between the indicator variables and their corresponding construct(s). It determines which indicators to use for construct measurement and the directional relationship between construct and indicators (Hair et al., 2014, 2017). In general, it includes the test of composite reliability, average variance extracted (AVE) and discriminant validity (Hair et al., 2017). According to Hair et al. (2010) and Hair et al. (2014), the value of Cronbach's alpha (CA) and composite reliability (CR) should be above 0.70, and each construct's AVE be 0.50 or higher. Moreover, the achievement of discriminant validity (Fornell-Larcker criterion) is that the indicator loading is more significant than its cross-loading. Table 3 shows that the values of Cronbach's

TABLE 3 | Measurement model results.

Constructs	Items	Outer loadings	Cronbach's alpha	Composite reliability	AVE
Bandwagon	I buy medical protective products to be integrated into the social group I aspire to	0.837	0.880	0.918	0.736
	I only choose the medical protective products that others buy	0.875			
	I like owning the medical protective products worn by others	0.836			
	I buy very popular products	0.882			
FOMO	I am anxious when missing the chance to get the medical protective products	0.846	0.909	0.932	0.733
	Keep tabs on others	0.880			
	Worried when others buy the medical protective products	0.842			
	Follow others' shopping pattern	0.842			
Impulse buying	'Just do it' describes the way I buy things	0.871	0.875	0.923	0.800
	I often buy medical protective products without thinking	0.906			
	'I see it, I buy it' describes me	0.906			
Scarcity	I think that the current supply of medical protective products is small	0.822	0.880	0.913	0.677
	I think the medical protective products is selling out soon	0.844			
	I think that many people will buy medical protective products	0.848			
	I feel that the shortage of medical protective products will cause many people to buy	0.763			
	I think the supplies only limit the number of masks for each person and will cause a lot of people to buy	0.834			

alpha, composite reliability and AVE are all over the advised thresholds. The square root of AVE of each construct is also higher than its correlations with other constructs. This proves that discriminant validity is achieved (**Table 4**). The results are considered a satisfactory fit for the measurement model.

Structural Model

The results are shown in **Table 5** support all the hypotheses presented in the model, as the value of p is less the 0.05 with a t -value below 1.96 (Hair et al., 2017). **Table 5** demonstrates the mediation of fear of missing out and moderation of bandwagon on the relationship between scarcity and impulse buying. Firstly, it presents the indirect effect between scarcity and impulse buying through FOMO was significant ($\beta=0.095$, $t=3.446$, $p<0.01$). That is, FOMO positively mediates the relationship between scarce medical protective equipment and Chinese consumers' impulse buying.

Secondly, the results show the moderation of the bandwagon on the relationship between scarcity and impulse buying ($\beta=0.099$, $t=2.894$, $p<0.001$). It means that increasing the bandwagon effect will enhance the scarcity effect, which may make consumers more impulsive. In short, H1 and H2 are supported. **Figure 2** depicts the results of the structural model.

DISCUSSION

Fear of missing out was found to play a mediating role in the relationship between scarcity and impulse buying. In other words, the high level of scarcity associated to medical protective

equipment increased consumers' fear of missing out on the products, making them more impulsive in their purchasing behaviour. This finding supports the S-O-R model, which contends that the stimuli from the environment affects an individual's emotion which in turn influences individual behaviour (Wu and Li, 2018). Zhang W. et al. (2020b) provide further corroborated, arguing that FOMO mediates the relationship between consumers' perceived scarcity and choice. This finding provides insight into a customer's emotion and its importance to consumer behaviour. Retailers not only confined to the medical sector should consider this when they wish to use external or internal environmental factors to attract consumers and influence purchase intentions.

The study indicated that the bandwagon effect moderates the relationship between scarcity and impulse buying. It revealed that the impact of scarcity of medical protective equipment on consumers' impulse buying depended on the level of the bandwagon effect. When consumers found others purchasing medical protective equipment, their perception of the products' scarcity engendered impulse behaviour. This finding is supported by previous studies (Gierl and Huettl, 2010; Sharma and Roy, 2016) which concluded that the bandwagon effect positively impacted the scarcity effect. This implies that retailers and/or the government, individually and collectively, may wish to reduce the scarcity effect by implementing control levers over the bandwagon effect which can reduce the impact which has been observed previously in other retail sectors and in the context of seasonality.

CONCLUSION

Theoretical Implications

Based on the findings, this study reveals several theoretical implications. First, the results extend existing research on scarcity, impulse buying, fear of missing out and the bandwagon effect. Second, this study underlines the argument that the combined theories of S-O-R and bandwagon effect are able to explain the phenomenon of scarcity and its impact on consumers' impulse buying. Finally, this study provides additional insight into the relationship between scarcity and impulse buying, taking into account the underlying mediating (fear of missing out) and moderating (bandwagon) variables. Using the model generated in this study, consumers' reactions (impulse buying) to scarce products can be better explained.

Practical Implications

This study also reveals several practical implications. First, the results illustrate that the scarcity effect on consumers' impulse buying increases with the fear of missing out, which can assist retailers in developing mediating mechanisms and scarcity strategies to maximise the possible effect of scarcity on consumers' purchase intention. Second, the results encourage retailers to pay attention to the bandwagon effect, as a high level of bandwagon effect may increase the scarcity effect on consumers' impulse buying. Retailers may incorporate this into their scarcity strategy, creating 'bandwagon consumption' to attract more potential consumers. Third, the results of this research provide useful information for

TABLE 4 | Discriminant validity assessment using Fornell–Larcker criterion.

Construct	(1)	(2)	(3)	(4)
(1) Bandwagon	0.858			
(2) FOMO	0.563	0.856		
(3) Impulse buying	0.570	0.516	0.894	
(4) Scarcity	0.517	0.488	0.485	0.823

TABLE 5 | Path coefficients.

Path	Std. Beta (β)	T-value	p-Value	Hypotheses	Decision
Scarcity → FOMO	0.095	3.446	0.001**	H1	Supported
FOMO → Impulse buying	0.233	4.428	0.000***		
Scarcity → impulse buying	0.488	11.986	0.000***		
FOMO → Impulse buying	0.194	3.692	0.000***		
Moderating Effect → Impulse buying	0.099	2.894	0.004**	H2	Supported

* $p<0.05$; ** $p<0.01$; *** $p<0.001$.

