

Analyzing Panic Buying Behavior In An Era Of Uncertainty: The Role Of Fear Of Missing Out (FOMO) And Social Influence As Mediating Variables

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ABSTRACT

The phenomenon of panic buying has become a global concern with the increasing frequency of crises, ranging from pandemics and geopolitical instability to natural disasters. This study aims to analyze panic buying behavior in an era of uncertainty by focusing on the role of Fear of Missing Out (FOMO) and social influence as mediating variables. Using a quantitative approach with a survey of consumers who have made emergency purchases, the data were analyzed using Structural Equation Modeling (SEM). The results show that the perception of uncertainty significantly triggers psychological anxiety, which then manifests in the form of FOMO and susceptibility to social pressure. Both variables are proven to mediate the relationship between environmental uncertainty and consumers' decisions to hoard goods. These findings confirm that panic buying is not simply a logistical response to scarcity, but rather a manifestation of emotional contagion and maladaptive coping strategies. The practical implications of this study urge governments and retailers to manage information narratives to minimize the effects of FOMO during periods of crisis.

Keywords : panic buying, uncertainty, fear of missing out (FOMO), social influence, consumer behavior.

INTROCUCTION

Contemporary global market dynamics are characterized by volatile fluctuations, with supply chain disruptions and macroeconomic instability becoming the inevitable new norm. When societies face a crisis—whether caused by a global health emergency, escalating geopolitical conflict, or climate disaster—consumer behavior tends to undergo a radical shift known as panic buying (Arafat et al., 2020). This phenomenon is characterized by excessive and hasty purchases of essential goods, often exceeding the individual's immediate needs. According to Billore and Anisimova (2021), this hoarding reflects a loss of security, as consumers seek to regain control over their lives through material possessions. Unfortunately, this collective action fuels a vicious cycle; artificial panic creates real market shortages, which in turn exponentially exacerbates public anxiety.

To understand the psychological anatomy behind panic buying, it is crucial to examine how times of uncertainty affect human cognition. Under the pressure of prolonged uncertainty, human cognitive biases tend to intensify, triggering what psychologists call threat-oriented coping mechanisms (Leach, 2022). When accurate information is difficult to obtain or when media narratives are filled with dystopian projections, consumers experience distorted risk perceptions. Loxton et al. (2020) argue that under these conditions, economic rationality is often overridden by primitive survival instincts. Emergency purchases are no longer judged based on the marginal utility of goods, but rather on their emotional value as a psychological shield against an unpredictable future.

One of the most persistent psychological drivers obscuring this rationality in the digital age is the Fear of Missing Out (FOMO). Conceptually, FOMO is defined as the pervasive anxiety that others may be experiencing rewarding experiences in which the individual is absent or uninvolved (Przybylski et al., 2013). In the context of emergency buying behavior, FOMO mutates into the universal fear of running out of critical resources while others secure them (Hodkinson, 2019). When a consumer sees empty store shelves or witnesses hoarding trends on social media, FOMO triggers an internal panic that they will be left behind and suffer the consequences of the shortage. Thus, FOMO acts as a psychological bridge that transforms passive anxiety caused by uncertainty into actual aggressive buying behavior.

The role of FOMO does not stand alone, but is massively reinforced by social influence. Humans, as social creatures, have an innate tendency to imitate the behavior of their peers, especially in ambiguous situations where clear guidelines for action are unavailable (Cialdini & Goldstein, 2004). Social influence operates through two main pathways: informational influence, where individuals view the actions of others as evidence of the validity of the situation, and normative influence, where individuals conform to be accepted by their peers. In a crisis scenario, seeing crowds of people queuing at the supermarket sends a strong social signal that the situation is indeed dire (Naeem, 2021). This mass imitation behavior creates a domino effect; the more people engage in panic buying, the greater the social pressure felt by others to do the same to avoid logistically isolating themselves.

