

The Influence of Perceived Risk and Cognitive Attitudes Towards Persistent TikTok Weight Loss Advertisements on Consumer Purchasing Intentions in Malaysia

Diyana Nur Norazman^{1}, Noor Mayudia Mohd Mothar², Wardatul Hayat Adnan³, Yuana Iwan⁴, Fatimah Tajuddin⁵, Abdul Latiff Bin Hj. Jamaludin⁶*

^{1,2,3} Faculty of Communication and Media Studies, Universiti Teknologi MARA (UiTM), Shah Alam, Malaysia

⁴ Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah (UMS), Sabah, Malaysia

^{5,6} Faculty of Social Sciences & Liberal Arts, UCSI University, Malaysia

Corresponding author: Diyana Nur Norazman
Email: diyananurnorazman@gmail.com
DOI: <https://doi.org/10.61688/ajpbs.v7i1.511>

Article History

Received	Revised	Accepted	Published
March 16, 2026	May 20, 2026	May 31, 2026	June 30, 2026

ABSTRACT

This quantitative study examines the influence of perceived risk on consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia and investigates the moderating role of cognitive attitude. TikTok, a rapidly evolving platform, has emerged as a dominant advertising channel, particularly for weight-loss content targeted at young adults. Drawing on the AIDA model and User-Generated Content (UGC) theory, this paper conceptualizes a framework in which perceived risk influences consumers' safety, performance, and financial outcomes, while cognitive attitudes moderate how consumers interpret and respond to these advertisements. With persistent exposure to weight loss content on TikTok, perceived risk emerges as a stabilizing mechanism: alignment between brand values and visible practices, transparent communication, and relatable human elements such as user narratives or testimonials reinforce cognitive evaluation and emotional resonance. As a result, perceived risk shapes users' evaluation of advertising content and subsequently influences their intention to consider or purchase advertised products, while cognitive attitude moderates this relationship.

Keywords: TikTok, weight loss advertisements, perceived risk, cognitive attitudes, AIDA model, user-generated, Malaysia

How to Cite

Diyana Nur Norazman, Mohd Mothar, N. M., Hayat Adnan, W., Iwan, Y., Tajuddin, F., & Jamaludin, A. L. (2026). The influence of perceived risk and cognitive attitudes towards persistent TikTok weight loss advertisements on consumer purchasing intentions in Malaysia**. *The Asian Journal of Professional & Business Studies*, 7(1), 232-248. <https://doi.org/10.61688/ajpbs.v7i1.511>

Copyright © 2026 The Author(s)

Published by Universiti Poly-Tech Malaysia. This is an open access article under the Creative Commons Attribution (CC BY 4.0) license:

<https://creativecommons.org/licenses/by/4.0/legalcode>

1. INTRODUCTION

The rapid advancement of social media technologies has fundamentally transformed how health-related information is disseminated and consumed. Unlike traditional communication channels, contemporary social media platforms employ algorithm-driven recommendation systems that continuously personalize content based on users' behavioural patterns, creating highly immersive and persistent communication environments (Munro et al., 2024; Sohid et al., 2024; Ahmmad et al., 2025). Among these platforms, TikTok has emerged as one of the most influential digital ecosystems because its recommendation algorithm systematically curates short-form videos according to users' watch time, engagement behaviour, and interaction history, resulting in repeated exposure to highly personalised content (Zhou, 2024; Zannettou et al., 2024; Amir Hamzah et al., 2025). Within this ecosystem, weight-loss advertisements are continuously reinforced through algorithmic recommendations, exposing users to commercial promotions, influencer endorsements, user-generated transformation videos, and affiliate marketing content that collectively shape consumers' cognitive evaluations and purchasing behaviour (Ahmad et al., 2024; Alfian et al., 2024; Jain et al., 2025; Malik, 2025).

The persistent delivery of weight-loss advertisements presents a significant communication concern because persuasive messages are increasingly embedded within entertainment-oriented content rather than conventional advertising formats. Influencers frequently employ personal narratives, emotional vulnerability, and transformation stories to establish authenticity and develop parasocial relationships with audiences, making promotional messages appear more trustworthy and relatable (Balaban & Szabolcs, 2022; Adeane & Stasiak, 2024; Gerrath et al., 2024; Leite et al., 2024; Azhar et al., 2025). However, exaggerated and deceptive influencer advertising may also distort consumers' evaluation of promoted products (Ayar, 2024). At the same time, user-generated content (UGC), including testimonials, reviews, and before-and-after transformation videos, reinforces social validation by presenting commercial messages as authentic peer experiences rather than paid promotions (Udoka & Ikot, 2024; Lariba, 2024; Niazi, 2025). Consequently, repeated exposure to persuasive content increases message familiarity, reduces consumers' perceived uncertainty, and encourages favourable evaluations of weight-loss products despite limited scientific verification (Barari et al., 2025; Whang & Lee, 2025).

Perceived risk has long been recognised as a critical determinant of consumer decision-making because it reflects consumers' subjective assessment of the potential negative consequences associated with purchasing a product or service (Pang & Ismail, 2022; Handoyo, 2024; Syamsuar & Witasryah, 2025). In conventional online commerce, perceived risk primarily encompasses financial, performance, and safety uncertainties that discourage purchase behaviour. However, within TikTok's algorithm-driven advertising environment, risk perception extends beyond traditional transactional concerns. Persistent algorithmic exposure, misleading health claims, artificial intelligence-generated promotional content, exaggerated testimonials, and affiliate marketing practices can distort consumers' ability to objectively evaluate product credibility and potential health consequences (Pickett et al., 2023; Maulana & Marsasi, 2024; Jain et al., 2025). Rather than encouraging rational evaluation, repetitive algorithmic exposure creates familiarity with persuasive messages, increasing consumers' confidence in products while simultaneously diminishing their perception of risk.