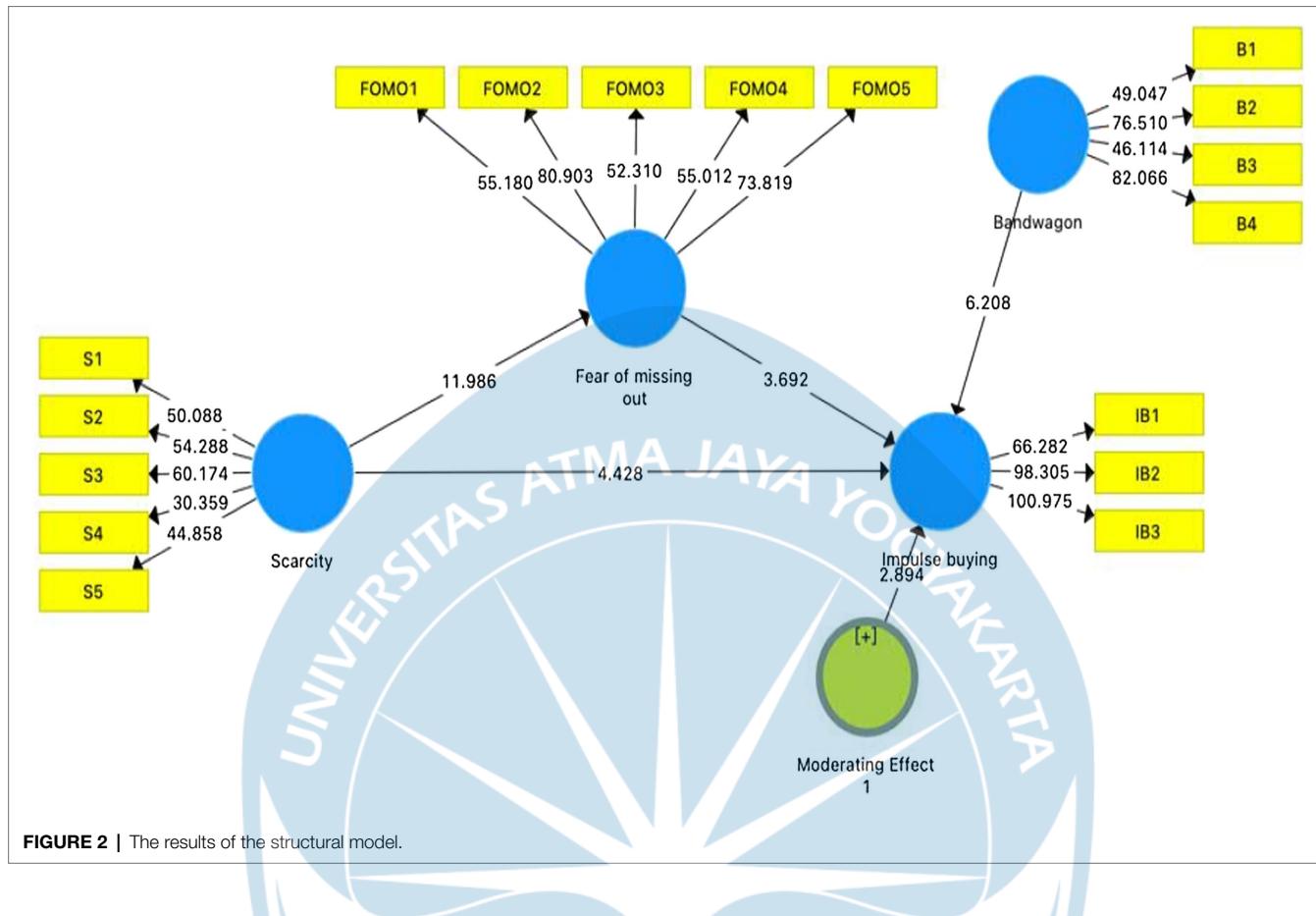


FIGURE 2 | The results of the structural model.

the Chinese Crisis Response Department so that they may take proactive measures to reduce the crisis brought about by consumers' impulse buying during the pandemic. The Crisis Response Department may consider taking preventive measures for consumers' reactionary behaviour (bandwagon) to curtail the effect of scarcity, reducing consumers' impulse buying and better controlling purchase behaviour during a pandemic or state of emergency. For instance, the Crisis Response Department could inform and educate the general public that bandwagon consumption could lead to insufficient protective equipment being available for frontline staff and likely cause prices to soar, underlining the necessity to limit the purchase quantity of medical protective equipment. Finally, this study, through its analysis of the scarcity effect on consumers' impulse buying, can assist consumers realise that scarcity is employed as a marketing tactic to promote irrational purchase behaviour. The findings from the research can make customers more aware of their emotions and the role they play in the purchasing of products and services which in turn can save them money as scarce products are generally higher priced (Van Herpen et al., 2009).

LIMITATIONS AND FUTURE RESEARCH

The study does have its limitations, which do not impact on the validity of the research but are nevertheless considered limitations and linked to further recommendations. First, this

study only investigated the fear of missing out without considering other potential mediators. It is surmised that with the underlying S-O-R model, there could be other types of affection that can serve as mediators. Future research may prefer identifying additional mediating variables which belong to emotion and cognition (e.g., fear and judgment). Second, this study attempted to understand the scarcity effect on impulse buying with the help of two theories: S-O-R and bandwagon effect. Although the research model is comprehensive with the rationale for selection compelling, there are other potential theories which could have been used to understand the same effect. For further research, other theories could be employed, such as the competitive arousal model and theory of fear, to examine consumers' impulse buying. Finally, this study was cross-sectional in nature. The data was collected at one specific time in China (January–March 2020). Further research could be extended, combining both quantitative and qualitative approaches, to gain insight into the long-term impact and behaviour of COVID-19 on the purchase behaviour of medical protective equipment.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Human Ethics Committee, Taylor's University. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

REFERENCES

- Abbas, J. (2021). Crisis management, transnational healthcare challenges and opportunities: The intersection of COVID-19 pandemic and global mental health. *Res. Global.* 3:100037. doi: 10.1016/j.resglo.2021.100037
- Abel, J. P., Buff, C. L., and Burr, S. A. (2016). Social media and the fear of missing out: scale development and assessment. *J. Bus. Eco. Res.* 14, 33–44. doi: 10.19030/jber.v14i1.9554
- Addo, P. C., Jiaming, F., Kulbo, N. B., and Liangqiang, L. (2020). COVID-19: fear appeal favoring purchase behavior towards personal protective equipment. *The Service Industries Journal* 40, 471–490. doi: 10.1080/02642069.2020.1751823
- Ahmed, R. R., Streimikiene, D., Rolle, J. A., and Pham, A. D. (2020). The COVID-19 pandemic and the antecedents for the impulse buying behavior of US citizens. *J. Comp.* 12, 5–27. doi: 10.7441/joc.2020.03.01
- Alves, J. C., Lok, T. C., Luo, Y., and Hao, W. (2020). Crisis management for small business during the COVID-19 outbreak: survival, resilience and renewal strategies of firms in Macau. *Res. Square.* 1–29. doi: 10.21203/rs.3.rs-34541/v1
- Arafat, S. M., Kar, S. K., and Kabir, R. (2021). Possible controlling measures of panic buying during COVID-19. *Int. J. Ment. Heal. Addict.* 19, 2289–2291. doi: 10.1007/s11469-020-00320-1
- Arafat, S. Y., Kar, S. K., Marthoenis, M., Sharma, P., Apu, E. H., and Kabir, R. (2020). Psychological underpinning of panic buying during pandemic (COVID-19). *Psychiatry Res.* 289:113061. doi: 10.1016/j.psychres.2020.113061
- Aydin, H. (2018). Explaining the effects of fear of missing the developments in social media (Fomo) on instinctive purchases by self-determination theory. *Int. J. Eco. Admin. Stu.* 17, 415–426. doi: 10.18092/ulikitidince.439179
- Basha, N. K., Aw, E. C. X., and Chuah, S. H. W. (2022). Are we so over smartwatches? Or can technology, fashion, and psychographic attributes sustain smartwatch usage? *Technol. Soc.* 69:101952. doi: 10.1016/j.techsoc.2022.101952
- Cacciolatti, L., and Lee, S. H. (2016). Revisiting the relationship between marketing capabilities and firm performance: The moderating role of market orientation, marketing strategy and organisational power. *J. Bus. Res.* 69, 5597–5610. doi: 10.1016/j.jbusres.2016.03.067
- Cai, Z., Gui, Y., Wang, D., Yang, H., Mao, P., and Wang, Z. (2021). Body image dissatisfaction and impulse buying: A moderated mediation model. *Front. Psychol.* 12:653559. doi: 10.3389/fpsyg.2021.653559
- Casale, S., and Flett, G. L. (2020). Interpersonally-based fears during the COVID-19 pandemic: reflections on the fear of missing out and the fear of not mattering constructs. *Clin. Neuropsychiatry* 17, 88–93. doi: 10.36131/CN20200211
- Chan, T. K., Cheung, C. M., and Lee, Z. W. (2017). The state of online impulse-buying research: A literature analysis. *Inf. Manag.* 54, 204–217. doi: 10.1016/j.im.2016.06.001
- Chen, A., and Shi, Y. (2020). The impact of risk appetite on public purchasing behavior: taking the purchase of masks as an example. *Sci. Technol. Rev.* 38, 86–92. doi: 10.3981/j.issn.1000-7857.2020.04.011
- Chen, C. C., and Yao, J. Y. (2018). What drives impulse buying behaviors in a mobile auction? The perspective of the stimulus-organism-response model. *Telematics Inform.* 35, 1249–1262. doi: 10.1016/j.tele.2018.02.007
- Cherian, A., and Tamilarasasi, D. S. (2020). Impulse buying during the pandemic times, with special reference of Kerala. *PalArch's J. Archaeol. Egypt/Egyptol.* 17, 2757–2766.
- Cook, S. C., and Yurchisin, J. (2017). Fast fashion environments: consumer's heaven or retailer's nightmare? *Int. J. Retail Distrib. Manag.* 45, 143–157. doi: 10.1108/IJRDM-03-2016-0027
- Creswell, J. W. (2008). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. 3rd Edn. Upper Saddle River, NJ: Pearson Education, Inc.
- Darrat, A. A., Darrat, M. A., and Amyx, D. (2016). How impulse buying influences compulsive buying: The central role of consumer anxiety and escapism. *J. Retail. Consum. Serv.* 31, 103–108. doi: 10.1016/j.jretconser.2016.03.009
- Di Crosta, A., Ceccato, I., Marchetti, D., La Malva, P., Maiella, R., Cannito, L., et al. (2021). Psychological factors and consumer behavior during the COVID-19 pandemic. *PLoS One* 16:e0256095. doi: 10.1371/journal.pone.0256095
- Firman, A., Putra, A. H. P. K., Mustapa, Z., Ilyas, G. B., and Karim, K. (2020). Re-conceptualization of business model for marketing nowadays: theory and implications. *J. Asian Fin. Eco. Bus.* 7, 279–291. doi: 10.13106/jafeb.2020.vol7.no7.279
- Fu, W. W., and Sim, C. C. (2011). Aggregate bandwagon effect on online videos' viewership: value uncertainty, popularity cues, and heuristics. *J. Am. Soc. Inf. Sci. Technol.* 62, 2382–2395. doi: 10.1002/as.21641
- Gierl, H., and Huettl, V. (2010). Are scarce products always more attractive? The interaction of different types of scarcity signals with products' suitability for conspicuous consumption. *Int. J. Res. Mark.* 27, 225–235. doi: 10.1016/j.ijresmar.2010.02.002
- Gupta, S., and Gentry, J. W. (2019). Should I buy, hoard, or hide? -consumers' responses to perceived scarcity. *Int. Rev. Retail Distrib. Consum. Res.* 29, 178–197. doi: 10.1080/09593969.2018.1562955
- Hair, J., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. (2014). Partial least squares structural equation Modelling (PLS-SEM) an emerging tool in business research. *Eur. Bus. Rev.* 26, 106–121. doi: 10.1108/EBR-10-2013-0128
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling*. 2nd Edn. Thousand Oaks, CA: Sage.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2010). *Multivariate Data Analysis*. 7th Edn. Upper Saddle River, NJ: Prentice Hall.
- Hayran, C., Anik, L., and Gürhan-Canlı, Z. (2020). A threat to loyalty: fear of missing out (FOMO) leads to reluctance to repeat current experiences. *PLoS One* 15:e0232318. doi: 10.1371/journal.pone.0232318
- Ho, S. Y., and Lim, K. H. (2018). Nudging moods to induce unplanned purchases in imperfect mobile personalization contexts. *MIS Q.* 42, 757–778. doi: 10.25300/MISQ/2018/14083
- Hodkinson, C. (2019). Fear of missing Out'(FOMO) marketing appeals: A conceptual model. *J. Mark. Commun.* 25, 65–88. doi: 10.1080/13527266.2016.1234504
- Huang, X., and Cai, R. (2021). Does product semantics matter in stimulating impulse buying behavior for internet products? *Front. Psychol.* 12:676086. doi: 10.3389/fpsyg.2021.676086
- Islam, T., Pitafi, A. H., Arya, V., Wang, Y., Akhtar, N., Mubarik, S., et al. (2021). Panic buying in the COVID-19 pandemic: A multi-country examination. *J. Retail. Consum. Serv.* 59:102357. doi: 10.1016/j.jretconser.2020.102357
- Joensuu-Salo, S., Sorama, K., Viljamaa, A., and Varamäki, E. (2018). Firm performance among internationalized SMEs: The interplay of market orientation, marketing capability and digitalization. *Admin. Sci.* 8:31. doi: 10.3390/admsci8030031
- Kamboj, S., Sarmah, B., Gupta, S., and Dwivedi, Y. (2018). Examining branding cocreation in brand communities on social media: applying the paradigm of stimulus-organism-response. *Int. J. Inf. Manag.* 39, 169–185. doi: 10.1016/j.ijinfomgt.2017.12.001
- Kaur, K. (2020). Impact of the first phase of movement control order during the COVID-19 pandemic in Malaysia on purchasing behavior of Malaysian consumers Kamaljeet Kaur^{1*}, Mageswari Kunasegaran², Jaspal Singh³, Selvi