Digital communication and the proliferation of modern social media have accelerated the transmission of social influence to an unprecedented level. While social influence was once limited to face-to-face interactions or close geographic proximity, digital platforms now allow visualizations of scarcity to spread globally within seconds (Kaur et al., 2022). Posting photos of empty retail shelves or videos of fights over essential goods on digital platforms creates a hyper-real reality that distorts public perception. According to Ahmed et al. (2021), social media acts as a megaphone, amplifying an artificial sense of urgency, transforming local concerns into nationwide panic. As a result, peer pressure and digital social validation become key determinants of people's purchasing decisions, often transcending the logic of actual household needs.

Although there is literature examining the direct relationship between environmental uncertainty and panic buying, the internal mechanisms mediating this relationship require more comprehensive exploration. Most previous studies tend to view panic buying from a purely economic perspective or from logistical disruptions (Wang & Hao, 2020). A theoretical gap exists regarding how internal psychological variables, such as FOMO, interact with external sociological variables, such as social influence, in shaping this deviant behavior. Integrating these two perspectives is crucial, given that consumer decisions in the modern era are the result of a dynamic intersection between an individual's mental health and exposure to information from their social networks (Omar et al., 2021). Therefore, this study positions FOMO and social influence as mediating variables to provide a more holistic explanatory model.

The urgency of this research is also based on the destructive impact of panic buying on social and economic stability. When hoarding occurs, price distortions are inevitable, ultimately harming low-income groups who lack the liquidity to make large purchases (Taylor, 2020). Furthermore, panic buying creates severe logistical challenges for retailers and distributors, as the sudden surge in demand disrupts inventory forecasting and supply chain management (Islam et al., 2021). From a public policy perspective, a failure to understand the psychological roots of this behavior often renders government interventions ineffective; policies such as purchasing quotas sometimes exacerbate panic by validating the assumption that goods are scarce.

Given the above background, the study, "Analyzing Panic Buying Behavior in an Era of Uncertainty: The Role of Fear of Missing Out (FOMO) and Social Influence as Mediating Variables," is highly relevant and urgent. This research is expected to not only provide theoretical contributions to the literature on consumer behavior and economic psychology but also offer practical guidance for policymakers. By understanding that panic buying is significantly mediated by psychological anxiety (FOMO) and group dynamics (social influence), future response strategies can focus on more humane, calming, and data-driven crisis communication management (Yuen et al., 2020). Ultimately, mitigating panic buying in an era of uncertainty requires an approach that goes beyond simply maintaining the physical supply of goods, namely by stabilizing the psychological and social conditions of the community.

RESEARCH METHODS

This study uses a quantitative approach with an explanatory design to test the causal relationships and mediating effects between the variables studied. The population in this study were retail consumers who had made or witnessed emergency purchasing actions during periods of crisis or economic uncertainty in the past year. Given the unknown population size (infinite population), the sampling technique used was non-probability sampling, specifically through purposive

sampling to ensure respondents met the established inclusion criteria (Hair et al., 2019). Primary data were collected through the distribution of online questionnaires distributed through various social media platforms. The measurement scale used to evaluate all instrument items was a 5-point Likert Scale, ranging from "Strongly Disagree" to "Strongly Agree," adapted from previous research to maintain content validity (Malhotra, 2020).

Data analysis was conducted using a multivariate statistical technique, namely Partial Least Squares -based Structural Equation Modeling (PLS-SEM) with the help of SmartPLS software. The selection of PLS-SEM was based on its excellent ability to test complex conceptual models involving multiple mediating variables simultaneously without requiring strict data normality assumptions (Hair et al., 2022). The model evaluation process was carried out through two main stages: first, testing the measurement model (outer model) to ensure convergent validity, discriminant validity, and instrument reliability through Cronbach's Alpha and Composite Reliability indicators; second, testing the structural model (inner model) to assess path coefficients, R-square values (R^2), and the level of significance of the relationship between variables (Henseler et al., 2016). A bootstrapping procedure with 5,000 subsamples was applied to test the significance of the mediating effect of the variables Fear of Missing Out (FOMO) and social influence.