Consumers' cognitive attitudes further condition the influence of perceived risk on purchasing intention. Cognitive attitude refers to an individual's capacity to critically evaluate information, assess message credibility, compare persuasive claims with existing knowledge, and resist manipulative communication strategies (Bowden, 2022; Xiu et al., 2024). Consumers with stronger cognitive attitudes are more likely to engage in systematic information processing by scrutinising advertising claims, verifying evidence, and considering potential risks before making purchasing decisions. In contrast, individuals with weaker cognitive attitudes tend to rely on heuristic cues, including influencer popularity, visual attractiveness, social proof, and emotional storytelling, which increase their susceptibility to persuasive advertising (Nilsson et al., 2023; Trisettiando & Ali, 2025). TikTok's rapid, highly visual, entertainment-oriented interface further intensifies this tendency by limiting consumers' cognitive resources and encouraging heuristic rather than analytical processing (Opara et al., 2025).

These issues are particularly relevant in Malaysia, where TikTok has become an important platform for promoting health and weight-loss products to young adults. Malaysian consumers aged 18–34 show high engagement with influencer-endorsed health products, largely driven by community validation, social proof, and algorithmically curated recommendations (Sitorus et al., 2024; Ibrahim et al., 2025). At the same time, the increasing prevalence of obesity has intensified demand for weight-management solutions, resulting in the widespread promotion of dietary supplements,

injectable medications, bariatric procedures, and other commercial weight-loss interventions through social media platforms (Hakim, 2025; Peng et al., 2025; Hess et al., 2025; Malik, 2025). The proliferation of misleading health claims, unverified product endorsements, and AI-generated promotional content has raised growing concerns about consumer safety, ethical advertising practices, and the effectiveness of digital health communication (BERNAMA, 2024; Li et al., 2025).

Although previous studies have established that perceived risk influences consumer purchasing behaviour in online environments (Pang & Ismail, 2022; Handoyo, 2024; Syamsuar & Witarsyah, 2025), most investigations have examined perceived risk within conventional e-commerce settings or treated it as an independent predictor of purchasing intention. Limited research has examined how persistent algorithm-driven exposure to TikTok weight-loss advertisements shapes consumers' perceived risk and how cognitive attitude moderates the relationship between perceived risk and purchasing intention, particularly within the Malaysian context (Jain et al., 2025; Cao & Nguyen, 2025). Addressing this gap is essential to extend communication theory in algorithm-driven social commerce and provide practical insights for policymakers, marketers, and public health practitioners seeking to promote responsible digital advertising and strengthen media literacy among Malaysian consumers. Guided by the AIDA model and User-Generated Content (UGC) theory, this study aims to examine the influence of perceived risk on consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia and to investigate the moderating role of cognitive attitude in this relationship.

2. LITERATURE REVIEW

2.1. Perceived Risk

The literature consistently identifies perceived risk as a fundamental determinant of consumer purchasing behaviour, particularly within digital commerce where uncertainty surrounding product quality, credibility, and performance is considerably greater than in traditional retail environments (Pang & Ismail, 2022; Handoyo, 2024; Syamsuar & Witarsyah, 2025). While earlier studies primarily conceptualised perceived risk in terms of financial, functional, and performance uncertainties, more recent research suggests that the emergence of social commerce platforms has expanded the construct to include psychological, social, and health-related risks associated with persuasive digital communication (Knight, 2023; Dao & Phuong, 2025).

Within TikTok's algorithm-driven ecosystem, persistent exposure to weight-loss advertisements, influencer endorsements, and user-generated transformation videos has fundamentally changed how consumers evaluate product-related risks (Gak et al., 2022). Repeated algorithmic exposure increases familiarity with persuasive messages, which may reduce consumers' critical assessment of advertising claims despite limited scientific evidence supporting product effectiveness (Jain et al., 2025; Malik, 2025; Whang & Lee, 2025). Furthermore, User-Generated Content (UGC) has emerged as an important mechanism that reduces perceived uncertainty by providing authentic peer experiences through reviews, testimonials, photographs, and transformation videos, thereby increasing consumer confidence during product evaluation (Udoka & Ikot, 2024; Lariba, 2024; Barari et al., 2025).

Nevertheless, the growing commercialisation of TikTok through sponsored content, affiliate marketing, and AI-generated testimonials has increasingly blurred the distinction between genuine consumer experiences and promotional communication, making it more difficult for consumers to accurately evaluate advertising credibility (Azhar et al., 2025; Opara et al., 2025). Consequently, although perceived risk remains a significant predictor of purchasing behaviour, existing research has largely examined the construct from conventional e-commerce or general social commerce perspectives. Limited empirical evidence explains how perceived risk operates within persistent TikTok weight-loss advertising or how consumers' cognitive attitudes influence the relationship between perceived risk and purchasing intention, particularly in Malaysia. Addressing these gaps provides the theoretical and empirical justification for the present study.

2.2. Cognitive Attitude

Cognitive attitude has become an increasingly important construct in understanding consumer behaviour within digital advertising because it determines how individuals evaluate, interpret, and respond to persuasive information before making purchasing decisions. Rather than functioning as a simple cognitive trait, cognitive attitude reflects consumers' ability to critically assess message credibility, compare advertising claims with existing knowledge, and distinguish factual information from persuasive communication. In social media environments such as TikTok, this evaluative process matters because consumers are continuously exposed to algorithmically curated advertisements that blend commercial promotions with entertainment and user-generated content (Minadeo & Pope, 2022). Consequently, purchasing decisions are influenced not only by advertising content itself but also by consumers' cognitive capacity to process and evaluate that information.

Existing studies suggest that individuals with stronger cognitive attitudes are more likely to engage in systematic information processing by verifying advertising claims, evaluating potential risks, and seeking credible sources before making purchase decisions. Conversely, consumers with weaker cognitive attitudes tend to rely on heuristic cues, including influencer credibility, popularity, emotional appeals, and social proof, which may increase their susceptibility to persuasive advertising (Tripopsakul & Hoonsopon, 2025; Hendriana et al., 2022; Elsholiha et al., 2023). Although emotional engagement can enhance message acceptance, advertisements that conflict with consumers' prior knowledge often generate cognitive dissonance, reducing persuasion effectiveness and encouraging greater scrutiny of advertising messages (Chungcheh & Hossain, 2024; Rocha-Vilca et al., 2024; Klug et al., 2021).

