Journal of Posthumanism
2024
Volume: 4, No: 3, pp. 2010–2025
ISSN: 2634-3576 (Print) | ISSN 2634-3584 (Online)
posthumanism.co.uk

DOI: https://doi.org/10.63332/joph.v4i3.2326

Study on Health Content on TikTok: Eating Habits and Smoking Cessation Programs

Najwa AlSaeed[1], Tevhide Serra Gorpe[2]

Abstract

The study addresses TikTok health content, with a focus on eating habits and smoking cessation programs. The target age group ranges between 13 and 24 years in the Kingdom of Saudi Arabia. The study covers the period from June to December 2024. In addition, the study aims to analyze TikTok videos with a focus on narrative patterns, visual strategies, and the role of artificial intelligence (AI) in designing and disseminating messages. The content analysis method was adopted for the research. Data is represented by (67) videos that were collected from the TikTok application by searching keywords. For example, keywords used were inclusive of "eating habits", "dieting", "healthy food alternatives", "Saudi anti-smoking campaigns", and "dangers of smoking" among other keywords. The findings have revealed that, as far as health-oriented content is concerned, the usage of informational videos amounts 70.1% of the all forms of contents amongst Saudi users in general and adolescents in particular; which is a percentage that indicates that TikTok could be used as an effective platforms for disseminating health-related content among Saudi adolescents and youth. It is worth mentioning that videos on smoking cessation might become a strong tool for influencing youth's health behavior if enriched with more innovative techniques and approaches, placing the active engagement of the audience in the foreground. Future research should seek to examine how interactive features, influencer collaboration, and AI-driven content personalization can further optimize engagement and behavior change. These could refine the content strategies so that TikTok becomes an even more effective medium to encourage healthier lifestyles and reduce harmful habits among young audiences in Saudi Arabia.

Keywords: *Health Content, TikTok, Eating Habits, and Smoking Cessation.*

Introduction

Social media has fundamentally altered the manner in which the world communicates and obtains information (Patrick, Venkatesh & Stukus, 2022). Social media has permeated every aspect of personal and professional lives over the past 20 years. Social media content is the enormous volume of posts, pictures, and videos that users share on social media platforms such as Facebook, Instagram, TikTok, and Twitter. Video content is now preferred over written content by many social media users, particularly younger generations (Zhu et al., 2020). Technological developments have altered how consumers and healthcare professionals obtain and utilize health information (Norman, 2012). Healthy behaviours can be improved and promoted through social media sites in the creation and presentation of the health literacy program's content (Fathi et al., 2024). Social Media sites can influence eating habits in both positive and negative ways (Umennuihe et al., 2024). Research on the effects of eating content has been spurred by the growth of short-form video content (Drivas, Reed & Berndt-Goke, 2024). TikTok has become a popular site for sharing videos (Mandzufas et al., 2023;

[1] City University Ajman, Email: a.najwa@cu.ac.ae
[2] University of Sharjah, Email: tgorpe@sharjah.ac.ae

Rosenholm, 2022). Globally, TikTok boasts over one billion monthly active users. Given its wide audience and high user engagement, TikTok may develop into a platform for the sharing of health-related content (Hill, Manuell & Willemsen, 2023).

TikTok is incorporated into health-related content to reach a younger audience (Rosenholm, 2022). Although there is a lot of eating-related content on TikTok, there are few studies that have been dedicated to investigating this issue (Davis et al., 2023). An important avenue for future research is analyzing user comments, which would yield a rich understanding of the discourse surrounding topics on TikTok platform (Mandzufas et al., 2023). To enable young people to use social media in a constructive way and acquire the skills necessary to identify potentially harmful content, it is necessary to encourage healthy digital habits and enhance their health literacy (Raiter et al., 2023). By tracking how teens interact with these videos, what they do afterwards, and how this influences their eating and food practices, it may be possible to learn more about lifestyle choices. By discussing teenagers' use of online and offline TikTok food videos both, the relationship exists between social media, adolescent lifestyle, and social dynamics regarding eating habits will be better understood (Wang et al., 2024). For young people, quitting smoking is a serious public health concern. Through a variety of video formats, social media informs the public about health issues. Young people's attitudes regarding smoking may be influenced by various content creators who use videos to promote quitting smoking (Ye, Ye & Gao, 2023).

Statement of the Problem

Saudi adolescents and teenagers exhibit unhealthy eating practices, behaviors, and smoking habits, especially the ones that represent the 13-24 years of age category. Such habits and behaviors are considered of great concern. Indeed. Recent statistics reveal that 23.1% of individuals aged 15 and older in the Kingdom are classified as obese, with 45.1% categorized as overweight. Although data specific to the 13 to 24 age group is not explicitly detailed, these figures highlight a broader trend of poor dietary habits among Saudi youth (Saudi Press Agency, 2024).

Smoking also presents a significant public health challenge for this demographic. Studies indicate that 31.3% of Saudi youth have used tobacco at some point, while 8.78% are current smokers. Among tobacco users, traditional smoked products dominate, with 6.75% smoking cigarettes and 2.80% smoking shisha. The high prevalence of tobacco use emphasizes the need for effective public health interventions to address smoking and encourage healthier lifestyles among Saudi youth (Shubayr, Alhazmi, El Dalatony, El Desouky, Al-Zalabani, Monshi, Elkhobby, Aldukhail, Alqahtani, Aldossary, 2024).