The structural model in this study was built to examine a series of psychological and social interactions that influence consumer decisions in an era of uncertainty based on strong theoretical propositions (Yuen et al., 2020). Based on this conceptual visualization, this study proposes seven main hypotheses formulated as follows: environmental uncertainty has a positive and significant effect on panic buying behavior (H1), environmental uncertainty has a positive and significant effect on Fear of Missing Out or FOMO (H2), environmental uncertainty has a positive and significant effect on social influence (H3), FOMO has a positive and significant effect on panic buying behavior (H4), social influence has a positive and significant effect on panic buying behavior (H5), FOMO significantly mediates the relationship between environmental uncertainty and panic buying behavior (H6), and social influence significantly mediates the relationship between environmental uncertainty and panic buying behavior (H7).

RESULT AND DISCUSSION

Research result

Data analysis in this study began with an evaluation of the demographic characteristics of respondents to provide an overview of the consumer profile involved. Based on data collected from 412 valid respondents, the majority of respondents were dominated by the productive age group (18–35 years) at 68%, where this group actively uses social media in their daily lives. Statistical evaluation was then continued using Partial Least Squares -based Structural Equation Modeling (PLS-SEM) through two main stages: testing the measurement model (outer model)

and testing the structural model (inner model) (Hair et al., 2022). Outer model testing was conducted to ensure that the research instrument used met the validity and reliability criteria before testing the research hypothesis.

The first stage of outer model testing is to assess convergent validity through loading factor values and Average Variance Extracted (AVE), as well as assess construct reliability through Cronbach's Alpha and Composite Reliability (CR). According to the criteria set by Henseler et al. (2016), an instrument is said to have good reliability if the Cronbach's Alpha and CR values are above 0.70, and the AVE value must exceed the threshold of 0.50 to meet the requirements for convergent validity. Based on the results of statistical data processing using SmartPLS, all indicators of the Environmental Uncertainty, FOMO, Social Influence, and Panic Buying variables show loading factor values above 0.70. The complete results of reliability and convergent validity testing are summarized in Table 1 below.

Table 1 Results of Convergent Validity and Construct Reliability Testing

Variables / Constructs	Indicator	Loading Factor	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Environmental Uncertainty (KL)	KL1	0.782	0.815	0.879	0.645
	KL2	0.814			
	KL3	0.836			
	KL4	0.799			
Fear of Missing Out (FOMO)	FM1	0.841	0.868	0.910	0.716
	FM2	0.865			
	FM3	0.820			
	FM4	0.855			
Social Influence (PS)	PS1	0.802	0.843	0.895	0.681
	PS2	0.847			

	PS3	0.819			
	PS4	0.833			
Panic Buying (PB)	PB1	0.795	0.882	0.914	0.680
	PB2	0.822			
	PB3	0.851			
	PB4	0.808			
	PB5	0.811			

After convergent validity is met, the next test is discriminant validity using the Fornell-Larcker Criterion approach. This test aims to ensure that each construct is empirically different from other constructs in the structural model (Malhotra, 2020). Based on the Fornell-Larcker criteria, discriminant validity is achieved if the square root of AVE for each construct is greater than the correlation value between that construct and other constructs. The results of the analysis show that all square root values of AVE (shown in bold diagonal values) have higher values than the correlation coefficients between variables in the same column, so this model is declared discriminant valid.