Despite the growing body of research on cognitive processing in digital marketing, most studies have examined cognitive attitude as an independent predictor of consumer behaviour rather than as a moderating mechanism. Consequently, empirical evidence remains limited on how cognitive attitude shapes the relationship between perceived risk and purchase intention in persistent TikTok weight-loss advertising. This limitation is particularly evident in the Malaysian context, where repeated exposure to algorithm-driven health-related advertisements requires consumers to continuously evaluate message credibility before making purchasing decisions. Therefore, examining the moderating role of cognitive attitude provides a more comprehensive understanding of why consumers exposed to similar levels of perceived risk may demonstrate different purchasing intentions, thereby extending existing knowledge on consumer behaviour in social commerce (Pickett et al., 2023).

2.3. Purchasing Intention

Purchasing intention represents consumers' conscious willingness to purchase a product after evaluating available information, perceived benefits, and potential risks associated with the decision. Within TikTok's social commerce environment, purchasing intention is influenced not only by product characteristics but also by algorithmically curated communication that continuously exposes consumers to persuasive advertising, influencer endorsements, and user-generated content. This persistent exposure creates repeated opportunities for consumers to evaluate promotional messages, increasing both message familiarity and behavioural intention.

Existing studies indicate that purchasing intention is shaped by a combination of informational and psychological factors. Social proof, visual demonstrations, and customer testimonials reduce uncertainty by providing observable evidence of product effectiveness, thereby increasing consumers' confidence in purchasing decisions (Spasova, 2023; Oyama & Nakano, 2025). However, exaggerated transformation stories, misleading testimonials, and unrealistic advertising claims may also generate skepticism and reduce trust when consumers perceive inconsistencies between promotional messages and expected outcomes (Masuda et al., 2021; Lim & Tan, 2024; Hidayah et al., 2024). Similarly, interactive platform features and emotionally engaging narratives strengthen consumer involvement and purchase consideration, yet they may simultaneously increase consumers' psychological investment and susceptibility to persuasive communication (Teo et al., 2023; Zamzuri et al., 2024; Vrtana & Krizanova, 2023; Gega et al., 2024). Urgency cues and fear of missing out (FOMO) further accelerate purchase decisions by encouraging immediate action while limiting consumers' opportunity to critically evaluate advertising claims (Alzaben et al., 2022; Tresna, 2025; Ngo et al., 2025; Cai & Ambad, 2025).

Despite these findings, purchasing intention within TikTok weight-loss advertising remains insufficiently understood because previous studies have largely examined isolated persuasive factors rather than considering how consumers' perception of risk influences behavioural intentions. Furthermore, limited research has examined whether cognitive attitude alters the relationship between perceived risk and purchasing intention in persistent, algorithm-driven advertising environments. Addressing this gap provides a more comprehensive understanding of consumer decision-making among Malaysian TikTok users and strengthens the theoretical explanation of purchasing intention in contemporary social commerce.

3. UNDERPINNING THEORY

3.1. AIDA Model

The AIDA model, comprising Attention, Interest, Desire, and Action, is one of the most widely applied frameworks for explaining how advertising influences consumer decision-making. The model proposes that consumers progress through a sequence of cognitive and behavioural stages before making a purchase decision. Although originally developed for traditional advertising, AIDA remains highly relevant in digital marketing because social media platforms continuously expose consumers to persuasive messages that influence cognitive evaluation and purchasing behaviour.

Within TikTok's algorithm-driven environment, the Attention stage is achieved through persistent exposure to weight-loss advertisements repeatedly delivered via personalised recommendations. The platform's recommendation algorithm increases message visibility and familiarity by continuously presenting similar content based on users' viewing behaviour and engagement patterns (Whang & Lee, 2025; Jain et al., 2025). As consumers move to the Interest stage, they begin evaluating the credibility, relevance, and potential benefits of the advertised products. At this stage, perceived risk becomes a critical determinant because consumers assess whether product claims are trustworthy, safe, and likely to deliver the promised outcomes (Pang & Ismail, 2022; Handoyo, 2024).

The Desire stage reflects consumers' internal evaluation of whether the perceived benefits outweigh potential risks. This evaluation is influenced by cognitive attitude, which determines whether consumers critically analyse advertising claims or rely on heuristic cues such as influencer credibility, testimonials, and social proof (Bowden, 2022; Xiu et al., 2024). Consumers with stronger cognitive attitudes are more likely to verify information before developing purchase desire, whereas those with weaker cognitive attitudes are more susceptible to persuasive advertising. Finally, the Action stage reflects consumers' purchasing intention after evaluating advertising messages. Accordingly, the AIDA model provides a suitable theoretical foundation for explaining how perceived risk influences purchasing intention and how cognitive attitude moderates this relationship within persistent TikTok weight-loss advertising.

3.2. User-Generated Content (UGC) Theory

User-Generated Content (UGC) theory explains how consumer-created content influences information processing, trust formation, and purchasing behaviour within digital environments. Unlike firm-generated advertising, UGC comprises reviews, testimonials, ratings, photographs, videos, and personal experiences voluntarily shared by consumers through online platforms (Sokolova & Kefi, 2020). Because UGC is generally perceived as independent from commercial interests, consumers often regard it as more authentic, credible, and trustworthy than traditional advertising (Belanche et al., 2021; Barari et al., 2025). Consequently, UGC has become an influential source of information in social commerce, particularly for products involving high uncertainty, such as health and weight-loss products.

Within TikTok, UGC is embedded throughout the platform through transformation videos, product demonstrations, customer testimonials, comments, and user reviews. These forms of peer-generated communication provide consumers with experiential information that reduces uncertainty about product effectiveness and safety before they make purchase decisions (Udoka & Ikot, 2024; Lariba, 2024; Niazi, 2025). Because perceived risk reflects consumers' fear or uncertainty about a purchase outcome, authentic UGC helps reduce information asymmetry by letting potential buyers evaluate

products based on previous users' experiences rather than relying solely on marketer-generated claims (Barari et al., 2025). Consequently, credible UGC can reduce perceived risk and strengthen purchasing intention.