Social media influencers (SMIs) wield significant influence over their audiences' attitudes and behaviors, particularly concerning health-related habits. Despite a growing body of research, findings remain inconsistent, and a comprehensive synthesis of key conclusions is lacking. There is an urgent need for further studies to explore the potential negative impacts of social media exposure on health behaviors. TikTok, in particular, has emerged as a highly relevant platform that merits greater scholarly attention (Kaňková, Binder & Matthes, 2024).

Research is needed to explore how TikTok can be leveraged to enhance the dissemination of healthcare-related information (Shrivastava & Shrivastava, 2023). This includes investigating the credibility of health advice shared on the platform, assessing the quality of the information, and examining how users engage with and apply the health-related content they encounter

(Zenone, Ow & Barbic, 2021).

The growing use of TikTok has made Saudi individuals less likely to adopt active lifestyles and healthy eating habits over the past few decades (Aleid et al., 2024). In the Kingdom of Saudi Arabia, social media use is linked to several behavioural and health outcomes, such as tobacco use, eating habits, diet, and obesity. Effective interventions are desperately needed to encourage healthy habits and avert adverse health consequences. Cigarette smoking, waterpipe smoking, and e-cigarette use were linked to daily TikTok usage among adults, teens, and young people. These tobacco-related behaviors were linked to particular social media platforms (BinDhim et al., 2023). Compared to older adults, Saudi younger adults can benefit from social media platforms to control their eating habits and diet patterns (Aleid et al., 2024).

In this case, it is important for the researchers to state that TikTok appears to be influencing Saudi users' eating habits and smoking and behaviors even on a negative level; which is a sign that is indicative of the popularity of such online platform and its potential to garner increasing levels of exposure. As a result, since TikTok had this much influence on Saudi users, then it must have also been utilized as a tool through which health and effective eating habits and anti-smoking messages can be disseminated; which is exactly what the current research aspires to address by analyzing the role of TikTok videos designing and disseminating such messages; especially knowing that there is little research on TikTok content pertaining to eating habits. It is necessary to look into eating-related content on TikTok because of the platform's high percentage of young, potentially impressionable users (Davis et al., 2023).

One significant risk factor for morbidity and mortality is smoking (Abid, Alwadey & Eldeirawi, 2022). Saudi Arabia has made significant progress against smoking by taxing smoking, limiting smoking in public areas, and launching several awareness campaigns (Balubaid et al., 2024). The rapidly evolving media landscape and the varied effects of smoking cessation programs among communities with high smoking prevalence are the main areas of research needed for the ensuing ten years (Durkin, Brennan & Wakefield, 2022). Despite the fact that teens and young adults use TikTok extensively, little is known about how this social network can help people stop smoking and what kind of content can motivate this process (Basch et al., 2021). In addition to what has been mentioned, little is known about how AI affects the creativity and productivity of content creation on TitTok (Zhang, 2023).

Consequently, although Saudi adolescents and teenagers use social-media platforms, especially TikTok, the potential of its usage as an instrument for promoting health-oriented content is still not sufficiently investigated and underestimated from an academic standpoint with enough studies and researchers' insights. Though more and more health-related content is being shared on TikTok, there are still concerns about how well it works to encourage positive behavior change in this group. Teenagers and young adults in Saudi Arabia face particular difficulties because of bad eating habits, such as consuming a lot of fast food and sugary drinks, and the pervasive problem of youth smoking. Accordingly, the study aims to investigate how health-related content on TikTok can influence eating habits and smoking cessation campaigns among adolescents and youth within the Saudi context.

Research Objectives

The aim of the study is to explore the TikTok health content related to eating habits and smoking cessation programs. TikTok videos targeting Saudi youth between the ages 13 to 24 are analyzed by content analysis, looking at the narrative patterns, visual strategies, and the role of AI in

designing and disseminating messages. The integration of AI plays a major role in personalizing content and increasing engagement, making health education more effective for young people. Accordingly, the study focuses on how videos address issues such as overeating and smoking.

Research Questions

The current research attempts to find decisive answers to the following research questions (RQs):

1. **RQ1:** What types of TikTok video formats are most commonly used to deliver messages about healthy eating and smoking to Saudi youth?

2. **RQ2:** What are the predominant themes and narratives present in TikTok videos focused on healthy eating and those addressing smoking?

3. **RQ3:** How do the content themes differ between videos that promote healthy behaviors versus those that discuss smoking?

4. **RQ4:** Which editing techniques are most frequently employed in these videos, regarding healthy eating and smoking?

Literature Review

The vast number of people who use the internet as a media source to get health information is impacted by technological advancements in this area. Websites are transformed from static sources to many-to-many communication channels by social media, which is a relatively recent development (Uittenhout, 2012). Twitter, YouTube, TikTok, Snapchat, Facebook, WhatsApp, Instagram, and Reddit are all considered forms of social media. It is a brand-new and dynamic field (Kanchan & Gaidhane, 2023). As of September 2021, TikTok had amassed over 1 billion monthly users worldwide, demonstrating its rapid growth since its launch (Zenone et al., 2021). TikTok is currently the most rapidly expanding social media platform among kids and teens worldwide (McCashin & Murphy, 2023).