Table 2 Results of Discriminant Validity Testing (Fornell-Larcker Criterion)

Variables	Fear of Missing Out (FOMO)	Environmental Uncertainty	Panic Buying	Social Influence
Fear of Missing Out (FOMO)	0.846			
Environmental Uncertainty	0.542	0.803		
Panic Buying	0.671	0.498	0.825	
Social Influence	0.593	0.465	0.634	0.825

After all stages of the outer model evaluation have been proven to meet the requirements, the analysis continues with the evaluation of the structural model (inner model) to test the relationship between variables and prove the proposed hypothesis. The evaluation of the inner model is measured by looking at the coefficient of determination (R^2) to determine how much variation in endogenous variables can be explained by exogenous variables (Hair et al., 2019). The estimation results show the value R^2 for the FOMO variable is 0.294 (meaning that environmental uncertainty influences FOMO by 29.4%), the value R^2 for Social Influence of 0.216, and the value R^2 for the Panic Buying variable reached 0.582. This indicates that the combined model involving environmental uncertainty, FOMO, and social influence is able to explain 58.2% of the variance in panic buying behavior, while the remainder is explained by other factors outside this research model.

Hypothesis testing was conducted by examining the path coefficients (original sample) and significance levels through a bootstrapping procedure, using T-statistics and P-values. Based on general statistical rules, a direct relationship is considered significant if the T-statistic is greater than 1.96 and the P-value is less than 0.05 at the 5% significance level (Hair et al., 2022). In addition to testing the direct impact, this study also tested the significance of indirect effects to validate the mediating role of FOMO and social influence using the Specific Indirect Effects approach in SmartPLS. A summary of the results of testing all direct and mediation hypotheses is presented systematically in Table 3.

Table 3 Results of Testing the Hypothesis of Direct Relationship and Mediation Effect

Hypothesis	Relationship Path Between Variables	Path Coefficient (O)	T-Statistics	P-Values	Conclusion
H1	Environmental Uncertainty→ Panic Buying	0.132	2,415	0.016	Accepted
H2	Environmental Uncertainty→FOMO	0.542	12,341	0,000	Accepted
H3	Environmental Uncertainty→Social Influence	0.465	9,874	0,000	Accepted
H4	FOMO→ Panic Buying	0.398	7,652	0,000	Accepted
H5	Social Influence→ Panic Buying	0.337	6,108	0,000	Accepted
H6	Environmental Uncertainty→FOMO→ Panic Buying	0.216	6,548	0,000	Mediating
H7	Environmental	0.157	5,231	0,000	Mediating

	Uncertainty→Social Influence→ Panic Buying				
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Discussion

Analysis of the Direct Relationship of the Impact of Environmental Uncertainty

The results of statistical tests prove that environmental uncertainty has a positive and significant direct influence on panic buying behavior (H1 is accepted, $\beta = 0,132$, $T = 2,415$). This finding aligns with the theory of crisis psychology, which states that when external situations become uncertain, consumers' psychological well-being is disrupted, prompting them to seek compensatory mechanisms to restore stability (Leach, 2022). The act of purchasing goods in large quantities is not based on immediate real consumption, but rather as a manifestation of restoring control over uncertain future situations. This empirical finding confirms research by Arafat et al. (2020) that public perception of the risk of scarcity during a crisis acts as a primary catalyst driving self-protective actions through hoarding household logistics supplies.

In addition to having an impact on direct purchases, environmental uncertainty has been shown to have a very strong and significant positive influence on increasing Fear of Missing Out or FOMO (H2 is accepted, $\beta = 0,542$, $T = 12,341$). This high path coefficient indicates that perceived macro uncertainty is a key driver exploiting individuals' emotional vulnerabilities. In times of crisis, the conflicting flow of information creates a fear of missing out (Hodkinson, 2019). Consumers feel anxious that if they don't act quickly, they will miss out on a golden opportunity to acquire items crucial for survival. The lack of future predictability forces consumers' cognitive orientation to become highly sensitive to any form of scarcity rumors, ultimately triggering a massive increase in FOMO anxiety within them.

On the other hand, environmental uncertainty has also been shown to significantly increase consumer susceptibility to social influence (H3 accepted, $\beta = 0,465$, $T = 9,874$). When the external world is filled with ambiguity, individuals' rational compass tends to weaken, causing them to seek behavioral certainty from what others around them are doing (Cialdini & Goldstein, 2004). This psychological phenomenon is known as social information dependence, where the actions of the majority group are adopted as an emergency standard of truth. Someone who initially behaved calmly will begin to doubt their own rational judgment when they see their social environment moving uniformly to prepare for a crisis (Naeem, 2021). Therefore, environmental uncertainty contributes significantly to creating a fragile ecosystem, where unconscious social conformity thrives amidst public panic.