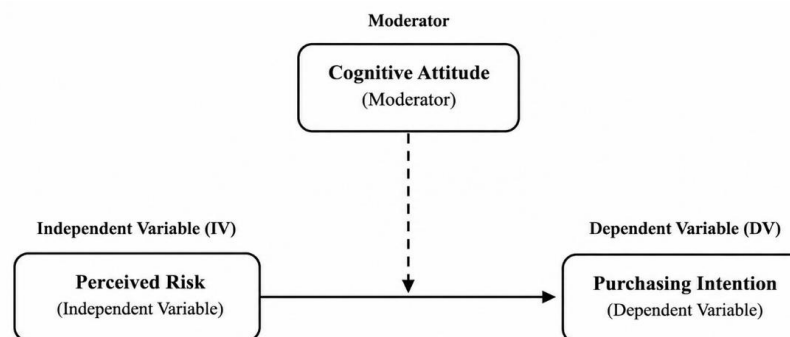
However, the rapid commercialisation of TikTok has challenged the traditional assumptions of UGC theory. Sponsored content, affiliate marketing, paid product endorsements, and AI-generated testimonials have increasingly blurred the distinction between authentic user experiences and commercial promotion (Azhar et al., 2025; Opara et al., 2025). As a result, consumers can no longer assume that all peer-generated content is genuine, making cognitive evaluation increasingly important when assessing advertising credibility. Consumers with stronger cognitive attitudes are more likely to distinguish authentic experiences from persuasive marketing, whereas those with weaker cognitive attitudes may rely on superficial cues when evaluating product information. Therefore, UGC theory provides an appropriate theoretical foundation for explaining how perceived risk influences purchasing intention and why cognitive attitude moderates this relationship within persistent TikTok weight-loss advertising.

3.3. Conceptual Framework

This study's conceptual framework integrates the AIDA model and User-Generated Content (UGC) theory to explain consumers' purchasing intentions toward persistent TikTok weight-loss advertisements. The framework proposes that perceived risk is the independent variable influencing consumers' purchasing intention, while cognitive attitude moderates the strength of this relationship. Within TikTok's algorithm-driven environment, consumers are continuously exposed to persuasive advertising messages through influencer endorsements, sponsored content, and user-generated content, which shape their perceptions of product-related risks before they decide to purchase.

Consistent with the AIDA model, repeated exposure to persuasive advertising captures consumers' attention and stimulates interest in weight-loss products. During this evaluation process, consumers assess the credibility, safety, and reliability of advertising claims, forming their risk perceptions before developing purchase intentions. However, consumers do not evaluate advertising information uniformly. Guided by UGC theory, customer reviews, testimonials, transformation videos, and other peer-generated content provide additional information that may reduce uncertainty and influence consumers' evaluation of advertising claims. The extent to which consumers rely on such information depends on their cognitive attitude. Individuals with stronger cognitive attitudes are more likely to critically evaluate advertising credibility and distinguish authentic experiences from persuasive marketing, whereas those with weaker cognitive attitudes may rely on heuristic cues, making them more susceptible to persuasive advertising. Consequently, the framework proposes that cognitive attitude moderates the relationship between perceived risk and purchasing intention by influencing how consumers interpret and evaluate advertising messages within persistent TikTok weight-loss advertising.

Figure 1 Conceptual Framework



4. SIGNIFICANCE OF THE STUDY

4.1. Policymakers and Regulatory Authorities

This study provides valuable empirical evidence for policymakers and regulatory authorities, including Malaysia's Ministry of Health (Kementerian Kesihatan Malaysia, KKM), the Malaysian Communications and Multimedia Commission (MCMC), and the Ministry of Domestic Trade and Cost of Living (Kementerian Perdagangan Dalam Negeri dan Kos Sara Hidup, KPDN). The findings show that perceived risk significantly influences consumers' intention to purchase persistent TikTok weight-loss advertisements. These insights can support stronger policies governing digital advertising, influencer marketing, and online health-product promotions. The study also highlights the need for clearer advertising disclosures, stricter monitoring of misleading health claims, and improved consumer protection initiatives to reduce the dissemination of deceptive weight-loss advertising on social media platforms.

4.2. Media Literacy

This study's findings advance digital media literacy by showing the importance of cognitive attitude in shaping consumers' evaluation of persistent TikTok weight-loss advertisements. As consumers are increasingly exposed to algorithm-driven promotional content, influencer endorsements, and user-generated content, stronger media literacy skills can help them critically assess advertising claims, identify misleading or exaggerated health information, and evaluate potential risks before making purchasing decisions. These findings provide valuable evidence for government agencies such as the Ministry of Health Malaysia (KKM), the Malaysian Communications and Multimedia Commission (MCMC), the Ministry of Domestic Trade and Cost of Living (KPDN), and the Ministry of Education (KPM) to develop digital media literacy programmes, consumer awareness campaigns, and educational initiatives that promote critical evaluation of health-related advertising on social media platforms. Such initiatives may strengthen consumer protection, encourage informed purchasing decisions, and foster a more responsible digital advertising ecosystem.

4.3. Theoretical Contributions

This study contributes to the theoretical advancement of digital advertising and consumer behaviour by extending the application of the AIDA Model and User-Generated Content (UGC) Theory within the context of persistent TikTok weight-loss advertisements. While previous studies have primarily examined these theories in conventional social media marketing or e-commerce settings, this study demonstrates how perceived risk influences consumers' progression through the decision-making process in an algorithm-driven social media environment. The findings confirm that higher perceived risk reduces consumers' purchasing intention, supporting the AIDA model by showing that risk perceptions can interrupt consumers' progression from the Interest and Desire stages to the Action stage.

Furthermore, this study extends UGC Theory by demonstrating that cognitive attitude moderates the relationship between perceived risk and purchasing intention. Rather than relying solely on user-generated content to reduce uncertainty, consumers' cognitive evaluation determines how they interpret advertising claims, influencer endorsements, and peer-generated information before making purchase decisions. This finding provides a more comprehensive theoretical explanation of consumer behaviour by integrating risk perception with cognitive processing in social commerce. Consequently, the study enriches the literature on digital advertising, social commerce, and health-related consumer behaviour by proposing a theoretically integrated framework that explains purchasing intention within persistent algorithm-driven advertising environments.