Users of the social media application, TikTok, can watch and post short videos (Mandzufas et al., 2023). As it provides access to a vast amount of user-generated content, TikTok has become extremely popular among teenagers. Interestingly, a common theme on this social media platform for short videos is food videos. Short food videos on TikTok may have an impact on teens' eating habits, one of their most immediate and consistent health behaviors, despite their lighthearted and entertaining tone (Wang, Sher & Chung, 2024). TikTok offers content pertaining to diet culture, weight standards, and the presentation of an idealized body image. TikTok influences how people view their bodies and how they eat. This viewpoint emphasizes how TikTok can both increase awareness of eating disorders and apply pressure by showcasing "ideal" bodies and unrealistic exercise and diet plans (Ślusarek, 2024). Some TikTok influencers promote unattainable body standards, leading users to blindly follow these trends. This has resulted in negative consequences, such as mental and physical repercussions like eating disorders and low self-esteem (Cruz et al., 2023).

Digital platforms have revolutionized health promotion tactics by providing previously unheard-of chances to involve audiences worldwide in the promotion of healthy behaviours and interventions. A revolutionary approach to public health communication, encouraging preventive healthcare behaviours through social media interventions enables people, communities, and healthcare systems to work together to achieve

common health objectives. The methods for utilizing digital technologies' potential to address global health issues and enhance population health outcomes must also be advanced along with these technologies (Thomas, 2024). Zhu et al. (2020) reveal that many styles can be used for generating videos such as the use of cartoon or documentary styles. To create messaging that is likely to connect with younger audiences, humor, self-criticism, and specific health content in meme-like formats can be incorporated (Bruno, 2020).

Social media platforms must take steps to improve exposure to and accessibility to high-quality, scientifically supported information (Milton et al., 2023; Kington, 2021). Immediate attention to the possible health consequences of TikTok and the proposal of a research agenda to educate the public, researchers, decision-makers, and healthcare providers can improve health-related information (Zenone et al., 2021). More research is needed to determine the effect of social media content on efficient health campaigns (Uittenhout, 2012). Through three primary functions—information, persuasion, and entertainment—TikTok influences individuals' decisions to buy and accept healthy products. This digital media tool has a direct impact on the audience and is sufficient to change their viewpoint, ideas, and actions for living a healthier life (Moungchinda, 2023).

Worthy here to mention is that the conventional method of creation has been disrupted by the emergence of generative AI. Platforms have tried to use recent developments in AI to assist creators with their video creation process because it can be challenging to produce video content. The use of AI voice technology boosts the production of videos by creators. It is interesting to note that when using AI voice, creators establish more original videos while disclosing less about themselves. The AI voice eliminates the need for creators to use their own voices when producing videos (Zhang, 2023).

TikTok social media campaigns have great influences on raising public awareness and encouraging behaviour change, especially when talking about switching from bad habits to healthy ones. However, the audience's level of engagement and the campaign's content frame all affect how effective these campaigns are (Ali, 2025). That is to say, it is essential to look at the framing of the content to be discussed and how it can affect the message behind the video. The TikTok videos that talk about how using e-cigarettes can have negative effects on one's physical and mental health as well as addiction. The framing of the video was altered to contrast the health risks of vaping (loss framing) with the advantages of stopping (gain framing). It might be beneficial for future TikTok campaigns to stop vaping to include themes about addiction, physical health, dangerous chemicals, and gain-framed messaging. Furthermore, using message sources from people who are currently vaping and those who have successfully stopped could improve campaign engagement (Wu et al., 2025).

Social media user experiences have been significantly altered by AI technology (Kang & lou, 2022). To attract millions of users globally, TikTok users typically employ AI techniques for video production. Users do not have to search for videos most of the time because TikTok uses artificial algorithms to label users and videos in a reasonable manner. TikTok can always release visually appealing videos based on user viewing history and data analysis (Wang, 2021). Utilizing AI and big data, is essential to better customize campaigns and promote international cooperation in health promotion (Ali, 2025). TikTok labels users and videos using artificial algorithms (Wang, 2021). Platforms with AI capabilities process and analyze data using algorithms to automate procedures or provide comprehensive outcomes (Farooq, 2023). Algorithmic platformization highlights how algorithms impact content production. Precarity

(circumscribed creativity), algorithmic optimization (how it is influencing and being influenced by content), and the interdependence of content, algorithms, and creators must be discussed. Infrastructure processes also have great impacts on content production (curating platform-preferred materials). The focus of algorithmic platformization is on the influence of infrastructure algorithms on cultural productions, specifically the effects of algorithm-based or algorithm-powered platforms such as TikTok on content production (Su & Kaye, 2023).

Research Methodology

The content analysis method was adopted for the research, and it is one of the methodologies that are dependent on interpretation to identify patterns, messages, and trends from specific content such as videos, images, and texts. Accordingly, content analysis can be referred to as an approach that uses a number of techniques that assist researchers in analyzing data in both quantitative or qualitative manner using statistical tools or discourse and/or sentiment analysis of texts to extract different specific meanings respectively (Velle & Ferreira, 2025).