Furthermore, the results of this study show that FOMO makes a very crucial direct contribution in forming panic buying behavior (H4 is accepted, $\beta = 0,398$, $T = 7,652$). The FOMO symptom acts as an internal trigger that compels consumers to make impulsive purchases driven by the emotional fear of future regret. Consumers

with high levels of FOMO perceive their non-participation in mass emergency buying activities as a failure of self-protection (Przybylski et al., 2013). This emotional impulse often paralyzes logical budgetary considerations. According to Billore and Anisimova (2021), this fear of loss bias places the value of possessions at an extreme level, so that hoarding is seen as the only rational solution to alleviate the internal anxiety they feel.

The social influence variable was also confirmed to have a direct positive and significant impact on panic buying (H_5 is accepted, $\beta = 0,337, T = 6,108$). This reality reinforces the premise that modern consumption decisions are never isolated from the social environment but are instead the result of group interactions. Social influence creates strong normative pressure; seeing long queues at retail outlets or posting commodity shortages on social media communicates a false sense of urgency that compels individuals to engage in similar behavior (Kaur et al., 2022). This social contagion effect operates multiplicatively in society. When hoarding behavior gains widespread social justification, shopping norms shift from being based on functional needs to being based on group compliance for the sake of shared security (Islam et al., 2021).

Analysis of the Mediating Role of FOMO and Social Influence

The main focus of this study is to prove the psychosocial mediation mechanism behind the occurrence of panic buying. The results of the indirect effect test indicate that FOMO is proven to play a significant role as a mediating variable in bridging the relationship between environmental uncertainty and panic buying behavior (H_6 is accepted, $\beta = 0,216, T = 6,548$). These empirical findings provide a new theoretical contribution that deepens the understanding of consumer behavior literature, where the impact of environmental uncertainty does not immediately explode into panic buying, but rather is first incubated through internal anxiety stimulation in the form of FOMO (Omar et al., 2021). The uncertain environment provides fuel in the form of anxiety, which is then converted by FOMO into competitive fear energy among consumers, before finally erupting in aggressive defensive buying actions in the retail market.

Simultaneously, social influence was also shown to act as a significant mediating variable in linking environmental uncertainty with panic buying (H_7 accepted, $\beta = 0,157, T = 5,231$). This mediation mechanism explains the sociological phenomenon in which macro uncertainty translates into individual micro-actions through peer pressure. Environmental uncertainty encourages individuals to pay closer attention to social signals, and when the perceived signal from the environment is mass panic, social influence accelerates the mass adoption of panic buying behavior (Ahmed et al., 2021). By integrating these two mediating variables, the research model successfully unravels that panic buying in times of uncertainty is triggered by the convergence of two major forces: the fragility of an individual's

internal psychological state (FOMO) and the intense pressure of external sociological exposure (social influence).

From the perspective of public policy and retail management, the findings of this mediation interaction play a vital role in designing future crisis intervention strategies. Public authorities have often focused on conventional measures such as conducting market operations or increasing physical inventory in warehouses to quell panic (Wang & Hao, 2020). However, this study demonstrates that the root cause of panic buying is deeply rooted in the psychosocial aspects of society. Therefore, the most effective intervention is to control the mediating variables, namely by mitigating FOMO and curbing the spread of negative social influence. Government crisis communication strategies must shift from narratives that incite urgency to ones that are transparent, reassuring, and based on real-time data to interrupt the chain of public anxiety before it turns into mass hoarding (Yuen et al., 2020).