5. METHODOLOGY

This study employed a quantitative, non-experimental survey design to examine the influence of perceived risk on consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia and the moderating role of cognitive attitude. A quantitative approach was selected because it enables the empirical examination of relationships among variables using statistical analysis. Data were collected through a structured online questionnaire

administered to Malaysian TikTok users previously exposed to weight-loss advertisements. The study targeted users aged 18-34 years, reflecting the platform's dominant user demographic and the segment most frequently exposed to health- and weight-related promotional content. The final sample comprised 384 valid respondents, consistent with the minimum sample size recommended by Krejcie and Morgan (1970) for large populations. Researchers recruited respondents through TikTok using purposive sampling based on their prior exposure to persistent weight-loss advertising content. Data collection continued until the predetermined sample size was achieved.

The questionnaire consisted of four sections. Section A collected respondents' demographic information, while Sections B, C, and D measured perceived risk, cognitive attitude, and purchasing intention, respectively. Measurement items were adapted from validated scales reported in previous studies and contextualised to persistent TikTok weight-loss advertisements. All items were assessed using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Prior to hypothesis testing, the data were screened for completeness and reliability. Internal consistency was evaluated using Cronbach's alpha; all constructs exceeded the recommended threshold of 0.70, indicating satisfactory reliability. Statistical analyses were conducted using IBM SPSS Statistics Version 28. Descriptive statistics summarised respondents' demographic characteristics, while hierarchical multiple regression examined the direct effect of perceived risk on purchasing intention and the moderating effect of cognitive attitude.

6. FINDINGS AND DISCUSSION

Table 1 Factor analysis and reliability of perceived risk, cognitive attitude, and purchasing intention.

Construct	Key Dimensions	Factor Loadings	KMO	Bartlett's Test	Cronbach's α	Composite Reliability	Variance Explained
Perceived Risk	Financial risk, safety, performance uncertainty	0.66–0.89	0.91	$p < .001$	0.865	0.881	68.2%
Cognitive Attitude	Knowledge, self-disassociation, risk-to-ability	0.68–0.88	0.88	$p < .001$	0.926	0.935	74.0%
Purchasing Intention	Desire, intention, likelihood of purchase	0.73–0.94	0.91	$p < .001$	0.931	0.942	84.0%

Table 1 presents the measurement model assessment for the three study constructs. All factor loadings exceeded the recommended threshold of 0.60, indicating satisfactory indicator reliability. The Kaiser-Meyer-Olkin (KMO) values ranged from 0.88 to 0.91, confirming adequate sampling adequacy, while Bartlett's Test of Sphericity was statistically significant ($p < 0.001$) for all constructs, supporting the suitability of the data for factor analysis. Cronbach's alpha values ranged from 0.865 to 0.931, and Composite Reliability values ranged from 0.881 to 0.942, demonstrating good to excellent internal consistency. Furthermore, the explained variance exceeded the recommended 50% threshold for all constructs, confirming satisfactory construct validity and reliability before hypothesis testing.

H1: Perceived risk significantly influences consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia.

The results of the hierarchical multiple regression analysis supported H1, indicating that perceived risk significantly influenced consumers' purchasing intention towards persistent TikTok weight-loss advertisements ($\beta = -0.143$, $t = -2.915$, $p < .05$). The unstandardized regression coefficient ($B = -0.184$) indicated that a one-unit increase in perceived risk resulted in a 0.184-unit decrease in purchasing intention. The negative regression coefficient shows an inverse relationship between perceived risk and purchasing intention, suggesting that consumers who perceived higher uncertainty about product safety, effectiveness, financial consequences, and advertising credibility were less likely to purchase weight-loss products promoted on TikTok. These findings indicate that perceived risk remains a significant predictor of purchasing intention,

confirming that higher perceived risk reduces consumers' willingness to purchase products advertised through persistent TikTok weight-loss advertisements.

H2: Cognitive attitude significantly moderates the relationship between perceived risk and consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia.

The moderation analysis supported H2, demonstrating that cognitive attitude significantly moderated the relationship between perceived risk and purchasing intention. The interaction effect was positive ($B = 0.097$), indicating that cognitive attitude weakened the negative influence of perceived risk on purchasing intention. Bootstrap analysis further confirmed the robustness of the moderation effect, with the 95% confidence interval ranging from 0.007 to 0.187 and excluding zero. Furthermore, the simple slope analysis showed that under high levels of cognitive attitude, the negative relationship between perceived risk and purchasing intention became statistically non-significant ($B = -0.087$, $p > .05$). These findings indicate that consumers with stronger cognitive attitudes were less influenced by perceived risk when forming purchasing intentions towards persistent TikTok weight-loss advertisements, confirming that cognitive attitude significantly buffered the adverse effect of perceived risk.

7. CONCLUSION

This study examined the influence of perceived risk on consumers' purchasing intention towards persistent TikTok weight-loss advertisements in Malaysia and the moderating role of cognitive attitude. The findings demonstrated that perceived risk significantly and negatively influenced purchasing intention, indicating that consumers who perceived greater uncertainty regarding product safety, effectiveness, financial consequences, and advertising credibility were less likely to purchase weight-loss products promoted on TikTok. Furthermore, cognitive attitude significantly moderated this relationship by reducing the negative influence of perceived risk, suggesting that consumers with stronger cognitive evaluations were better able to assess advertising information and make purchase decisions despite perceived uncertainties.

The study contributes to the digital advertising literature by extending the application of the AIDA model and User-Generated Content (UGC) Theory within the context of persistent TikTok weight-loss advertising. By demonstrating that cognitive attitude alters the relationship between perceived risk and purchasing intention, the study provides a more comprehensive understanding of how consumers process persuasive health-related advertising in algorithm-driven social media environments. These findings also enrich social commerce research by highlighting the importance of cognitive evaluation when consumers are repeatedly exposed to influencer marketing and user-generated content.