- Salome4, and Sukjeet Kaur Sandhu5. *Horizon* 2, 131–144. doi: 10.37534/bpjhssr.2020.v2.n.S.id1038.p131
- Ku, H. H., Kuo, C. C., Yang, Y. T., and Chung, T. S. (2013). Decision-contextual and individual influences on scarcity effects. *Eur. J. Mark.* 47, 1314–1332. doi: 10.1108/03090561311324345
- Labad, J., González-Rodríguez, A., Cobo, J., Puntí, J., and Farré, J. M. (2021). A systematic review and realist synthesis on toilet paper hoarding: COVID or not COVID, that is the question. *PeerJ.* 9:e10771. doi: 10.7717/peerj.10771
- Lee, H. J., and Yun, Z. S. (2015). Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food Qual. Prefer.* 39, 259–267. doi: 10.1016/j.foodqual.2014.06.002
- Li, C., Wang, Y., Lv, X., and Li, H. (2021). To buy or not to buy? The effect of time scarcity and travel experience on tourists' impulse buying. *Ann. Tour. Res.* 86:103083. doi: 10.1016/j.annals.2020.103083
- Li, M., Zhao, T., Huang, E., and Li, J. (2020). How does a public health emergency motivate people's impulsive consumption? An empirical study during the COVID-19 outbreak in China. *Int. J. Environ. Res. Public Health* 17:5019. doi: 10.3390/ijerph17145019
- Li, X. Y., Wang, J., Zhang, R. X., Chen, L., He, C. K., Wang, C. Y., et al. (2020). Psychological status Among anesthesiologists and operating room nurses During the outbreak period of COVID-19 in Wuhan, China. *Front. Psychiatry* 11:574143. doi: 10.3389/fpsyg.2020.574143
- Lim, P. L., and Yazdanifard, R. (2015). What internal and external factors influence impulsive buying behavior in online shopping? *Global J. Manage. Bus. Rep.* 15, 25–32.
- Lins, S., and Aquino, S. (2020). Development and initial psychometric properties of a panic buying scale during COVID-19 pandemic. *Heliyon* 6:e04746. doi: 10.1016/j.heliyon.2020.e04746
- Mainolfi, G. (2020). Exploring materialistic bandwagon behaviour in online fashion consumption: A survey of Chinese luxury consumers. *J. Bus. Res.* 120, 286–293. doi: 10.1016/j.jbusres.2019.11.038
- Martin-Neuninger, R., and Ruby, M. B. (2020). What does food retail research tell us about the implications of coronavirus (COVID-19) for grocery purchasing habits? *Front. Psychol.* 11:1448. doi: 10.3389/fpsyg.2020.01448
- Maxwell, A. (2014). Bandwagon effect and network externalities in market demand. *Asian J. Manag. Res.* 4, 527–532.
- Mehrabian, A., and Russell, J. A. (1974). *An Approach to Environmental Psychology*. United States: MIT Press.
- Mertens, G., Gerritsen, L., Duijndam, S., Salemink, E., and Engelhard, I. M. (2020). Fear of the coronavirus (COVID-19): predictors in an online study conducted in march 2020. *J. Anxiety Disord.* 74:102258. doi: 10.1016/j.janxdis.2020.102258
- Moon, M. A., Farooq, A., and Kiran, M. (2017). Social shopping motivations of impulsive and compulsive buying behaviors. *UW Journal of Management Sciences* 1, 15–27.
- Park, K., Ha, J., and Park, J. Y. (2017). An experimental investigation on the determinants of online hotel booking intention. *J. Hosp. Mark. Manag.* 26, 627–643. doi: 10.1080/19368623.2017.1284631
- Pradhan, V. (2016). Study on impulsive buying behavior among consumers in supermarket in Kathmandu Valley. *J. Bus. Soc. Sci. Res.* 1, 215–233. doi: 10.3126/jbsrr.v1i2.20926
- Primanto, A. B., and Rahmawati, R. (2021). The antecedents of impulse buying behavior During Covid-19 pandemic: revealing the role of panic buying, government stimulus, perceived scarcity, and fear appeals. *J. Theor. App. Manage.* 14, 230–247. doi: 10.20473/jmtt.v1i4.3.29886
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *Int. J. Eco. Manage. Sci.* 6, 1–5. doi: 10.4172/2162-6359.1000403
- Rasoolimanesh, S. M., Wang, M., Roldán, J. L., and Kunasekaran, P. (2021). Are we in right path for mediation analysis? Reviewing the literature and proposing robust guidelines. *J. Hosp. Tour. Manag.* 48, 395–405. doi: 10.1016/j.jhtm.2021.07.013
- Rodrigues, R. I., Lopes, P., and Varela, M. (2021). Factors affecting impulse buying behavior of consumers. *Front. Psychol.* 12:697080. doi: 10.3389/fpsyg.2021.697080
- Schoenherr, T., Ellram, L. M., and Tate, W. L. (2015). A note on the use of survey research firms to enable empirical data collection. *J. Bus. Logist.* 36, 288–300. doi: 10.1111/jbl.12092
- Sharma, P., and Roy, R. (2016). Looking beyond first-person effects (FPEs) in the influence of scarcity appeals in advertising: A replication and extension of Eisend (2008). *J. Advert.* 45, 78–84. doi: 10.1080/00913367.2015.1093438
- Shayan, S., Aneela, M., Akram, M. S., and Ronika, C. (2017). Do luxury brands successfully entice consumers? The role of bandwagon effect. *Int. Mark. Rev.* 34, 498–513. doi: 10.1108/IMR-09-2014-0302
- Šrol, J., Ballová Mikušková, E., and Čavojová, V. (2021). When we are worried, what are we thinking? Anxiety, lack of control, and conspiracy beliefs amidst the COVID-19 pandemic. *Appl. Cogn. Psychol.* 35, 720–729. doi: 10.1002/acp.3798
- Sun, S., Xie, Z., Yu, K., Jiang, B., Zheng, S., and Pan, X. (2021). COVID-19 and healthcare system in China: challenges and progression for a sustainable future. *Glob. Health* 17, 1–8. doi: 10.1186/s12992-021-00665-9
- Swennen, G. R., Pottel, L., and Haers, P. E. (2020). Custom-made 3D-printed face masks in case of pandemic crisis situations with a lack of commercially available FFP2/3 masks. *Int. J. Oral Maxillofac. Surg.* 49, 673–677. doi: 10.1016/j.ijom.2020.03.015
- Taylor, S. (2021). Understanding and managing pandemic-related panic buying. *J. Anxiety Disorders* 78:102364. doi: 10.1016/j.janxdis.2021.102364
- Tynan, C., McKechnie, S., and Chhuon, C. (2010). Co-creating value for luxury brands. *J. Bus. Res.* 63, 1156–1163. doi: 10.1016/j.jbusres.2009.10.012
- Van Herpen, E., Pieters, R., and Zeelenberg, M. (2009). When demand accelerates demand: trailing the bandwagon. *J. Cons. Psychol.* 19, 302–312. doi: 10.1016/j.jcps.2009.01.001
- Wu, W. Y., Lu, H. Y., Wu, Y. Y., and Fu, C. S. (2012). The effects of product scarcity and consumers' need for uniqueness on purchase intention. *Int. J. Cons. Stu.* 36, 263–274. doi: 10.1111/j.1470-6431.2011.01000.x
- Wu, Y. L., and Li, E. Y. (2018). Marketing mix, customer value, and customer loyalty in social commerce: a stimulus-organism-response perspective. *Int. Res.* 28, 74–104. doi: 10.1108/IntR-08-2016-0250
- Yang, J., Peng, M. Y. P., Wong, S., and Chong, W. (2021). How E-learning environmental stimuli influence determinates of learning engagement in the context of COVID-19? SOR model perspective. *Front. Psychol.* 12:584976. doi: 10.3389/fpsyg.2021.584976
- Yuen, K. F., Wang, X., Ma, F., and Li, K. X. (2020). The psychological causes of panic buying following a health crisis. *Int. J. Environ. Res. Pub. Health* 17:3513. doi: 10.3390/ijerph17103513
- Zhang, J., Jiang, N., Turner, J. J., and Pahlevan Sharif, S. (2021). The Impact of Scarcity of Medical Protective Products on Chinese Consumers' Impulsive Purchasing during the COVID-19 Epidemic in China. *Sustainability* 13:9749. doi: 10.3390/su13179749
- Zhang, W., Leng, X., and Liu, S. (2020). Research on mobile impulse purchase intention in the perspective of system users during COVID-19. *Personal Ubiquitous Comp.* 1–9. doi: 10.1007/s00779-020-01460-w
- Zhang, Z., Jiménez, F. R., and Cicala, J. E. (2020). Fear of missing out scale: a self-concept perspective. *Psychol. Market.* 37, 1619–1634. doi: 10.1002/mar.21406
- Zheng, X., Men, J., Yang, F., and Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *Int. J. Info. Manage.* 48, 151–160. doi: 10.1016/j.ijinfomgt.2019.02.010