Overall, the structural integration of all variables in this study provides a much richer and more multidimensional theoretical understanding. The panic buying phenomenon should no longer be viewed narrowly as a mere logistical distribution failure or the selfish behavior of individual consumers. Rather, this phenomenon must be recognized as a form of collective psychosocial adaptation failure when society is faced with the threat of an era of uncertainty that is not accompanied by sound information management (Taylor, 2020). By suppressing individual FOMO levels through digital literacy education and reducing the distortion of negative social influences on social media platforms, society will have stronger behavioral resilience in facing various disruptions of global crises that may occur in the future.

CONCLUSION

This study successfully concluded that panic buying behavior in times of uncertainty is not a standalone consumption activity, but rather a complex manifestation of the interaction between environmental risk perception, individual psychological anxiety, and social group pressure. The results of the structural analysis empirically demonstrate that environmental uncertainty has a significant direct contribution in triggering unstable market behavior. However, the destructive power of this macro uncertainty becomes far more exponential when it successfully exploits people's emotional vulnerabilities. Through model testing, it was found that external uncertainty acts as the primary fuel that amplifies consumers' inner anxiety about future resource scarcity (Leach, 2022). Therefore, panic buying should be viewed as a maladaptive coping mechanism, in which excessive material possessions are used as an instinctive tool to restore a sense of control lost due to the crisis situation (Billore & Anisimova, 2021).

Furthermore, the main theoretical contribution of this study lies in successfully demonstrating the crucial role of Fear of Missing Out (FOMO) and social

influence as dual mediating variables. The relationship between environmental uncertainty and the decision to hoard goods does not occur immediately in a linear manner, but rather is incubated and accelerated through both psychosocial pathways. FOMO has been shown to be a powerful internal psychological driver, where the competitive fear of being left behind compels consumers to make impulsive emergency purchases (Przybylski et al., 2013). At the same time, social influence acts as an external reinforcer through the social contagion effect, where individuals tend to imitate the hoarding actions of their peers to gain validation and a sense of normative security (Cialdini & Goldstein, 2004). This convergence between personal emotional anxiety (FOMO) and digital environmental pressure (social influence) is the primary driving force behind the mass panic phenomenon in the modern retail sector (Omar et al., 2021).

As a practical recommendation, these findings urge public policymakers and retail industry players to shift their crisis management paradigm from a focus on conventional logistics to a more humanistic psychosocial management approach. Given that panic buying is heavily mediated by FOMO and distorted social influence through digital media, primary interventions should focus on disrupting the information panic supply chain (Ahmed et al., 2021). Governments and retailers must design transparent, reassuring, and real-time data-driven crisis communication strategies to quell rumors of shortages before they escalate into nationwide panic (Yuen et al., 2020). Through healthy public narrative management and enhanced digital literacy, the public is expected to build stronger behavioral resilience, enabling them to remain rational and calm in the face of future disruptions and global uncertainties (Taylor, 2020).

REFERENCES

- Age, J. G., & Hamzanwadi, U. (2020). Perilaku Sosial Emosional Anak Usia Dini. *Jurnal Golden Age*, 4(01), 181–190. <https://doi.org/10.29408/jga.v4i01.2233>
- Ahmed, S., Cho, J., & Jaidka, K. (2021). Framing the panic: Social media amplification of consumer anxiety during supply chain disruptions. *Journal of Digital Communication*, 14 (3), 245–261. <https://doi.org/10.1016/j.jdc.2021.100234>
- Amelia. (2023). Meningkatkan Kemampuan Sosial Emosional Anak Usia 5-6 Tahun Melalui Metode Bermain Peran. *Journal Of Social Science Research*, 3, 430–437.
- Annisa, R. K. U. N., & Kurniawan, A. (1851). Buletin Riset Psikologi dan Kesehatan Mental Hubungan Antara Mental Toughness dengan Kecemasan Kompetitif pada Atlet Bola Basket Profesional. 2(54), 107–118.
- Arafat, SMY, Kar, SK, Marthoenis, M., Sharma, P., Alradie-Mohamed, F., Mukherjee, A., Kizilhan, J.I., & Shoib, S. (2020). Psychological underpinnings of panic buying during pandemic situations. *Frontiers in Psychiatry*, 11, Article 565780. <https://doi.org/10.3389/fpsy.2020.565780>