From a practical perspective, marketers and content creators should prioritise transparent communication, accurate product information, and authentic user-generated content to minimise consumers' perceptions of risk and enhance purchasing intention. Policymakers and platform regulators may also consider strengthening advertising transparency and disclosure requirements to protect consumers from misleading weight-loss promotions.

This study is limited to Malaysian TikTok users and focuses exclusively on persistent weight-loss advertisements. Future research may examine other social media platforms, product categories, or demographic groups to determine whether the observed relationships remain consistent across different digital marketing contexts. Additionally, future studies could investigate other psychological mechanisms, such as trust, perceived credibility, or digital health literacy, to further explain consumer decision-making in social commerce environments.

8. ACKNOWLEDGEMENT

The authors sincerely thank all respondents who voluntarily participated in this study and generously shared their time and experiences. The authors also acknowledge the valuable support provided by their affiliated institution in facilitating this research. We thank our colleagues, research assistants, and academic peers whose constructive feedback and encouragement helped complete this study. The authors are deeply grateful to their families and friends for their unwavering encouragement, patience, and understanding throughout the research process. Finally, we sincerely thank the

editors and anonymous reviewers for their insightful comments and constructive suggestions, which have significantly enhanced the quality and rigor of this manuscript.

9. CONFLICT OF INTEREST

This article has not been published previously and is not under consideration for publication elsewhere. This publication has been approved by all authors for publication and has not been published elsewhere, printed or electronically, in the same form or in any other language without the written consent of the copyright-holder.

10. AUTHOR CONTRIBUTION STATEMENT

Diyana Nur Norazman contributed to the conceptualization, research design, and preparation of the original manuscript. Noor Mayudia Mohd Mothar contributed to supervision, critical review, and editing. Wardatul Hayat Adnan and Yuana Iwan contributed to supervision, critical review, and refinement of the manuscript. Fatimah Tajuddin and Abdul Latiff Bin Hj. Jamaludin contributed to reviewing, validating, and refining the manuscript. All authors reviewed and approved the final version of the manuscript and agreed to be accountable for its content.

11. ETHICS STATEMENT

This study followed established ethical principles for research involving human participants. Participation was voluntary, and all respondents were informed of the study's purpose before taking part in the survey. All participants provided informed consent before data collection. Participants were assured that their responses would remain confidential and anonymous and would be used solely for academic and research purposes.

REFERENCES

- Adeane, E., & Stasiak, K. (2024). "It's really hard to strike a balance": The role of digital influencers in shaping youth mental health. *Digital Health*, 10, 20552076241288059. <https://doi.org/10.1177/20552076241288059>
- Ahmad, N. A., Esa, N. E. Y., Rahman, A. A., Haron, H., Nazmi, F. M., & Rasak, N. T. S. (2024). TikTok's impact on consumer behaviour: A conceptual reviews. *Advanced International Journal of Business Entrepreneurship and SMEs*, 6(20), 221–227. <https://doi.org/10.35631/aijbes.620019>
- Ahmmad, M., Shahzad, K., Iqbal, A., & Latif, M. (2025). Trap of social media algorithms: A systematic review of research on filter bubbles, echo chambers, and their impact on youth. *Societies*, 15(11), 301. <https://doi.org/10.3390/soc15110301>
- Alfian, N. B. K., Jamri, M. H., Ridzuan, A. R., Ismail, N., Khairuddin, K., Hassan, M. S., & Hashim, N. H. (2024). A paradigm shift: TikTok's impact on social media marketing strategies. *International Journal of Research and Innovation in Social Science*, 8(9), 3001–3009. <https://doi.org/10.47772/ijriss.2024.8090249>
- Alzaben, A., & Alharthi, M. (2022). The use of social media to search for weight reduction information: Assessment of the perception among a sample of Saudi adults. *Digital Health*, 8, 20552076221136939. <https://doi.org/10.1177/20552076221136939>

- Amir Hamzah, S. K., Abdul Aziz, A., & Mohamed, S. (2025). Behavioural influence of TikTok's algorithm recommendations on users' engagement and users' self-persuasion. *ESTEEM Journal of Social Sciences and Humanities*, 9(1), 144–162. <https://doi.org/10.24191/ejssh.v9i1.5637>
- Ayar, İ. (2024). The impact of exaggerated and deceptive influencer advertising and influencer attractiveness on consumer purchase intentions. *İktisadi İdari Ve Siyasal Araştırmalar Dergisi*, 9(25), 837–853. <https://doi.org/10.25204/iktisad.1480293>
- Azhar, S. A., Mohd Yusof, Y. L., & Harun, Z. F. (2025). Building consumer trust: Key factors shaping responses to influencer marketing campaign. *Social and Management Research Journal*, 22(1), 113–128.
- Balaban, A., & Szambolics, Z. (2022). A proposed model of self-perceived authenticity of social media influencers. *Media and Communication*, 10(1), 1–12. <https://doi.org/10.17645/mac.v10i1.4765>
- Barari, S., Dehghani, M., & Valaei, N. (2025). The impact of social media influencer characteristics on consumer responses: A theoretical framework. *Journal of Business Research*, 170, 114324. <https://doi.org/10.1016/j.jbusres.2024.114324>
- Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products and consumers. *Journal of Business Research*, 132, 186–195. <https://doi.org/10.1016/j.jbusres.2021.03.067>
- BERNAMA. (2024, December 23). Cops warn of TikTok scam using AI to mimic medical expert. *BERNAMA*. <https://www.bernama.com/en/news.php?id=2376480>
- Bowden, A. (2022, October). *The impact of followers' attitudes and beliefs on the effectiveness of social media influencers as product endorsers*. The University of Brighton.
- Cai, S., & Ambad, S. N. A. (2025). The effect of scarcity marketing on online impulse buying behaviour: The mediating role of perceived value. *ASEAN Entrepreneurship Journal*, 11(2), 102–117.
- Cao, T., & Nguyen, T. H. (2025). The impact of TikTok advertising content on purchase intention: The roles of brand awareness, brand image, age, and income groups. *Asia Pacific Journal of Marketing and Logistics*, 1–18. <https://doi.org/10.1108/apjml-11-2024-1700>
- Chungchekh, M., & Hossain, M. (2024). Competing for trust: How initiative and repetition of exposure influence information credibility. *Proceedings of the Association for Information Science and Technology*, 61(1), 1–12. <https://doi.org/10.1002/pa2.1170>
- Dao, Q. T., & Phuong, T. A. (2025). TikTok usage and body image: The mediating role of social comparison among Gen Z. *American Journal of Humanities and Social Sciences Research*, 9(4), 127–141.
- Elsholiha, A., & Dwinanda, R. (2023). Influence of live-streaming shopping activities on attitude toward purchase intention. *Journal of Marketing Innovation*, 3(2), 96–110. <https://doi.org/10.35313/jmi.v3i2.96>
- Gak, L., Olojo, S., & Salehi, N. (2022). The distressing ads that persist: Uncovering the harms of targeted weight-loss ads among users with histories of disordered eating. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–23. <https://doi.org/10.1145/3555102>
- Gega, A., & Cruz, J. (2024). TikTok influencers and purchase intentions of the senior high school students in Divine Word College of San Jose. *International Journal of Research Studies in Management*, 13(1), 1–15. <https://doi.org/10.5861/ijrsm.2024.1054>