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Zhang, Jiang, Turner and Pahlevan-Sharif. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

Do TikTok Discounts Livestream Triggers Gen Z Impulse Buying Behavior?

¹Ghea Septia Atika Refasa, ²Heriyadi, ³Bintoro Bagus Purmono, ⁴Barkah, ⁵Helma Malini

^{1,2,3,4,5}Faculty of Economics and Business, Universitas Tanjungpura, Indonesia

Abstract

The popularity of live streaming has changed the pattern of interaction between buyers and sellers in the modern business world. For business people, live streaming brings benefits because product information can be disseminated instantly. The high number of social media users in Indonesia has also led to new marketing methods, one of which is live streaming. This quantitative study aims to determine the effect of discounts on Livestream sales on the TikTok application on impulsive purchases of generation Z in Indonesia, which are mediated by positive emotions. This study involved 220 people from various regions in Indonesia who were collected online using a purposive sampling technique with a questionnaire. The data was analysed using Structural Equation Modeling (SEM) using AMOS 24. The results showed that discounts during Livestream selling on the TikTok application had a positive and significant effect on impulse purchases of generation Z in Indonesia. Meanwhile, discounts when selling Livestream on the TikTok application have a positive and significant effect on positive emotions. Positive emotions have an indirect effect between discounts during Livestream selling and impulsive purchases of generation Z in Indonesia. These findings can assist online business players in optimizing marketing in the Livestream selling industry, which is currently booming.

Introduction

Technology in the digitalization era plays a role in various aspects of life (De Mooij, 2019). Technology has significantly changed and affected every aspect of life (Sami & Irfan, 2018). There are 171.7 million internet users in Indonesia, or around 64.8% of Indonesia's total population of 264 million. Internet users have increased by 10.2% or 27.9 million people compared to internet users in the previous year, according to data from the Association of Indonesian Internet Service Providers (APJII). Turban et al. (2004) describes several things that support the rapid growth of internet users, including internet facilities that are increasingly easy to obtain and the increasingly widespread culture of online shopping that is practical, simple, and efficient. The current development of information and technology has led to various features that support customer activities in making online purchases, one of which is the live streaming feature. Live streaming combines seller activities with video, enabling sellers to give distinctive interactive presentations (Wang, 2019). Live streaming is a new marketing tool gaining popularity worldwide (Wongkitrungrueng & Assarut, 2020). Sellers can carry out entertaining activities and encourage customers to buy the products presented (Lu, Xia, Heo, & Wigdor, 2018).

Sales with live streaming can occur through a live-streaming platform that combines commercial activities or social media that presents live-streaming features (Wongkitrungrueng & Assarut, 2018). Livestream selling is very effective for Generation Z, which cannot be separated from technological advances. Generation Z are those born between 1995 and 2010 who feel comfortable using technology because they were born in a digital world, so they are often called the first digitally native generation (Lanier, 2017). According to the research results of the Boston Consulting Group, it is stated that there has been a change in attitude or behavior in generation Z, especially when shopping and spending their money through online shopping, compared to previous generations (Ahmed, 2020). It is because those who enter the Z generation have hedonic, consumptive, and wasteful characters. They are also easily influenced by attractive stimuli to make purchases (N. D. Wahyuni, 2017).

Research conducted by the Valassis research institute shows that several sales promotion stimuli affect consumers, especially generation Z. In the context of live streaming, it refers to things such as exclusive prices

for live broadcasts, it gives consumers a type of sales promotion in the form of specific price discounts only when live stream going on. Price discounts are a price-based sales promotion strategy where customers are given the same product at a relatively lower price (Xu, Y., & Huang, J.S., 2014). When the live streaming ends, the price of the product being sold will return to its original price. The time limit given puts pressure on viewers to decide on a purchase (Wu et al., 2021). Stimuli during live streaming, such as price discounts, can lead to positive emotions in consumers when shopping, the more frequent price discounts make consumers feel happy (Kurniawati & Restuti, 2014). Maule et al. (2000) found that time pressure positively influences individual arousal. As a result, the brief decision window creates a sensation of time pressure and excites viewers during the live stream. It is what causes consumers to shop impulsively (Fahd, 2015). Impulse buying is a behavior carried out by a consumer without being planned and carried out spontaneously (Ruswanti, 2016). Online impulse buying is shopping behavior that occurs unplanned and emotionally attractive, where deciding on a purchase is carried out quickly without thinking about the information and other available alternatives.