Moreover, content analysis is considered a highly research method that can help investigate the root causes of different problems in different forms of studies, such as informational ones. Indeed, content analysis can be used in conjunction with other analytical tools from a quantitative standpoint using various sources of data; including websites, documents, laws, journals, books, and even paintings (Rathore & Patwa, 2020). Therefore, in this research, TikTok videos related to eating habits and smoking cessation programs were analyzed.

Data Collection

Data was collected from the TikTok application by searching keywords. Such data were required to be analyzed in this research were picked randomly from the official and unofficial accounts and many more hashtags which helped the researchers to directly identify the video exactly related to the topic of research. The following list of hashtags was used to select the material:

1. **#EatingHabits**
2. **#HealthyEating**
3. **#QuitSmoking**
4. **#Dessert**

Moreover, the exact keywords that were used to generate the initial videos that were then reviewed to select the exact required data for the current study can be outlined as follows as each set of keywords correspond to one of the previously-specified hashtags:

Hashtag	**Corresponding Keywords**
#EatingHabits	1. Late-night snacks 2. Intermittent fasting 3. Sugar-avoidance 4. Meal preps 5. Skipping breakfast 6. Not enough water 7. Eating fruits after meals 8. Eating once a day 9. Different cuisines 10. Eating before bed

	11. Watching videos while eating
#HealthyEating	1. More calcium 2. Sufficient protein 3. No empty calories 4. Drinking a lot of water 5. Fluid intake 6. Calorie calculation 7. Weight and calorie monitoring 8. Food rich in fatty acids 9. Healthy fats 10. Vegan snacks 11. Gluten-free food items 12. Going on Keto diets 13. Dieting responsibly 14. No veggies/More veggies
#**QuitSmoking**	1. Nicotine-replacement 2. Doing exercise 3. Anti-smoking campaigns 4. Smoking-cessation programs 5. No-smoking challenge 6. Anti-smoking hotlines 7. Relaxation as an alternative 8. Devices to quit smoking
#**Dessert**	1. Too much sugar 2. Unhealthy dessert/Healthy dessert 3. Overly sweet 4. Health hazards of dessert 5. Healthier dessert options 6. Having dessert at night 7. Desserts' negative image 8. Dietitians' advice on dessert 9. Sugar alternatives and replacements 10. Desserts for diets

Preparing the Codebook:

As a result, a total of (67) videos were selected that provided content mainly in Arabic. Moreover, the researchers prepared a coding guide based on the elements of the following Video Content-Analysis (VCA) Codebook.

1. Video-Type Codebook

- Documentary.
- Dance-Based.
- Informational.
- Advertisement.
- Educational.

- Challenge.
- Tutorial.

2. Video-Content Codebook

- Nutritional Content.
- No-Smoking Campaign.
- Smoking-Cessation-Oriented Content.
- Dieting Content.
- Eating Habits.

3. Video-Editing Type Codebook

- Text-Based Video.
- Audio-Only Video.
- Cartoonish Special Effects.
- Professional Special Effects.
- AI Usage.

The researchers made sure that the coding was reliable, using Holsti's formula. The sampling of videos for this paper was done randomly; an independent coder was consulted for a sample of 10 videos. To further elaborate on this notion, it can be indicated that the researchers needed to verify the reliability of the coding process in the sense that it can be used more than once without losing its accurate approach in generating findings. Therefore, (10) videos were selected as a sample to test this level of reliability.

Then, although these 10 videos were tested by the researchers themselves, they were also given to an independent coder to help enhance the integrity of the testing process and to ensure that it is free of biases as much as possible. Lastly, all parties, the researchers and the independent coder, selected 8 videos which they approved as viable strands of data. In other words, the reliability of the sample of these (10) videos reflect the reliability of the entire research sample of all (67) videos; given the fact that the number of agreements recorded between the researcher and the independent coder was 8 out of the 10 videos analyzed. The reliability was computed by the following formula:

R=N1+N2/2×C

R=2*8/10+10=0.8

This indicates that the level of reliability is good, which demonstrates strong agreement by the coders, lending credibility to the data from the coding and the data collection process.

Official account	**Number of followers**	**Likes**
dr.alammar	204.3K	1.8M
dr.rehamgarash		265.9K

	77.5K	
anmarfit	1.1M	10.5M
dopamine_saudi	281.7K	1.1M

Table: 1 Official Accounts

Table 1 highlights a sample of some channels that were relied upon in the collection of the videos that were analyzed by the researchers; in order to confirm that videos were not selected in a haphazard manner but rather in accordance with the popularity of each channel and number of followers it holds.