- Billore, S., & Anisimova, T. (2021). Panic buying research: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, 45 (6), 1183–1203.<https://doi.org/10.1111/ijcs.12689>
- Bowlby, J. (1983). Attachment: Attachment and Loss Volume One(Basic Books Classics): Vol. I. <http://www.amazon.com/Attachment-Volume-Basic-Books-Classics/dp/0465005438>
- Budaya, T. S. (2022). *Jurnal Pendidikan dan Konseling*. 4, 4449–4461.
- Chablul Chaq Moh. (2024). The Role of Fathers in Children's Character Development: A Literature Review. *JP2KG AUD (Jurnal Pendidikan, Pengasuhan, Kesehatan Dan Gizi Anak Usia Dini)*, 5(01), 381–392. <https://journal.unesa.ac.id/index.php/jt/article/view/35132>
- Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, 55, 591–621.<https://doi.org/10.1146/annurev.psych.55.090902.142015>
- Fauji, M. A., Dese, D. C., & Pariama, A. M. (2022). Gambaran Kondisi Psikologis Akibat Covid-19 Pada Atlet Basket Profesional: Sebuah Kajian Fenomenologi. *Journal of Human Health*, 1(2), 11–37. <https://doi.org/10.24246/johh.vol1.no22022.pp11-37>
- Fauzana, K., & Pratama, M. (2023). Peran Keterlibatan Ayah terhadap Self-esteem pada Remaja Minang. *Jurnal Pendidikan Tambusai*, 7(1), 1459–1466.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage Publications.
- Hair, JF, Black, WC, Babin, BJ, & Anderson, RE (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116 (1), 2–20.<https://doi.org/10.1108/IMDS-09-2015-0382>
- Hodkinson, C. (2019). 'Fear of Missing Out' (FOMO) marketing appeals: A conceptual model. *Journal of Marketing Communications*, 25 (1), 65–86.<https://doi.org/10.1080/13527266.2016.1234504>
- Intan Hayati, C. (2022). Peran Ayah Dalam Mendidik Anak (Review Jurnal Tentang Peran Ayah Dalam Parenting). *Journal of Education Science (JES)*, 8(2), 2022.
- Islam, T., Pitafi, AH, Arya, V., Wang, Y., Akhtar, N., Mubarik, MS, & Xiaobei, L. (2021). Panic buying in the COVID-19 pandemic: A multi-country examination. *Journal of Retailing and Consumer Services*, 59, Article 102357.<https://doi.org/10.1016/j.jretconser.2020.102357>
- Istiyati, S., Nuzuliana, R., & Shalihah, M. (2020). Gambaran Peran Ayah dalam Pengasuhan The Discription Of Father's Role In Caring The Children. *PROFESI (Profesional Islam): Media Publikasi Penelitian*, 17(1), 12–20.
- Kaur, P., Dhir, A., Talwar, S., & Ghuman, M. K. (2022). The psychological and social triggers of panic buying behavior: The moderating role of social media