Various analyzes of impulse buying have been carried out. Most impulse buying analysis focuses on e-commerce and conventional stores rather than Livestream selling. This research was conducted because it can provide information about discounts when Livestream selling TikTok can influence impulse buying in generation Z in Indonesia. In addition, the findings obtained will then be used for developing other research in the sales process utilizing live streaming. Therefore, this research aims to determine the effect of discounts during Livestream selling on the TikTok application on impulse purchases mediated by positive emotions.

Materials and Methods

1. Materials

1.1 Discount on Livestream Selling and Impulse Buying

According to Buyit (2020), Livestream selling refers to using live video to showcase and sell products. Livestream selling is a powerful sales channel because it increases engagement in several ways. The live streaming transmission uses one or more communication technologies that can instantly send images and sound to other locations, allowing users to see their visibility and presence (Chen & Lin, 2018). People can watch live streams on their smartphones anytime and anywhere, interact in real-time with sellers and make purchases immediately by simply clicking on the link embedded on the screen. Consumers prefer live-streaming shopping for many reasons, one of which is that discounted prices are the main thing (Hou & Shen, 2021).

According to Sutisna (2002: 300), a price discount is a reduction in the price of a product from the regular price within a certain period. Discount indicators are: 1) The discount amount, namely the discount given when the product is discounted. 2) Price discount period, such as the period given at the time of discount, and 3) Types of products that get discounted prices, namely the variety of choices on products that are discounted (Gendall et al., in Asterrina et al. 2011: 3). Discounts can encourage impulse buying behavior.

In accordance with research from Brian Vicky Prihastama (2016), Septian Wahyudi (2017), and Sudharto P. Hadi (2017), the tendency of consumers to buy out of control comes from sales promotion stimulants, one of which is caused by price discounts or discounts. Sales promotions can also impact emotions in the form of positive emotions for consumers (Kotler & Keller, 2016). These positive emotions result in sudden cravings. When consumers' positive emotions increase, this will also increase consumer impulse purchases (Kurniawan & Kunto, 2013).

1.2 Discount on Livestream Selling and Positive Emotion

Sales promotion functions not only as a company communication tool with consumers but as a tool to influence consumers in purchasing activities (Purnamasari & Murwatiningsih, 2012). Consumers will immediately be interested in trying a product or service offered when the manager displays an attractive sales promotion for consumers. The existence of sales promotions can also have an impact on emotions in the form of positive emotions among consumers (Kotler & Keller, 2016).

Stimulus in Livestream selling in the form of price discounts can lead to positive emotions in consumers when shopping, the more frequent price discounts make consumers feel happy (Kurniawati & Restuti, 2014). Price

discounts are a price-based sales promotion strategy where customers are offered the same product at a lower price (Gumilang & Nurcahyo, 2016). Previous research stated that price discounts affect positive emotions (Kurniawan & Kunto, 2013; Kurniawati & Restuti, 2014; Fahd, 2015; Akyuz, 2018; Idris, 2018).

1.3 Positive Emotion and Impulse Buying

Emotional shopping is a feeling that cannot be controlled but can influence people's behavior or habits when shopping (Hidayat & Erika, 2017). Amiri (2012) states that, generally, more positive emotions at the time of purchase can lead to an increase in impulsive purchases. Positive emotions play an essential role in their intention to buy. Positive emotions can influence consumers when shopping, where consumers experience feelings of pleasure and joy. These positive emotions result in sudden cravings. When consumers' positive emotions increase, this will also increase consumer impulse purchases (Kurniawan & Kunto, 2013). Several experts and previous studies have tested whether when consumers have significant positive emotions will influence purchases more. Kwan (2016) proved and stated that the higher the consumer's positive emotions, the higher the effect on impulsive purchases.

2. Methods

2.1 Measurements

Samples were taken by purposive sampling to collect data with the criteria determined by the researcher. This research uses primary data sources through questionnaires. The questionnaire uses a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The number of samples collected and examined in this study was 220 respondents. Respondent criteria are customers who have shopped at least once during Livestream selling on the TikTok application. This study will use Structural Equation Modeling (SEM) with the AMOS 24 statistical tool to analyze and evaluate the measurement model and structural model of the research construct that is built. The fit test model will be assessed based on goodness of fit index parameters such as CMIN/DF, Root Mean Square Error of Approximation (RMSEA), Root means squared residual (RMR), goodness of fit index (GFI), Tucker Lewis Index (TLI), Incremental Fit Index (IFI), Comparative Fit Index (CFI), Normal Fit Index (NFI).

2.2 Sampling and Data Collection

The number of samples collected and examined in this study was 220 respondents. The sample involved is a Livestream-selling TikTok customer who is domiciled in Indonesia, with an age range of 12-27 years, having purchased Livestream selling on the TikTok application at least once. Sampling locations were distributed in various cities in Indonesia, such as Jakarta, Bandung, Medan, Surabaya, Semarang, Balikpapan, Denpasar, Makassar, Pontianak, and various other regions of Indonesia, through online questionnaires.

2.3 Data Analysis

The validity evaluation will rely on the standardized loading factor (SLF) value, which must be ≥ 0.50 (Hair et al., 2014, p. 618), and the reliability construct will rely on the tabulated results of construct reliability (CR) and average variance extracted (AVE) values. Furthermore, the SEM analysis is a structural model analysis to assess the research hypothesis that has been built and whether it is accepted or rejected. SEM analysis will display the t-value for each coefficient. The hypothesis can be said to have a causal relationship if the t-count value $\geq t$ table (1.96) with a significant level of α , like 0.05. The Sobel test will determine the mediating variable's indirect effect.

Results and Discussion

1. Respondent Characteristics

Data on the characteristics of the respondents are shown in Table 1, which totals 220 respondents. Gender is dominated by women (72.3%), domiciled in Jakarta (16.8%), the age range is 19-22 years (92.3%), work is as a student (85%), shopping intensity is two times on TikTok Livestream (33.6%) and spending on TikTok Livestream < Rp. 100,000,- (48.2%).

Table 1: Characteristics of Respondents.

Category	Item	f	%
Gender	Male	61	27,7%
	Female	159	72,3%
	Total	220	100%
domicile	Jakarta	37	16,8%
	Pontianak	97	44%
	Bandung	17	7,7%
	Surabaya	9	4%
	Medan	7	3,2%
	Semarang	2	0,9%
	Makassar	2	0,9%
	Denpasar	3	1,4%
	Manado	1	0,5%
	Palembang	1	0,5%
	Mempawah	9	4%
	Bogor	1	0,5%
	Bekasi	2	0,9%
	Lampung	1	0,5%
	Singkawang	3	1,4%
	Malang	3	1,4%
	Tangerang	8	3,6%
	Purwokerto	2	0,9%
	Yogyakarta	13	5,9%
	Sanggau	1	0,5%
	Balikpapan	1	0,5%
	Total	220	100%
Age	12 – 15 Year	4	1,8%
	16 – 18 Year	7	3,2%
	19 – 22 Year	203	92,3%
	23 – 27 Year	6	2,7%
	Total	220	100%
Occupation	Students	187	85%
	Civil Servant	7	3,2%
	Private sector employee	16	7,3%
	Businessman	9	4%
	Freelancer	1	0,5%
	Total	220	100%
How many times have you shopped online during Live Streaming on the TikTok app in 1 month?	1 time	36	16,3%
	2 times	74	33,6%
	3 times	69	31,4%
	4 times	18	8,2%
	>5 times	23	10,5%
	Total	220	100%
The average cost incurred for shopping online during Live Streaming on the TikTok application	<IDR. 100.000	106	48,2%
	IDR. 100.000 – Rp. 200.000	27	12,3%
	IDR. 200.000 – Rp. 300.000	16	7,3%
	>IDR. 300.000	71	32,3%
	Total	220	100%

2. Measurement and Structural Models

The results of the validity and reliability tests on the research indicators were obtained from the results of the AMOS 24 data processing output.