Findings of Descriptive Analysis

Upon analyzing all 67 videos, the following findings can be extracted in their finalized form and in a compendious manner:

Video-Type Codebook		
Categories	**Definition**	**N (%)**
Documentary	Videos that present real-life events that are accompanied with narrations and/or interviews	1 (1.5)
Dance-Based	Videos that present individuals who demonstrate ideas with dancing moves that are equipped with music melodies, narration, and/or text	0
Informational	Videos that present informative content which is supposed to educate people about a specific subject	47 (70.1)
Advertisement	Videos that promote an idea, product, program, and/or services	14 (20.9)
Educational	Videos that provide detailed informative content	4 (6.0)
Challenge	Videos that demonstrate a daring challenge to viewers to implement something to raise awareness or benefit a specific segment of audience	1 (1.5)
Tutorial	Videos that provide step-by-step walkthroughs towards following a specific diet or quitting smoking	0

Table 2. Video types of TikTok (N= 67)

Video-Content Codebook		
Categories	**Definition**	**N (%)**
Nutritional Content	Content that demonstrates the	10 (14.9)

	benefits of various forms of healthy food that are low in caloric intake and high in nutritional value	
No-Smoking Campaign	Content that provides information about a program or an initiative launched by the Saudi Government, or any other government for that matter, to assist smokers in quitting this detrimental habit	5(7.5)
Smoking-Cessation-Oriented Content	Content that presents normal individuals who speak against smoking and encourage views to quit smoking; using emotionally-driven and/or informational messages	15(22.4)
Dieting Content	Content that provides different diet plans, approaches, and/or trends that are supposed to present healthier alternatives to other empty-calorie types of food	25(37.3)
Eating Habits	Content that provides information about the inapt eating habits that Saudi teenagers follow	11(16.4)

Table 3. Video Content Posted to TikTok (N= 67)

Video-Editing Type Codebook		
Categories	**Definition**	**N (%)**
Text-Based Video	Videos that only use texts to demonstrate the idea of the content	6 (9.0)
Audio-Only Video	Videos that only use audio tracks to demonstrate the idea of the content	17(25.4)
Cartoonish Special Effects	Videos that use simplistic designs of effects, emojis, and/or characters along with the video to deliver the message	1(1.5)
Professional Special Effects	Videos that use complex characters, designs, and/or effects to deliver the message	40(59.7)
AI Usage	Videos that use AI-generated pictures, effects, and/or hashtags that can help personalize the content and disseminate the message in a more specified	3(4.5)

	manner to a specific segment of audience	

Table 4. Video Editing Type of TikTok (N= 67)

Consequently, upon analyzing the videos in a descriptive manner using a statistical approach, the research questions can be answered through the information that can be extracted from the data-analysis procedure as outlined within the previously-formulated tables. Firstly, Table 2 shows that informational content is the most popular on TikTok, with 70.1%, which reflects users' tendencies to be useful and swift in information delivery, going in line with the interactive nature of the platform. Second comes advertisements at 20.9%, a very good indication that companies also use TikTok well enough as a marketing tool to reach audiences.

The educational videos are small in proportion to 6.0%, suggesting opportunities toward developing more engaging educational content. Documentary videos and challenges only account for 1.5% each, while other important categories, such as dance videos or practical tutorials, seem to be missing. Indeed, all these denote that the diversity in types of content is rather limited and largely focused on either direct information provided or the promotion of health-related products and services.

The data in Table 3 shows that diet-related content leads the platform, with 37.3%, which reflects a great interest in health and physical appearance among the younger generation. It is followed by smoking cessation content, which is 22.4%, reflecting a positive shift toward quitting the addiction.

However, videos specifically for anti-smoking campaigns are limited to 7.5%, indicating that there is much potential to further increase efforts in this area. Meanwhile, 16.4% of content focused on everyday eating-a new awareness of diet as part of the overall well-being. General nutrition takes 14.9%, providing great insights, but also serving as a signal that this kind of content should be further developed.

Lastly, Table 4 shows that the most used is professional effects at 59.7%, which identifies the role that high-quality editing techniques play in attracting and maintaining viewers. Videos relying on audio comprise 25.4%, indicating that some audiences prefer listening to audio. This can also be cheaper and faster than producing a video. Text-based videos are a mere 9.0%, indicating a limited focus on imparting information through text supported visually. While it uses cartoonish effects and AI-driven content at 1.5% and 4.5%, respectively.

Discussion

The results from this study have shown that TikTok can be capitalized on as a platform for disseminating health-related content among Saudi adolescents and youth. The analysis of the types of videos demonstrated that informational videos are dominant, constituting about 70.1% of the total contents, indicating that the videos focused on health information in simple and understandable terms. While it also showed from the data that other categories, such as documentary videos and challenges, are less dominant, limiting diversity of content and the ability to reach audiences with varied interests and learning styles. More significant proportions of categories like "diet-related content" and "daily eating habits" showed that physical health and appearance concerns were on their rise among the youths. Undoubtedly, such themes are very relevant, but more needs to be developed on "quitting smoking contents" and "anti-smoking campaigns" for more effective awareness raising among the groups concerned.

It is worth mentioning that videos on smoking cessation might become a strong tool for influencing youth's health behavior if enriched with more innovative techniques and approaches, placing the active engagement of the audience in the foreground. These findings point to the need for further efforts toward developing more comprehensive and interactive content on the platform that would yield tangible results in reducing the rate of smoking among youth. As for the style of video editing, professional effects take the leading place with 59.7%. This denotes a high importance of qualitative video processing in order to attract views. At the same time, it testifies to the insufficient usage of modern novelties, such as AI and cartoon effects, which can become good tools for increasing audience engagement, especially among the young.