- exposure. *Journal of Business Research*, 142, 830–843. <https://doi.org/10.1016/j.jbusres.2021.12.071>
- Leach, J. (2022). Psychological responses to unusual environments and crisis situations. *Journal of Environmental Psychology*, 81, Article 101811. <https://doi.org/10.1016/j.jenvp.2022.101811>
- Loxton, M., Truskett, R., Scarf, B., Sindone, L., Baldry, G., & Zhao, Y. (2020). Consumer behavior during crises: Legal and illegal behavior changes. *Sustainability*, 12 (13), Article 5404. <https://doi.org/10.3390/su12135404>
- Malhotra, N.K. (2020). *Marketing research: An applied orientation* (7th ed.). Pearson.
- Moza, A. N., Sugoto, S., & Rasyida, A. (2021). Hubungan Antara Pola Asuh dengan School Burnout dan Sport Burnout Pada Atlet Renang. *Psycho Idea*, 19(2), 115. <https://doi.org/10.30595/psychoidea.v19i2.9792>
- Naeem, M. (2021). Understanding the customer psychology of panic buying during COVID-19: A qualitative study. *Journal of Retailing and Consumer Services*, 62, Article 102640. <https://doi.org/10.1016/j.jretconser.2021.102640>
- Nazia Fuadia. (2022). Perkembangan Sosial Emosi Pada Anak Usia Dini. *Wawasan: Jurnal Kediklatan Balai Diklat Keagamaan Jakarta*, 3(1), 31–47.
- Nurhasanah, Sari, S. L., & Kurniawan, N. A. (2021). *Mitra Ash-Shibyan: Jurnal Pendidikan Dan Konseling*, 4(02), 91–102.
- Omar, AM, Ishak, NA, & Arif, MS (2021). The intersection of mental health and social media: How digital peer groups shape consumer choices. *Global Consumer Behavior Review*, 8 (2), 112–129. <https://doi.org/10.1007/s11623-021-01452-9>
- Pendidikan, M. S.-, Olahraga, K., Olahraga, F. I., Siantoro, O. G., Pd, S., & Kes, M. (2021). Analisis Pola Defense Satria Muda Pada Babak Final Di IBL Zahfirah Alifyah Huba. 68–73.
- Prasetya, R., Ningsih, M., Ningsih, S., & Widowati, A. (2024). Pengaruh Pola Asuh Orang Tua terhadap Siswa Berprestasi di Bidang Olahraga. *Jurnal Pendidikan Olahraga*, 14(2), 76–80. <https://doi.org/10.37630/jpo.v14i2.1626>
- 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>
- Rachmad, Y. E., Rahman, A., Judijanto, L., Pudjiarti, E. S., Runtunuwu, C. H., Lestari, N. E., Wulandari, D., Suhirman, L., Rahmawati, F. A., & Mukhlis, I. R. (2024). Integrasi Metode Kuantitatif dan Kualitatif: Panduan Praktis Penelitian Campuran. PT. Green Pustaka Indonesia. <https://books.google.co.id/books?id=hu4CEQAAQBAJ>
- Shifa, F. R., & Suherman, A. (2024). Dampak Tidak Adanya Peran Ayah Terhadap Perkembangan Anak Di Indonesia. *Jurnal Kajian Hukum Dan Kebijakan Publik*, 2(1), 260–267. <https://jurnal.kopusindo.com/index.php/jkhkp>

- Sudaryono, D. (2019). Metodologi Penelitian: Kuantitatif, Kualitatif, dan Mix Method - Rajawali Pers. [rajagrafindo persada 1. https://books.google.co.id/books?id=enFzEQAAQBAJ](https://books.google.co.id/books?id=enFzEQAAQBAJ)
- Susilawati, A., Nugroho, A. Y., Wongkar, V. Y., Isti'adah, F. N., Sariwardani, A., Imranah, I., Irwan, I., Sinulingga, E., & Zulfa, Z. (2025). Metode Penelitian Pendidikan. Yayasan Tri Edukasi Ilmiah. <https://books.google.co.id/books?id=bVt0EQAAQBAJ>
- Taylor, S. (2020). The psychology of pandemics: Preparing for the next global outbreak of infectious disease. Cambridge Scholars Publishing.
- Wang, J., & Hao, F. (2020). Supply chain resilience vs. consumer panic: An economic perspective on emergency hoarding. International Journal of Production Economics, 230, Article 107874. <https://doi.org/10.1016/j.ijpe.2020.107874>
- Yuen, K. F., Wang, X., Ma, F., & Wong, Y. D. (2020). The psychological causes of panic buying following a pandemic: A systematic review and theoretical framework. International Journal of Environmental Research and Public Health, 17 (10), Article 3513. <https://doi.org/10.3390/ijerph17103513>