Table 2: Measurement Model Results

Items		SLF	CR	AVE
<i>Discount on Livestream Selling (DOLS)</i>	I feel that the countdown promotion time specified in the livestreaming is relatively short	0,703	0,923	0,528
	Before the deadline of sales promotion on livestreaming, there is very little time for making the decision	0,702		
	The closer to the end of the time limited sale promotion, the more time pressure will push me to buy as soon as possible	0,687		
	I will keep watching the live streaming to receive coupons and freebies or to enter a prize draw	0,748		
	Triggering consumers to buy in discount amount	0,745		
	Triggering consumers to buy in discount period	0,769		
<i>Positive Emotion (PE)</i>	Triggering consumers to buy in product category	0,733		
	Happy feeling	0,759	0,881	0,538
	Feeling satisfied	0,727		
	Comfortable feeling	0,702		
<i>Impulse Buying (IB)</i>	Feelings of excited	0,747		
	Spontaneous purchase	0,762	0,850	0,560
	Purchase without thinking	0,850		
	Rush purchase	0,726		
	Purchases are influenced by emotional conditions	0,643		

Table 2 is the result of testing the validity and reliability of the overall model. The standardized loading factor (SLF) value of all indicator variables in the full model is above 0.50. It means that all indicators are declared valid and believed to be able to measure the construct of the entire model being built. The results of the reliability test present relevant results. All instruments are declared reliable and can consistently measure the constructs of the entire model built. It is shown from the avariance extracted (AVE) value of all instrument indicators, which obtain a value of ≥ 0.50 , and the value of construct reliability (CR) which obtains a value of ≥ 0.70 .

Table 3: Goodness of Fit Index

Goodness of Fit Index	Cut off Value	Results
CMIN/DF	≤ 3.00	1,965
RMSEA	$\leq 0,08$	0,066
RMR	$\leq 0,05$	0,029
GFI	$\geq 0,90$	0,910
TLI	$\geq 0,90$	0,938
IFI	$\geq 0,90$	0,949
CFI	$\geq 0,90$	0,949
NFI	$\geq 0,90$	0,902

Table 3 is the result of the fit test model. The model fit test results show that the model's suitability requirements can be accepted and declared fit. Eight measurements show the degree of good fit. Hair et al. (2014: 583) state that a research model construct can be declared fit and accepted if three to four measurements obtain a degree of good fit or above the cut-off value.

3. Hypotheses Testing

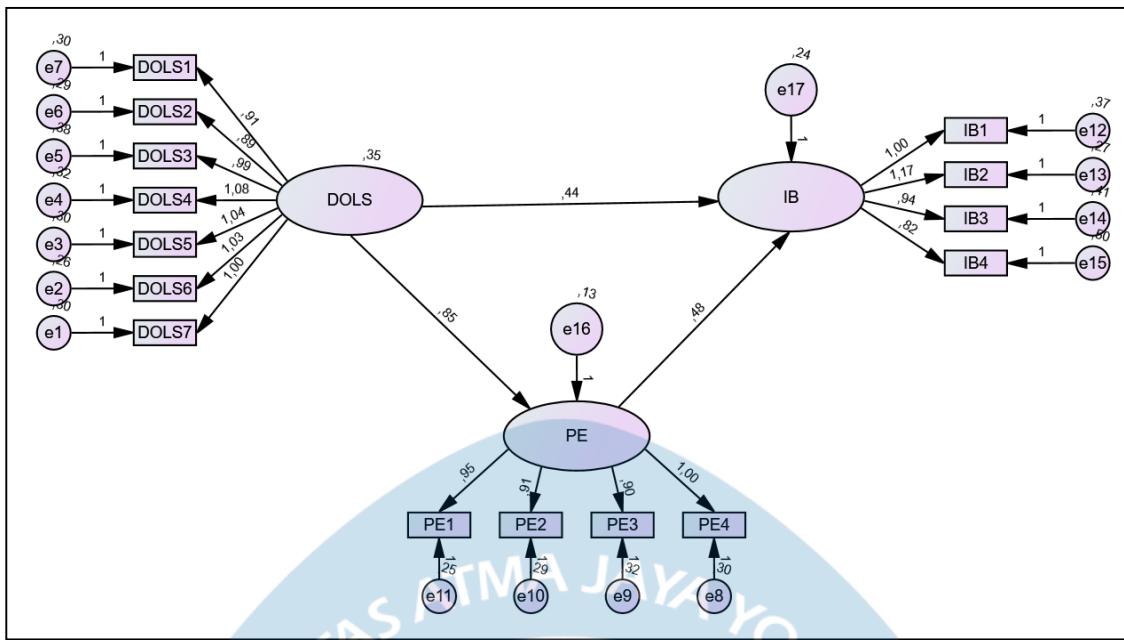


Fig 1: Full Model Structural Test

The results of testing the effect of the relationship between variables in the research construct built in this study can be presented as follows.

Table 4: Hypothesis Testing

		Estimate	S.E.	C.R.	P	Label
Positive_Emotion <---	Discount_on_Livestream_Selling	0,851	0,094	9,066	***	
Impulse_Buying <---	Discount_on_Livestream_Selling	0,443	0,163	2,720	0,007	
Impulse_Buying <---	Positive_Emotion	0,478	0,160	2,990	0,003	

Based on Table 4, the t-count value for the variable discount on Livestream selling on impulse buying is obtained by some 2.720, which indicates an acquisition greater than the t-table value of 1.96. Likewise, the p-value of 0.007 indicates a value smaller than 0.05 ($\alpha = 0.05$). It means that the first hypothesis regarding the discount on Livestream selling positively and significantly affects impulse buying. For the second hypothesis, the t-value for the discount on the Livestream selling variable for positive emotion also obtains a value of 9.066 and a p-value of less than 0.001. Prove the hypothesis that was built where the discount on Livestream selling has a positive and significant effect on positive emotion. The third hypothesis, the acquisition of the t-count value for the positive emotion variable for impulse buying, is obtained by a number of 2.990 and a p-value of 0.003. It means that positive emotion has a positive and significant effect on impulse buying. To see the indirect effect on the influence of the built mediation variable is presented in table 5, obtained from the Sobel test results.

Table 5: Sobel Test - Significance of Mediation

	Sobel test statistic	Two- tailed probability
Discount on Livestream Selling --> Positive Emotion --> Impulse Buying	2,84	0,004

Based on the results of the Sobel test shown in Table 5, the Sobel test statistic was 2.84, and the p-value was 0.004. These results indicate that the value of the Sobel test statistic is greater than the t-table value of 1.96. Likewise, the p-value obtained shows a value less than 0.05 ($\alpha = 0.05$). This result indicates a significant indirect effect of discounts on Livestream selling on impulse buying through positive emotion.

Discussion

This study aims to propose a conceptual model of discount on Livestream selling and its effect on impulse buying on the TikTok application in Indonesia, which is mediated by positive emotion. According to the results of this study, all hypotheses are accepted, showing that discounts on Livestream selling affect impulse buying in the TikTok application. Also, positive emotion mediates the relationship between discounts on Livestream selling and impulse buying. The results of this study are helpful for companies for future marketing strategies by considering discounts on Livestream sales.

Previous research stated that price discounts affect positive emotions (Kurniawan & Kunto, 2013; Kurniawati & Restuti, 2014; Fahd, 2015; Akyuz, 2018; Idris, 2018). The more frequent price discounts make consumers feel happy in shopping (Kurniawati & Restuti, 2014). This research is also in line with Amos et al. (2014), Bandyopadhyay et al. (2021), Febrilia & Warokka (2021), and Ozer & Gultekin (2015). Mood, or emotional state, has long been associated with impulse buying (Lucas & Koff, 2017; Rook & Fisher, 1995). When consumers are in a positive mood, they emotionally respond to situational stimuli and then engage in impulsive buying behavior. It can be interpreted as feelings of pleasure, excitement, fear, and anxiety influencing consumer behavior in unplanned purchases. For example, when consumers feel happy, shopping activities become more enjoyable, so the opportunity to purchase suddenly increases (Ozer & Gultekin, 2015).

The results of this study indicate that in increasing impulse buying, business people are expected to consistently provide promotional strategies in the form of price discounts to touch consumers' hearts and create positive emotions when shopping on Livestream selling.

Conclusions

Based on the conclusions in this study, business people need to provide discounts more often, especially when conducting Livestream selling, because it is proven that price cuts make consumers more interested in unplanned purchases (impulse buying). It is because consumers have positive emotions that it is hard to control themselves when looking at discounted prices. Then for further researchers, it is recommended to use variables other than the variables in this study to obtain more varied results. It is also recommended to increase the number of samples used in the study. Then for further researchers, it is recommended to use variables other than the variables in this study to obtain more varied results. It is also recommended to increase the number of samples used in the study.