- Gerrath, M. H. E. E., Olya, H., Shah, Z., & Li, H. (2024). Virtual influencers and pro-environmental causes: The roles of message warmth and trust in experts. *Journal of Business Research*, 175, 114520. <https://doi.org/10.1016/j.jbusres.2024.114520>
- Hakim, L. (2025, August 18). Over half of Malaysian adults are overweight. *NST Online*.
- Handoyo, S. (2024). Purchasing in the digital age: A meta-analytical perspective on trust, risk, security, and e-WOM in e-commerce. *Heliyon*, 10(8), e29714. <https://doi.org/10.1016/j.heliyon.2024.e29714>
- Hendriana, E., Dwinanda, B., Syaripuddin, F. A., & Hudaifi. (2022). Examining the extended advertising value model: A case of TikTok short video ads. *Mediterranean Journal of Social & Behavioral Research*, 6(2), 35–44. <https://doi.org/10.30935/mjosbr/11820>
- Hess, L. B., Chu, Y., & Ma, J. (2025, April 19). Analysis of influencer perspectives on Ozempic on TikTok. *International Journal of Management Theory and Practices*.
- Hidayah, N., Rahman, A., & Sari, D. (2024). The influence of TikTok EWOM on purchase intentions for The Originote skincare products. *Asean International Journal of Business*, 3(2), 1017. <https://doi.org/10.54099/aijb.v3i2.1017>
- Ibrahim, N. M. B. H., Shah, K. A. M., & Abdullah, N. S. N. (2025). An overview of TikTok on online shopping behaviour in Malaysia. *International Journal of Research and Innovation in Social Science*, IX(II), 1606–1625. <https://doi.org/10.47772/ijriss.2025.9020132>
- Jain, L., Velez, L., Karlapati, S., Forand, M., Kannali, R., Yousaf, R. A., Ahmed, R., Sarfraz, Z., Tallo, C. A., & Ahmed, S. (2025). Exploring problematic TikTok use and mental health issues: A systematic review of empirical studies. *Journal of Primary Care & Community Health*, 16, 21501319251327303. <https://doi.org/10.1177/21501319251327303>
- Klug, M., & Huber, M. (2021). Trick and please: A mixed-method study on user assumptions about the TikTok algorithm. *Proceedings of the ACM Conference on Human Factors in Computing Systems*, 1–12. <https://doi.org/10.1145/3447535.3462512>
- Knight, B. (2023, August 21). TikTok and body image: Idealistic content may be detrimental to mental health. *UNSW Newsroom*.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Lariba, C. (2024). The role of user-generated content in shaping brand perceptions. *International Journal of Public Relation and Communication*, 1(1), 25–37.
- Leite, F. P., Pontes, N., & Schivinski, B. (2024). Influencer marketing effectiveness: Giving competence, receiving credibility. *Journal of Travel & Tourism Marketing*, 41(3), 307–321. <https://doi.org/10.1080/10548408.2024.2317748>
- Li, G., Li, H., Su, Y., Li, Y., Jiang, S., & Zhang, G. (2025). GPT-4 as a virtual fitness coach: A case study assessing its effectiveness in providing weight loss and fitness guidance. *BMC Public Health*, 25(1), 2466. <https://doi.org/10.1186/s12889-025-22739-8>
- Lim, J. W., & Tan, C. L. (2024). From presence to participation: How social presence drives repurchase and engagement in Malaysian social commerce. *Asian Communication Research Journal*.