Furthermore, the findings cohere, on both empirical and theretical levels, with the previously-outlined literature. Our findings indicate that the dominant purpose of the videos on TikTok is informational at 70.1%, and this points toward the preference for speedy and helpful information among users. This supports the research by Uittenhout (2012), who has mentioned that social media websites have now turned into dynamic channels of communication. The dominance of informational content also supports the perspective of Moungchinda (2023) in identifying TikTok as an effective tool in delivering health-related information. However, it was observed that the meager presence of educational content was just 6.0%, indicating a yet-to-be-tapped area but supported by Milton et al. (2023) and Kington (2021), who assert that an increase in dissemination will improve public knowledge supported by scientifically backed content.

The prevalence of diet-related content being 37.3% agrees with Wang, Sher, and Chung's findings, 2024, that food videos have a strong influence on teen eating behavior. This also corresponds with Ślusarek (2024), who spoke about TikTok's promotion of diet culture and changing body image. However, our findings on the subject of smoking cessation are relatively high at 22.4%, which denotes a positive shift in behavior. In comparison, specific anti-smoking campaign videos are low at 7.5%, reinforcing Wu et al. (2025), who had argued for better framing of content so as to increase the engagement level in smoking cessation efforts.

Meanwhile, our findings also show that professional effects are the most used editing style, 59.7%, which indicates that high-quality visual format is important to keep viewers' interest. This leads to the work of Zhu et al. 2020, who note that other effective styles for health messaging include those in a documentary and cartoon format. Also, the low percentage of text-based content, 9.0%, indicates a predisposition toward visual storytelling, which supports Wang (2021) in his statement that AI-driven algorithms give more visibility to visually appealing content on TikTok for the purpose of retaining users.

Moreover, TikTok has an influence on dietary and lifestyle changes in the lives of its users. According to Cruz et al. (2023), some influencers on TikTok promote unrealistic body standards that may lead to negative mental and physical health effects. This, therefore, calls for more regulation of content and counterbalancing of such dangerous trends with evidence-based health messaging, as Ali recommends (2025), and Zenone et al. (2021). Better content regulation would reduce some of the risks associated with bad health advice but would also provide a more balanced perspective on well-being.

Accordingly, AI technology constitutes an integral part of TikTok content consumption patterns. Su and Kaye (2023) articulate that the system of recommendations at the platform is highly influential for content visibility and user engagement. The low presence of AI-driven content, 4.5%, in our results shows that while AI-driven media is emerging, it is not yet mainstream. On the other hand, Zhang (2023) underlines the increasingly important role played by AI voice

technology, enabling creators to make content with a minimum of self-disclosure, and perhaps to drive future trends in video creation.

And since the literature provides evidence that "social media campaigns have the capacity to influence favorable behavioral change given content framing and audience engagement" (Ali, 2025), our finding is in support of the relatively small percentage of antis-smoking campaigns, indicating the potentiality for storytelling. Wu et al. discuss that gain-framed messaging combined with testimonials by former smokers are two strategies aimed at enhancing campaigns and, for that matter, reinforce the imperative of strategic designing of content toward health initiatives.

Finally, as presented by Farooq in 2023, TikTok uses an algorithmic platformization in which such platforms are content-making and consumptive sites through curating users' preferred material content using the use of data analyses that increase or limit varieties in health-related content exposure. In this context, the observation aligns with what Kang and Lou (2022) indicate on AI driving the user experiences. These findings suggest that the algorithm of each platform needs to be optimized for maximum exposure to health information emanating from credible sources, with the minimum possible contact with potentially misguiding or dangerous content. This suggests directions for future research in how public health campaigns could take advantage of the TikTok algorithm.

Conclusion

It points to potential valuable health education on the platform for Saudi youth aged 13–24 years. Such dominance in informational videos ensures that the platform can communicate simple, credible health messages in a more interactive way. On the other hand, underrepresentation of different types of content suggests a need to pay particular attention to catering for varied interests and learning preferences. This depicts that there is increased health consciousness through the emphasis on dieting and eating behaviour, while little concern is created for smoking cessation content, which is an area that needs further development for relevant behavioural changes.

Advanced video-editing techniques, such as professional special effects, have also greatly improved viewer engagement. In any case, some modern technologies involving AI and cartoon effects have limited inclusion, which would suggest vast opportunities to make interactions more engaging. Such innovative tools would facilitate creating more personalized and immersive content, making messages of health more relatable and memorable for a young audience.

The high prevalence of advertising content is indicative that commercial interests are making effective use of TikTok, but this again raises concerns about the potential influence of promotional material on health behaviours. A more balanced approach is required, with equal emphasis on educational and awareness-driven content as is given to commercial promotions.

Overall, the findings underline the increasing role of TikTok in public health education, while areas of improvement have also been brought forth. Increasing the variety of content, creating better smoking cessation campaigns, and using emerging technologies may enhance this platform's impact on youth health awareness.

Future research should also seek to examine how interactive features, influencer collaboration, and AI-driven content personalization can further optimize engagement and behavior change. These could refine the content strategies so that TikTok becomes an even more effective medium

to encourage healthier lifestyles and reduce harmful habits among young audiences in Saudi Arabia.

It is worth noting that the current research is limited by the geographical approach of videos given the fact that the targeted audience are Saudi users. Moreover, the temporal limitations are also considered constraints that limit the ability to generate more views; as the researchers preferred to choose a range that starts in June and ends in December of 2024 to make sure that the videos are as recent as possible. Lastly, the sample is also limited by an age range of 13-24 years for Saudi users.