Data Availability

The Data Already in sub Results and Discussion.

Conflicts of Interest

The author declare that there is no conflict of interest regarding the publication of this paper.

Funding Statement

The funding of this research from author self.

Authors' contributions

Authors may use the following wordings for this section: “ ‘First Author’ designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. ‘Second Author’ and ‘Third Author’ managed the analyses of the study. ‘Fourth Author’ and ‘Fifth Author’ manage the literature searches. All authors read and approved the final manuscript.”

Acknowledgments

The author would like to express his deepest gratitude to the Dean of Faculty of Economics & Business Universitas Tanjungpura, for her whole hearted support. I also thanks the Head of Management Department of Management Faculty of Economics & Business Universitas Tanjungpura, and MBKM Program from Ministry of Education, Culture, Research, and Technology, who contributed to the completion of this research.

References

1. Ali, M, Ahmed, T, & Absar, S 2020, 'Urban Youth Attitude toward Online Shopping: Evidence from Dhaka City', *International Journal of Entrepreneurial ...*, papers.ssrn.com, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3849232
2. Amiri, F, Jasour, J, Shirpour, M, & Alizadeh, T 2012, 'Evaluation of effective fashionism involvement factors effects on impulse buying of customers and condition of interrelation between these factors', *Journal of Basic and Applied Scientific ...*
3. Amos, C, Holmes, GR, & Keneson, WC 2014, 'A meta-analysis of consumer impulse buying', *Journal of Retailing and Consumer ...*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S096969891300115X>
4. Andani, K. and Wahyono, W., 2018. Influence of Sales Promotion, Hedonic Shopping Motivation and Fashion Involvement Toward Impulse Buying through a Positive Emotion. *Management Analysis Journal*, 7(4), pp.448-457.
5. APJII 2022, , 'Profil Internet Indonesia 2022', Retrieved from apjii.or.id: [Asosiasi Penyelenggara Jasa Internet Indonesia \(apjii.or.id\)](#)
6. Asterrina, F, & Tuti, H 2013, 'Pengaruh Diskon Terhadap Perilaku Impulse Buying (Studi Pada Konsumen Centro Departemen Store di Margo City)', *Digilib UI*
7. Bandyopadhyay, N, Sivakumaran, B, Patro, S, & ... 2021, 'Immediate or delayed! Whether various types of consumer sales promotions drive impulse buying?: An empirical investigation', *Journal of Retailing and ...*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0969698921000989>
8. Bibi, A, Bukhari, S, Sami, A, Irfan, A, & ... 2018, 'Effect of latest technology and social media on interpersonal communication on youth of Balochistan', *Journal of Managerial ...*, qurtuba.edu.pk, [https://www.qurtuba.edu.pk/jms/default_files/JMS/special_edition/3%20FMM/27%20\(AIC-FMM%202017\)%20475-490%20Arifa%20Bibi%20FMM-928.pdf](https://www.qurtuba.edu.pk/jms/default_files/JMS/special_edition/3%20FMM/27%20(AIC-FMM%202017)%20475-490%20Arifa%20Bibi%20FMM-928.pdf)
9. Chen, C.C. and Lin, Y.C., 2018. What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. *Telematics and Informatics*, 35(1), pp.293-303.
10. Fahd, F, & Sugiarto, Y 2015, 'Analisis Pengaruh Promosi Dan Atmosfer Gerai Terhadap Impulse Buying Melalui Emosi Positif Sebagai Variabel Intervening (Studi Pada Toko Busana Muslim ...)', eprints.undip.ac.id, <http://eprints.undip.ac.id/45737/>
11. Febrianty, P.A.T. and Yasa, N.N.K., 2020. The Effect Of The Store's Atmosphere, Emotional Shopping, And Shopping Lifestyle On Impulse Buying (Study On Miniso Retail Customers In Denpasar City). *American Journal Of Humanities And Social Sciences Research (Ajhssr)*, 4(11), pp.38-48.
12. Febrilia, I, & Warokka, A 2021, 'Consumer traits and situational factors: Exploring the consumer's online impulse buying in the pandemic time', *Social Sciences &Humanities Open*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S2590291121000784>
13. Gao, H., Chen, X., Gao, H. and Yu, B., 2022. Understanding Chinese Consumers' Livestreaming Impulsive Buying: An Stimulus-Organism-Response Perspective and the Mediating Role of Emotions and Zhong Yong Tendency. *Frontiers in Psychology*, 13.
14. Gumilang, WA, & Nurcahya, IK 2016, 'Pengaruh Price Discount Dan Store Atmosphere Terhadap Emotional Shopping Dan Impulse Buying', *E-jurnal ...*, download.garuda.kemdikbud.go.id, <http://download.garuda.kemdikbud.go.id/article.php?article=1368312&val=989&title=PENGARUH%20PRICE%20DISCOUNT%20DAN%20STORE%20ATMOSPHERE%20TERHADAP%20EMOTIONAL%20SHOPPING%20DAN%20IMPULSE%20BUYING>
15. Hadi, SP 2017, 'In search for sustainable coastal management: A case study of Semarang, Indonesia', *IOP Conference Series: Earth and Environmental ...*, iopscience.iop.org, <https://doi.org/10.1088/1755-1315/55/1/012054>

16. Hidayat, R, & Erika, R 2017, 'Pengaruhstore Atmosphere Dan Promosi Terhadap Shopping Emotion Dan Impulse Buying Pada Supermarket Halimah Lytech Homebatam Centre", *Inovbiz: Jurnal Inovasi Bisnis*, ejournal.polbeng.ac.id, <http://ejournal.polbeng.ac.id/index.php/IBP/article/view/175>
17. Hou, J., Shen, H. and Xu, F., 2021. A Model of Livestream Selling with Online Influencers. Available at SSRN 3896924.
18. Ittaqullah, N., Madjid, R. and Suleman, N.R., 2020. The effects of mobile marketing, discount, and lifestyle on consumers' impulse buying behavior in online marketplace. *International Journal of Scientific and Technology Research*, 9(3), pp.1569-1577.
19. Jalantina, D.I.K., 2019, October. The Effect of Price Discount and Store Atmosphere Against Impulse Buying with Shopping Emotion as an Intervening Variable in Consumers of Super Indo Retail Semarang. In *Proceeding: International Conference on Business, Economics and Governance (ICBEG)-ISBN 978-602-14119-3-3* (pp. 83-94).
20. Kotler, P, & Keller, KL 2016, 'A framework for marketing management', keyano.ca, https://www.keyano.ca/en/resourcesGeneral/academics/FALL18_MARK4465.pdf
21. Kurniawan, D 2013, 'Pengaruh promosi dan store atmosphere terhadap impulse buying dengan shopping emotion sebagai variabel intervening studi kasus di Matahari department store ...', *Jurnal Strategi Pemasaran*, publication.petra.ac.id, http://publication.petra.ac.id/index.php/manajemen_pemasaran/article/view/711
22. Kurniawati, D, & Restuti, S 2014, 'Pengaruh Sales Promotion Dan Store Atmosphere Terhadap Shopping Emotion Dan Impulse Buying Pada Giant Pekanbaru', *Jurnal Tepak Manajemen Bisnis*, jtmb.ejournal.unri.ac.id, <https://jtmb.ejournal.unri.ac.id/index.php/jtmb/article/view/2483>
23. Kwan, OG 2016, 'The Effect of Sales Promotion and Store Atmosphere on Impulse Buying with Positive Emotion as an Intervening Variable at Planet Sports Tunjungan ...', *Journal of Marketing Management*
24. Lanier, K 2017, '5 Things HR professionals need to know about generation Z: thought leaders share their views on the HR profession and its direction for the future', *Strategic HR review*, emerald.com, <https://doi.org/10.1108/SHR-08-2017-0051>
25. Larasati, K.L.D. and Yasa, N.N.K., 2021. The role of positive emotion in mediating the effect of price discount on impulse buying Indomaret customers in Denpasar city, Indonesia. *European Journal of Management and Marketing Studies*, 6(2).
26. Lee, C.H. and Chen, C.W., 2021. Impulse buying behaviors in live streaming commerce based on the stimulus-organism-response framework. *Information*, 12(6), p.241.
27. Lee, J.E. and Chen-Yu, J., 2017, January. The Role of Emotion in the Effect of Price Discount for Apparel Products. In *International Textile and Apparel Association Annual Conference Proceedings* (Vol. 74, No. 1). Iowa State University Digital Press.
28. Li, Y. and Peng, Y., 2021. What drives gift-giving intention in live streaming? The perspectives of emotional attachment and flow experience. *International Journal of Human–Computer Interaction*, 37(14), pp.1317-1329.
29. Lin, CT, Chen, CW, Wang, SJ, & Lin, CC 2018, 'The influence of impulse buying toward consumer loyalty in online shopping: a regulatory focus theory perspective', *Journal of Ambient Intelligence and ...*, Springer, <https://doi.org/10.1007/s12652-018-0935-8>
30. Lu, Z., Xia, H., Heo, S. and Wigdor, D., 2018, April. You watch, you give, and you engage: a study of live streaming practices in China. In *Proceedings of the 2018 CHI conference on human factors in computing systems* (pp. 1-13). Lucas, M, & Koff, E 2017, 'Body image, impulse buying, and the mediating role of negative affect', *Personality and Individual Differences*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0191886916310327>
31. Listriyani, L., 2019. The role of positive emotion in increasing impulse buying. *Management Analysis Journal*, 8(3), pp.312-320.