- Malik, A. (2025). *Decoding the algorithm: The mathematics behind TikTok's short-form content success*. Honors Scholar Theses.
- Masuda, H., Han, S. H., & Lee, J. (2021). Impacts of influencer attributes on purchase intentions in social media influencer marketing: Mediating roles of characterizations. *Technological Forecasting and Social Change*, 174, 121246. <https://doi.org/10.1016/j.techfore.2021.121246>
- Maulana, N. N., & Marsasi, N. E. G. (2024). Perceived risk and trust to maximize purchase intention through planned behavior theory. *Jurnal Ekonomi*, 29(3), 570–591. <https://doi.org/10.24912/je.v29i3.2664>
- Minadeo, M., & Pope, C. (2022). Weight-normative messaging predominates on TikTok – a qualitative content analysis. *International Journal of Obesity*, 46(4), 789–797. <https://doi.org/10.1038/s41366-022-01023-2>
- Munro, E., Wells, G., Paciente, R., Wickens, N., Ta, D., Mandzufas, J., Lombardi, K., & Woolard, A. (2024). Diet culture on TikTok: A descriptive content analysis. *Public Health Nutrition*, 27(4), 567–578. <https://doi.org/10.1017/S1368980024001381>
- Ngo, T. T. A., Nguyen, H. L. T., Mai, H. T. A., & Nguyen, H. P. (2025). Key determinants of online impulse buying behavior: A study from TikTok Shop users in Vietnam. *Acta Psychologica*, 260, 105593.
- Niazi, A. (2025). *From viral to verified: Leveraging media technology to combat overhyped food trends on TikTok* [Master's thesis, Malmö Universitet].
- Nilsson, J., Nilsson, F., & Johansson, E. (2023). *TikTok made me buy it: Influencer marketing on TikTok: What affects Swedish consumers' purchase intentions?* DIVA.
- Opara, E., Adalikwu, T. M., & Tolorunleke, C. A. (2025). The impact of TikTok's fast-paced content on attention span of students. *Preprints.org*. <https://doi.org/10.20944/preprints202501.0269.v1>
- Oyama, K., & Nakano, Y. (2025). Quality assessment of medical institutions' websites regarding prescription drug misuse of glucagon-like peptide-1 receptor agonists by off-label use for weight loss: Website evaluation study. *JMIR Formative Research*, 9(1), e68792. <https://doi.org/10.2196/68792>
- Pang, M. S., & Ismail, K. (2022). Examining the effects of perceived risk on consumers' online purchase intention in Klang Valley. *Management and Accounting Review*, 21(2), 75–94.
- Peng, G., Wang, C., Zhang, H., Xu, T., & Di, J. (2025). Evaluating the reliability and quality of bariatric surgery educational content on TikTok and Bilibili: A cross-sectional content analysis. *Obesity Surgery*, 35(12), 5111–5119. <https://doi.org/10.1007/s11695-025-08317-2>
- Pickett, A. C., Brown, K. M., Damon, Z. J., & Brison, N. T. (2023). Potentially misleading weight loss advertisements targeting men: Examining influence of celebrity athlete endorsement on ad believability and purchase intentions. *Health Behavior Research*, 6(2). <https://doi.org/10.4148/2572-1836.1177>
- Rocha-Vilca, L., Sánchez-Flores, M., & Gallardo-Echenique, E. (2024). Emotions in advertising and their connection to consumers. In *Smart Innovation, Systems and Technologies* (pp. 315–325).
- Sitorus, B. A., Ambad, S. N. A., & Dawayan, C. R. (2024). TikTok influencers' credibility and its impact on local cosmetic purchase intention. *Jurnal Intelek*, 19(2), 121–132. <https://doi.org/10.24191/ji.v19i2.26536>
- Sohid, A., Azhar, M., & Rahman, A. (2024). The dominance of TikTok in shaping online purchasing intention. *Information Management and Business Review*, 16(3), 1–10. [https://doi.org/10.22610/imbr.v16i3s\(i\)a.4172](https://doi.org/10.22610/imbr.v16i3s(i)a.4172)

- Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53, 101742. <https://doi.org/10.1016/j.jretconser.2019.01.011>
- Spasova, M. (2023). Age differences in adaptation of persuasion strategies in advertising. *Economics & Sociology*, 16(3), 45–60. <https://doi.org/10.14254/2071-789x.2023/16-3/3>
- Syamsuar, D., & Witarsyah, D. (2025). The role of perceived value and risk in shaping purchase intentions in live-streaming commerce: Evidence from Indonesia. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4), 298. <https://doi.org/10.3390/jtaer20040298>
- Teo, T. S. H., Lee, C. S., & Lim, W. M. (2023). Exploring the TikTok influences on consumer impulsive purchase behavior. *International Journal of Business and Society*, 24(1), 1–20. <https://doi.org/10.33736/ijbs.5600.2023>
- Tresna, I. C. (2025). Fear of Missing Out (FOMO) in consumer behaviour: A systematic literature review on antecedents, consequences, and moderating factors. *Journal of Information Systems Engineering & Management*, 10(36s), 626–639. <https://doi.org/10.52783/jisem.v10i36s.6542>
- Tripopsakul, S., & Hoonsopon, D. (2025). Influencer credibility, parasocial relationships, and product involvement in purchase intentions. *Emerging Science Journal*, 9(4), 2132–2144. <https://doi.org/10.28991/esj-2025-09-04-021>
- Trissetianto, A. C., & Ali, H. (2025). The role of TikTok in shaping Gen Z's brand loyalty and consumer behavior. *Greenation Management and Business Review*, 1(2), 77–83. <https://doi.org/10.38035/gmbr.v1i2.818>
- Udoka, V. U., & Ikot, U. E. (2024). The role of user generated content in building trust and brand loyalty: A case study of online reviews and ratings. *Global Scientific Journals*, 12(4), 652–668.
- Vrtana, D., & Krizanova, A. (2023). The power of emotional advertising appeals: Examining their influence on consumer purchasing behavior and brand–customer relationship. *Sustainability*, 15(18), 13337. <https://doi.org/10.3390/su151813337>
- Whang, J., & Lee, S. (2025). How ad variation and repetition influence memory recall: Effects of brand familiarity and message similarity. *Cogent Business & Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2480474>
- Xiu, L., Chen, X., Mao, L., Zhang, E., & Yu, G. (2024). Unveiling the influence of persuasion strategies on cognitive engagement: An ERPs study on attentional search. *Frontiers in Behavioral Neuroscience*, 18, 1302770. <https://doi.org/10.3389/fnbeh.2024.1302770>
- Zamzuri, N. N. A. I., Hamdan, N. E. A., Jamludin, N. A., Shaari, M. S., Taridi, N. S., Wahab, M. S. A., & Jamal, J. A. (2024). The perceptions of overweight and obese individuals regarding weight-loss dietary supplement advertisements: A pilot cross-sectional survey. *Journal of Public Health and Pharmacy*, 4(3), 267–279. <https://doi.org/10.56338/jphp.v4i3.5295>
- Zannettou, S., Nemes-Nemeth, O., Ayalon, O., Goetzen, A., Gummadi, K. P., Redmiles, E. M., & Roesner, F. (2024). Analyzing user engagement with TikTok's short format video recommendations using data donations. *Proceedings of the CHI Conference on Human Factors in Computing Systems*, 1–16. <https://doi.org/10.1145/3613904.3642433>
- Zhou, R. (2024). Understanding the impact of TikTok's recommendation algorithm on user engagement. *International Journal of Computer Science and Information Technology*, 3(2), 201–208. <https://doi.org/10.62051/ijcsit.v3n2.24>