Therefore, further research can also be conducted to investigate the role of TikTok videos on the enhancement of more users from different countries across the globe who are classified into different age categories, and perhaps more studies can expand the temporal scope by selecting and analyzing videos from previous years as well using a variety of both quantitative and qualitative methodologies and data-analysis modalities.

References

Abid, O., Alwadey, A. M., & Eldeirawi, K. (2022). Prevalence of tobacco smoking between 2009 and 2015 among students and the general population in the Kingdom of Saudi Arabia. European Publishing.

Aleid, S.; Alshahrani, N.Z.; Alsedrah, S.; Carvalho, A.B.; Lima, M.J.; Teixeira-Lemos, E.; Raposo, A. The Role of Social Media Advertisement and Physical Activity on Eating Behaviors among the General Population in Saudi Arabia. Nutrients, 16(2024), 1-13.

Ali, F. H. M. (2025). The Effectiveness of Social Media Campaigns in Promoting Dietary Behaviors that Support Immune Health. iJournals: International Journal of Software & Hardware Research in Engineering, 13(1), 1-5.

Balubaid, M., Al-Husayni, F., Alwafi, H., Alsheikh,N., Alasmari, B., Aliwani, S., Alharthi, S., Qanash, H., Taher, N., Alharbi, A., Naser, A.Y., Al Thaqafy, M., Neyazi, A., & Qanash, S. (2024). The Prevalence of Smoking Among Medical Residents in Saudi Arabia, A Cross Sectional National Survey. Bahrain Medical Bulletin, 46(1), 1972-1977.

Basch, C.H., Fera, J., Pellicane, A., & Basch, C. E. (2021). Videos With the Hashtag #vaping on TikTok and Implications for Informed Decision-making by Adolescents: Descriptive Study. JMIR Pediatrics and Parenting, 4(4), 1-5.

BinDhim NF, Althumiri NA, Al-Duraihem RA, Alasmary S, Alkhamaali Z and Alhabeeb AA (2023) Association between daily use of social media and behavioral lifestyles in the Saudi community: a cross-sectional study. Front. Public Health, 11(2023), 1-9.

Bruno, C. M. (2020). A Content Analysis of How Healthcare Workers Use TikTok. Elon Journal of Undergraduate Research in Communications, 11(2), 5-16.

Cruz, A. L. Q. G., Cruz, C. D. R. D., Espedido, H. M., Camangyan, I.M., Cabaya, K. G. (2023). Decoding Tiktok Trend's Impact on Young Adults' Body Image: Insights for Media Psychology. Psychological Research, Our Lady of Fatima University, Northern Metro Manila.

Davis, H. A., Kells, M. R., Roske, C., Holzman, S., Wildes, J. E. (2023). A reflexive thematic analysis of #WhatIEatInADay on TikTok. Eating Behaviors, 50(2023), 1-6.

Drivas, M., Reed, O. S., & Berndt-Goke, M. (2024). #WhatIEatInADay: The effects of viewing food diary TikTok videos on young adults' body image and intent to diet. Body Image, 49(2024), 1-11.

Durkin, S. J., Brennan, E., & Wakefield, M. A. (2021). Optimising tobacco control campaigns within a changing media landscape and among priority populations. Tob Control, 31(2022), 284–290

Farooq, S. (2023). The BMW Model of Perceived Sacrifices of AI (AI): An Interpretive Study. Al-Kashaf:

Research Journal for Social Sciences, 3(3), 16-25.
Fathi, M., Gilavand, A., Darabi, A., & Ahmadi, M. (2024). Impact of Social Media Use on the Development of Health Literacy. EBHPME, 8(1), 25 -32
Hill, G., Manuell, A., & Willemsen, A. (2023). A rapid review of quality of health information on TikTok. JHD, 8(2), 560–574.
Kanchan, S., & Gaidhane, A. (2023). Social Media Role and Its Impact on Public Health: A Narrative Review. Social Media Role and Its Impact on Public Health: A Narrative Review. Cureus 15(1), 1-10.
Kang, H., & Lou, C. (2022). AI agency vs. human agency: understanding human–AI interactions on TikTok and their implications for user engagement. Journal of Computer-Mediated Communication, 27(5), 1–13.
Kaňková, J., Binder, A., & Matthes, J. (2024). Health-Related Communication of Social Media Influencers: A Scoping Review. Health Communication, 2024, 1-14.
Kington, R. S., Arnesen, S., Chou, W-Y, S., Curry, S. J., Lazer, D., & Villarruel, A. M. (2021). Identifying Credible Sources of Health Information in social media: Principles and Attributes. National Academy of Business - Edu/Perspectives, 2021, 1-37.
Mandzufas, J.; Ayalde, J.; Ta, D.; Munro, E.; Paciente, R.; Pranoto, E.P.; King, K.; How, K.; Sincovich, A.; Brushe, M.; et al. The Investigation of Health-Related Topics on TikTok: A Descriptive Study Protocol. Digital, 3(2023), 97–108.
McCashin, D., & Murphy, C. M. (2023). Using TikTok for public and youth mental health – A systematic review and content analysis. Clinical Child Psychology and Psychiatry, 28(1), 279–306.
Milton, A., Ajmani, L., DeVito, M. A., Chancellor, S., (2023). "I See Me Here": Mental Health Content, Community, and Algorithmic Curation on TikTok. ACM, 2023, 1-17.
Moungchinda, M. P. (2023). The Role of TikTok Content Creators on Decision Made for Children's Health and Wellbeing from Thai mothers' Point of View: a case study (Unpublished Academic Dissertation), Thammasat University, Thailand.
Norman, C. D. (2012). Social media and health promotion. Global Health Promotion, 19(4), 3–6.
Patrick, M., Venkatesh, R. D., & Stukus, D. R. (2022). Social media and its impact on health care. Ann Allergy Asthma Immunol, 128(2022), 139−145.
Raiter, N., Husnudinov, R., Mazza, K., & Lamarche, L. (2023). TikTok Promotes Diet Culture and Negative Body Image Rhetoric: A Content Analysis. Journal of Nutrition Education and Behavior, 55(10), 755-760.
Rathore, D. M., & Patwa, A. (2020). Content Analysis and Its Uses in Research. SDES International Journal of Interdisciplinary Research, 1(3), 92-98.
Rosenholm, I. L. (2022). Health Communication on TikTok A Qualitative Study of Credibility on A Humorous Platform (Unpublished Master Dissertation), Karlstads University, Sweden.
Saudi Press Agency. (2024). GASTAT releases health determinants statistics publication for 2024. Saudi Press Agency. https://www.spa.gov.sa/en/N2209224
Shrivastava, S. R., & Shrivastava, P. S. (2023). Utilizing the Tool of Tiktok in Medicine, Public Health, and Medical Education. Medical Journal of Dr. D.Y. Patil Vidyapeeth, 2023, 22-27.
Shubayr, M. A., Alhazmi, A. S., El Dalatony, M. M., El Desouky, E. D., Al-Zalabani, A. H., Monshi, S. S., Elkhobby, A. A., Aldukhail, S. K., Alqahtani, M. M., & Aldossary, M. S. (2024). Factors associated with tobacco use among Saudi Arabian youth: Application of the Theory of Planned Behavior. Tobacco Induced Diseases, Article 189. https://www.tobaccoinduceddiseases.org/Factors-associated-with-tobacco-use-among-Saudi-Arabian-youth-Application-of-the,196678,0,2.html
Ślusarek, N. (2024). Designing a conversational agent for young adults at risk for developing an eating disorder based on Cognitive Behavioural Therapy Recommendations for Interaction Design

(Unpublished Academic Dissertation), KTH Royal Institute of Technology, Sweden.
Su, C., & Kaye, B. V. (2023). Borderline practices on Douyin/ TikTok: Content transfer and algorithmic manipulation. Media, Culture & Society, 45(8), 1534–1549.

Thomas, S. (2024). Social Media Intervention Strategies for Promoting Preventive Health Care Behaviors. International Journal of Scientific Research and Engineering Development, 7(6), 1081-1127.
Uittenhout, H. (2012). The Use And Effect Of Social Media In Health Communication About Common Head Lice (Unpublished Academic Dissertation), University of Twente, The Netherlands.
Umennuihe, C.L., Okechukwu, F. O., Onyeke, N. G., Umennuihe, A.E., & Ekeh, P. N. (2024). Influence of Social Media Use on the Eating Behavior and Food Preferences of Undergraduate Students in the University of Nigeria, Nsukka. J. of Family and Society Research 3(1), 80 – 91.
Valle, P. R. D., & Ferreira, J. D. L. (2025). Content analysis in the perspective of bardin: Contributions and limitations for qualitative research in education. Educação em Revista, 41, 1-21.
Wang, C-H., Sher, S. T-H., & Chung, C-F. (2024). From Viral Content to Real-Life Cuisine and Beyond: Examining Teenagers' Interactions with TikTok Food Videos and the Influence on Their Food Practices. Proc. ACM Hum.-Comput. Interact., 8(2024). 1-30.
Wang, Y. (2021). A Review of Reasons for TikTok's Global Surge. Advances in Social Science, Education and Humanities Research, 631(2021), 588-591,
Wu, J., Fetterman, J. L., Ross, J. C., Hong, T. (2025). Effects of Message Frames and Sources in TikTok Videos for Youth Vaping Cessation: Emotions and Perceived Message Effectiveness as Mediating Mechanisms. Journal of Adolescent Health, 76(2025), 122-130.
Ye, L., Ye, Y., & Gao, H. (2023). Effectiveness of social video platforms in promoting smoking cessation among youth: A content-specific analysis of smoking cessation topic videos on the social platform Bilibili. Tob. Induc. Dis., 21(2023), 1-10.
Zhang, X., HOW DOES AI-GENERATED VOICE AFFECT ONLINE VIDEO CREATION? EVIDENCE FROM TIKTOK (Unpublished Master Dissertation), The University Of British Columbia, Canada.
Zhu, C., Xu, X., Zhang, W., Chen, J., & Evans, R. (2020). How Health Communication via Tik Tok Makes a Difference: A Content Analysis of Tik Tok Accounts Run by Chinese Provincial Health Committees. Int. J. Environ. Res. Public Health, 17(2020), 1-13.