32. Martaleni, M., Hendrasto, F., Hidayat, N., Dzikri, A.A. and Yasa, N.N.K., 2022. Flash sale and online impulse buying: Mediation effect of emotions. *Innovative Marketing*, 18(2), p.49.
33. Maule, AJ, & Edland, AC 2002, 'The effects of time pressure on human judgement and decision making', *Decision making*, taylorfrancis.com, <https://doi.org/10.4324/9780203444399-23>
34. Murti, A, & Idris, I 2018, 'Analisis Faktor-Faktor Yang Mempengaruhi Emosi Positif Dan Dampaknya Terhadap Pembelian Impulsif Pada Air Asia Indonesia', *Diponegoro Journal of Management*, ejournal3.undip.ac.id, <https://ejournal3.undip.ac.id/index.php/djom/article/view/22391>
35. Nindyakirana, R.H. and Maftukhah, I., 2016. Membangun emosi positif melalui promosi penjualan dan lingkungan toko dampaknya terhadap impulse buying. *Management Analysis Journal*, 5(4).
36. Ozer, L, & Gultekin, B 2015, 'Pre-and post-purchase stage in impulse buying: The role of mood and satisfaction', *Journal of retailing and consumer services*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0969698914001441>
37. Pramesty, N.L.P.U.M. and Widagda, I.J.A., 2020. The Role of Positive Emotion Mediates Fashion Involvement on Impulse Buying. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 4(9), pp.1-8.
38. Prihastama, BV 2016, 'Pengaruh Price Discount Dan Bonus Pack Terhadap Impulse Buying Pada Pelanggan Minimarket (Studi Pada Pelanggan Minimarket Indomaret Jl ...)', *Fakultas Ekonomi. Universitas Negeri Yogyakarta*
39. Purnamasari, S, & Murwatiningsih, M 2015, 'Brand Image Sebagai Mediasi Pengaruh Promosi, Harga dan Sikap Konsumen Terhadap Keputusan Pembelian Jamu Nyonya Meneer di Semarang Timur', *Management Analysis* ..., journal.unnes.ac.id, <https://journal.unnes.ac.id/sju/index.php/maj/article/view/8878>
40. Ramdhan, W., Nofriadi, N. and Dahriansyah, D., 2022. Masyarakat Bijak dalam Memanfaatkan Sosial Media di Era Society 5.0. *Jurnal Pemberdayaan Sosial dan Teknologi Masyarakat*, 1(2), pp.159-164.
41. Rook, DW, & Fisher, RJ 1995, 'Normative influences on impulsive buying behavior', *Journal of consumer research*, academic.oup.com, <https://academic.oup.com/jcr/article-abstract/22/3/305/1791744>
42. Ruswanti, E 2016, 'The impact of the impulse buying dimension and cherry picking: an empirical study (Consumers Case Study in a mall in Central Jakarta)', *Journal of Indonesian Economy and Business*, core.ac.uk, <https://core.ac.uk/download/pdf/205146303.pdf>
43. Sa'adah, A.N., Rosma, A. and Aulia, D., 2022. Persepsi Generasi Z Terhadap Fitur Tiktok Shop Pada Aplikasi Tiktok. *TRANSEKONOMIKA: Akuntansi, Bisnis Dan Keuangan*, 2(5), pp.131-140.
44. Sarah, S. and Sobari, N., 2022, July. The effect of live streaming on purchase intention of e-commerce customers. In *Proceeding of the International Conference on Family Business and Entrepreneurship* (Vol. 3, No. 1).
45. Setiawan, I.K. and Ardani, I.G.A.K.S., 2022. The Role of Positive Emotions to Increase the Effect of Store Atmosphere and Discount on Impulse Buying. *European Journal of Business and Management Research*, 7(1), pp.219-223.
46. Safitri, A., Kusumastuti, E. and Haryanti, T., 2022. Pengaruh E-Service Quality Terhadap Kepuasan Konsumen Shopee Indonesia (Studi Pada Mahasiswa Di Kota Purwokerto). *Jurnal Pustaka Aktiva (Pusat Akses Kajian Akuntansi, Manajemen, Investasi, dan Valuta)*, 2(1), pp.12-20.
47. Safri, D.N. and Sudarwanto, T., 2022. PENGARUH COMPATIBILITY LIFESTYLE MILENIAL DAN PERAN ENDORSER INFLUENCER TERHADAP MINAT BELI PADA PENGGUNA "TIKTOK" SHOP. *Jurnal Riset Entrepreneurship*, 5(2), pp.10-17.
48. Torbenson, VE, Brodrick, EM, Mooij, MM de, & ... 2019, 'Randomized comparison of a reduced-visit prenatal care model enhanced with remote monitoring', *American journal of ...*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0002937819308105>

49. Turban, E, King, D, Lee, J, & Viehland, D 2004, 'Electronic Commerce: a managerial perspective 2004', academia.edu, <https://www.academia.edu/download/7523097/tech63574qalandry.pdf>
50. Venia, M., Marzuki, F. and Yuliniar, Y., 2021. Analisis Faktor Yang Mempengaruhi Perilaku Impulse Buying (Studi Kasus Pada Generasi Z Pengguna E-Commerce). *Konferensi Riset Nasional Ekonomi Manajemen dan Akuntansi*, 2(1), pp.929-941.
51. Wahyudi, S 2017, 'Pengaruh Price Discount Terhadap Impulse Buying', *Valuta*, journal.uir.ac.id, <https://journal.uir.ac.id/index.php/valuta/article/view/2080>
52. Wahyuni, ND 2017, 'Generasi Z Diprediksi Jadi Generasi Konsumtif, Apa Alasannya', *Liputan6. Com*
53. Wardi, Y., 2022. THE INFLUENCE OF LIVE SALE AND FLASH SALE ON REPURCHASE INTENTION IN THE NEW NORMAL ERA ON SHOPEE CUSTOMERS IN PADANG CITY. *Banking and Management Review*, 11(1), pp.1512-1525.
54. Wisesa, I.G.B.S. and Ardani, I.G.A.K.S., 2022. The Effect of Sales Promotion and Store Atmosphere Mediated by Positive Emotion on Impulse Buying for Customers in Bookstores. *European Journal of Business and Management Research*, 7(3), pp.63-66.
55. Wongkitrungrueng, A, & Assarut, N 2020, 'The role of live streaming in building consumer trust and engagement with social commerce sellers', *Journal of Business Research*, Elsevier, <https://www.sciencedirect.com/science/article/pii/S0148296318304168>
56. Wu, Y., Xin, L., Li, D., Yu, J. and Guo, J., 2021. How does scarcity promotion lead to impulse purchase in the online market? A field experiment. *Information & Management*, 58(1), p.103283.
57. Xu, Y. and Huang, J.S., 2014. Effects of price discounts and bonus packs on online impulse buying. *Social Behavior and Personality: an international journal*, 42(8), pp.1293-1302.
58. Yu, M., Chen, H. and Dou, Y., 2022. Just the Right Emotion: Exploring the Effects of Verbal and Facial Emotions in Live Streaming E-commerce. Available at SSRN 4141860.
59. Zahari, N.H.M., Azmi, N.N.N., Kamar, W.N.I.W.A. and Othman, M.S., 2021. Impact of live streaming on social media on impulse buying. *Asian Journal of Behavioural Sciences*, 3(1), pp.13-23.